European Proceedings of
Social and Behavioural Sciences
EpSBS

www.europeanproceedings.com

e-ISSN: 2357-1330

DOI: 10.15405/epsbs.2021.05.190

ISCKMC 2020

International Scientific Congress «KNOWLEDGE, MAN AND CIVILIZATION»

FRAME STRUCTURE OF TERM SYSTEMS WITHIN SECONDARY ENCYCLOPEDIC TEXT

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Abstract

The present article attempts to study the complex structural system of terminological units in the secondary scientific-encyclopedic text. Application of the methods of frame modeling let conclude that all available terminological units, regardless of their usual nature, can be combined into a single system with a frame hierarchical structure. The term system components organized by frame modeling form specific integrative structures that ensure the unity and recognition of cognitive components, as well as the formation of expert components in the process of obtaining, describing and understanding a particular area of the information and knowledge continuum. In the secondary scientific-encyclopedic texts under consideration, a special terminological space is created at the condition of immanent account of the recipient orientation. This space contributes to the integration of repeated expert and primary cognitive information, which provides a unified prognostic and modeling in the perception and interpretation of generalized content. The terms form the top of the concept frame (dominant verbalizer of basic characteristics). Further relevant features are presented in subframes (intelligently understandable terms). Variable terminals fix peripheral expert characteristics of the phenomenon (terminoids of various types). The process of active intensification of knowledge components creates the need to present expert informants. Predicting the marking of even a minor expert element makes it necessary to predict understanding and adequate interpretation of re-identified information.

Keywords: Terminological system, terminoid, frame organization, scientific-encyclopedic text, integration of codes, information and knowledge continuum

https://doi.org/10.15405/epsbs.2021.05.190
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Selection and peer-review under responsibility of the Organizing Committee of the conference
eISSN: 2357-1330

1. Introduction

The term is the main lexical and conceptual unit of any scientific sphere of human activity. In quantitative terms, terms predominate over other types of special vocabulary (nomenclature, professionalisms, professional jargon, etc.) in scientific texts. Scientific-encyclopedic texts are rich in terms that are common and known to most educated native speakers. Sometimes authors give a reference to an article for broadening the mind. Generalization, abstraction of the presentation is realized in the scientific style at the lexical level through the use of a large number of lexical units with an abstract meaning (abstract vocabulary). The scientific language coincides with the conceptual-logical language, the conceptual language acts as a more abstract one (Bally, 1961).

2. Problem Statement

As was already mentioned, almost all lexical units that are part of the narrative in encyclopedic texts are most often stylistically neutral and are used in normative syntactic constructions in direct, subject-logical meanings assigned to them by socially-conditioned experience. Vocabulary of the narrative in the book review may also include terms that, according to Alekseeva (2006), first of all, ensure objectivity of cognitive information at the word level. The use of terms in texts of the genres under consideration contributes to a more precise definition of a thematic conceptual sphere by recipients (Leychik, 2009). Thus, reading such a text even by a non-specialist will allow determining the specifics of the problems under consideration, general methodology, and approaches to description.

3. Research Questions

The main issues that are reflected in this study include 1) classification of terminological units that function in secondary texts of scientific-encyclopedic articles, 2) description of the frame structure of the term system of a particular branch of knowledge and identification of hierarchical or coordinated verbalizers of various degrees of explication of criterial features in a term, 3) description of the functional and explicative potential of terminoids of various types in scientific-encyclopedic texts, as well as the study of ways of their formation.

4. Purpose of the Study

The main purpose of this article is to describe and analyze the mechanisms of formation of the term system of secondary scientific-encyclopedic text as a special system of integration of language and cognitive codes, which forms a common space for interaction of expert and cognitive information.

5. Research Methods

The research is based on both the standard methods of component and contextual analysis of terminological units, and the method of frame and field modeling of individual term systems, as well as

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the methods of discourse analysis for describing the explicative capabilities of central and peripheral verbalizers in the explication of generalized content of a scientific-encyclopedic text of the subject area "linguistics".

6. Findings

Today, radically opposite points of view on the specifics of formation of term systems in a particular subject area co-exist in the scientific world. Some scholars emphasize the natural ways of terminological generation. They insist on the dominance of the processes of spontaneous formation of special terminologies, mostly incomplete, logically non-strict, consisting of pre-terms, quasi-terms, pseudo-terms (Leychik, 2009). These unstructured systems appear to be self-organizing and over time, increasing the frequency of use of the units that constitute them, the transition of individual components to productive models, methodically and gradually structured. In this very sense, they provide the conventional implementation of the principle of objectivity of cognitive information.

