opción

Revista de Antropología, Ciencias de la Comunicación y de la Información, Filosofía, Lingüística y Semiótica, Problemas del Desarrollo, la Ciencia y la Tecnología

Año 36, 2020, Especial N° 26

Revista de Ciencias Humanas y Sociales
ISSN 1012-1587/ ISSNe: 2477-9385
Depósito Legal pp 198402ZU45

Universidad del Zulia
Facultad Experimental de Ciencias
Departamento de Ciencias Humanas
Maracaibo - Venezuela

Opción, Año 36, Especial No.26 (2020): 1697-1711
ISSN 1012-1587/ISSNe: 2477-9385

Value aspect of text formation: the dynamics of meaning

Nataliya V. Danilevskaya, Elena A. Bazhenova, Larisa G. Kyrkunova, Larisa S. Tikhomirova, Tatiana B. Karpova
Perm State National Research University, Russia

Abstract

The paper's objective is to identify the characteristics of the formation and expression of new knowledge in a scientific text. The leading research method is functional-stylistic. The study revealed that the alternation of components of old and new knowledge is the mechanism of text formation, reflecting the logical sequence of cognitive actions directed on the substantiation of new knowledge. In conclusion, the result of the textualization of cognitive examination appears in the text in the form of cognitive-evaluative actions such as explanation, specification, generalization, definition, consequence, conclusion, etc.; in the dynamics of knowledge representation, different validation actions are often syncretic.

Keywords: Cognitive evaluation, New knowledge, Concepts.

Aspecto del valor de la formación de texto: la dinámica del significado

Resumen

El objetivo del trabajo es identificar las características de la formación y expresión de nuevos conocimientos en un texto científico. El método de investigación líder es funcional-estilístico. El estudio reveló que la alternancia de componentes del conocimiento antiguo y nuevo es el mecanismo de formación de texto, que refleja la secuencia lógica de acciones cognitivas dirigidas a la sustanciación de nuevo conocimiento. En conclusión, el resultado de la textualización del examen cognitivo aparece en el texto en forma de acciones cognitivas-evaluativas como explicación, especificación, generalización, definición, consecuencia, conclusión, etc .; En la dinámica de la

Recibido: 20-12-2019 •Aceptado: 20-02-2020

representación del conocimiento, las diferentes acciones de validación son a menudo sincréticas.

Palabras clave: Evaluación cognitive, Nuevos conocimientos, Conceptos.

1. INTRODUCTION

In this article, we are talking about the peculiarities of the formation of new knowledge in the scientific text, more precisely about the dynamics of meaning in cognitive activity. Modern linguistics understands language as a thought process based on the use of knowledge contained in a man's mind (KLIX, 1987). As this takes place, all explanations of actual (and ideal) objects are expressed in terms of their verbalized description, i.e. they represent language text – oral or written. In other words, knowledge as a process and result of human cognitive activity is the basis of text as the verbal product of reality perception.

The study of the process of cognition reflected in the text is inseparably linked with the notion of intertext, a global inclusion of specific statements in the overall context of the kin or of closely related statements on the same topic / scientific problem. This interpretation of the intertext is a wide or radical concept of the boundless text, intertextual in each fragment. According to this concept between all created (strangers) and created (ours) texts there is a general intertextual space, so the perception of the text is a continuous reading in the endless text, which works due to perceiving the mind of the reader.

With this broad understanding of intertextuality, it is apparently impossible to analyze relations between different meanings in a specific text, and linguistics is deprived of its research tasks. In this regard, a German researcher R. Lachmann proposed to distinguish between 1) the dialogic as the universal dimension of the text and 2) the dialogic as the special way of construction of meaning and as a dialogue of his own and other people's opinions. The result is a narrow model of intertextuality, according to which the interext is the intentional designation of the author of the utterance of the correlation of his semantic position with those of a stranger/strangers.

