

DEVELOPMENT AND TRANSLATION FEATURES OF AN AVIATION TERMINAL SYSTEM FROM ENGLISH TO RUSSIAN

AVIATION TERMINOLOGICAL SYSTEM IN ENGLISH AND RUSSIAN LANGUAGES AND TRANSLATION FEATURES

AVIATION TERMINAL SYSTEM IN ENGLISH AND RUSSIAN TRANSLATION AND DEVELOPMENT FEATURES

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ABSTRACT

The article explores both general and specific aspects concerning the establishment of an aviation terminology system and the primary methods used for translating these terms from English into Russian. It emphasizes various processes involved in term formation, influencing their emergence and usage in today's linguistic context. By examining industry-specific English and Russian aviation terminologies, the study identifies certain underlying patterns. The analysis underscores that the inclusion of terms within specialized vocabularies signifies shared processes in word and phrase formation across contemporary English and Russian languages.

KEYWORDS: aviation terminology, professional terminology system, industry-specific terminology, word formation, phrase formation.

ANNOTATION:

Maqolada aviatsiya terminologiyasi tizimini yaratishning umumiy va o'ziga xos jihatlari va ushbu atamalarni ingliz tilidan rus tiliga tarjima qilishning asosiy usullari ko'rib chiqiladi. Unda atama yasaliishi bilan bog'liq bo'lgan turli jarayonlar, ularning paydo bo'lishi va bugungi lingvistik kontekstda qo'llanilishiga ta'sir ko'rsatadi. Sanoatga oid ingliz va rus aviatsiya atamalarini o'rganish orqali tadqiqot ma'lum bir asosiy naqshlarni aniqlaydi. Tahlil shuni ko'rsatadiki, atamalarning ixtisoslashgan lug'at

tarkibiga kiritilishi zamonaviy ingliz va rus tillarida soʻz va iboralarni shakllantirishda umumiy jarayonlarni anglatadi. Tayanch iboralar: aviatsiya terminologiyasi, kasbiy terminologiya tizimi, tarmoq terminologiyasi, soʻz yasalishi, ibora yasalishi..

KALIT SOʻZLAR: aviatsiya terminologiyasi, kasbiy terminologiya tizimi, sohaga oid terminologiya, soʻz yasalishi, ibora yasalishi.

АННОТАЦИЯ

В статье рассматриваются как общие, так и частные аспекты формирования авиационной терминологической системы и основные методы перевода этих терминов с английского языка на русский язык. В нем подчеркиваются различные процессы, связанные с образованием терминов, влияющие на их появление и использование в современном лингвистическом контексте. Анализируя отраслевую английскую и русскую авиационную терминологию, исследование выявило определенные основные закономерности. Анализ подчеркивает, что включение терминов в специализированные словари означает общие процессы словообразования и фразообразования в современных английском и русском языках.

КЛЮЧЕВЫЕ СЛОВА: авиационная терминология, профессиональная терминологическая система, отраслевая терминология, словообразование, словообразование.

INTRODUCTION

In contemporary linguistics, terminology is viewed not merely as a collection of terms but as a structured subsystem of language, encompassing microsystems of terms [3; 5; 11; 13].

The aviation terminology system is categorized into four subsystems: aeronautics, aviation, rocketry, and astronautics. This investigation focuses on the aviation subsystem, as documented in English-Russian and Russian-English aviation dictionaries, along with the English-Russian civil aviation dictionary [2; 4; 6; 8; 9; 10; 12].

During the research, 997 aviation-related terms were analyzed. Among these, 96 terms were categorized as simple terms, 102 as complex terms (including compounds and various types of abbreviations), 739 as phrase terms (the largest group), and 60 as abbreviations.

The study revealed that the development of the aviation terminology system progresses along two primary pathways:

- introducing new concepts and designating new objects using units already existing in the language (e.g., taxi – руление, path – траектория полёта);
- creating new terms by applying word-formation models from the English language (e.g., tail-down – посадка на хвост, alphanumeric – буквенно-цифровой (индикатор)).

METHODOLOGY

This study adopts a descriptive analytical approach to investigate the development and translation of aviation terminology from English to Russian. Data collection involved compiling a corpus of 997 aviation terms from English-Russian and Russian-English dictionaries, alongside industry-specific texts. Terms were categorized into simple, complex, phrase terms, and abbreviations. Morphological analysis focused on identifying predominant processes such as suffixation, prefixation, abbreviation, and compounding. Comparative analysis examined similarities and differences in term formation between the two languages. Quantitative analysis measured the frequency of morphological methods to determine prevalent trends. Additionally, the study assessed the syntactic methods used in forming complex terms, particularly through lexical-syntactic and morphological-syntactic constructions. These methodologies facilitated a comprehensive understanding of the structural evolution and linguistic patterns within aviation terminology.

