The equivalence of the Russian and English phraseological terms in the field of construction and architecture

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Abstract. The authors of the article analyze the Russian and English phraseological terms in the field of construction and architecture and reveal the absolutely identical, full and partial phraseological equivalents, phraseological analogues, calques and half-calques. It helps to identify and describe the linguistic peculiarities of this sphere of knowledge in the process of comparative analysis. The absolutely identical phraseological equivalence is shown in the examples of compared meanings of phraseological units, their style, structure, image and grammatical form. Absolute phraseological equivalents are distinguished when phraseological units coincide semantically, stylistically and lexically, and their partial coincidence is found on the morphological level. Partial phraseological equivalents of scientific and technical terms in the field of construction and architecture coincide with Russian phraseological units semantically, stylistically and lexically in some cases. Phraseological analogues can be singled out when phraseological units coincide in meaning and style, but differ in their image.

Key words: construction, architecture, scientific and technical, phraseological term, equivalence, phraseological units.

1 Introduction
The problem of the equivalence is one of the most important aspects in the comparative study of lexicology and phraseology. Equivalence is understood as the correspondence of meanings of language units of two or more languages, i.e. the correspondence of language units in the meanings fixed in the compared language systems. When the cross-language equivalence is mentioned then the correspondence of the nuclear and peripheral semantic components of the language units in the compared languages is taken into consideration. Linguists believe that comparative research can become an effective way to solve translation problems and define the types of interlingual correlation of phraseological units of the compared languages [1].

“Contrastive semantic analysis is a useful way of understanding the evolution of legal terminology” [2]. It can be considered as the process of analysing different languages and comparing the languages at different levels. G.K. Gizatova [3], A. Katherine [4], C.M. Blanco [5], J. Davila-Montes [6] rely on comparative speech and stylistics using corpus linguistics methodology in contrastive semantic analysis. Corpora are “even more important in the area of languages for specific purposes” [7].

The cross-language phraseological equivalence requires close attention and the sense of matter is revealed in the researches of H. Zho [8], M.A. Grigorieva [9], E.M. Solodukho, V. Vivaldi [10], A. Mykowiecka [11], L.K. Bayramova [12], P. Gamallo [13], A. Krzyzanowska [14], L. Sasu [15], E.M. Ponti [16], A. Rosenbachn [17], J. Yuan [18].
A.D. Reichstein regards the cross-language equivalence as the interlingual correlation of specific phraseological units; i.e. the equivalence (similarity) of their semantic and formal semantic organization, the absence of the interlingual correlation means their absolute difference. In contradistinction to “adequency” [19], the relations of absolute equivalence and absolute difference are the two polar types of interlingual correspondence. It should be mentioned that the average equivalence exists as well. “Some traditional methods would begin with an expression in one language and proceed to an equivalent expression in the other language. Thanks to the metalanguage method, different languages can be treated as equals in descriptions” [20].

The presented study addresses the cross-language semantic equivalence of the phraseological terms (referred to below as PT) in the field of construction and architecture in the Russian and English languages.

The phraseological equivalents under study are characterized by correspondence or discrepancy on the semantic, stylistic, lexical and morphological levels. Some discrepancies are due to the particularities of the grammatical and syntactic systems of the compared languages and do not affect the completeness of the equivalence of PTs [21-24]. Another group of discrepancies is associated with the peculiarity of the thinking process of people belonging to different nations using the grammatical categories that are available in both compared languages. It leads to the appearance of the partial equivalence of the PTs in compared languages. Therefore, a certain lack of equivalence in the grammatical and syntactic image of PTs, which depends on the specifics of languages of different systems, does not give reason to consider such equivalents as partial and should, in our opinion, be considered as absolute phraseological equivalents [25-30].

2 Materials and methods

2.1 Materials
The presented research has been carried out with the help of the continuous sampling and partial selection used for the study of the vocabulary entries from the scientific and technical dictionaries in the field of construction and architecture. The authors have analyzed 963 PTs of the Russian scientific and technical terminology and 875 PTs of the English terminology in the field of construction and architecture. The following mono- and bilingual dictionaries have been chosen as the source of data for study: Cambridge Dictionary, Comprehensive Russian-English scientific and technical dictionary, Oxford Illustrated Dictionary, Complete English-Russian Polytechnical Dictionary (M.V. Adamchick), Complete English-Russian Dictionary (V.K. Müller), English-Russian Phraseological Dictionary (P.P. Lytvinov), Russian Language Explanatory Dictionary (S.I. Ozhegov), Terms of Russian Architectural Heritage (V.I. Pluzhnikov), Visual Dictionary of Architectural Styles (O. Hopkins).

