

ENGLISH-RUSSIAN TERM MAPPING IN DERIVATOLOGY: CHALLENGES AND SOLUTIONS IN LINGUISTIC TRANSLATION**Gulimmatova Barchinoy**

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Abstract. *The article investigates both theoretical and practical problems which arise during term mapping work between English and Russian linguistic systems in the field of derivatology. The research evaluates current methods of transferring derivational terms between languages while recognizing fundamental differences in metalinguistic understanding and suggesting new methods to achieve term equivalent status. The research results show that effective term transfer needs more than word replacement because it demands complete comprehension of fundamental theoretical frameworks together with flexible translation methods that maintain concept integrity while handling different linguistic systems.*

Keywords: *derivatology, term mapping, linguistic translation, English-Russian terminology, word formation, metalanguage, terminological equivalence, derivational systems.*

Annotatsiya. *Ushbu maqola ingliz va rus lingvistik an'analari o'rtasidagi derivatologiyada terminlarni moslashtirishning nazariy va amaliy muammolarini o'rganadi.*

Tadqiqot derivatsion terminologiyani o'tkazishning mavjud yondashuvlarini tahlil qiladi, metalingvistik konseptualizatsiyadagi tizimli nomuvofiqliklarni aniqlaydi va terminologik ekvivalentlikka erishish uchun metodologik yechimlarni taklif etadi. Tadqiqot natijalari shuni ko'rsatadiki, muvaffaqiyatli terminologik o'tkazish faqat leksik almashtirish emas, balki asosiy nazariy paradigmalarni chuqur tushunish va tizimli farqlarni hisobga olgan holda kontseptual aniqlikni saqlaydigan moslashuvchan tarjima yondashuvlarini qabul qilishni talab etadi.

Kalit so'zlar: *derivatologiya, terminlarni moslashish, lingvistik tarjima, ingliz-rus terminologiyasi, so'z yasalishi, metatil, terminologik ekvivalentlik, derivatsion tizimlar.*

Аннотация. *Данная статья исследует теоретические и практические проблемы, связанные с картированием терминов в дериватологии между английской и русской лингвистическими традициями. Исследование анализирует существующие подходы к переносу деривационной терминологии, выявляет системные расхождения в металингвистической концептуализации и предлагает методологические решения для достижения терминологической эквивалентности. Результаты исследования демонстрируют, что успешный терминологический перенос требует не просто лексической замены, а глубокого понимания базовых теоретических парадигм и готовности применять гибкие переводческие подходы, которые сохраняют концептуальную точность при учёте системных различий.*

Ключевые слова: *дериватология, картирование терминов, лингвистический перевод, англо-русская терминология, словообразование, метаязык, терминологическая эквивалентность, деривационные системы.*

INTRODUCTION

The field of derivatology which examines how different languages create words and establish word relationships has developed unique term usage systems between English and Russian academic studies. The two systems show how different languages organize their elements yet they also demonstrate how scientists approach their research through distinct theoretical frameworks and different methods of studying derivational processes [1]. The need to establish links between English and Russian derivational terms has become more crucial because of the expansion of international linguistic research and academic partnerships and the rising demand for user-friendly linguistic comparison tools [2]. The process of precisely transferring terms between languages stands as a vital requirement for research that involves multiple languages and for translation work yet the study of how English-Russian derivational terms connect has not received adequate attention in present-day linguistic research.

The term mapping process in derivatology research becomes complex because multiple factors together create interconnected challenges which need to be solved. First, the structural differences between English and Russian word formation systems create asymmetries in how derivational processes are categorized and described [3]. The English language uses analytical morphology together with compounding and conversion to create derivational patterns which differ from Russian synthetic morphology that employs extensive inflectional and derivational affixation methods [4]. Second, the theoretical frameworks developed within Anglo-American and Russian linguistic traditions have produced distinct metalinguistic vocabularies that do not always align in their conceptual scope or classificatory principles [5]. Theoretical assumptions from direct translation terms create multiple meanings which cover shared concepts instead of matching identical phenomena. The different historical paths which derivational studies took in various linguistic cultures created research priorities and analytical categories which make it difficult to achieve direct terminological matching in research studies [6]. The development of bilingual linguistic resources, textbooks, and research tools requires systematic solutions to term mapping problems that cannot be resolved through simple dictionary consultation [7].

