BUILDING THE LEXICON OF LOCOMOTIVES: A LOOK AT SEMANTIC METHODS IN RAILWAY TERMINOLOGY

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Annotatsiya. Ushbu maqolada temir yo'l terminologiyasini yaratishda leksik-semantik atama hosil qilish, ba'zi muhim atama xususiyatlarini va uning paydo bo'lishi va ishlashining jihatlari hamda terminlar va oddiy so'zlar o'rtasidagi morfologik va semantik farqlar muhokama qilinadi. Mazkur maqolada asosiy e'tibor kundalik hayotdagi so'zlar orqali temir yo'l terminlari yaratilishi jarayonida ularning o'xshatish xususiyati va vazifa bajarish xususiyatlarida metaforaning nomoyon bo'lishi misollar orqali yoritib berilgan. Tadqiqot temir yo'l bilan bog'liq matnlarni tahlil qilish uchun korpus lingvistikasidan foydalanadi. Maqola metafora va metonimiyaga asoslanib, temir yo'l terminologiyasini shakllantirishga hamda ular o'rtasidagi yashirin aloqalarni aniqlashga qaratilgan. Ushbu tadqiqotning dolzarbligi uning til, texnologiya va madaniyat o'rtasidagi murakkab munosabatlarni tushunishga qo'shgan hissasidadir.

Tayanch so'zlar: temir yo'l terminologiyasi, semantik usullar, metafora, metonimiya, temir yo'l texnologiyasi, korpus lingvistika.

Аннотация. В данной статье исследуются семантические методы, используемые при формировании железнодорожной терминологии. Основное внимание уделяется тому, как повседневные слова преобразуются для создания уникального лексикона. В исследовании применяется корпусная лингвистика для анализа выбора слов и паттернов в текстах, связанных с железнодорожным транспортом. Исследование, анализируя метафоры и метонимию, нацелено на выявление скрытых связей, формирующих железнодорожную терминологию.

Актуальность данного исследования заключается в его вкладе в понимание сложных взаимосвязей между языком, технологией и культурой. Оно подчеркивает непрерывное развитие языка наряду с технологическим прогрессом и креативность, вовлеченную в формирование специализированного лексикона.

Ключевые слова: железнодорожная терминология, семантические методы, метафоризация, метонимия, формирование языка, национальное сознание, железнодорожное строительство.

Abstract. This article investigates the semantic methods used to construct railway terminology. The focus is on how everyday words are transformed to create a unique lexicon. The study employs corpus linguistics to analyze word choices and patterns within railway-related texts. By examining metaphors and metonymy, the research aims to reveal the hidden connections shaping railway terminology.

The actuality of this research lies in its contribution to understanding the intricate relationship between language, technology, and culture. It highlights the ongoing evolution of language alongside technological progress and the creativity involved in shaping a specialized lexicon.

Keywords: *railway terminology, semantic methods, metaphorization, metonymy, language formation, national consciousness, railway engineering.*

Semantic methods of word formation are based on reinterpreting the original word, resulting in a new meaning. Therefore, the original and new words, despite their complete external (primarily phonetic) similarity, differ not only in meaning but also in morphological and grammatical features. Words formed semantically often differ in expressive-stylistic coloring and imagery due to the fact that they arise as a result of metonymic and metaphoric transfers through associative and connotative thinking.

The specificity of the semantic method of term formation, unlike general literary semantic word formation, manifests in that semantic formations usually result from the prolonged evolution of the word, typically culminating in the formation of homonymous words. In terminological formation, existing words are adapted in a short period of time.

Domestic terminologist D.S. Lotte [2:85] highlights the following advantages of terms formed by semantic means: brevity, precision, and clarity. However, according to his opinion, such formations also possess negative aspects: these terms often do not reflect or even obscure and distort the classificatory connections that exist between corresponding concepts. Other shortcomings of terms formed by semantic means are also noted:

a) terms are in homonymous relationships with commonly used words;

b) analogies, characteristic of semantic term formation, create conditions for the expressiveness and emotionality of the term, which should not be present in the term.

