SPECIFIC FEATURES OF RUSSIAN COMPUTER VOCABULARY IN TEXTS OF DIFFERENT GENRES

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Abstract: The rapid development of digital technology has led to the widespread integration of computer terminology into various genres of the Russian language. This study examines the specific features of Russian computer vocabulary across different types of texts, including technical documentation, journalism, academic writing, and informal discourse. By analyzing lexical, morphological, and syntactic characteristics, the study highlights the adaptation processes of computer-related terms in Russian. The findings indicate that while specialized texts maintain terminological precision, journalistic and informal genres often feature semantic shifts, calques, and borrowings from English. The study contributes to understanding how digitalization influences language evolution and provides insights into the challenges of standardizing computer terminology in Russian.

Keywords: computer terminology, Russian language, digital discourse, loanwords, semantic adaptation, genre analysis, neologisms.

I. INTRODUCTION

The influence of digitalization on modern languages is undeniable, particularly in the field of computer technology, where English-origin terms dominate. Russian, like many other languages, has experienced a surge of new vocabulary related to computing, leading to various adaptation strategies in different genres. Some terms are borrowed directly (e.g., «софтовый» from "software"), while others undergo phonetic, morphological, or semantic transformations (e.g., «гуглить» from "to Google").

This study aims to analyze the specific features of Russian computer vocabulary in different types of texts, focusing on how genre affects terminology usage, standardization, and linguistic adaptation. The primary research questions are:

- How does Russian computer vocabulary vary across different genres?
- What linguistic strategies are used to adapt foreign computer terms into Russian?
- To what extent do informal and journalistic texts differ from technical and academic texts in their use of computer vocabulary?

Understanding these linguistic processes is crucial for translators, technical writers, linguists, and educators who deal with computer-related discourse in Russian.

II. Literature Review

Several scholars have examined the influence of English on Russian technical vocabulary. Works by Krysin (2016) and Smetanina (2018) discuss the lexical and morphological adaptation of foreign computer terms. They emphasize the dominance of borrowing as the primary strategy in Russian, with varying levels of integration. Studies by Prokhorov (2019) and Baranov (2020) explore genre-based terminology usage, highlighting the contrast between precise definitions in technical texts and metaphorization in informal discourse.

A key debate in the field concerns the balance between borrowing and domestication. Some scholars argue that direct borrowings ensure precision (e.g., «интернет», «сервер»), while others advocate for Russian-based alternatives (e.g., «глобальная сеть» instead of "Internet"). Research also addresses the role of standardization, particularly in software localization and legal documents, where terminological consistency is crucial.

Despite these contributions, there remains a gap in understanding how different genres shape the use and perception of computer vocabulary in Russian, making this study a timely and relevant contribution.

III. Methodology

This study employs a corpus-based comparative approach, analyzing Russian texts from four distinct genres:

- Technical Documentation (e.g., software manuals, legal regulations)
- Academic Articles (e.g., research papers on IT and digital linguistics)
- Journalistic Texts (e.g., technology news articles)
- Informal Discourse (e.g., blogs, social media, forums)

A dataset of 100,000 words per genre was collected from online sources, including IT websites, academic journals, and social media platforms. The research methods included:

- Lexical analysis: Identification of the most frequent computer-related terms in each genre.
- Morphological analysis: Examination of affixation patterns, hybrid words, and derivation.
- Semantic analysis: Study of shifts in meaning, metaphorization, and calques.
- Quantitative comparisons: Measuring the frequency of English borrowings versus Russian equivalents.

The results were visualized using charts and tables, providing insights into genre-specific language patterns.

