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Research paper

The Role and Place of Terminological Word Combinations in the Terminological Systems of the German, Russian and Tatar Languages

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Abstract

The relevance of this article is due to the growing role of word combinations in enriching terminological vocabulary in the German, Russian and Tatar languages. In the center of terminological nomination there are terminological word combinations, which can be interpreted by a more complex structure of terms of a certain professional sphere and concepts in the intellectual activity of professionals. Terminological word combinations allow clarifying the available concept. Terminological word combinations appear at later periods of development of terminological systems. Terms – word combinations are considered to be the most productive way of nominating concepts that undergo changes over time and can be simultaneously used as abbreviations. Terminological word combinations are different from free word combinations and phraseological units. The purpose of the article is to describe the features of a terminological word combination.

In addition, the article describes productive models of the formation of terminological word combinations in the German, Russian and Tatar languages. All possible structural types can be combined into substantive-substantive and attributive-substantive word combinations. The materials of the article can be useful in teaching the German, Russian and Tatar languages, as well as for courses in comparative typology and lexicology. The results can also be used in the study of particular terminological systems and in the description of the professional language personality.

Keywords: *linguistics, terminological system, term, terminological word combination, model of formation.*

1. Introduction

"Language and its various structures are analyzed as the result of action needs in human communication" [1]. The widespread use of terminological vocabulary is a peculiarity of professional communication of specialists in various fields of science, technology and production. All terminological units performing functions of nominating and expressing a special concept of a particular area of knowledge form a terminological system. Traditionally, it is customary to distinguish between the following types of terms: terms-words and terms – word combinations.

Recognition of a word combination as a term is currently an indisputable fact. "Belonging of a terminological unit to the semiotic language system is confirmed by the fact that a term may be a word or word combination and have such semantic and formal features of language units as denotative, significative, syntagmatic, categorical and grammatical meanings" [2]. Any terminological system includes both single-word linguistic means of nomination and complex structural formations. This is due to the desire for the precision of the notion denoted. Danilenko notes that terms – word combinations are most informative, because "they can be used to express the greatest number of necessary features of a concept" [3]. The appearance of compound word combinations in terminological systems is associated with late periods of the formation of a particular terminological system. With the development of science and technology at the time when a part of the terminological system has already been formed, there is a need to clarify some terms in this terminological system for full and precise expression of emerging concepts. The cognitive function of science is related to the creative, nominative and derivative-metalinguistic aspectuality of the widest range [4]. Cumbersomeness and approximation to definitions are disadvantages of such nominative units [3].

The formation of a terminological word combination is as follows: a term – name of a broad concept – is added with the definition narrowing the meaning of the term [5]. With the emergence of varieties of a concept, a sufficient number of limiting word combinations designed to serve as a name of these varieties can be easily selected. Thus, a dominant word in word combinations often expresses a generic term, while a dependent word expresses a specific term, i.e. the generic relation is specified through a specific term. For example: *konsolidierte Bilanz, aktive Bilanz, totale Bilanz, zussammengefaßte Bilanz, oborotnyi balans, balans oborudovaniya, eilenesh balans, zhikhazlar balansy, predpriyatienen tep fondlary balansy.*

2. Materials and Methods

Economic terminological units of the German, Russian and Tatar languages, namely few-word terms of economic terminology, served as a material for this study.

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In the analyzed area, the total number of compared terms was 14,500 nominative units. The analysis of a large number of units is necessary to ensure the reliability and objectivity of research results. The nominative units of the Tatar and Russian languages of the "Russian-Tatar Dictionary of Economic Terms" edited by Gazizova [6], for which the equivalents of the German language from the Gabler Wirtschaftslexikon dictionary were selected, served as a source material of the study.

The following methods and techniques have been used in the work: a descriptive method, a logical-linguistic method, a word-formative analysis for the identification of the ways of nominating single-word units; a method for the qualification of syntactic forms through the methods of their morphological expression; a comparative method for determining similarities and differences of the units that make up the terminological system, as well as for considering the ways of their implementation in multistructural languages; a statistical method for determining the number of terminological units in the composition of different groups and subgroups. These methods are implemented based on the principles of synchronism, systemacity, comparability, the priority of intralinguistic description before interlingual, terminological adequacy.

3. Results

Terminological word combinations are a rather productive way of enriching terminological vocabulary in the German, Russian and Tatar languages. The comparison of terminological combinations with its close linguistic formations in the form of free word combinations and phraseological units makes it possible to identify the language specificity of this nominative unit and to consider it as an independent category.

Terminological word combinations in compared languages are formed by substantive-substantive and attributive-substantive types.

