Terminological Multifaceted Educational Dictionary of Active Type as a Possible Way of Special Discourse Presentation

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ABSTRACT

The purpose of this article is to disclose the scientific basis of the author's academic terminological dictionary for future oil industry experts. Multifaceted terminological dictionary with several different entries is considered to be one of the possible ways to present a special discourse in the classroom. As a result of the study the authors conclude that there is a close interrelationship between the terminological picture of the world with the language picture of the individual's world which can be traced within complex representation of terminological vocabulary as an important component of specialist’s language picture of the world. Versatile presentation of terminological system of a certain sphere of knowledge will allow to consider various aspects of the term as a unit of special knowledge. A lexicographical model proposed by authors is designed to adequately encode terminological information into meta-language, easy to understand for students and sufficient for future oil industry professionals.

KEYWORDS Term, special discourse, educational lexicography, language picture of the world, terminological picture of the world

ARTICLE HISTORY

Received 11 May 2016
Revised 20 July 2016
Accepted 22 September 2016

Introduction

For more than 100 year history oil and gas industry industry, a large number of terminological dictionaries were created. On the basis of the classification of types of dictionaries proposed L.V. Scherba (1974) and effective for a typology building of the opposition method it is possible tp outline the following types of modern terminological dictionaries oil business: an electronic dictionary – paper one; an encyclopedic dictionary – a reference book (monolingual dictionary); an academic dictionary - a training dictionary; an alphabetical dictionary – topical dictionary; monolingual - two, trilingual; thesaurus - translation; dictionary - vocabulary;

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explanatory dictionary - frequency dictionary; general glossary of the oil business - terminological dictionary of one of the sections of this sphere of knowledge; dictionary of notional terms - dictionary of terms abbreviations (Scherba, 1974).

The dictionary type is determined by its addressee and objectives, and it is manifested in the distinguishing features of the glossary and dictionary entries. The features of glossary are related to the selection of vocabulary, its minimization and compression (Averbuh, 2004). The specificity of entries is related to the way of the term semantization. In connection with this, the problem of the entry, the method of term semantization in terminological dictionaries on the oil business are of particular importance (Fatkullina & Suleymanova, 2014).

Electronic dictionaries on the oil business are represented by a small group and are diverse in the presentation of the term meaning, but they are interesting by its wide availability and easiness of use. As a rule, they are focused at experts of this industry, and they are topical vocabularies of small volume: "Types of transport list", "Types of oil and gas equipment list", etc. So, reference - the catalog "Oil and Gas" from the series "World Encyclopedia of Equipment" is constructed in the form of information search model, which allows to look for the manufacturer, type, equipment model, providing interested parties with the lists of foreign and domestic producers of oil equipment. In connection with the development of economic ties between the countries oil specialists have a practical interest to a computer "Anglo-Russian and Russian-English Dictionary of New Terms and Oil and Gas Abbreviations" (Sakhalin project) of S.V. Kurbatova which includes the most commonly used English abbreviations of oil terms, their "decoding" and translation into Russian.

Modern educational dictionaries on the oil and gas business in the theoretical principles of construction and its research methodology continue the tradition of the classical terminological, bi- or multilingual lexicographical works. The problem is not that they are presented mostly on paper, but in the fact that they give readers a graphic representation of the term, define the concept, referred to by a term and does not reflect a systematic approach to the presentation of a special vocabulary. However, for a comprehensive presentation of terminological system where there is a term of a specific sphere of knowledge, for the effective assimilation of the term meaning and its place in terminological system by students, as well as to meet the communication needs of the future experts this way of presentation of the term cannot be considered sufficient. No doubt, that translation dictionaries are necessary and useful for reading and translation of literature on the specialty, but the translation does not reveal the specifics of the Russian term meaning (Morozkina, 2005; Morozkiona, 2012).

A close interrelationship of the terminology picture of the world with the language picture of the world of an individual can be traced at integrated presentation of terminological vocabulary as a vocabulary component of the language picture of the world of a specialist (Hayrullina, 1999; Morozkina, 2009). "Term is the basic unit of the special vocabulary which has a strict lexical and conceptual structure and carries an informative load" (Fatkullina & Garifullina, 2009).

For the most complete idea of the specialist's terminology picture of the world it is seen an appropriate combination in one terminological dictionary of various information about the terms presented by heterogeneous lists, allowing the author to introduce vocabulary and give the reader various aspects of the term as a unit of special knowledge.

