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The development of Russian terminology science at the beginning of the 21st century

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Abstract. Cognitive Terminology appeared as an independent science with its own categorical apparatus, methods and procedures of research, discussed issues and tendencies of its development at the end of the 90s of the 20th century in the framework of Cognitive Linguistics.

In the presentation the author will focus on the achievements of Cognitive Terminology during the first 12 years of the 21st century paying attention to the contributions of articles and journals in Cognitive Linguistics and Terminology written by Russian authors. Dissertations also provide a comprehensive and updated discussion on the representation of categories and concepts, formation of various conceptual domains, models, cognitive maps of professional spheres, cases of conceptual integration, the interrelation between everyday and scientific knowledge, and discourse as an object of Cognitive Terminology.

Cognitive Terminology is represented as one of the tendencies of modern terminological science, in which notions of categorization and conceptualization, conceptual modeling and its embodiment on the language level, a conceptual metaphor as a way of term-formation are discussed.

The elaboration of cognitive and informational structure of term, notions of scientific discourse and professional communication, as well as the theory of LSP – these became new spheres, by which Cognitive Terminology enriched Cognitive Linguistics.

Keywords. Cognitive terminology, Russian terminological school, categorization, conceptualization, representation, picture of world, discursive analysis, term, Languages for Special Purposes (LSP).

1. Introduction

The article is necessary to begin with the words of Thomas Kuhn, who articulated them in his famous book "Structure of scientific revolutions, "Each new paradigm of knowledge introduces its own model of formulating a set of problems and particular ways of solving it" (KyH 1997: 11) A cognitive paradigm of linguistic knowledge has become a new epistemic framework, that is connected with human existence, perception and cognition of the surrounding world, human consciousness as well as cognizing activity and of course the role of language in all these phenomena.

During its 30-years of existence cognitive linguistics in Russia has proved to open up a novel vision of linguistic facts, this approach provides us with a new understanding of linguistic picture of the world, mechanisms of categorization and conceptualization, issues of knowledge representation. It also brought about a clear understanding that a cognitive approach should be complemented with the help of discourse analysis and observation of the existing forms, functioning in the language and the new ones, being created 'on-line' (Кубрякова 2004: 23).

Within the framework of cognitive linguistics in the late 90-s of the past century a new trend of cognitive Terminology science emerged (Новодранова 1997; 2000; Манерко 2003; Шеллов 2002). Nowadays it is a distinct scientific trend with its categorical, object of research, methods of analysis, problems and tendencies of development.

2. The appearance and the development of "Cognitive Terminology"

The term of "cognitive terminology" was introduced for the first time in Russian linguistic school by Larissa Alexeeva in her article "A term as a category of cognitive terminology" (Алексеева 1998). A detailed description of theoretical and methodological issues of cognitive terminology was provided by Larissa Alexeeva and Svetlana Mishlanova in their monograph "Medical discourse: theoretical foundations and principles of analysis" (Алексеева, Мишланова 2002), where the origins of cognitive terminology, main tendencies of its development, principles of analysis applied to linguistic means, as representing the special knowledge are dwelled on. The monograph provides the general outline of cognitive terminology and the analysis of major categories. The authors suggest the scientific discourse should be a subject of cognitive terminology research.

In 2008 a textbook of Elena Golovanova "Cognitive terminology" (Golovanova 2008) was issued. She discusses the key issues of the new trend as distinct and reflecting the state of the art of scientific knowledge. She also points out the difficulties in investigating the dichotomy "language and knowledge", defines the notion of Language for Specific Purposes, and reveals the cognitive essence of the term in correspondence to professional linguistic personality. Processes of conceptualization and categorization, metaphor usage, professional set expressions are also touched upon in the aforementioned textbook.

In the last 12 years of the 21st century cognitive Terminology develops within the framework of cognitive linguistics. All the leading collections of scientific papers include a number of articles on cognitive terminology. First of all a credit line should be given to a collection of papers edited by Larissa Manerko (issues from III to VI that appeared from 2000 to 2009). They focus on the cognitive essence of the term and displaying the cognitive discursive bases of form and organization of terminological systems, functioning in LSP. It was here, where the article of Vladimir Leitchik "Cognitive terminology- the fifth stage of terminology development as a leading discipline on the border of the XX - XXI centuries" (Лейчик 2007) appeared.

A major achievement of the development of cognitive linguistics in Russia is launching series of works "Cognitive investigations of language" edited by Nikolai N. Boldyrev and issued by the Institute of linguistics of the Russian academy of sciences and Tambov state university named after G. R. Derzhavin. Now we have 15 issues that were published from 2009 to 2013. It is devoted to the conceptual analysis of language and the description of conceptualization and categorization processes in various spheres of language, including terminology. The articles among other questions pay attention to types and formats of knowledge, principles and mechanisms of their structuring and methods of cognitive analysis.