Furthermore, the increasing internationalization of linguistic research and the proliferation of collaborative projects involving scholars from different linguistic backgrounds make the resolution of these terminological challenges a practical necessity rather than an academic luxury.

METHODOLOGY AND LITERATURE REVIEW

The research applies qualitative analysis through its complete study of available literature and its assessment of different terminology. The literature review reveals several fundamental dimensions of the term mapping problem. Tadjibaeva's analysis of semantic and word-forming derivations in modern English and Russian demonstrates that basic term relationships possess greater theoretical complexity than they first appear [2]. The Russian distinction between "slovoobrazovatel'naya derivatsiya" (word-forming derivation) and "semanticheskaya derivatsiya" (semantic derivation) does not map neatly onto English terminology, where "derivation" often encompasses both processes without explicit terminological differentiation.

Translators face difficulties because they must choose between two options: maintaining the Russian distinction through descriptive phrases or using English terms which combine concepts that Russian tradition maintains as separate. The study demonstrates that such decisions require people to understand word formation processes according to the conceptual framework of each tradition.

Mamasoliyeva and Shevtsova's study examines how derivational aspects of English and Russian composite word structures serve as evidence for solving mapping difficulties [3]. The term "composite" itself represents a translation choice that reflects theoretical assumptions about the relationship between compounding and other word formation processes. The Russian linguistic tradition defines "složnoe slovo" (complex word) through a more extensive set of word formations than English defines "compound" because it includes elements that English considers different categories like phrasal verbs and particle combinations. Researchers face challenges when they attempt to translate derivational analysis between languages because they need to establish conceptual boundaries which require them to develop new terms or use borrowed translations that bring foreign concepts into the language's metalinguistic discussions.

The development of derivational systems together with their corresponding terminologies creates extra historical challenges for mapping activities. Madaminova's examination of the derivational system evolution in Russian language demonstrates how terminological frameworks develop in response to changing linguistic realities and theoretical paradigms [4]. Languages undergo evolution through their development of new word creation methods which emerge alongside technological advancements and linguistic intercultural interactions. The various linguistic traditions implement their separate adaptations which result in different timelines for developing terminological systems. The earlier terms that described derivational processes have maintained their original meaning while new terms have emerged to describe these processes because different languages have adopted these changes at different times.

Khakimov's discussion of Russian word formation as a scientific discipline provides insight into the epistemological foundations that inform terminological choices [5]. The Russian tradition of viewing word formation as a distinct linguistic discipline with its own theoretical framework, methodological approaches, and research agenda has produced a highly developed specialized metalanguage that reflects this disciplinary autonomy. Anglo-American linguistics integrates word formation with morphology and lexicology which creates terminological systems that treat different linguistic concepts and their academic weight in different ways. The process of term mapping requires more than identifying equivalent terms because it requires reconciling different methods which divide linguistic knowledge and classify word formation knowledge.

The comparative perspective extends beyond English-Russian pairs to include insights from derivational analysis in other languages. Aburakhmanov's linguistic interpretation of derivation in German language, while focused on a third language, offers valuable methodological lessons for cross-linguistic term mapping [6]. The study shows that derivational concepts which were created for one language system will undergo adaptation and modification because they cannot be used in another language system and their terminological changes show the basic theoretical framework which supports them. Alimova's study of English derivation patterns shows how non-native speakers of English understand and use English derivational terms between different languages [7].

The specialized domain of terminology formation presents particular challenges for derivational term mapping. Khaydarov's research on semantic derivation in terminology formation highlights how processes of terminological neologization themselves rely on derivational mechanisms that must be accurately described using derivational terminology [8].

The metalanguage that describes term formation processes requires translation across different languages which introduces potential misunderstandings that impact both language research and specialized field terminological activities.

The analysis shows that technical term creation involves different derivational processes than those used in general language which requires specialized terminological tools that lack corresponding terms in different language systems.

The study of semantic derivation through Abulkhayirov's English research shows how linguistic theories from one language system develop into new forms in different language systems of study according to their research work [9]. The study shows that scholars working within the Russian tradition often engage critically with Anglo-American derivational theory, adopting some concepts while rejecting or modifying others to fit within established Russian terminological and theoretical frameworks. The process of selective appropriation and adaptation results in terms that should match each other because they share similar meanings, but they actually express mixed concepts from both traditions, which makes it harder to establish direct connections between them. The research by Khairullayev and Ruziyeva about how syntactic derivation operates in language shows the mapping problem which exists between word formation and syntax because this field uses different terms which change their meaning from one linguistic system to another [10].