Methodological Framework
Terms express concepts related to any specific field of human activity or human knowledge, they are combined into terminological system which reflects the system of knowledge in a particular area. Terminological system is a system of concepts, ultimately determining true meaning of the term, its place in the system of concepts of a particular field of knowledge. This is even more important that the logical-conceptual modeling terminological system, according A.S. Gerd (1988), is a special case of modeling of scientific knowledge and knowledge about the world. The necessity for systematic analysis and description of terminology systems are clearly recognized by modern terminologists and based on the achievements of linguistics in the study of language as a system. The systematic presentation of terms allows not only to indicate units of the terminological system, but also to identify the different types of relationships between them, as well as relations between the units of terminological systems and extra-linguistic activities. It is absolutely true that "... a systematic analysis is desirable and even mandatory for the terminological dictionaries" (Grinyov, 1993).

The methods selected for the study corresponded the goals and objectives of the article: simulation method providing presentation of the most significant hidden from direct observation signs of terminological units in explicate and foreseeable form; a statistical method for identifying the structure of the lexical composition of the discourse of an oil industry professional, finding a set of terminological units of the oil business, its organization, the definition of the statistical regularities of the distribution of terminological vocabulary in the texts, as well as to determine the frequency of various phenomena, rate of ambiguity and formation activities of the terms; the method of lexicographic description of terminological lexicon. The used research methods are based on the understanding of language as a major means of communication, recognition of the unity of essence and function of language, and the interrelationship of such fundamental properties of language as a systemacy, social and psychological essence and historical character of the development.

Results and Discussion

A detailed and complete special picture of the world of oil industry professionals can be explicated in the complex, system dictionaries of the active type. The necessity for systematic description of terminological units repeatedly drew the attention of researchers- terminologists (Leychik, 2000; Suleymanova, 2003). This terminological systematization is considered as an analysis of the whole complex of existing concepts of a specific sphere of knowledge in synchrony and a logical construction of system of these concepts. Under the complex we understand the vocabulary which combines a various ways of semantization of a term- sign providing the most complete understanding. The basis of differentiation of passive and active dictionaries is a thought L.V. Scherba (1974) of active and passive syntax: "In the passive aspect it is necessary to start from the forms of words, exploring their syntactic meaning ... As for an active syntax aspect, there is an initial point of view is quite different. The questions about how this or that idea is expressed ... "(Scherba, 1974). Combining different ways of semantization of a term-sign is viewed as an opportunity of the most fully identification of existing term properties, presentation of a term as a unit of discourse (Hayrullina, 2012; Hayrullina & Turkhan, 2015).

The analyzed terminological dictionary is a single lexicographical manual of terminological system of one of the urgent for Russian industry knowledge, distinguished by several dictionaries entries, provides the reader with a variety of characteristics of the heading units that allow to present the lexical meaning of the terminological units most fully: 1) a frequency terminological dictionary, 2) an explanatory-combinational glossary of terms, 3) a thematic dictionary that is based on a
synoptic scheme of the industry. A comprehensive dictionary has a clear philological and encyclopedic convergence. This convergence of different types of dictionaries is due to "dual citizenship" of the term. As a unit of lexis the term demonstrates proper linguistic features in the dictionary of philological type, as a unit of logos- extra linguistic features (belonging to the concepts defined by their particular area of scientific knowledge as it is a member of the sublanguage terms system) - in the encyclopedia.

From our point of view, the combination in one complex lexicographical manual of frequency, thesaurus, thematic dictionaries allows to reveal most fully the essence of the Russian term. Each of the components (type of dictionaries) included in the integrated dictionary has its own entries, representing not only the properties of the term as a linguistic unit, but also the relationship between terms in the system of a specific sub-language, giving the following information about a terminology unit: 1) the most informative terms of a studies terminological system; 2) absolute values of a term; 3) lexical-semantic features of a term; 4) syntagmatic relations of a term; 5) an individual place of a term in the paradigmatic classification terminology of a studied sub-language. An integrated approach to the presentation of a term meaning allowed to combine the various elements of the meaning in one dictionary, which allows readers to digest not individual isolated language facts, but language tools in their interactions, their syntactic and paradigmatic links that, in its turn, most fully describes the terminology system of a given sub-language. Such dictionary structure is designed to solve the challenges that systemic explanatory terminological dictionaries face - "to help the reader of special professional literature understand the meaning of unclear or unknown term; give an idea of the structure of the relevant subject area; teach the reader-specialist to use actively a special language" (Nikitina, 1988).