At the same time, representatives of the second approach believe that the term system is conventional in nature. In our research, we share the opinion that genesis of the term system is a complex process of replacing one system of coding and conventionalization by another: basic nuclear group of terms of a particular subject area are formed spontaneously (although not without regard to the existing productive models). However, in the process of scientific knowledge extension (and sometimes in the framework of approximation), terms going through all the stages of formation (pre-term, pseudo-term, etc.) are accepted by the community of experts artificially (by agreement with the principles of definitiveness, evidentiality and explicativeness). This distinguishes terms from ordinary lexemes.

The process of terminologisation is a way of fixing the components of the information-knowledge continuum not only at the stage of object-logical understanding of conceptual relations, but also within the framework of secondary re-objectification at the level of re-reflection, for example, when generating additional meanings in the texts of encyclopedias. This fact, as well as the way of forming terminological system in the contaminated process of interaction of spontaneity and conventionality, is confirmed in the works of some researchers into the problems of semantic analysis of the language of science. This terminated stratum of the language system is, in fact, a meta-language that defines meaning and the various shades of a single consistent verbal representation. Various forms of formal conventionalization (pre-term, quasi-term, pseudo-term) do not simply denote a list of specific objects in the scientific text, but explicit the stages of reflection in understanding the components of information-knowledge continuum. The scientific term, in contrast to other forms of verbal existence of a scientific conventionalized concept, not only denotes a special concept that already has a definition, it also relates to a system of similar concepts within the framework of well-defined paradigmatic relations, while pseudo-terms, quasi-terms and pre-terms have only relational reflexive connections in the system of scientific knowledge. In a broad sense, terminology, as a specific layer of vocabulary, does not only makes it possible to organize the information and knowledge space by means of systematizing, describing and communicating its components, but also to create conditions for preservation, re-conceptualization and secondary reproduction of existing scientific concepts and for accumulation of new knowledge on the basis of existing one (Latu & Gukosyants, 2019).

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Terminological fields within the framework of the used cognitive-pragmatic approach represent sets of frames – key cognitive concepts of the humanities and other spheres, reflecting elements of the professional worldview and system connections between them.

Components of the term system organized by the type of frame modeling are special semantic networks that structure the processes of obtaining, describing and understanding a particular area of information and knowledge continuum (in our case, the sphere of linguistic research). The multi-dimensional, comprehensive description achieved in this way rigidly determines the model of representation of knowledge components. In a three-dimensional frame model, the positions of certain components of the representation of cognitive information are clearly defined, and their status in the system of informative impact is fixed. As a result, the generalized meanings and knowledge components with the greatest potential are not leveled in the adapted representation, but on the contrary, they are accentuated and able to fix pragmatic focus.

Structural formation of a term determines the presence of a vertex that is explicated in the subsystem of the scientific language by a basic term, in fact, a concept frame that includes the basic determinative feature of all possible markers of the cognitive subspace of the name, for example, *complex word* as the name of a special type of derivatives. Explication of further features of the concept takes place in the form of subframes, which verbal markers are represented by narrower intelligible terms with the allocation of one or another concretizing criterion of *copulative composite*. In this case, terminals, i.e. units characterized by extreme variability and explicating expert components of knowledge (relation to a particular field of science, optional concretizers, etc.), are always filled with terminoids or pseudo-terms – *dvandva compound*. Modification of variable components of a terminoid cannot take into account only the recipient focus, i.e. when marking even a minor expert element, it is necessary to predict its understanding and adequate interpretation by a hypothetical recipient. This means that there are special conditions and norms for providing expert information (Latu & Gukosyants, 2019). Thus, it is the frame construction of the terminological field that is dominant when explicating the hierarchy of criteria features of the knowledge component implemented in the scientific text. In other words, generalized cognitive information schematically occupies upper levels of the hierarchy of categorization of the research object, and the subsequent ones are filled with less relevant and less recognizable criteria.