Recognition of mastectomy relations and polyphony of semantic positions in the text contributes to the reconstruction of a picture of the world (historical, political, economic, national, etc.) of native speakers, the reconstruction of the Zeitgeist (spirit of the time). And it is not so much the text but a discourse - a text as content and meaning of the connection to the global cultural process. As noted by Maas, discourse expresses the appropriate language formation in relation to socially and historically determined social practice.

2. METHODOLOGY

Functional stylistic analysis of integral scientific text makes it possible to consider knowledge from the point of view of its fixation, text-generating role, i.e. reflection of its generation and expression in the text with an emphasis on the production of new knowledge in relation to the existing system of scientific information. In this respect,

knowledge proves to be a certain center of cognitive activity as such, its aim, sense and content.

Knowledge understood in this way as an object of scientific text analysis, presents itself as the whole, and its constituents (by law part-whole) are old (known) knowledge and new (unknown) knowledge as components of conceptual knowledge about subject (event, property) of reality that author develops and expresses in the text.

3. RESULTS AND DISCUSSION

Division of scientific knowledge into components old – new is connected to the nature of perception, i.e. has gnoseological roots. So, for instance, the moment of non-understanding is regarded as the highest level of understanding in psychology and philosophy, when perceived and mastered knowledge forces subject to fix in consciousness the transfer to the next round of reality perception, i.e. transfer to the birth of new knowledge (GUSEV & TULCHINSKY, 1985; MAMCHUR, OVCHINNIKOV & UJOMOV, 1989). Compare idea that the highest level of understanding does not compel to agree to the perceived in advance, on the contrary, it uses text otherwise – not to stimulate new texts, but to stimulate the transformation of own consciousness into consciousness that is capable to assimilate new reality (MUSHELISHVILI & SHREYDER, 1989). In other words, we encounter the highest level of understanding when activity aimed at reality perception leads us to the necessity of transforming both own

and general scientific system of knowledge to mental creativity concerning the generation of new knowledge. Consequently, we can say that knowledge presented as the unity of opposites old – new possesses text-generating potential and can be considered from this point of view.

Components of old (known) and new (unknown) knowledge – are axiologically defined meanings that are materialized in work's surface texture and represent in their integrity incremental dynamics of scientist's cognitive and communicative activity that is aimed at the generation and justification of new scientific knowledge in the text. Old and new knowledge, understood in this way, are text units, i.e. they express the typical content-semantic structure of scientific work, are connected with implementation of the author's cognitive attitude and orientation towards the reader in the process of creative activity, feature structurally intentional integrity and text-building function. Thus, the interaction of old and new knowledge components in the process of text development ensures its content, sense and composition integrity.

It is essential that in the process of scientific knowledge objectification in work's speech texture, of greater importance is not scientifically old, i.e. already known to the science and recorded in some earlier texts, but communicatively, or contextually old, known from left context of the given specific scientific work, i.e. knowledge used in a certain discourse for an incremental development of scientific concept when author delivers new knowledge by small

portions against the background of repeatedly reproduced earlier knowledge that became clear to the reader due to its communicative recognizability. In other words, contextually known knowledge in the text serves as an intellectually mnestic conductor of new knowledge that proves to be possible and communicatively relevant only on the basis of known knowledge.

Consider, e.g., such means as we earlier stated that; in the previous chapter we said that; as we emphasized; as it was mentioned before; we several times mentioned; let us stress/repeat/remind once more etc. that are so frequent in scientific texts. Such units allow the introduction into the verbal texture of those knowledge components that directly belong to the author's concept, i.e. to the proper new scientific knowledge.

As hypothetical knowledge transfers to more proved knowledge, the concentration of contextually old knowledge per text page increases. That is connected with the process of accumulating knowledge on the object under study within the separate communicative act. That is why in the second half of text space and especially during last stages of its development we witness semantic attack effect by new knowledge towards reader's perceptive and interpreting activity: in these text parts elements of new conceptual knowledge are particularly frequent, they literally drown surrounded by elements of contextually known knowledge. Therefore, in such fragments scientifically new knowledge is characterized by maximal density per text space unit and the intensity of its expression increases

to the highest level. Text fragments featuring a maximal density of new scientific sense can be called the parts of the conceptual explosion. Here the volume of intertextual knowledge is usually insignificant, but the volume of properly author's, new knowledge, and, accordingly, the density of intratextual alternation connected with the formation and expression of new knowledge, considerably increases (DANILEVSKAYA, 2001).

