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The Fragmentation of Professional Discourse

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Abstract

The objective of this article is to discuss the advantages of professional discourse or text fragmenting as a method of detailed study of its cognitive-semantic and pragmatic components. The common review of the previous numerous investigations of fragmenting or fragmentation is given. The scientific discourse or texts making out the study subject are specified as the domains in which the terms are directly involved into the real professional communication. The position developed in the article is that the most relevant aspect of such professional text fragmenting presupposes the inclusion into the fragment a term for some special object corresponding to the chosen field of knowledge or professional activity. For this reason the accentuated text fragment is nominated a terminological fragment. It can be separated and described in diachronic or synchronic aspects. Possible content varieties of such fragments are taken into consideration. The discussed method permits further development of the proper cognitive and pragmatic theory of terms and terminological fragments functioning in discourse and text.

1. Introduction

The appearing of new types of activities in modern life fosters new jobs and employments, narrows specialties, which are represented in the linguistic world view. While considering the professional discourse, it is necessary to note the linguistic world view existence of the linguistic communities, smaller than a nation, such as social groups,

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professional groups etc. According to V. I. Postovalova "thanks to the language, the experience knowledge acquired by individuals is transformed to the collective experience" (Postovalova, 1998, p. 8).

Nowadays considering various aspects of professional communication is a priority of modern cognitive terminology. Not only the systematic lexicography aspect of modern terminology, but also its functioning in discourse is of interest, as it is in the discourse where dynamic potential of a language sign becomes evident.

Discourse, being a form of knowledge, has its own conceptual system with thesaurus connections. We agree with E.S. Kubryakova that text and discourse should be distinguished from the point of view of modern cognitive linguistics. The expediency of using this approach "seems to be quite natural, as it corresponds to the contradiction of cognitive activity and its result" (Kubryakova, 1997, p. 15). With the development of text linguistics the perspective on the discourse has shifted from the study of the isolated segment of the text or the text in the direction of compulsory registration of the conditions in which the text was actualized. N. D. Arutyunova defines discourse as "...a coherent text in conjunction with extra-linguistic - pragmatic, socio-cultural, psychological and other factors; text taken in the event-driven aspect; speech considered as a meaningful social action, as a component involved in the interaction of people and in the mechanisms of their creation (cognitive processes). Discourse is speech, "involved in life"" (Arutyunova, 2002, p. 136). Professional discourse, according to E. I. Golovanova is defined as "verbally-mediated communication as a process of professional activity players controlled interaction characterized by a certain set of rules, patterns of thinking and behaviour". The types of professional discourse may vary in discursive formats, as well as the dominant types (styles) of thinking (Golovanova, 2013, p. 32).

The functioning of terminosystems (terminologies) in discourse is rather actual nowadays. Terminological systems are investigated from the point of view of pragmatic, semiotic, and cognitive-communicative approaches. The analysis of the composition of the different layers of terminology is of particular interest: for example, the professional and spoken language correlation, and the use of the vernacular or slang, borrowings. The focus of research are economic terminology vocabulary forming the basis of the linguistic discourse of the economy – E. V. Kerber (Kerber, 2013), bionics terminology of technical discourse – T. N. Sharapova (Sharapova, 2011), special lexis in the Internet discourse – M. S. Shumajlova (Shumajlova, 2012), terminology in modern theater discourse – I. N. Churilova (Churilova, 2014), automotive terminology in media discourse – Ju. N. Revina (Revina, 2012) and others.

A detailed investigation of engineering psychology sphere – the discipline of the objective laws of the processes of information interaction between a person and technology in order to use them in the design practice, developing and operation of the "man-machine-environment" (Klyoster, 2013, p. 103), the necessity in defining the boundaries and describing the semantic content of the professional discourse emerged. The resulting manifestation of the studied discourse is the texts that appear in the process of business communication, which, in its turn, is a way of language specialist’s interaction in this field.

The material for the given research is German sources: monographs, textbooks (Badke-Schaub, Hofinger, & Lauche, 2012), scientific journals ("Report Psychologie", "Zeitschrift für Arbeitswissenschaft", "Psychologische Rundschau", "Zeitschrift für Experimentelle und Angewandte Psychologie"), containing reviews and interviews, engineering psychology encyclopaedias, directories and vocabularies (Charwat, 1994) both printed and electronic ones. The analysis of the material mentioned above allowed formulating the hypothesis that professional discourse of engineering psychology is full of semantically non-homogeneous language units: terms composing the semantic center of this subject area, professionalisms, nomenclature, as well as general and scientific vocabulary, including and explaining the specialist professional activity fragments.