However, pseudo-terminological units that function in the language of science are strikingly different from pseudo-lexemes of ordinary, usual use in the fact that the component analysis reveals actually significant elements of these formations in contrast to empty explicators. Each of the elements of a terminoid denotes an object of actual or reflexive reality.

Such names always reflect expert opinion about the phenomenon objectified in speech, for example:

Discourse. Generic term for various types of text. The term has been used with various differences in meaning: connected speech (Harris 1952); the product of an interactive process in a sociocultural context (Pike 1954); performance (vs 'text' as a representation of the formal grammatical structure of discourse) (van Dijk 1974); talk (vs written prose, or 'text') (Cicourel 1975); conversational interaction (Coulthard 1977); 'language in context across all forms and modes' (Tannen 1981); and process (vs

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product, or 'text') (Brown and Yule 1983) (ethnography of speaking, functional grammar) (as cited in Bussmann, 2006).

Selection and accentuation of one or another feature of the scientific concept 'discourse' that is in the process of formation generates a set of terminoids that mark the cognitive information about the objectified phenomenon with their separate components (actual terms): *text, context, language*. Other elements contribute to explication of the integral criterion feature in its new status as the determinant of the entire phenomenon: *various types, connected, interactive process*.

It should be noted that there are special cognitive mechanisms for creating such markers in the secondary encyclopedic text. They are subject to dominant approximation and generalization strategies that operate in the process of ensuring recipient focus. Thus, pseudo-thermilogisation, or the use of everyday lexemes (*talk, performance*), and determinologisation of individual lexemes from other fields of science – sociology (*sociocultural*), cultural studies (*ethnography*), chemistry (*interaction*) are the most frequent cases.

Contamination represents a less frequent mechanism with a greater explicative potential in terms of creating an expert opinion. It makes it possible for a pseudo-determined element to acquire the status of a nomen objectifying the subject of a scientific message in a broader context. For example, *connected speech* emphasizes not only the discourse components of 'energy' and 'speech generation', but also with the element 'connectivity' objectified in the usage. At the same time, rejection of further specification creates wider possibilities for interpretation of this component – "connectivity of elements of different levels in speech" or "connection of speech production with extralinguistic factors".

One should distinguish between dynamic term systems and static ones. Nuclear markers of cognitive information in static systems cannot be changed and make up the entire space of interpretation, forming the actual scientific or educational text, clarifying the tasks and ways of mastering the components of the information and knowledge continuum. A dynamic scenario-type term system changes its structure quite freely, introducing peripheral verbalizers into the field of interpretation, which modify the "active" zones of structuring generalized knowledge. These active zones can shift conventional criteria to the terminal area and update expert information without eliminating basic cognitive components (Guselnikova, 2009).

For example: *MONGOLIAN POETICS. The written tradition of the Mongols is relatively young. Extant monuments allow dating back its origin to the 13th century. <...> For example, tuuzh (narration) was used for denoting prosaic and poetic, literary and epic works. The word shuleg (poems) denoted poetic speech, but there was no term for designating the prose. <...> This genre was designated by the Mongols as tovchoo (legend) and existed until the beginning of the 20th century in a modified form. Accordingly, they have already received other designations – tovch (legend), erikh (rosary), tuukh (history), tol (mirror). There are no clear differences between these terms; they all imply prose works on a historical theme* (Literary encyclopedia of terms and concepts, 2001).

In the case of applying a dynamic system of cognitive information verbalization in the encyclopedic text, the de-semantized folk etymological units *tuuzh, shuleg, tovchoo, erikh, tuukh, tol* are introduced as terminoids that clarify certain characteristics of the generalized basic concept of *Mongolian poetics*. Each of the terminal markers actualizes not only a separate genre variety in the form of a

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verbalizer created on the basis of the metaphorical transfer *erikh (rosary), tol (mirror)*, but also introduces colloquial linguoculturally marked elements into the scientific narrative that allow predicting interpretation of expert information by a hypothetical recipient. At the same time, the generalized content of the frame vertex, which explicates cognitive information in the commonly understood term 'Mongolian poetics', is not only preserved, but also supplemented with new characteristics.

In this aspect, the hierarchical structure of the generalized description is expanded not in the field, but in the fractal dynamic explication.