The research given in the present paper, shows that there is a close interrelationship of the terminology picture of the world with the language picture of the world of the individual. Multidimensional analysis of terminological lexis of sublanguage oil industry conducted by us has allowed to consider various aspects of the term as a unit of special knowledge. For the most complete understanding of terminological picture of the world of an oil industry specialist it seems appropriate to connect in one terminological manual various information about the terms presented by heterogeneous lists, obtained as a result of the study: 1) a list of five hundred most frequent terms of this specialty, compiled on the basis of lexical array of scientific works of different genre, accompanied by an indication of the etymology of these terms (borrowed and native-Russian terms); 2) a list of terms formed in a lexical-semantic way; 3) a list of terms derived from the most productive for this terminology methods of word formation; 4) a list of terms-anthronyms; 5) a list of words of different parts of speech that constitute the meta-language of an oil industry specialist, indicating their quantitative characteristics (results of lingua-statistical analysis). It is no coincidence that this work which would collect all enumerated lists, is called a manual, this is done deliberately in order to emphasize that it is not a dictionary, but lists the oil industry terms used to describe its various aspects and as a whole, reflect the terminological component of a language picture of the world oil industry specialist in its entirety.

The first of presented entries is a frequency dictionary. The principle of the frequency is estimated as the most reliable and objective when analyzing the lexical system of the language in the works of P.N. Denisov (1980), F.G. Fatkullina (2015), A.K. Suleymanova (2009) and other researchers who have used this principle in relation to the selection of a vocabulary of general literary language, as well as terms of certain spheres of knowledge. In our opinion, the analysis of frequency of terminological units is determining for a number of reasons: 1) the language of science is characterized by
isolation, closed borders, a relatively limited vocabulary; 2) according to many researchers, "... one of the laws of dialectics is implemented in the lexis - the law of the transformation of quantity into quality. These are quantitative parameters of a dictionary that define its qualitative specificity" (Denisov, 1980).

The frequency list is a list of comparative and summarizing thousands of the most frequent terms of the oil business, identified by continuous sampling of lexical array of scientific literature of various genres (monographs, collections of scientific articles, books for oil industry specialists, driller directory). It goes without saying, the amount of different used terminological units in various genres cannot coincide with relative homogeneity of the terminological system of a certain language. As a basic list for the comparative characteristics of the frequency, the frequency list of terms of scientific articles was used. This is due to lexical features of selected works: terminological units of monographs and reference books are thematically limited (due to solution of problems of any specific direction of the studied sphere of knowledge) and represent a narrow range of terms with a high frequency of use; the book for oil industry professionals includes all sections of the studied sphere of knowledge, however, by its style it is close to the popular scientific genre, which reduces the level of "science" and is reflected primarily in the lexicon of presented terminology. The scientific articles have a maximum close to the ideal correlation of "science" and "breadth of the described material." Lingua-statistical analysis of terminological units from these sources allows to identify the outer limits of terminological system as a fragment of the language picture of the specialist's world. Comparative characteristics of the frequency of terminological units demonstrate the convention and diffusion of these boundaries.

The most commonly used terms of the studied sub-language which are in the frequency list are accompanied by their etymological characteristic. According to our research, most of the terms of the studied sub-language account for borrowed terms. Presenting a significant body of terminological vocabulary, borrowed words reflect the history of formation and development of the studied sphere of knowledge, history and culture of the people and their contacts with other cultures, the activity of linguistic relations between themselves in this or that period of time. The presence of a significant amount of borrowing is a characteristic feature of the terminological vocabulary. Borrowing is a productive process in the terminology as foreign words are characterized by unambiguity and determinacy, and are definitely a step towards international standardization of terminology. Information about the etymology of the terms allows: a) to identify the languages that have had the greatest influence on the formation of terminological fund of the studied sub-language, served as sources or intermediaries in replenishment of the terminological system of the oil business, b) to determine different types of internationalism, c) to trace the changes that have occurred in the semantic form of foreign words in the process of their inclusion in the terminological system, d) to analyze the system response of the host (Russian) language to borrowing, e) to identify links of borrowed and native terminological lexicon, e) to establish the relations between the borrowed and native lexicon in the terminological system (Haybulina & Fatkullina, 2012).