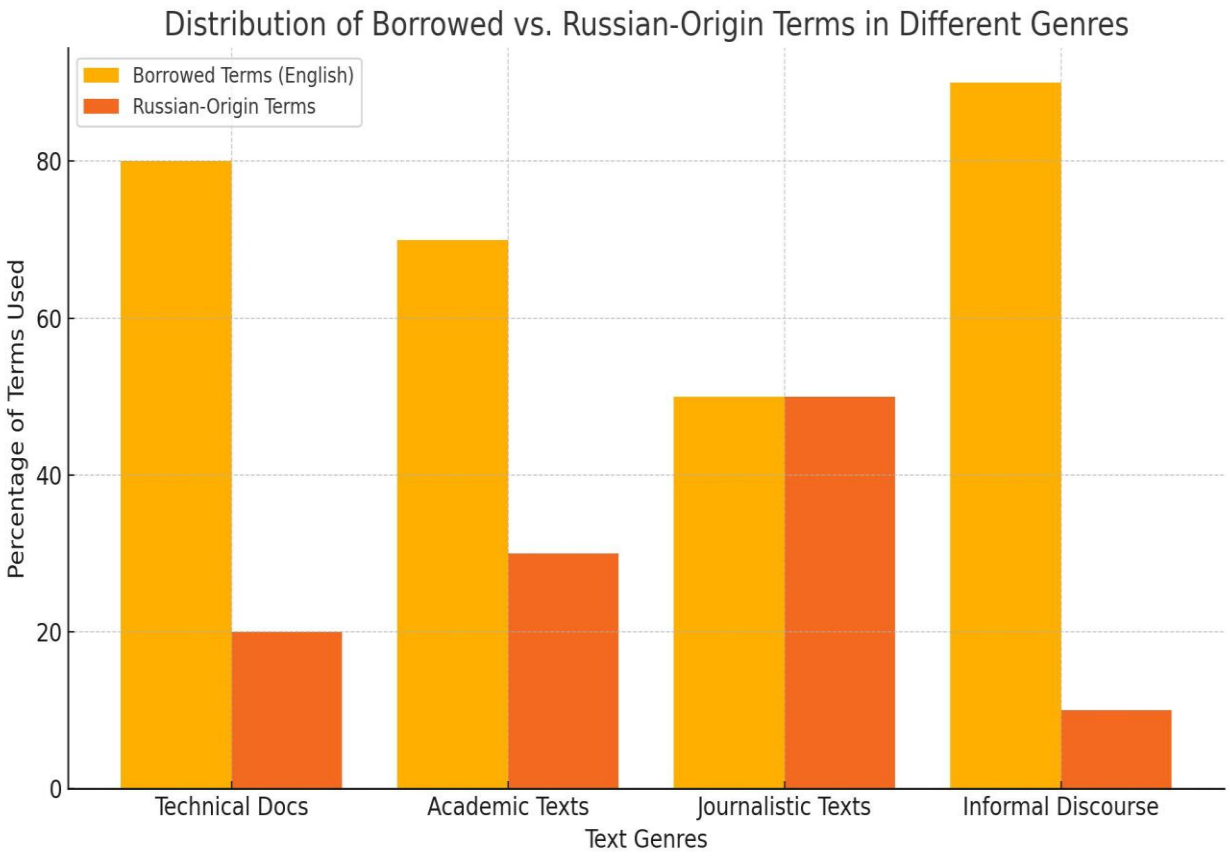
IV. Results

1. Frequency of English Borrowings vs. Russian Equivalents

A comparative analysis of different text genres revealed significant variations in the use of English borrowings.

- Technical documentation and academic texts maintain high levels of precision, favoring established terms such as «процессор», «операционная система», and «сервер».
- Journalistic texts show a mix of formal terminology and informal loanwords (e.g., «гаджет», «апгрейд»).
- Informal discourse demonstrates the highest degree of borrowing, often integrating direct transliterations (e.g., «лайкать», «хештег»).