The foregoing allows us to regard the interaction of old and new knowledge components as a text-generating mechanism in scientific activity.

At the same time, it is just a mechanism of cognitive discourse development. Being a mechanism, it has, if we may say so, its energy, its cognitive stimulus-motor, which is, in our opinion, the estimation. That is quite logical since estimating operation is in the nature of consciousness and perception as purposeful activities. As far back as Potebnia emphasized that everything is language is estimating and expression and thought are always accompanied by confrontment against another thought (KANG'ETHE, 2015).

As a rule, unknown acts as a problem emerging from the influence of new demands that are generated by the already achieved level of knowledge. That means that search never begins from zero points but is performed given some minimal information that is used by a scientist either for support, or denial. However, an estimation of the present is, at the same time, an estimation of new, expressed

openly or covertly in the subtext. Knowledge can be considered scientific only if the author reveals certain relations, connections or dependence between new and existing scientific theories. Thus, new appears as an estimation act of old, and this estimation is being performed in terms of the emerging new knowledge (CARSTON, 1988; PYLYSHYN, 1984; SCHANK & BIRNBAUM, 1984; WILENSKY, 1987).

Therefore, scientific knowledge as such may be considered as initially estimative, or – in a broader sense – axiology. The axiological character of scientific knowledge is generated by the nature of scientific work as a specific branch of humane activities that aims at the formation of estimative information about the objective world. Therefore, the purpose of any scientific search is the discovery and formulation of some property of the real object, consistent pattern or law of its functioning etc. Thereby, each searching act that is recorded in the text implicitly claims to be the truth, or, in terms of axiology, – scientific value. The latter is possible as the highest level of axiological chain that attributes specific character of cognitive activity in science: estimation — norm/law/consistent pattern/tendency — value. In other words, estimation is the first indispensable step from ignorance to knowledge in its new or renewed role. In this regard, it is quite natural to state the fundamental importance of estimation for the process of new scientific knowledge development and formation.

Scientific text is realized as a fact of the socially significant event by means of intertextual interaction of knowledge components.

Dynamics of thought itself, its phased transition from old knowledge that is already known in this discourse to the new knowledge that is not expressed yet, is performed by means of intratextual interaction of knowledge components in the text. It is important that just estimation is the basis of conceptual knowledge that is formed and developed in the text. Explicitly or implicitly expressed estimation is always connected with the author's choice of concept, idea or just judgment, opinion, belief, statement, fact as certain scientific value. According to philosophers and cosmetologists, estimation specifies the perspective of the cognitive process and serves as the first indispensable step in the transition from ignorance to knowledge, i.e. from problem situation and problem to new scientific theory (BIBLER, 1998; CHAFE, 1987; PYLYSHYN, 1984).

According to Chafe, the extent of subject ingrow into a certain way to perceive reality presupposes subject-object relations of the meeting of different senses, correlation of their attitudes and their relevant reformation (CHAFE, 1987). It is establishing correlations (signed + or–) between different subjects of scientific sense, to be more exact, between senses of different subjects, that serves as the implicit prerequisite of meaning-making. Besides, hypothetic premises (as the initial designation of new knowledge in the text) turn out to be such only because, according to Slavin, they are there along with premises with already established truth, therefore, there never was any new knowledge that was not defined, to some extent, by the preceding knowledge. Furthermore, human rational behavior is controlled by the

value-oriented attitude system of his consciousness. This system is based on socially conventional laws, norms and rational behavior patterns.