The subject of this paper is presentation of the professional discourse as fragmented area with the purpose of the detailed investigation of its conceptual and intentional specificity.

2. Research background

The idea of denotative space multiframe review in fragments is defined as "a set of objects of reality, reflected in the text" (Podtikhova, 2013, p. 78), it was discussed in several scientific fields of linguistics, literature, history, philosophy and others.

So, N. L. Maximova allocates in Artyom Veselyi prose a compositional device – fragmentation, it involves "a selection from the stylistic harmony of some separate, quite independent units (fragments) of the text, which provide
the ability to transform the text, that is ... quite "safely" to embed in the text or separate the text fragments, to put a complete literary form to another or remove one from another according to certain artistic challenges" (Maximova, 2013, p. 91). This principle characterizing the postmodern literature allows the authors "to glue", to "compile" mosaic reality "like wise" (Ponomareva, 2006, p. 243). In her turn, T. Nikishina hypothesizes on short stories by Maurice Blanchot that "the fragmented text is formed throughout the author's work as a non-unity, consisting of "fragments" (lat. fragmentum)" (Nikishina, 2013, p. 60). E. V. Podtikhova analyzes the mechanisms and principles of graphic text denotative space fragmentation in informants' minds. The author determines a fragment as a couple of object verbal nominations next to each other, by their means the semantic structure of the verbal text in the process of its re-encoding from graphic one is recreated (Podtikhova, 2013, p. 78).

The particular value for the realization of the importance of textual information representations in fragments, has V. A. Baranov with his research as part of corpus linguistics providing an example of asynchronical lists of the Gospel in Old Russian in the Internet sources, where the researcher provides specialized tools of fragmentation marking modules, allowing to carry out automatic search and timely reference materials for different types of selected text analysis (Baranov, 2011, p. 40).

The expediency of the combined stresses fragmentation method was underlined by Ye. V. Budaev when considering the diachronic aspects of the metaphors in political discourse. This theoretical construct is convenient for the isolation of time segments, divided into segments to be described and compared. The author offers a combination of focus (partition of the time period based on political events) and the uniform fragmentation (time period is divided into equal parts, called fragmentation step). According to the researcher, the use of this technique makes it possible to introduce the material not as a sample from the continuum (as opposed to discrete analysis), but as "special structure" (Budaev, 2010, p. 9).

The material of a fragmentation scientific texts problem was revealed in V. L. Naer research, which describes as the recipient himself and determines the most informative scientific text fragments. The author of the scientific text, in his turn, assumes the reader interest to implement fully "the principles of semantic partitioning and allocation of the most significant segments of communicative utterances (that is pragmatic division)" (Naer, 1985, p. 18). In this regard, B. S. Muchnik proposed a scheme of written communication to explain the nature of the scientific text fragmentation: description of the thought transfer from the writing person to the reader; consideration of professional communication as a one-way transmission of thought; considering intentions transfer that later the writing person expresses in words; introducing the thought as a test plan which allows the writing person during the communication process, "adjusting to the reader" to correct the text creation " (Muchnik, 1985, p. 28).

A somewhat different concept of text partitioning – segmentation – is based on the fact that scientific and technical text contains a set of systemic importance: analytical expressions, graphs, tables, and the necessary explanations, which are divided in relation to the relayed messages to the so-called semantic cumulants, local and global. Local cumulants intermediate information is divided into segments. The segmentation specificity is adaptability, it focuses the reader's attention on the segments that contain relevant information. Adaptive segmentation makes it possible to highlight key aspects of the text, overshadowing redundant information that is not included in the required minimum, filling the global cumulant; it is a section showing the specific results of the study, including conclusions and comments (Kuz'min & Kedrus, 1986, p. 53).