Terminology presents an abundant material for testing methods and techniques of cognitivediscursive approach in modern linguistics. And it is fully justified that a special part in a collection of works devoted to Elena S. Kubriakova is occupied by terminological works, where such prominent specialists in terminology as Vladimir M. Leitchik, Larissa Manerko, Valentina Novodranova and many others have presented their works. A journal "Issues of Cognitive Linguistics" (2004-2013) also contributes to elucidating of cognitive terminology aspects, for in each issue there is at least one article devoted to cognitive terminology and scientific discourse.

The appearance of "Encyclopedic dictionary on general terminology" edited by Viktor A. Tatarinov (Татаринов 2006) became a significant event for it included a special article of Valentina Novodranova "Cognitive terminology" (Новодранова 2006). There cognitive terminology science is presented as one of the trends of modern terminology originating from notions being elaborated within the framework of cognitive linguistics: categorization and conceptualization, conceptual model and its representation on the linguistic level, cognitive metaphor, as a means of term-formation, that gives opportunity to interpret the phenomenon under consideration on cognitive and communicative levels in a new way. The fact of including the article into the encyclopedic dictionary gives evidence of accepting the new trend as a separate one by the terminological circles.

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The International Congresses on cognitive linguistics held each 2 years at Tambov State University also play a vital role in developing cognitive Terminology. The last congress in 2013 saw the new cognitive methods and approaches to scientific text and discourse presented. The following questions were touched upon and outlined: interrelation of everyday and scientific knowledge in professional communication, conceptual modeling of scientific texts, intertextuality in scientific texts, scientific picture of the world, scientific discourse. Materials of International congress were issued as a separate collection of papers before 2009 and starting with 2009 they were included into the collection of papers of "Cognitive investigations of language".

Cognitive terminology enriched the cognitive linguistics with elaborated cognitive structure of the term, defined such notions as scientific discourse and professional communication as well as theory of LSP.

The Formation of cognitive terminology is strongly biased with the theory of LSP for the linguistic component of both is terminology, as well as the whole lexis of the particular field of knowledge. That means the language of science, embodying its conceptual content.

Moreover, it was within the cognitive terminology where a scientific definition of LSP was given and it was defined on a scientific basis. LSP is such a system of linguistic means of general language, that represents the knowledge structures, being formed at a certain period of scientific development and demonstrating the highest possible level of scientific research within some particular period and in particular sphere of knowledge, because of the level of it and its relevance for the particular community (Зяблова 2005). The main function of LSP is to present the conceptual and linguistic picture of the given sphere of knowledge as well as to serve as a professional norm adequately representing the structures of human knowledge and experience, to facilitate the description of the special sphere of knowledge, communication and its development.

Terms are the main linguistic units of LSP. Their cognitive interpretation was provided by cognitive Terminology, where a term is defined as a verbalized result of professional cognition, a meaningful linguo-cognitive means of orientation in professional sphere and a very important element of professional communication. It conceptualises the result of cognition of a special field of knowledge or activity, representing the existing structures of special knowledge that determine cognitive essence of the term. Knowledge structures that are revealed in a term represent an integration of several types of knowledge: the knowledge about a special fragment of the world (encyclopedic, general scientific and special knowledge); knowledge about mental forms of reflecting it in the mind, linguistic representations and knowledge about operating and linguistic units in order to process, keep and transmit knowledge.

A term is a means of accessing the cognitive knowledge bases of specialists, but together with that they fulfill the cognitive function to transmit this knowledge to others. To fulfill the communicative function effectively a term should be convenient in professional speech, it should obey the rules of economy, have a compact form and be adequate to the represented knowledge. This feature becomes evident and transparent in discourse, when as a result of cognitive operations of people involved into communication this concise linguistic form may transmit rather a considerable bulk of knowledge. Thus, cognitive approach allowed to characterize the morphology and organization of terminological systems not only as a set of terms collected together, but as a complicated net of knowledge, that may be represented with the help of cognitive maps, scenarios, frames, etc. that may give an idea of the whole structure of the science, pinpoint the major stages of its development and appearance of key notions in it, showing various criteria of singing out this or that element within the system, their interrelation, the most important principles of system-organization.