Letermedephilologiecomprend au sens large, etinitialement, l'intégralité des sciences littéraires et linguistiques <…> La philologie linguistiqueest, certes, pratiquée, maiselle n'a jamais été érigéeen système <…> La philologie littéraire a trop longtemps négligé les implicationslinguistiques ne serait-ceque du travail strictement editorial <…> Mettre en relief l'importance de la linguistique pour la philologie éditoriale et préciser les interactions entre l'analyse linguistique et l'éta-blissement des textes, contient pourtant un potentiel notable pour la philologiedes prochaines années (Polzin-Haumann & Schweickard, 2015).

In this example, the basic term (vertex) *philologie* does not form a hierarchical field in the explication of criteria less significant than the basic characteristics. It is broken up in the form of linguistic terms *linguistique, philologie littéraire, philologie éditoriale*, which are placed in a row by significance and actual recognition. Identification of hierarchically subordinate expert information in a growing fractal structure is carried out by introducing general scientific de-semanticized terms *implication, analyse*, which, having a more abstract meaning, implement a common approximation space. Determinologisation of general scientific abstract concepts in the process of leveling individual semantic components makes it possible to implement the verbalizer in a previously unfamiliar context and create a more saturated information field, as in the above example with the lexeme *pratiquée*, which implements the dual use of the contaminant *la philologie linguistique (linguistic philology)*. Thus, a certain context forms a metaphorical perception of the concept of "practice of linguistic philology" as the "practice of studying texts", which is the prerogative of philological analysis. However, the counter-predictive elements of the phrase *n'a jamais été érigée en système* still introduce the "system of language" into the sphere of consideration, although in an atypical for a scientific language form of litotes. It is amphibolic distortion in the framework of introducing expert information on negativization into the semantics of the term that creates a "semantic well", discredits direct perception and forces the recipient of an encyclopedic text to intentionally expand their space of cognition.

Another important way of marking cognitive information and introducing additional interpretive schemes is amalgamation (merging various well-established term units through the basic archiseme and creating a new generalized meaning). In the above example, there is a similar terminoid *la philologie linguistique*. The initial characteristic spaces of categorization are mixed and a variable space of expert opinion forms, which is designed to change the traditionally established views on the opposition of the described fields of knowledge. There are also more radical ways of amalgamation, involving the merging of bases or other structural components of the combined lexemes, while the glide of formal indicators ensures the "sliding" of new secondary components of the information-knowledge continuum into the established content space of the term. For example: *Semi-dialect. 1. Intermediate territorial-social*

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language education that arose in the conditions of interaction of territorial varieties of language (dialects) and destruction of the structure of interacting dialects (Dictionary of sociolinguistic terms, 2006).

We believe that every scientific text, regardless of the recipient focus, has a special system of integration of language and cognitive codes. This system forms a common space for interaction of individual expert and general cultural cognitive information, thus providing a single prognostics in the interpretation of generalized meaning and its components of cognitive information (Bredikhin & Serebryakova, 2016). The role of a centripetal factor is played by scientific worldview and background knowledge of a hypothetical recipient, determining both the author's and the reader's ideas about generalized abstract structures and possibilities of their realization. This base of apperception of the information-knowledge continuum in a secondary non-objective form opposes the naive individual perceptual understanding, which acts as a factor of entropy in the encyclopedic text.

7. Conclusion

The synergy of cognitive (knowledge) and expert (information) components is not a simple sum of individual knowledge elements, but the result of interaction and formation of a new secondary system. This integrative generalized system, structured in basic terms, works as a set of rules and regulations in the process of synthesizing more accessible forms of representation of the information and knowledge continuum.

The nucleus of a frame-based terminology system is represented by usual terms with a single definition that are not subject to contextual verification in the text; peripheral areas that contaminate cognitive and expert information create a label value only in the context of approximated content by introducing knowledge components. The whole set of terminological units creates a semantic framework for the implementation and interpretation of new information, and it is on this basis that the entire volume of primary research content necessary for communication is crystallized (regardless of the type of creation of new knowledge – objective or reflexive). This is a linking component of knowledge and information, cognitive and language codes, isolated as a result of intentional active study and objectification of the components of the information-knowledge continuum. The nodal structures of verbalized concepts organically combine deep and surface structures, semantics and form. The structural organization of the term system of encyclopedic linguistic dictionaries in their article-by-article representation has a field-fractal deployment – a hierarchical field organization of dominant features of a phenomenon and a horizontal subset of variable nominees.

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