The above mentioned adaptive segmentation is a kind of information and interpretation division of the scientific article semantic structure in the form of an algorithm assuming the existing macro- and micro marks developed for the lingo-didactic purposes by E. A. Nepomnyaschaya at Kharkov State University (Nepomnyaschaya, 1979, p. 21). The work with the text according to the proposed scheme simplifies the process of understanding and comparison of the received information for the students. As macro marks for its selection are the required components of the text: title elements, the title, an abstract, introduction or preface, subtitles and other means of text graphic division, conclusion, bibliography and references (both commenting and bibliographical), as well as graphic material: charts, drawings, diagrams. Micro marks are lexical and syntactic means expressing the author's attitude to the further exposition, editorial methods for isolating phrases, paragraphs containing important information. For example, the resulting analytical expressions are supplied with the words: also, zum Schluß, folglich, wie folgt; a thought turn is noted with: dagegen, andererseits, aber, doch. Micro marks also include constructions, indicating the author's contribution to the problems development, exclamation and interrogative sentences, key terms of the relevant
specialty. This algorithm is suitable for the formation of articles collections on the right issues for subsequent translation, annotation, or summarization.

In the given research it is proposed to focus on the functioning in the professional discourse the terminological units that contain the knowledge of the fragments of the displayed professional reality.

3. Terminological fragmentation

The concept of "terminological fragmentation" which is understood as a method of the analysis of professional discourse by the division of the studied area in general or the scientific text on the chosen perspective in particular, on "terminological fragments" for the purpose of their further detailed consideration is central for this work.

In the definition of "a terminological fragment" the appeal to the theory of the hypertext in which the fragment is the main structural unit is advisable. The attention of linguists is directed to studying of both an electronic and non-electronic form of hypertext materials. Examples of non-electronic hypertext are reference books, encyclopedic dictionaries in which the transition to the necessary page is carried out by means of a table of contents (the indication of pages), of the allocated words (see, see below, see on p., etc.), or the index.

The electronic form of the hypertext differs "in an instant transition from one text to another, and for this purpose it is not necessary to leave the space of an initial text field: it is worth pointing to the word or sentence supplied with the hyperlink or the offer – and you have a text related with it; thus the initial text fragment does not disappear, and only for some time passes into the background" (Emelin, 1999).

In the present article the term hypertext defines the nonlinear structure of the texts whose sequence of studying the reader defines himself. Following the references, the reader often leaves the initial subject domain, getting in the following one, that is possible only indirectly connected with the studied domain that emphasizes interdiscursive character of hypertext documents. Here it is possible to draw an analogy to the consideration of professional discourse within which live verbal interaction of the experts using (if necessary) the knowledge from adjacent subject domains, their terms framework is observed.

Apparently from the provided short review, fragmentation can be carried out in relation to discourse practices or texts of different types and genres. Thus it can be "multidirectional", that is to solve various linguistic tasks. In the professional discourse/text it allows to solve a lot of problems connected with key-terms functioning of various fields and consequently to reconstruct the reflected professional reality to a certain extent in cognitive-semantic and pragmatic aspects. We agree with E. S. Kubryakova that "... in scientific texts the special attention is paid to the definition of introduced concepts and terms, the explanation of the categorial apparatus of the corresponding science, the logical omissions, narration violations are hardly possible" (Kubryakova, 2004, p. 513). Therefore it is offered to carry out the studying of the denotative contents and pragmatics of professional discourse, analyzing the terminological fragments in diachrony and synchrony by the continuous multidirectional fragmentation method to create the full representation of the chosen field (the terminological combination "continuous multidirectional fragmentation" firstly mentioned by T. Nikishina (Nikishina, 2013, p. 60) concerning the fragmentation of the art text – see above).

Respectively, the fragmentation of the professional discourse and its resulting form – of the text can be aimed at the pointing out in the organized discourse/text fragments related to some term or including such a term and definitely integrated into the complete speech composition. Such type of fragmentation reflects the essential role in the organization of the contents and profiling of information in the text which is presented by special terms. Therefore the fragment of the special text in which the term nominating the object of professional reality is recorded and can be identified the terminological or even terminocentric. The terminological fragment may contain the minimum sufficient context realizing the cognitive-heuristic potential of the term.

The concept "minimum sufficient context" (Galich, 2011, p. 18) to a certain extent opens the fragment text content selected for the linguistic analysis of included units as well as terms. The external form of such fragment at adequate interpretation allows reconstructing a special situation reflected in it, the cognitive situation influencing the choice of lexical and grammatical forms by the speaker, and also the pragmatic situation explaining the choice of the given form on the basis of communicative intentions of the speaker, communication conditions, the thematic relations between its subjects, between the subjects and reality and other parameters.
In the process of similar analysis the components as the term itself, the subject (the one introducing or using the term), the term usage strategy (it is firstly introduced, widely used, generally accepted or has variants – synonyms, co-reference nominations, etc.), the presence or absence in the fragment of reference to the field of science, definition and estimated characteristic (convenient, evident, important, brilliant, unsuccessful, etc.) can be identified in the terminological fragment.