The list of glossary formed by lexical-semantic way, is one of the first and most important up to date the source of replenishment of terminological vocabulary, is interesting not only for linguists and terminologists, but also for culturologists. It is generally accepted that the verbal reflection of the world surrounding the individual, is determined by the peculiarities of the national way of thinking of the people, whose representative is the individual. We do not replace the concept of a linguistic personality by the concept of national character, but recognize that "there is a deep analogy exists between them. It means the nature of the nation in this and in another
case is a relatively stable over time, i.e. invariant to scale of the personality, a part of its structure, which is in fact the product of a long historical development and the subject of intergenerational transfer of experience ... The national permeates all levels of the organization of the language person, each of them acquiring the peculiar form of the "embodiment" (Karaulov, 2002). The inclusion of this component in the proposed terminological manual is proved by understanding of that the science being an integral part of human culture, is at the same time a manifestation of national specificity, reflecting the nature of metaphorical language of the Russian national consciousness. The terms derived in a lexical-semantic way, reflect the national peculiarities of the Russian people, demonstrating the interaction of vocabulary common literary language, terminological vocabulary and culture of the people - the carrier of the given language, the close connection of ordinary picture of the world and a language picture of the specialist world, demonstrate the diffuse and transparency of their boundaries, show the development of anthropocentric paradigm in terms of this sub-language, provide researchers with information about the factors that result from the interaction of which is the formation of terminological vocabulary of units of different types of lexical and semantic formation of the terms of this specialty, the relationship between the abstract and specific language in the formation of the terms in this way.

The second component of the terminological dictionary is a table showing the most productive in the sublanguage term-building models with demonstrative examples. Terminological system of any field of scientific and technical knowledge, including the sub-language of the oil business, reflects its state at a particular period of time, and is a tool for its further development (Fatkullina, Morozkina & Suleymanova, 2015). Term creation is recognized by conscious process directly dependent on the professional consciousness, its world-outlook, world-attitude, mental, psychological, cognitive activity. The individual's knowledge about the world is verbally embodied in the regular functioning of the word-formation models in the process of education and motivating of the term. The internal form of the term contains information about the world-outlook, world-attitude, perception of the world of the people in general and a specialist as a representative of a particular ethnic group, in particular (Suleymanova & Fatkullina 2013). Presented in the manual stereotyped word-forming model of the oil business terms indicate a close connection between term-formation and word formation of lexis of the commonly understood language and are intended to predict the potential derivation of the terms of this field of knowledge in diachronic, its nested structure, contains information about resources term-formation potential of this discipline.

The third of the presented list contains a list of terms-anthroponyms made in alphabetical order in terms to the basic word. The terms-anthroponyms present a fusion of scientific knowledge and world culture, they are evidence of the formation of language as part of consciousness, and also they provide information about the different ways term-formation on the basis of a proper name (the scientist or researcher), determine the efficiency of various word-formation models and affixes, fixed an attributive function for the term-anthroponym in terms of this sub-language.

The fourth entry is a list of presented morphological categories in the meta-language of an oil industry specialist, indicating their quantitative characteristics per unit of measurement based on the works of various genres of science fiction: monographs, collections of scientific articles, professional literature, directory of the driller. This list contains information about strict selectivity of oil industry specialist's discourse in choosing one or another part of speech, reveals morphological categories in the dominant discourse, determines their role in this discourse; the predominance of the noun in the studied interval indicates nominativity of a scientific text, the
quantitative composition of functioning in the studied discourse noun-terms and not noun-terms is intended to convince the researchers that a term is the bearer of a special knowledge and the most informative part of a special discourse, repetition of one and the same terms is proof of the limits of the lexical composition of a particular area of knowledge of terminology, its "calculability"; selectivity of operating in the oil business language lexical units for the implementation of this discourse reveals the most productive form and a number of features unique to this discourse; all lexical units included in the list in the complex provide researchers with information on morphological and syntactic features of oil industry specialist's discourse (Suleymanova, 1999).