Thus, the nature of perception is fundamentally estimative. What are the functions of estimation in scientific discourse? Being, as we already mentioned, a stimulus of interaction for old and new knowledge components, estimation penetrates all moments of their interweaving, i.e. participates in forming and arrangement of text joints of scientifically known with scientifically new and of contextually known with contextually new knowledge. Estimation accompanies all thinking activities of an author: 1) actions aimed at the formation of new knowledge content (ontological aspect of epistemic situation); 2) actions aimed at the determination of ways and methods of scientific problem solution (methodological aspect of epistemic situation); 3) actions aimed at the expression in text of personal, author's attitude to the subject of thought, as well as actions especially addressed by author towards would-be reader (axiological aspect of epistemic situation).

The notion of the epistemic situation put into scientific practice by (KOTYUROVA, 1988), is widely used now in functional, including functional stylistic researches. This notion reflects the generalized representation of extra-linguistic factors forming the basis of cognitive activity and defining the specific character of scientific text stylistic and speech organization.

In addition, estimation penetrates all aspects of epistemic situation, that means, it directly participates in formation and expression of each cognitive action, but, mainly – by means of

estimation, explicit or hidden, interrelation of these actions, included in the texture as one or other variety of one of the knowledge components, i.e. as scientifically communicative new or scientifically communicative old is performed. Unfortunately, the framework of this article does not make it possible to examine this issue more or less fully, therefore we will show the relationship of estimation and cognitive dynamics only based on the example of one cognitive action forming the ontological aspect of scientific knowledge expressed in the text, namely based on the example of explanation operation.

Estimation of semantic explanation – that is the estimation of the particular cognitive action aimed at the fixation of representation importance (need, significance) in the concrete fragment of the semantic development of the elucidating argument in favor of the expressed position. Logical operation of explanation is understood as the method, with the aid of which the object is determined not completely, but only in one sense and with the specific purpose. Russian grammar 1980 gives the following handling of elucidating relations: In elucidation as such... two different denominations are referred to one and the same object... in such case the first and the second terms either different names to one and the same.., or the first term of series is specified and defined concretely by the second one.., or the second term of series serves as revealing list... Explanation... explains (interprets), defines concretely or evaluates.

In both statements, there is the idea that explanation working on the principle about the same, but in other words, interprets preceding

term of series, thus from the specific position it performs evaluating function with respect to it. It seems that explanation is the method to express estimation of speech object in the aspect of its o t h e r understanding; this is the means of fixation in the text author's selection of precisely this, elucidating action, from many cognitive actions. The gradual polishing of various substantive subtleties of new scientific knowledge takes place, in many respects, be means of explanations. It is natural that the operation of explanation is rather frequent in scientific text. With the aid of such operations, the scientist deepens both his own idea about the object in question and reader's idea about it, at the same time laying the way for the latter to a more rapid and easier understanding of the entire concept as a whole.

As regards to the assertion about incompleteness of speech subject definition within the framework of explanation operation, first of all, it is not partial explanation of some thought that is meant here but explanation of its part, when the elucidating estimation relates to the word, word combination of a simple sentence or part of a complex sentence. Usually, estimation done during explanation operation stimulates the motion of the thought from the component of contextually known knowledge to the component of contextually unknown knowledge, but a wider context is necessary in order to determine the place of these components in the system of scientific knowledge of the entire text.

The elucidating statements are predominantly explicated and are introduced into the text by the explanatory conjunctions that are,

namely, precisely, or; by parenthetical words and word combinations otherwise, which means, in other words, better to say, briefly stated, being otherwise expressed, in the sense; by the monomial and binomial constructions By... is understood, By... we understand etc., as well as by the parts of the complex sentence We have in mind that; In the sense that and the like etc.