The development of the term meaning in diachrony is seen on the example of the encyclopedic fragments devoted to the central acting character of engineering psychologist’s professional communication – to the operator. Originally the term Operator ~ operator (1. Eine Person, die die Arbeitsweise komplexer technischer Einrichtungen überwacht und behandelt.) had the meaning of a person who uses and maintains technical process of complex technological process installations. Later, with the development of information communication systems the operator ~ Operator already means the information-computer system of technical installations service – 2. Ein IT-System der Behandlung von den technischen Einrichtungen. In the present time the above-mentioned term obtained one more meaning – signs which input is connected with certain operations carrying out – 3. Zeichen, die angeben, nach welcher Operation es verknüpft werden soll (Charwat, 1994, p. 322). The presented semantic chain possesses the internal hyper-hyponymic relations which characteristics are found taking into account the chronology of the studied scientific knowledge field (Klyoster, 2015, p. 41).

Therefore, fragments under discussion correspond to the considered cognitive processes and allow coming to the conclusions about the contents actualized in them and in the knowledge text including them, also about conditions and motives of its explication. The fragment used as the unit of analysis possesses the properties of "minimal", that is having no excessive abundance, equal to one sentence as minimal communicative unit, and in this context "sufficient" for the overall reconstruction of the cognitive and pragmatic situation. It is possible to present short and rather complete contexts with synchronic interpretation of the term for the pragmatic purposes: to report a new meaning to the recipient: Biodiversität ist das Fachwort für die biologische Vielfalt; Layout: das ist das Fachwort für das Aussehen der Zeitung (Deutscher Wortschatz-Portal der Universität Leipzig).

The deficiency of context is evidently demonstrated at the presence in the fragment of the pronominal components anaphorically referring to the previous verbal context, which also has to be included in the analyzed terminological fragment. In the following examples there is insufficient information on which denotation or another term is discussed: US-Forscher haben für dieses Phänomen schon ein neues Fachwort erfunden: die "Cyberhondrie"; Freies Arbeiten heißt das Fachwort dazu; Ein anderer Terminus wäre "taktische Medien" oder allgemeiner "Internetaktivismus" (Deutscher Wortschatz-Portal der Universität Leipzig).

In a number of similar cases the minimum sufficient context, allowing defining the term exactly, can require including long texts excerpts or even a discursive event in general into the terminological fragment. The estimative characteristics of terms, probably contradicting their linguistic status, are introduced into the fragment by means of estimated predicates and attributes: Die Wissenschaft packt diesen Vorgang verschämt in den schillernden Terminus "Intertextualität" (Deutscher Wortschatz-Portal der Universität Leipzig).

The pragmatic abundance of the given statement, absolute disapproval of the mentioned term usage with the indistinct meaning without the additional context is obvious. The author's position in the form of the relation to the term and its definitions is revealed in a number of micro markers possessing "hidden pragmatics" such as: "It is enough to know what is hidden by the term...", "It is assumed to denote it a term", "Sometimes it is possible to use the term in more general meaning", "Do you consider this term being inappropriately defined?" etc. Similar statements are more characteristic for the oral professional discourse.

4. Conclusion

Thus, the method of fragmenting or fragmentation of the discourse/text approved itself positively in a number of various linguistic researches and can be successfully applied in the sphere of professional discourse to study the live functioning of special terminology as its indispensable element. In this case it allows to reveal the peculiarities of information structuring in the scientific discourse/text and to describe a variety of its cognitive-semantic and pragmatic properties.
References


Kerber, E. V. (2013). Lingvistscheskie osobennosti nemeckojazhnij ekonomicheskoj terminologii [The linguistic peculiarities of the German-language economic terminology]. Omsk: OmSTU.

Klyoster, A. M. (2013). Istoriija razvitija terminologii inzhenernoj psihologii (na materiale nemeckogo jazyka) [History of engineering psychology terminology development (based on the German language material)]. Filologicheskie nauki. Voprosy teorii i praktiki [Philological sciences. Issues of theory and praxis], 3-2 (21), 103-106.


Podnikova, E. V. (2013). Denotativnoe prostranstvo teksta v aspekte mezhsemioticheskoy transformacii: problema fragmentirovaniya [Denotate text space in the aspect of intersemiotic transformation: the problem of fragmentation]. Vestnik OmGU [Herald of OmSU], 11 (160), 78-83.