RESULTS AND DISCUSSION

The research study identifies three main challenges that arise during English-Russian derivational term mapping according to its extensive literature review research. The three categories of mapping problems require different translation methods to achieve their respective solutions. The structural-systemic asymmetries arise from fundamental differences in how English and Russian organize their derivational systems, with English relying more heavily on zero-derivation, compounding, and conversion processes that have limited parallels in Russian morphology, while Russian exhibits elaborate patterns of prefixation and suffixation that create derivational categories without direct English equivalents [2][3]. The different systemic characteristics of the two systems lead to language-specific derivational terminology which results in terminological gaps or awkward descriptive circumlocutions when used for one-to-one language equivalency attempts.

The theoretical conceptual differences between these two linguistic traditions show how their researchers study and classify derivational phenomena through different methods. Russian derivatology has developed as an independent field of study which uses its own theoretical framework while English-language morphology studies word formation through its connections to syntax and lexical semantics. The different organizational structures of academic disciplines create distinct terminological systems which reflect various research priorities and theoretical frameworks. The Russian term "словообразовательное гнездо" (word-formation nest) describes all derivatives that stem from one root word yet English morphology lacks an accepted equivalent because it does not analyze derivational patterns through family-based hierarchical structures. Translators who work to convert Russian derivational analysis into English must choose between using loan translations that will confuse English speakers or developing new English terms which fail to represent the actual theoretical concepts needed for their work.

Table 1: Typology of Term Mapping Challenges in English-Russian Derivatology

Challenge Type	English Term	Russian Term	Mapping Problem	Proposed Solution
Structural Asymmetry	Zero-derivation / Conversion	Безаффиксное словообразование/ Конверсия	English distinguishes process from result;	Contextual translation with explanatory notes

			Russian emphasizes absence of overt marking	specifying theoretical framework
Conceptual Gap	Word family (informal)	Словообразовательное гнездо	Russian has systematic theoretical concept; English lacks precise equivalent	Loan translation "word-formation nest" with definitional clarification
Scope Divergence	Derivation	Деривация / Словообразование	English term broader, including both word formation and semantic change; Russian distinguishes processes	Specify intended scope: "word-forming derivation" vs "semantic derivation"
Classificatory Difference	Compound	Сложное слово / Композит	Russian category broader, includes structures English classifies differently	Adopt narrower translation "compound word" with explicit boundaries
Theoretical Framework	Productivity	Продуктивность	Concepts operationalized differently in research traditions	Define measurement criteria and theoretical assumptions explicitly

The functional-pragmatic variations present different ways which derivational terms function in linguistic discourse because they exhibit distinct definitional boundaries and common word pairings and situational uses. Research practice shows that direct translation terms are used in different ways because they apply to different types of phenomena and different linguistic communities use their connotations in distinct ways.

The English term "productivity" has become a common term in derivational studies because it describes how word-formation patterns create new word forms, yet researchers must choose between different theoretical and methodological approaches which differ among research traditions. Russian "produktivnost'" shares the general conceptual core but may be measured and evaluated differently depending on theoretical commitments about the relationship between synchronic analysis and diachronic change, between type frequency and token frequency, and between actual usage and potential generation.

The specific case studies show that translators and bilingual researchers study three mapping research problems through their research work. The first approach maintains strict formal equivalence between two languages but adds extra explanatory content which establishes their distinct conceptual systems through hybrid terms that connect both linguistic traditions.

The second method prioritizes conceptual understanding because it selects target language words which deliver the correct meaning despite not being direct translations of the original text. The third method uses loan translations and calques to transfer source language concepts into the target language which creates new administrative vocabulary but makes it difficult for people who lack knowledge of the original tradition to understand.