2.2 Research methods
The research represents the comparative and typological description of the data based on the analysis and synthesis of the major achievements of the modern linguistics and theory of phraseology. The continuous sampling and partial selection methods applied for the study of PTs from technical dictionaries and dictionaries of architectural terms have helped to form the experimental part of phraseology in the Russian and English scientific and technical terminology. The component analysis has been used in the study of structure of the investigated PTs. The authors have used the method of equivalent comparison of PTs as well.

3 Results
The authors have suggested a new way of classification of Russian and English scientific and technical terms in the field of construction and architecture. PTs found in the above mentioned terminologies belong to different types of equivalence, and require a separate classification. As a part of the study the following types of phraseological equivalents of Russian and English languages in the field of
construction and architecture have been singled out: absolutely identical, full and partial phraseological equivalents, phraseological analogues, calques and half-calques.

4 Discussion

4.1 Absolutely identical phraseological equivalents
There have been singled out 220 absolutely identical phraseological equivalents in the Russian and English scientific and technical terminology in the field of construction and architecture. For example, Russian PT poetapnoye stroitel’stvo (incremental/phased construction) and English PT incremental construction; Russian PT konus drobilki (crushing cone) and English PT crushing cone; Russian PT iskusstvenny kamen’ (artificial stone) and English PT artificial stone; Russian PT kleyevoye soyedineniye (glued connection) and English PT glued connection.

Let us show the comparison of the above mentioned PTs. Firstly, it is obvious that their meanings are similar. Secondly, when comparing their literal meaning the absolute equivalence of their components is observed: poetapnoye (incremental) – incremental, stroitel’stvo (construction) – construction; konus (cone) – cone, crushing – drobilka (crushing), iskusstvenny (artificial) – artificial, kamen’ (stone) – stone; glued – kleyevoye (glued), connection – soyedineniye (connection). The same grammatical form is elicited: Participle + Noun, Noun + Noun, Adjective + Noun. Thus, the PTs are absolutely identical as there is the exact match observed in their semantics, style, lexical composition, grammatical forms and syntactic structure.

4.2 Full phraseological equivalents
The second type of the phraseological equivalence found out by the authors is full phraseological equivalence. 313 cases of full phraseological equivalence are identified in the Russian and English scientific and technical terminology in the field of construction and architecture.

For example, Russian opornaya balka (bearing beam) and English bearing beam; Russian sv’azuyuschaya balka (bond beam) and English bond beam. These PTs have one meaning which coincide with each other. On one hand, when comparing their literal meaning the exact match between their lexical components is observed: opornaya (bearing) – bearing, sv’azuyuschaya (bond) – bond and balka (beam) – beam. On the other hand, they differ on the morphological level. In English, there
is no category of gender. Russian opornaya balka (bearing beam) and English bearing beam, Russian svazuyuschaya balka (bond beam) and the English bond beam are full equivalents. An English synonym to the PT bearing beam is a supporting beam. The last is also the full equivalent to Russian opornaya balka (bearing beam) as their meanings, image base, component and grammatical structure.

The following PTs can be considered the full phraseological equivalents of terms in the field of construction: Russian stroitel’niye ograzhdeniya (construction railings) and English construction railings; Russian kolennaya stena (knee wall) and English knee wall. Firstly, it should be noted that the compared PTs have the same meaning. Secondly, when comparing their components there is the exact match on the lexical level and the partial match on the morphological one: railings – ograzhdeniya (railings), stroitel’niye (construction) – construction; kolennaya (knee) – knee, wall – stena (wall).

4.3 Partial phraseological equivalents

The group of partial phraseological equivalents (552 PTs) is the third type of phraseological equivalence found in the study of the Russian and English phraseological terms in the field of construction and architecture.

For example, a partial equivalent for English air pocket is Russian vozduzhny puzyr’ (air bubble). Their syntactic structure in Russian is Adjective + Noun, and in English – Noun + Noun. Both PTs are formed on the base of the same image. The component parts puzyr’ (bubble) and pocket as lexical units have different meanings. It defines the difference between these PTs and the reason to consider them as partial phraseological units.

The following PTs are also distinguished as partial phraseological equivalents of scientific and technical terms: Russian izol’atsionny sloy (insulating layer) and English insulating barriers; Russian vyvavnivayuschy sterezhen’ (leveling rod) and English aligning arbour. Their significative and denotative meanings, functional, stylistic and grammar structures coincide. Although these PTs are characterized by the differences in the component parts of identical conceptual semantics: “layer” in Russian and “barriers” in English; “rod” in the Russian language and “arbour” in English.