A substantive-substantive type is characteristic for three languages and represented by the **S+S** model. This structural type is especially productive in the Tatar language, which is explained by the type of language. Relationships between components in this structure differ due to the features of each language. In the German and Russian languages, government is the main way of connection of components, while in Tatar the connection of components occurs on izafet schemes, in which the adjacency and strict sequence order of components are important.

Attributive-substantive models of two-component terminological word combinations are characteristic for the German, Russian and Tatar languages. In compared languages, attributive-substantive models are represented by three types of constructions: **A+S, P+S, N+S,** among which **A+S** is the most productive type.

4. Discussion

The clarification of the properties of a scientific concept results in the appearance of fixed word combinations, which consist of two or more stems and are formed on the models used in the language for the formation of a free word combination. These nominative units with a complex formal structure express the most semantically complicated specific concepts, fixing their most significant features.

The nomination of a new concept with a compound term has the difference in the language of science. The reflection of reality in the process of scientific cognition occurs in the form of a concept. A concept is both a result and a tool of scientific knowledge. General and essentially distinctive properties of objects and phenomena of the surrounding reality are reflected in a concept and make up its content. A concept is fixed in the language in the form of a word or word combination, the structure of which divides the concept, while separate components specify the features that make up its content. Before a concept becomes widely known in a special field, it is more convenient to express it with a word combination, since it denotes a new phenomenon more precisely and does not allow polysemy. A terminological word combination can be replaced by a short term over time. The more developed a particular area of science and technology, the more conceptual framework it has. Thus, terms – word combinations are interpreted as the most productive units of nomination of scientific-technical concepts in the majority of terminological systems of the compared languages, since they express a number of differentiating features of a more complex concept, thus reflect genus-species and other paradigmatic relations and ensure the unambiguousness and systemacity of terminological series.

The doctrine of a terminological word combination has its own history of development, which is currently not completed. On the one hand, this is due to the ambiguous definition of a term and its properties and, on the other hand, the study of terminological word combinations at the theoretical level inevitably leads to the comparative analysis of a terminological word combination, a free word combination and a phraseological unit. Such analysis allows getting a complete picture of a compound term, its features and functioning. However, it should be noted that the doctrine of a free word combination and a phraseological unit is characterized by a broad range of views [7].

Along with the features that bring together a terminological word combination with free word combinations and phraseological units, at the same time there are distinctive features that make it possible to draw a clear boundary among these linguistic units.

The meaning of a free word combination is composed of the meanings of its components within the structural-semantic model, based on which it is formed. A terminological word combination is different from a free word combination by stability, fixity and fixed order of its components.

The next distinctive feature of terminological word combinations in comparison with free combinations is that free word combinations act as names of objects, processes, qualities, properties, etc. They perform a nominative function, while terminological word combinations perform both nominative and definitive functions.

The parallel structure in the form of abbreviations is one of the features that distinguish a terminological word combination from a free word combination. Such abbreviations act in the language as an independent nominative unit along with corresponding developed analogues and are often more commonly used than their full equivalents. The latter provision is typical of the economic terminological system of the German and Russian languages: *GmBH – Gesellschaft mit beschränkter Haftung, SKV – svobodno konvertiruemaya valyuta.*

As already mentioned above, in the linguistic literature there is an opinion that terminological word combinations should be considered as a separate group in the phraseological system. Some linguists distinguish groups of phraseological terms, in which one of the components has a figurative meaning, considering that such word combinations do not reflect a system of terminological concepts. However, such word combinations reflect a terminological notion not at the lexical level. Metaphorization underlying the formation of such terms is not taken into account by specialists and figurativeness matters only at the beginning of the formation of such terms. In the long-term use of such word combination, a logical scheme of construction of a terminological word combination and the interrelation of corresponding structures become relevant: **pure competition** (*lauterer Wettbewerb*, *saf konkurentsiya, chistaya konkurentsiya*) is "a situation when each firm has a small market share, all firms produce homogeneous products using similar manufacturing processes, and each firm has perfect information. It is necessary that there is freedom of access, etc." [8].

Following Fleischer, we distinguish five distinctive features of terminological units in comparison with phraseological word combinations.

Firstly, terms are functional and the structure of the formant is not important for them: terminological units exist in the form of words and word combinations.

Secondly, terms are the primary structure; phraseological units are formed on the already existing primary model.

Thirdly, the basic composition of terms is fixed in special scientific systems, phraseological units – in different groups of commonly used vocabulary.

Fourthly, terms are interlinguistic in nature; they can literally be translated into foreign languages.