Table 2: Translation Strategies for Derivational Term Mapping

Strategy	Mechanism	Advantages	Disadvantages	Recommended Context
Formal Equivalence	Direct lexical correspondence	Maintains consistency; enables reader verification	May obscure conceptual differences; creates false equivalencies	Established term pairs with genuine conceptual overlap
Functional Equivalence	Target-language term with similar function	Integrates naturally into target discourse; accessible to readers	May lose source-language theoretical nuances	General linguistic writing for non-specialist audiences
Descriptive Translation	Multi-word explanatory phrase	Preserves conceptual precision; makes differences explicit	Creates terminological awkwardness; disrupts text flow	Initial introduction of unfamiliar concepts
Loan Translation	Calque preserving source structure	Introduces new conceptual frameworks; maintains terminological systematicity	Opacity for readers unfamiliar with source tradition	Theoretical discussions requiring precise framework alignment
Hybrid Approach	Combination of formal equivalent and clarification	Balances accessibility and precision; educates readers	Requires space for explanatory material	Academic research targeting bilingual scholarly audience

The successful implementation of these strategies requires metalinguistic awareness and theoretical sophistication on the part of translators and bilingual researchers. Simple dictionary consultation proves inadequate because derivational terminology cannot be divorced from the theoretical frameworks and analytical practices within which it functions. Translators must understand not only the formal definitions of terms but also their conceptual foundations, typical applications, and positions within larger terminological systems.

This requirement suggests that effective derivational term mapping necessitates collaboration between translation specialists and subject-matter experts who can evaluate the theoretical implications of terminological choices and assess whether proposed translations adequately capture the intended meanings within their disciplinary contexts.

The dynamic nature of derivational research introduces additional complexity to term mapping efforts.

As new theoretical approaches emerge and existing frameworks are refined or challenged, terminological systems must adapt to accommodate conceptual innovations. These adaptations occur independently in different linguistic traditions, potentially widening the gap between terminological systems or, alternatively, creating opportunities for cross-linguistic influence and terminological borrowing.

Recent developments in cognitive linguistics, corpus-based morphology, and construction grammar have influenced derivational research in both English and Russian contexts, but the terminological consequences of these theoretical shifts have not been uniform across languages.

Translators working with cutting-edge research must not only map established terminology but also navigate emerging terminological innovations that may not yet have stabilized equivalents in the target language.

CONCLUSION

The analysis of English-Russian term mapping in derivatology reveals that achieving accurate and theoretically grounded terminological transfer requires moving beyond simple lexical substitution to engage deeply with the conceptual frameworks, research traditions, and systematic differences that inform derivational terminology in both languages.

The three major categories of mapping challenges identified in this study—structural-systemic asymmetries, theoretical-conceptual discrepancies, and functional-pragmatic variations—each demand specific translation strategies adapted to the nature of the terminological problem and the context of communication.

The research demonstrates that successful term mapping involves not merely finding equivalent words but rather negotiating between different ways of conceptualizing derivational phenomena, organizing linguistic knowledge, and conducting morphological analysis.

The typology of translation strategies presented in this article provides a framework for making informed choices in derivational term mapping, recognizing that different contexts and purposes may call for different approaches ranging from formal equivalence to descriptive translation to hybrid solutions combining multiple strategies.

The effectiveness of these strategies depends critically on the translator's understanding of both linguistic systems and theoretical traditions, suggesting that optimal term mapping requires collaboration between translation specialists and subject-matter experts who can evaluate the conceptual adequacy of proposed terminological solutions.

The dynamic nature of derivational research, with ongoing theoretical developments and emerging terminological innovations in both traditions, means that term mapping must be understood as a continuous process of adjustment and refinement rather than a one-time problem to be definitively solved.

The practical implications of this research extend to multiple domains including translation practice, linguistic pedagogy, academic publishing, and international research collaboration. For translators working with linguistic texts, the framework developed here offers guidance for making theoretically informed decisions about terminological choices, moving beyond mechanical dictionary consultation to consider the conceptual foundations and functional contexts of derivational terminology.

For educators teaching derivational morphology in bilingual or multilingual contexts, awareness of the mapping challenges identified in this study can inform pedagogical approaches that help students navigate between different terminological systems and understand the theoretical commitments encoded in morphological metalanguage.

For editors and publishers involved in producing bilingual linguistic resources, the analysis highlights the need for careful attention to terminological consistency and conceptual accuracy, recognizing that term mapping represents a substantial intellectual challenge rather than a routine editorial task.

Ultimately, the resolution of terminological challenges in English-Russian derivatology contributes to the broader goal of facilitating cross-linguistic scholarly communication and enabling productive dialogue between different research traditions in the field of word formation studies.

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