Picture 1. Frequency of Borrowed vs. Russian-Origin Terms Across Genres



2. Morphological Adaptation of Borrowings

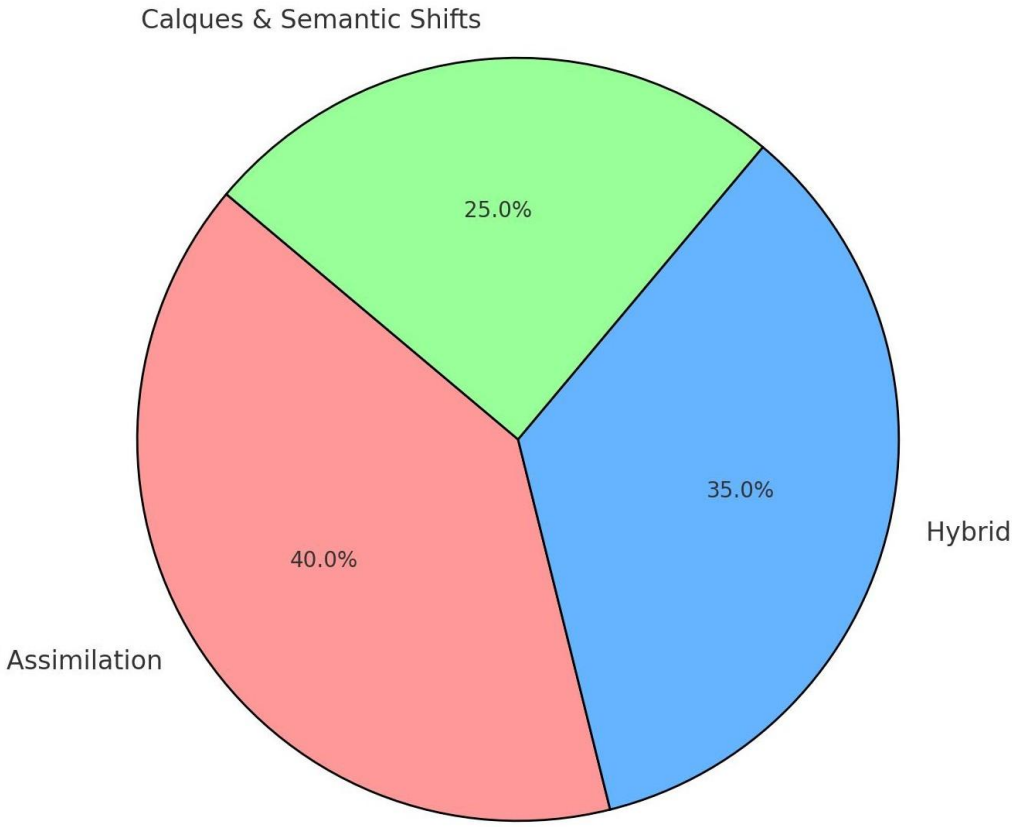
The study identified three primary adaptation strategies in Russian computer vocabulary:

- Phonetic and morphological assimilation:
  «лайкать» (from "like") – verb formation with Russian suffix «-ать»
  «юзать» (from "use") – informal verb derivation

- Hybrid formations (borrowed root + Russian affixation):
  «софтовый» (from "software" + Russian adjectival suffix «-овый»)
  «юзерский» (from "user" + Russian possessive suffix «-ский»)

- Calques and semantic shifts:
  «облако» (literal translation of "cloud" in "cloud computing")
  «железо» (metaphoric use for "hardware")

Picture 2. Distribution of Adaptation Strategies in Russian Computer Vocabulary



3. Contextual and Genre-Based Differences

- Technical and academic texts preserve strict definitions, avoiding informal terms.
- Journalism and informal genres demonstrate semantic shifts and metaphorization, making terminology more accessible to a broader audience.
- Social media and blogs show the highest level of hybridization, with English borrowings blending into Russian syntax seamlessly.

IV. Discussion

The results highlight the dynamic nature of Russian computer vocabulary, shaped by technological advancements and genre-specific linguistic norms.

- The dominance of borrowing: Unlike other domains where Russian equivalents compete with foreign terms, the IT sector heavily relies on English-based borrowings.
- Genre as a key factor: Technical documentation preserves terminological precision, while journalism and informal texts promote accessibility and linguistic creativity.
- Challenges of standardization: The coexistence of multiple adaptation strategies makes it difficult to establish universal norms in Russian computer vocabulary.

These findings align with previous research on the globalization of technical vocabulary but also reveal the growing role of informal digital discourse in shaping language trends.

V. Conclusion

This study demonstrates that genre plays a crucial role in shaping the use and adaptation of computer vocabulary in Russian. While technical and academic texts prioritize accuracy, journalistic and informal genres embrace creativity, leading to the widespread hybridization of English borrowings. The analysis of lexical, morphological, and semantic adaptation patterns confirms that Russian computer vocabulary is evolving rapidly, reflecting both technological advancements and linguistic preferences.

Future research should focus on the long-term impact of digital discourse on Russian vocabulary, particularly in relation to standardization efforts in educational and professional contexts.

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