Fifthly, terms are represented mainly by nominal word combinations, phraseological units are often formed in the combination of a verb and an adjective [9].

The fact that a term expresses a specific concept and is therefore independent of the context is a fundamental difference between terminological word combinations and phraseological units. Phraseological units name an object indirectly. An integrated terminological name can take determining elements.

Besides, phraseological units in a figurative meaning can be created with the use of a terminological word combination. This fact proves that these word combinations, as linguistic units, are of different nature. Phraseological units can be created on the model, by which terms are formed, as well as the structures characteristic of the entire vocabulary of a language.

Each language is served by its strictly specific set of structural-semantic models of word combinations; its type can be determined by a two-component word combination. Multicomponent word combinations are the result of the specification of the main or dependent component of a two-component word combination.

Nominal terminological word combinations are the most common types of word combinations in the German, Russian and Tatar languages. The structure of two-component nominal word combinations in the studied languages is not homogeneous.

All structural types can be combined into substantive-substantive word combinations represented by the **S+S** pattern and attributive-substantive word combinations formed on the following models: **A+S, P1+S, P2+S, N+S** (Table 1).

Table 1: Structural types of terms – word combinations in the German, Russian and Tatar languages

	Substantive-substantive types	Attributive-substantive types			
	S+S	**A+S**	**P1+S**	**P2+ S**	**N+S**
German	9.6%	80.7%	4.2%	5.5%	-
Russian	19.3%	79.7%	0.5%	0.5%	-
Tatar	61.4%	36.9%	1.64%	-	0.06%

4.1. Substantive-Substantive Models:

Substantive-substantive terms – word combinations are most typical of the Tatar language, which is explained by the language structure and the wide use of izafet models, as in the Turkic languages in general.

As is known, the components of substantive word combinations are connected by the relationship of subordination, they consist of a dependent and defining word. Some noun terms can only act as a dependent or defining word. However, there are few. A greater number of noun terms perform both functions. For example: *byudzhet chygymnary – chygymnar smetasy, tovar bazary – bazar kene, salym inspektsiyase – kerem salymy, khuzhalyk kileshue – fermer khuzhalygy, depozit banky – bank depozity, kapital obrashcheniya – proizvodstvo kapitala, nalog na reklamu – sbor nalogov, pribyl' predpriyatiya – peremeshchenie pribyli, tsena litsenzii – valyuta tseny.*

In German, nominal terminological word combinations are formed as a result of the subordination of a dependent word to a defining word by means of the genitive case: *Umlaufperiode des Kapitals, Liberalisierung des Außenhandels, Ausschaltung von Stillstandzeiten, Grundlage der Buchführung, Lizensierung der Banktätigkeit.*

Besides, nominal word combinations in German are formed with the participation of prepositions **an, ausserhalb, gegen, in, innerhalb, nach, ohne, von**: *Einsparung an Selbstkosten, ausserhalb der Bilanz, gegen Zahlung, Entlohnung im Gruppenstücklohn, innerhalb der Industrie, nach Gewicht ohne Akzept, in Zahlungsverzug, Finanzierung von Exportgeschäften, Ausgabe von Wertpapiere.*

Substantive-substantive word combinations of the Russian language are represented by the models: **S+S** and **S+pr+S**: *byudzhet razvitiya, realizatsiya pribyli, investitsiya kapitala, srok uplaty, spisanie dolga, upravlenie proizvodstvom, renta produktami, upravlenie zapasami.*

The model **S+pr+S** is implemented by means of various prepositions: **bez, v, do, za, k, na, o, ot, po, pri, s**: *prodazha bez pokrytiya, sdacha v arendu, pokrytie do otgruzki, oplata za fondy, veksel' k polucheniyu, raskhody na potreblenie, ob"yavlenie o bankrotstve, strakhovanie ot bezrabotitsy, stavka po vekselyam, skidka pri poteryakh.*

4.2. Attributive-Substantive Models

Two-component attributive-substantive terminological word combinations are represented in compared languages by the following structural types: **A+S, P1+S, P2+S, N+S.**

The main means of connection in the formation of such terminological word combinations in the Tatar language is the obligatory adjacency, a dependent word is placed before a noun: *tyshky burych, songy salym, echke seude, tulaem tekdimner, tulaem tabysh.*

Components of attributive-substantive word combinations of the Russian language are interrelated in number, gender and case: *balansovaya pribyl', kommercheskoe predlozhenie, roznichnaya skidka, oborotnyi balans, valyutnyi kliring.*