Material for terminological formation by semantic means has traditionally been, primarily, words from the basic vocabulary, long-lived in the language, denoting vital, human-surrounding objects and typical phenomena.

Contemporary terminology, being a pertinent topic in modern linguistic studies, pays special attention to issues of semantic transfer (metaphorization and metonymization), which are the subject of a number of works. In particular, notable works include those by S.V. Mikoni, V.V. Prima, O.O. Selivanova, I.V. Skuratova, E.A. Sorokina, A.Kh. Sultanova, and V.A. Tatarinov.

Let us consider railway terms formed through various forms of semantic transfer. Metaphorization, i.e., the expansion of the semantic scope of a word through the emergence of metaphorical meanings and the strengthening of meaning, gives rise to the following terms in English and Russian languages.

English language: *arm, bed, blade, body, chair, coat, diamond, dress.*

Russian language: *башмак (shoe), горка (slide), горло (throat), гребень (comb), колено (knee), костыль (crutch), крыло (wing).*

Metaphorization is one of the most common and productive methods of terminology formation. Therefore, semantic transfer directly contributes to the creation and enrichment of any specialized terminology.

According to E.V. Demishkevich, the English language distinguishes the following groups of terms formed through metaphorical transfer [1:103]:

Similarity in the functions of everyday items:

Arm: This common word is used to describe a horizontal bracket that supports a signal or sign. (Similarity to the way an arm extends from the body)

Blade: Refers to the flat, metal part of a switch that diverts a train from one track to another. (Similar to the flat, cutting edge of a knife blade)

Body: Used for the main structure of a passenger car or locomotive. (Similar to the human body as the core structure)

Chair: This term describes a support structure for a rail at specific locations, like on bridges or curves. (Similar to how a chair provides support for someone sitting)

Comb: This refers to the serrated edge at the top of a railroad crossing gate that warns drivers of an oncoming train. (Similar to the teeth of a comb)

Pocket: While not as common today, historically, "pocket" referred to the space between the rails where ballast accumulates. (Similar to a pocket in clothing for holding items)

Shoe: This term can describe the bottom wedge-shaped part of a switch that connects the rails. (Similar to the bottom part of a shoe that makes contact with the ground)

Tongue: This refers to a pointed piece of metal that connects sections of rail and allows for thermal expansion. (Similar to the way a tongue extends from the mouth)

Similarity in action:

Sanding: The action of applying sand to the rails to improve traction is directly related to the verb "to sand." This increases friction, similar to how sandpaper creates friction for smoothing surfaces.

Shunting: This refers to the maneuvering of locomotives and carriages within a railway yard. It shares a similar action with "shunting" a ball or object in a specific direction.

Coupling: This term describes the act of connecting two railway vehicles together. It aligns with the action of "coupling" two objects for attachment.

Buffering: This refers to the system of springs and beams that absorb shock between connected railway vehicles. The action of buffering mirrors the action of a physical buffer that absorbs impact.

Signaling: This refers to the system of lights, flags, and other visual or electronic signals used to communicate instructions to train crews. It directly relates to the action of "signaling" or sending a message.

These examples demonstrate how verbs describing actions in railway operations are directly adopted into railway terminology due to the clear similarity in the function being performed. The preservation of an image while applying it to another context is metaphor. The use of semantic transfer in terminology formation in each of the studied languages is an expression of national consciousness, reflecting the metaphorical nature of a specific language, which may vary for a variety of reasons.

Metaphor contributes to better understanding of scientific concepts and leads to significant savings in linguistic resources. In the context of rapid development of science and technology, this circumstance is very significant.

Terms formed through metaphorization, or in other words, association based on certain attributes - either external similarity or functional similarity. Obviously, association based on external similarity is simpler and forms the majority of metaphor terms in railway transport terminology.