4.4 Phraseological analogues

English spun concrete and Russian beton, uplotnenny tsentrofigururovaniem (spun concrete) can be considered as phraseological analogues (497 PTs). Though the component composition of PTs is different, with partial coincidence of one component part (beton and concrete), and PTs do not coincide in their structural and grammatical forms, they are similar in meaning. In Russian PT oporny bashmack (support shoe) and English PT elephant foot there is complete difference on the lexical level, but the coincidence on the morphological and grammatical levels is observed. Thus, the PTs are the phraseological analogues.

The above mentioned examples show that one phraseological unit coincides with another. Under the term “phraseological analogues” we understand a phraseological unit which coincides with the lexeme in another language. Many Russian scientific and technical phraseological terms in the field of construction and architecture correspond with the English phraseological terms, and vice versa.

Here are the examples of phraseological analogues in construction: English PT reinforced concrete and Russian PT zhelezobeton (reinforced concrete); English flying buttress and Russian kontrofors (flying buttress); English hydropower construction work and Russian gidroenergostroitel’stvo (hydropower construction work); English fluid mechanics and Russian gidromekhanika (fluid mechanics); English electrical installation and Russian electroustanovka (electrical installation); English half-moon window and Russian l’unet (lunette).

A lexical unit of the English language can be an analogue to the Russian PT as well. Let us consider the following examples: Russian bord’urny kamen’ (curbstone) and English curbstone; Russian udarnaya obrabotka kamm’a (dabbing) and English dabbing; Russian oporny vystup (ear) and English ear; Russian frontonnaya stena k soxednemu domu (gable) and English gable; Russian
chetyr'ekhugol'ny dvor, okruzhenny kolonnami (quadrangle) and English quadrangle; Russian derev'annaya stenovaya panel' (wainscot) and English wainscot.

Some phraseological units which differ in their range of meaning are considered to be phraseological analogues in the scientific and technical terminology in the field of construction and architecture. The differences in the semantic scope can be both quantitative and qualitative. These differences are expressed in the discrepancy of a separate meaning of a polysemantic phraseological unit in different languages.

For example, Russian oporny block (reference block) be translated into English as bearing pulley, support block, reference block; English bearing pulley has two meanings in the Russian language oporny block (reference block) and podshypnik shkiva (pulley bearing). These PTs have one similar meaning Russian oporny block (reference block) and English reference block, and two different ones. We can conclude that English PT bearing pulley and Russian PT oporny block (reference block) are phraseological analogues in the scientific and technical terminology in the field of construction.

4.5 Phraseological calques and half-calques
Calques (110 PTs) and half-calques (147 PTs) can be considered as the fifth and sixth types of phraseological equivalence of the Russian and English PTs in the field of construction and architecture. Let us note the examples of phraseological calques: English relief sculpture and Russian reliefnaya scul'ptura (relief sculpture); English architectural style and Russian arkhitekturny stil’ (architectural style); English block construction and Russian konstruktsiya blochnaya (block construction); English zigzag ornament and Russian zigzagooobrazny ornament (zigzag ornament).

Further the examples of half-calques are presented (with only one member borrowed from another language): English ribbed vault and Russian rebristy svod (ribbed vault); English isolating partition and Russian izoliruyuschaya peregorodka (insulating partition); English oblique projection and Russian naklonnaya pro’ektsiya (oblique projection).

5 Conclusion
The presented research has given the authors opportunity to accomplish a systematic and comparative description of the English and Russian scientific and technical phraseological terms in the field of construction and architecture. Thus, absolutely identical, full and partial phraseological equivalents, phraseological analogues, calques and half-calques have been distinguished among the above mentioned phraseological terms of Russian and English languages. The examples of absolutely identical phraseological equivalence reveal the total coincidence of all the meanings of the compared languages, component structure, image and grammatical form. The full phraseological equivalents are distinguished when phraseological units coincide on the semantic, stylistic, lexical and partially morphological levels. The partial phraseological equivalents of the Russian and English phraseological terms in the field of construction and architecture coincide semantically, stylistically and partially lexically. The phraseological analogues are found when compared phraseological units coincide in their meaning and style but differ in image. When Russian and English scientific and technical phraseological terms in the field of construction and architecture are taken into consideration, the lexical units of one language may correspond to the lexical units of another language and vice versa.

The authors have proposed a new classification of the Russian and English scientific and technical phraseological terms in the field of construction and architecture, which can be applied in lexicology, lexicography, phraseology and translation theory.

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