In addition, by means of agreement, a connection is implemented between the components of attributive word combinations of the German language. Their significant number in the terminology under study, in comparison with the other structural type – the formation of complex terms -words, can be explained by the fact that it is simpler to define a dependent and defining word in an attributive-substantive word combination than in a compound word. The relative semantic independence of components of word combinations prevents the development of polysemy: *abfallose Technologie, ambulanter Handel, absoluter Zuwachs, kommerzieller Erfolg, kurzfristige Abdeckung, erster Vorschuß.*

As another reason explaining the productivity of the attributive-substantive type of word combinations in the formation of economic terms, we can cite the following: for the denotation of the main concept at the initial stage, preference is given to the stem composition, which, according to Levkovskaya, is due to a set of "semantic-structural factors" of the German language [10]. However, a compound word becomes a denotation of a generic concept over time and a terminological word combination is applied in the formation of a specific concept. All the structural-semantic factors that contributed to the formation of a compound word are opposed by the desire for clarity and transparency of the structure of the term: *analytische Rechnungsführung, individuelles Pensionskonto, aktive Zahlungsbilanz, bargeldloser Zahlungsverkehr.*

A type, in which a participle acts as a dependent component, is the next typological model of the formation of attributive-substantive word combinations in the German, Russian and Tatar languages: *führende Fertigungsmethode, gleitende Planungsgrundsätze, fertiggestellte Produktion, gesteuerter Preis, konkludierte Handlung, tekushchie zapasy, investiruyushchie bankiry, funktsioniruyushchii kapital, skol'zyashchaya tsena, neoblagaemyi oborot, berleshterelgen kapital, kileshken beya, garantiyalengen veksel', blokadalangan schet*.

5. Conclusion

Thus, the nomination in the economy of the German, Russian, Tatar languages is characterized by the wide use of terms – word combinations. In specification of a concept, clarifying elements are added to a simple (single-word) term, thus forming specific correlates of the original concept, i.e. terminological word combinations, compound or few-word terms. As can be seen from the above research data, in the formation of economic terms a syntactic method is the most productive in Russian (62.5%) and Tatar (64%); in German this method is also rather productive (23%). The productivity of this method of term formation can be explained by the fact that this method allows creating terminological units, which can express more precise concepts (in comparison with terms-words), since a greater number of determinant components allows specifying the original concept and, besides, excluding polysemy in terminology.

The results and methodology of the study can be useful in the analysis of terminological word combinations of other terminologies and in the comprehensive study of the professional language personality, which involves the study of the complex structure of the professional activity, which is reflected in specialists' minds in the form of the most complex concepts, and for the implementation of which in the language the nomination of a more complex detailed structure (namely terminological word combinations) is required.

References

[1] Ehlich K, (2014), Text and Discourse. In: Angermuller J, Maingueneau D & Wodak R (Eds.), (2014), *The Discourse Studies Reader: Main Currents in Theory and Analysis*. John Benjamins Publishing Company, pp: 282-285.

[2] Bagana Zh & Taranova EN, (2016), *Terminoobrazovanie v yazyke nauki* [Term Formation in the Language of Science], Moscow: SIC INFRA-M.

[3] Danilenko VP, (1971), Leksiko-semanticheskie i grammaticheskie osobennosti slov-terminov [Lexico-Semantic and Grammatical Features of Terms-words], *Issledovaniya po russkoi terminologii* [Research on Russian Terminology], Moscow: Nauka, pp: 7-67.

[4] Buyanova LYu, (2012), *Termin kak edinitsa logosa* [Term as a Unit of the Logo], Moscow: FLINTA: Nauka.

[5] Wüster E, (1974), Die allgemeine Terminologielehre – ein Grenzgebiet zwischen Sprachwissenschaft, Logik, Ontologie, Informatik und Sachwissenschaften. *Linguistics*, 12(119), pp: 61-106.

[6] Gazizova FM, (1999), *Russian-Tatar Dictionary of Economic Terms*. Kazan: Iz-vo Rannur.

[7] Steyer K, (2013), *Usuelle Wortverbindungen. Zentrale Muster des Sprachgebrauchs aus korpusanalytischer Sicht*. Tübingen: Narr Francke Attempto Verlag.

[8] Pearce DW, (1992), *The Macmillan Dictionary of Modern Economics*. London: Macmillan Press.

[9] Fleischer W, (1996), Phraseologische, terminologische und onymische Wortgruppen als Nominationseinheiten. In: Knobloch C & Schaeder B (Eds.), (1996), *Nomination – fachsprachlich und gemeinsprachlich*, Opladen, pp: 147-170.

[10] Levkovskaya KA, (1960), *Noun word formation in modern German socio-political terminology and the adjacent lexicology*. Akad. Nauk SSSR.