It should be noted that metaphorization is characteristic not only of monolexemic terms but to an even greater extent for polylexemic ones. For example, among English multi-component railway terms formed through metaphorical transfer, the following can be mentioned: *railfoot, bedofballast, boilerbody, steamlap, boilercradle, boilerfoot, boilerhead, boilerjacket, boilershell, carbody, fishplate, plate-nail, railhead, railwaybed, steambox, steamchest.*

Russian multi-component terms formed by metaphorical transfer: *барабан котла (boiler drum), головка рельса (rail head), гребень колеса (wheel crest), земляное полотно (earth bed), подошва рельса (rail base), капот двигателя (engine hood), кожух котла (boiler casing), корпус котла (boiler crutch), костыль (steam serpent), паровой змеевик (steam bonnet), паровой колпак (steam sleeve),*

паровой рукав (steam sleeve), профиль рельса (rail profile), подбрюшник котла (boiler bellypan), подушка (pillow)

Semantic transfer, particularly metaphorization, is more productive in English than in Russian, which some researchers, including L.A. Chernyshova, refer to as a reflection of the nature of the respective national linguistic consciousness [3:231].

Metonymy is based on the proximity of meanings, concepts, or phenomena, and unlike metaphor, a common semantic element may be absent, which does not exclude the interrelation of meanings, concepts, and objects.

The essence of metonymy lies in isolating a property in a phenomenon that, by its nature, can replace the others. Metonymy may differ from metaphor in, on the one hand, a greater real connection between the substituting elements, and on the other hand, a greater limiting capacity, eliminating those features that are not directly noticeable in the given phenomenon.

Metonymy creates various categories of relationships with real reality and its reflection in human consciousness, relationships between objects, individuals, actions, processes, phenomena, social institutions, and events, place, time...

An example in the English language can be the following sentence: "These wheels will drive you at your pleasure." In it, the phrase "these wheels" is used as a type of metonymy, specifically a synecdoche. When translated into Russian, the sentence would sound like this: "Эти колеса гарантируют вам езду с удовольствием."

Metonymic meaning transfer can determine relations of polysemy both in a term-phrase and in a single-word term[4:203].

- Automatic Frequency Adjustment (AFA): 1. process; 2. device for searching and capturing the required frequency.

- Isolator: 1. dielectric, a substance poorly conducting heat; 2. electrical device for isolating parts of electrical equipment.

- Tuning: 1. adjustment process; 2. regulator position: perform tuning on an automatic regulator.

It should be noted that unlike metaphor, metonymy is more closely related to context, so it is significantly less often used as a means of forming new terms.

Thus, it can be argued that the terminological layer of railway lexis is replenished by the same means as the vocabulary of the language as a whole. Both English, French, and Russian languages utilize all available means and methods to expand the terminological stock in this area, including semantic methods of forming railway transport terms, namely metaphorization and metonymization. However, the

most productive method is the transfer of meaning by similarity. This fact is due to the lesser attachment of metaphor to context compared to metonymy. It should be noted that metaphorization is characteristic not only of monolexemic terms but also to an even greater extent for polylexemic ones.

Conclusion

In conclusion, the journey through the language of railways has revealed a fascinating landscape shaped by semantic methods. We've discovered how metaphorization, the transfer of meaning based on similarity, breathes life into terms like "railhead" and "frog." Metonymy, the association by proximity, has subtly reshaped words like "wheel" to encompass the entire locomotive. These methods not only enhance clarity and efficiency in communication, but also offer a glimpse into the national consciousness reflected in railway terminology.

Looking ahead, the ever-evolving railway industry will undoubtedly continue to inspire new terms and adaptations. Semantic methods will remain at the forefront, fostering clear communication across languages and disciplines. As technology advances, we can expect even more innovative metaphors and metonymic transfers to emerge, enriching the lexicon and keeping the metaphorical wheels of railway terminology turning.

Furthermore, the exploration of semantic methods in railway terminology extends beyond mere practicality. It offers a window into the fascinating relationship between language and technology. By understanding how everyday words are transformed to represent complex concepts, we gain a deeper appreciation for the creativity and ingenuity inherent in both language and railway engineering.

In essence, the language of railways is not just a collection of technical terms; it's a testament to the enduring human capacity for innovation and the power of language to adapt and evolve alongside technology. As long as trains continue to roll across the tracks, the metaphorical journey of railway terminology will undoubtedly continue to captivate and inspire.

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