European symposiums organized by International informational centre on terminology and held each two years in different countries are devoted to various aspects of languages for specific purposes. And within the last 12 years the Russian terminologists take part in them. In 2001

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in Vassa (Finland) Larissa Alexeeva and Valentina Novodranova were chairing a colloquium "Cognitive linguistics and terminology". Starting with 2003, the XIV European symposium on LSP in the University of Surrey, with the help of Heribert Picht (Germany) Russian and Western colleagues discuss the terminological problems together within the organized symposiums and round table discussions. In Bergamo (in Italy, in 2005) a joint colloquium "Communication, culture and knowledge" was held. In Hamburg 2007 Larissa Manerko initiated and organized a colloquium "Cognitive aspect of terminological description as a means of understanding specialized discourse". XVII European symposium in Aarhus (Denmark, in 2009) was devoted to cognitive terminology "Methods and Aims: (Re-) conceptualizing LSP research". 12 Russian terminologists came to present at this colloquium, 4 from them came with their Ph.D. students, who underwent the approbation of their candidate dissertations on cognitive terminology.

It is necessary to note that several terminological schools in Russia, such as Kaliningrad, Samara, Chelyabinsk work well within the framework of cognitive terminology. The school in Samara, founded by Valentina Novodranova, is now successfully developing, investigating medical cognitive terminology. The head of this school Elena V. Bekisheva launched the Russian interuniversity collection of papers "Language of medicine" (issue 1 appeared in 2004, the second one in 2008, and the third number was published in 2012). It centres on linguistic and methodological problems of medical terminology and professional communication. The issues of cognitive Terminology and broader – the functioning of LSP are intensively discussed on the pages of the journal.

It is important to mention the activity of Chelyabinsk terminological school, uniting the Chelyabinsk branch of Russian association of cognitologists and a department of theory of language of the Chelyabinsk State University. During the last 12 years they were housing the scientific conferences "Languages for Specific Purposes", among the main aims of which are: coordinating the work of terminologists in studying the problems of professional communication, pointing out the role of cognitive-discursive approach to investigating processes there.

The beginning of the XXI century saw a number of cognitive aspects of terminology and professional communication. The most significant are the three international symposiums of "Terminology and Knowledge", organized by a terminological centre of Russian Institute of the Russian language named after Viktor V. Vinogradov. The head of these symposiums is Sergei D. Shelov (2008, 2010, 2012).

The very name of the symposium "Terminology and knowledge" reveals the cognitive aspect of terminology, which makes various types of knowledge objective. The types of knowledge in their turn are connected with different stages of cognition process and formation of the theoretical thought. In the material of this symposium we can find a special part "Cognitive terminology and LSP", that reveals the up-to-date stage of cognitive terminology development.

In 2012 a scientific journal "The issues of terminology" edited by Sergei V. Grinev was established, where again cognitive terminology and LSP got separate parts, dealing with the theory of these two paves of research and practice. In the same year the first issue of the journal collected the prominent terminologists of Russia. In the introductory article "Terminology – past, present and future" by the chief-editor Sergei V. Grinev cognitive terminology is named as the leading trend in studying terms, connected with psycholinguistics, ethnolinguistics, sociolinguistics, linguoculturology, anthropolinguistics, theory of intercultural communications and other borderline disciplines. He also stressed the importance of diachronic studies of terminology, which "keeping up with the targets of cognitive terminology and forming new terminological systems but also to find out the ways and peculiarities of scientific thought as developed in diverse countries, acquiring, in this way a huge cultural, social and scientific meaning" (Гринев 2012: 11).

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3. Conclusion

Cognitive terminology is by no means elaborated in dissertations, where the following questions of cognitive terminology are stated:

- Representation of categories and concepts,
- Drawing the conceptual sphere, its conceptual model, cognitive map of science,
- Metaphorization as a means of term-formation,
- Conceptual integration,
- Interaction of everyday general and special knowledge,
- Scientific and naïve picture of the world,
- Discourse as an object of cognitive terminology.

The outline of problems, categorical approach, methods of investigation, as gained from monographs, articles and theses proves the active development of cognitive terminology in Russia at the beginning of the XXI century.

Still not all the questions of cognitive Terminology got their answers:

- the afore-terms (prototerms), featuring the early stages of scientific thought, are not well described;
- the difference between terms and professionalisms need to be thought out theoretically, yet we can point out some attempts to do so in the textbook "Terminology and professional lexis: composition and function" published by Leitchik and Shelov in 2012,
- the principles of forming such special units and nomens are not well defined,
- the terminology in its diachronic perspective still deserves more attention,
- as well as linguocultural investigations, revealing the national components of terminology and peculiarities of national professional thinking also need to be elaborated.

The questions of professional integration, tendencies of distributing the information within the text (figure and ground theory), the role of a linguistic person in case of forming terminology and scientific picture of the world, everyday and special knowledge are also waiting for their solutions.

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