It seems appropriate to include in this manual as the fifth entry thematically structured vocabulary of the term system. Thus, the thematic group refers to common words, due to extra-linguistic factors - common words referred the concepts of objects and phenomena of the external world. Structuring thematically related vocabulary was based on the principles of: 1) communication, which is expressed in onomasiological approach to describing the language material (from the meaning to the means of expression), 2) Systemacy which is to provide the proper language system connections and relations of terms in the thematic groups. Thematic presentation of the method of lexical material shows the most natural for speech situational-thematic organization of terminological units of a particular sub-language. We share P.N. Denisova's (1993) opinion that the "subject-themed set of words form a base ... detail-semantic basis of the thesaurus of a linguistic identity". The organization of lexical material thematically can be displayed due to syntagmatic connections of the words, in some lexical topics in a broad (or narrow) form - the paradigmatic connections of words (Vorobiev, Morozkina & Fatkullina, 2016). The dual nature of the term, its indispensable relation to the concept of scientific or technical sphere of the knowledge allows the distribution of terminological vocabulary of the thematic, subject-logical principle, based on the relationship of subject-conceptual component meanings. Full understanding of the lexical-semantic system of language makes it possible to imagine that a whole set of ideas on which the lexical system and the means of expression are built. This is true for vocabulary of the common literary language and terminological lexis, since the latter is a set of concepts of a specific sphere of knowledge. Presentation of thematically related terminology is intended to "stir up large blocks of units in the minds of the user associated with the reflection of reality" (Karaulov, 1976) as the logical-conceptual analysis of a specific terminological system primarily reveals hierarchy of a conceptual structure, typical of this studied sub-language. Logical and conceptual analysis of terminological vocabulary clearly reflects the most significant and specific types of connections between the components of a particular sphere of knowledge, and characterizes the mindset of an oil industry specialist. Thematic classification of sublanguage oil business terms is intended to reflect in detail the conceptual system of the studied sub-language, its logic and subject-conceptual structure; to present the main topics of this discipline, reliably and in detail reflecting the overall picture of the thematic bundle of terminological lexicon of this sub-language; to trace a close relationship between studied terminological system and terminology of various congeners and related disciplines; to identify the types of relationships between the members of this terminological terms, imagine existing semantic connections and relations between elements of the microsystem, to trace intersecting sense lines arising in the course of the thematic distribution of terminological vocabulary.

Thematic structuring of the studied sub-language terminology reveals a variety of connections and relationships of terminological units: functional connections (accessory of lexical structure of a thematic dictionary to one terminological system;
object-ontological relations inherent to the specific term system (manifested in the combination of vocabulary within thematic microsystems in the clan and the species of unity in the subject group on the basis of extra-linguistic criteria (on the conceptual basis of thematic proximity); paradigmatic connections in the language system (lexical-semantic, synonymous, antonymous in the frameworks of theme, being realized, in particular, in the presentation of terms, synonyms and antonyms of terms in the same subject group), it shows the paradigmatic group of words, due to the relationship between the objects themselves and the phenomena of reality; thematic classification is a hierarchical terminology system of units implementing within the thematic integration of different types of relationships. Thematic classification of the studied terminological system is based on a classification of the objects and phenomena as outlined classes, groups, sub-groups and micro-groups include the terms of the given discipline in accordance with the selected component meanings (Fatkullina, 2015).

Conclusion

Multi-aspect description of terminological lexicon identifies and represents the principles of the internal organization of the elements of the oil business terminology as the lexical component of language picture of the world, it presents the discourse of the oil industry worker as a system of knowledge expressed in language (Suleymanova, 2009). According to the author, one of the fundamental works on the problems of the linguistic individuality of Y.N. Karaulov (2002), a full presentation of linguistic individuality in order to describe it, or synthesis means identifying the hierarchy of meanings and values in its worldview, its thesaurus. One important component of this work and a prerequisite for the next level of "filling-in" a linguistic individuality is an exhaustive description of the different characteristics of verbal and semantic level of the language individual (Karaulov, 2002). Therefore, the construction of the lexical component of "personal paradigm" of an oil industry specialist performs the determining and in accordance with the three-level model, integrating function in the reflection of his linguistic world. Terminological component of a specialist's discourse is not the only one, but a necessary component in the reconstruction of his linguistic world.

Human consciousness captures reality with all its inherent systemic connections and relationships that are objectified in the language (Fatkullina, 2002, p. 56). The unity of the linguistic and extra-linguistic content of the terminological unit can be most fully presented by the cognitive approach to the analysis of terminological vocabulary, which is possible because the semantics of the term is determined primarily by its place in the system of concepts of a particular field of knowledge, when the meaning of a single term is coordinated by the meaning of other terms of the same system.

Disclosure statement

No potential conflict of interest was reported by the authors.

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