RESULTS AND DISCUSSION

During the evolution of aviation terminology in English and Russian, borrowings played a crucial role. Initially, France held a prominent position in aeronautics, influencing the formation of aviation terminology in the English language. However, as aviation developed in England from the early 20th century onwards, the prevalence of French borrowings declined sharply. By the periods following the First and Second



World Wars, as the English aviation industry advanced significantly, French borrowings became limited within the newly established corpus of aviation terms [3]. In the analyzed data, French borrowings constitute a minor portion. Out of 997 terms studied, only 49 were identified as borrowed words. Primarily, these borrowings relate to fundamental aviation concepts such as annunciation – световая сигнализация and fin – киль, стабилизатор.

Presently, the expansion of the English aviation terminology system predominantly occurs through internal development and the enrichment of vocabulary resources, rather than relying on borrowing from other languages [7, p. 52].

During the study, four primary methods for creating aviation terms were identified:

1. Naming based on similarity of external characteristics: for example, "wing walker" – сопровождающий у конца крыла (при буксировке самолёта), "eye-hoisting" – такелажное ушко.
2. Naming based on functional similarity: such as "airbridge" – регулярное воздушное сообщение, "crew station" – рабочее место экипажа.
3. Naming based on conceptual contiguity: for instance, "to steer" – держать курс, "counter" – счётчик, стойка.
4. Naming based on analogy: like "fail-safe" – надёжный, безопасный (о полёте), "runway sweeper" – машина для очистки ВПП.

Out of the total terms examined, 126 were created through a lexical-semantic approach. In modern English, the morphological formation of terms largely follows the fundamental patterns observed in the development of word formation within the broader literary language [13, p. 113].

The formation of terms adheres to consistent word-formation models and utilizes the same affixes that shape everyday vocabulary [13, p. 115]. However, the range of affixes employed is significantly narrower compared to those used in forming commonly used linguistic units [7, p. 51].

The creation of aviation terms primarily follows these models:

- using verb stems with verbal-nominal affixes: for example, analyser – анализатор, stoppage – засорение, dispatching – диспетчерское управление;
- utilizing nominal stems with productive affixes, leading to synthetic formations: such as aboard – на борту, bidirectional – имеющий двойное направление, in-flight – полётный.



One of the most productive morphological ways of forming aviation terms, according to our research, is conversion. In the material reviewed, models of the formation of nouns from verbs, as well as verbs from nouns, were identified:

- stand-by (to stand by) – нахождение пассажира в листе ожидания;
- answerback (to answer back) – обратный сигнал на запрос экипажа;
- to back – давать задний ход;
- to hop – совершить короткий перелёт.

The morphological method of forming terms is by far the most productive. As our research has shown, 472 out of 997 terminological units are formed in this particular way.

Syntactic methods of forming aviation terms are also quite active in modern English and Russian. As was revealed in the study, 405 units were created syntactically, formed using two methods related to syntactic ones:

- lexico-syntactic method;
- morphological-syntactic method.

With the lexico-syntactic method, new linguistic terms are created by simply combining lexical units without the use of morphological means: frame dumping – демпфирование, создаваемое каркасом; touchdown accuracy – точность приземления.

In the morphological-syntactic method, simultaneously with addition, the addition of certain affixes (word-forming or inflectional) to one of the components of a complex word is also used, for example: hinged blade – шарнирно-подвешенная лопасть, supernormal attitude – сверхнебольшой угол тангажа.

In the aviation terminology system, the formation of complex words using compression and stem formation has also been revealed:

- fly-by-glass control – пилотирование по экранному индикатору;
- hands-off aiming – прицеливание без ручного управления;
- runway – взлётно-посадочная полоса.

The study carried out a comparative analysis of the processes of term formation in the aviation terminology system of modern English and Russian languages.

The most typical ways of forming terms are morphological (word formation), syntactic or analytical (formation of term-word combinations), lexical-semantic and borrowing.



Within the realm of morphological processes, various methods of word formation are employed either independently or in combination: conversion, affixation, compounding, derivation, abbreviation, and semantic isolation. According to the study, the most prevalent morphological methods for forming aviation terms are suffixation, accounting for 45%, and prefixation, accounting for 39% of the total terms analyzed. Abbreviation accounts for 12% of terms, while compounding makes up 4%. These findings generally align with broader linguistic trends observed in the formation of terminological units. Additionally, the syntactic method of word formation is considered productive, reflecting a trend towards increasing the number of complex terms. Complex terminological units are predominantly formed through lexical-syntactic and morphological-syntactic methods. Borrowing is not a productive mechanism for developing the aviation terminology system, while the lexico-semantic method, although historically significant, is not currently productive. Overall, these observations underscore the dynamic processes involved in the formation and evolution of aviation terminology in both English and Russian languages.

CONCLUSION

Thus, the study of the aviation terminology system allows us to identify general patterns that may be characteristic of word and phrase formation processes in modern English and Russian languages.

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