4. CONCLUSION

The study revealed the following: 1) the dynamics of creation of a scientific text reflects the dynamics of the cognitive process: the way of obtaining new knowledge is carried out through the evaluation of existing scientific fund of knowledge and the ways of its development; 2) the cognitive process is based on the interaction of the known (old) information to unknown (new) information; 3) in the cognitive structure of the text of the old and new information appear as components of old and new knowledge; 4) from the point of view of the process of text formation, components of old and new knowledge are realized through the smaller varieties – scientific old/new knowledge and communication old/new knowledge; 5) the alternation of components of old and new knowledge is the mechanism of text formation, reflecting the logical sequence of cognitive actions directed on the substantiation of new knowledge; 6) energy force that runs to the work the mechanism of alternation, is a cognitive evaluation- a deliberate choice made by the author between one or another of cognitive actions in each fragment of the presentation of scientific

concepts; 7) the result of textualisation of cognitive examination appears in the fabric of the text in the form of cognitive-evaluative actions such as explanation, specification, generalization, definition, consequence, conclusion, statement, etc.; 8) in the dynamics of knowledge representation different validation actions are often syncretic.

In conclusion, let us emphasize that in the knowledge representation dynamics any given estimating actions rarely realize themselves in the pure form; most frequently, exposition in the concrete fragment appears as semantically syncretic cognitive appraisal action with respect to the object of the thought. The article may be useful for linguists, graduate students-philologists and specialists dealing with the problems of the text and the question of stylistics of scientific language.

REFERENCES

BIBLER, V. 1998. **Consciousness and thinking (Philosophical prerequisites).** Philosophical-psychological assumptions cultural dialog school. pp. 13-87. Russia.

CARSTON, R. 1988. "Language and cognition". **Linguistics: Cambridge survey. Language: Psychological and biological aspects.** Vol. 3, pp. 38–68. UK.

CHAFE, W. 1987. **Repeated verbalization as evidence for the organization of knowledge**. Vorab druck der Plenarvorträge. 14 Internationaler Linguistenkongress. pp. 88–110. Germany.

DANILEVSKAYA, N. 2001. "Knowledge as the subject of study and the mechanism of cognitive activity expression in scientific discourse. Varieties of knowledge". **Stereotype quality and creation in the text.** Vol. 4: 196–204. Russia.

GUSEV, S., & TULCHINSKY, G. 1985. **Problem of understanding in philosophy.** Moscow Russia.

KANG'ETHE, S. M. 2015. "Exploring the effects of cultural attrition as a recipe of lost human dignity and dented identity the case of selected African cultures". **Journal of Sociology and Social Anthropology.** Vol. 6, N^{o} 3: 429-434.

KLIX, F. 1987. **On the role of knowledge in science comprehension**. Vorab druck der Plenarvorträge-Preprints of the plenary session papers. 14 Internationaler Linguistenkongress. pp. 10–124. Germany.

KOTYUROVA, M. 1988. **On the extra linguistic foundations of the semantic structure of the scientific text.** Krasnoyarsk. Russia.

MAMCHUR, E., OVCHINNIKOV, N., & UJOMOV, A. 1989. **The Principle of simplicity and complexity measures.** Moscow. Russia.

MUSHELISHVILI, N., & SHREYDER, Y. 1989. **Comprehension versus understanding**. Scientific notes of Tartu University. Issue 855: Text – culture – semiotics of narration. Works on sign systems XXIII. pp. 3–17. Tartu. Estonia.

PYLYSHYN, Z. 1984. "Computation and cognition: Toward a foundation for cognitive science". Vol. XXIII. Cambridge (Mass.): London. UK.

SCHANK, R., & BIRNBAUM, L. 1984. **Memory, meaning and syntax**. Talking minds: The study of language in cognitive science**.** pp. 49–65. Cambridge (UK).

WILENSKY, R. 1987. **Meaning and knowledge representation**. Vorab druck der Plenarvorträge. pp. 125–152. Berlin (Germany).

UNIVERSIDAD DEL ZULIA

opción
Revista de Ciencias Humanas y Sociales

Año 36, Especial N° 26 (2020)

Esta revista fue editada en formato digital por el personal de la Oficina de Publicaciones Científicas de la Facultad Experimental de Ciencias, Universidad del Zulia.
Maracaibo - Venezuela

www.luz.edu.ve

www.serbi.luz.edu.ve

produccioncientifica.luz.edu.ve