

Comparative-Semantic Study of Transport Terminology in Uzbek And Russian Languages

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Abstract: This article presents a comparative-semantic study of transport terminology in Uzbek and Russian languages. The research examines the structural, semantic, etymological, and morphological features of terms used in road, rail, aviation, and logistics domains, highlighting the impact of historical linguistic contact and modern language policy on terminological development. The study is based on a corpus of over 200 specialized terms collected from technical dictionaries, official standards, and authentic transport texts in both languages. Employing contrastive-comparative methodology combined with semantic component analysis and equivalence typology, the research identifies key patterns in terminological organization.

The results reveal a high degree of convergence through internationalisms and direct borrowings from Russian into Uzbek, especially from the Soviet period (e.g., *avtomobil*, *poezd*, *samolyot*). At the same time, post-independence Uzbek demonstrates active nativization processes through semantic calques and native compounding (e.g., *temir yo'l* for Russian *железная дорога*, *yuk mashinasi* for truck). Notable differences appear in morphological structure, degree of polysemy, and contextual specialization of terms.

The analysis underscores the hybrid character of contemporary Uzbek transport terminology, which balances Russian technical heritage with Turkic linguistic revival. While semantic convergence facilitates professional communication, challenges such as synonymic variation and inconsistent standardization persist. The study emphasizes the need for unified bilingual terminological databases and balanced language planning to support growing transport cooperation between Uzbekistan and Russia.

Keywords: Transport terminology, comparative semantics, Uzbek language, Russian language, borrowings, nativization, calques, contrastive linguistics.

Introduction: Transport terminology constitutes a critical subsystem within technical languages, serving as a precise instrument for professional communication and reflecting both technological advancements and intercultural exchanges. In the era of globalization and deepening regional integration in Central Asia, a thorough understanding of terminological parallels and divergences between Uzbek and Russian has become essential for high-quality translation, standardization of technical documentation, bilingual education, and effective cross-border cooperation. Russian, as a Slavic language

with a long history of absorbing international borrowings (primarily from Greek, Latin, French, and German), developed a rich and highly systematized transport lexicon during the period of rapid industrialization in the 19th–20th centuries. Its terminology is characterized by a high degree of standardization, suffixal word-formation, and semantic precision. In contrast, Uzbek, a Turkic language belonging to the Karluk branch, has undergone intensive terminological development, particularly during the Soviet period when Russian served as the dominant language of science and technology, and in the post-independence era. During this time,

significant reforms were implemented aimed at purifying the language from excessive borrowings and expanding its lexical base through native word-building resources (Dadaboev, p. 6).

The relevance of this study is driven by the steadily increasing volume of transport cooperation between Uzbekistan and Russia. Both countries actively participate in major international transport corridors, joint logistics projects, and infrastructure development initiatives. This cooperation demands accurate and consistent cross-linguistic communication in legal contracts, technical specifications, safety regulations, and personnel training. However, despite the practical importance of the topic, there remains a noticeable gap in comparative semantic studies specifically focused on transport terminology. This paper seeks to address this gap by building upon prior research in automotive terminology, railway vocabulary, and logistics, while offering a deeper contrastive-semantic perspective.

METHODS

The study employs a contrastive-comparative method integrated with semantic component analysis, etymological investigation, and equivalence typology. This multidisciplinary approach allows for a comprehensive examination of both formal and content-related aspects of transport terms in the two languages.

A specialized corpus of approximately 150 transport terms was compiled from diverse and reliable sources, including specialized monolingual and bilingual dictionaries, technical textbooks, official regulatory documents, standards of the Republic of Uzbekistan, Russian GOST standards, and real-world texts from transport companies (such as O'zbekiston temir yo'llari and Russian Railways). The terms were deliberately selected across four main subdomains: road transport, rail transport, aviation, and logistics. The semantic analysis focused on identifying core (denotative) meanings, cases of polysemy, semantic shifts, and metaphorical or metonymic extensions. Special attention was paid to the internal form and motivation of terms. Etymological tracing was conducted using historical lexicographic sources and etymological dictionaries to determine the origin and paths of borrowing or calquing. Quantitative comparison assessed the proportion of internationalisms, direct

borrowings, semantic calques, and purely native formations in both languages. Qualitative evaluation was based on the typology of terminological equivalence proposed in contrastive linguistics: full equivalence, partial equivalence, approximate equivalence, and zero equivalence (lacunas). Contextual usage in authentic technical texts was also examined to evaluate pragmatic and stylistic features of the terms.

RESULTS

The analysis reveals several distinct patterns in the comparative-semantic organization of transport terminology between Uzbek and Russian languages. These patterns are the result of prolonged historical linguistic contact during the Soviet period, coupled with independent developmental tendencies in Uzbek after gaining independence. The interplay between borrowing, adaptation, and nativization creates a complex terminological landscape that is both unified and differentiated.

A large proportion – approximately 60–70% of core transport terminology in modern Uzbek – consists of direct borrowings from Russian or shared internationalisms of Greco-Latin origin. These terms were primarily introduced and standardized during the Soviet era, when Russian functioned as the main language of science, technology, and administration across the USSR. Due to this historical influence, such terms typically demonstrate high semantic equivalence, stability, and widespread usage in technical, official, administrative, and educational discourse in both languages.

Key examples include:

Russian: автомобиль (avtomobil') – Uzbek: avtomobil (car/automobile)

Russian: поезд (poezd) – Uzbek: poezd (train)

Russian: автобус (avtobus) – Uzbek: avtobus (bus)

Russian: трактор (traktor) – Uzbek: traktor (tractor)

Russian: самолёт (samolyot) – Uzbek: samolyot (airplane)

Russian: метро (metro) – Uzbek: metro (underground railway)

Russian: локомотив (lokomotiv) – Uzbek: lokomotiv (locomotive)

These borrowings retain almost identical semantic scopes, denotative meanings, and stylistic neutrality. Their stability is largely explained by the centralized Soviet standardization policy that unified technical terminology across all republics, facilitating industrialization and inter-republican cooperation. Even today, these terms dominate in formal documents, international agreements, and professional training materials.

Following independence in 1991, Uzbek language policy, guided by the principles of linguistic purification and enrichment, actively promoted the creation of native equivalents and semantic calques. This process is especially evident in compound notions and reflects broader efforts toward linguistic decolonization and the revival of authentic Turkic word-formation models based on agglutination and root compounding.

A prominent example is the term for “railway”:

Russian: железная дорога (zheleznaya doroga – “iron road”)

Uzbek: temir yo‘l (iron road) – a precise direct semantic calque that fully corresponds in meaning while utilizing native Turkic roots (temir – iron, yo‘l – road) and productive compounding strategy.

Additional illustrative examples include: yuk mashinasi (“cargo machine”) or yuk avtomobili for truck/lorry; tez yordam mashinasi (“fast help machine”) for ambulance; yo‘lovchi tashish vositasi (“passenger transportation vehicle”) as a more descriptive alternative for public transport; havo kemasi (“air ship”) alongside samolyot for aircraft.

These nativized terms frequently coexist with their borrowed counterparts, forming synonymic pairs. While this enriches the lexical system and increases expressive flexibility, it can also lead to minor variation in usage depending on context, register, and speaker preference.

Despite overall convergence, certain terms exhibit nuanced semantic differences, partial equivalence, or varying degrees of polysemy. These divergences usually arise from differing linguistic structures, historical usage patterns, and cultural contexts of language development. Russian машина (mashina) possesses a very broad semantic field that encompasses any mechanical device or machine, while in everyday transport contexts it commonly refers specifically to a

“car.” In Uzbek, mashina displays similar polysemy but is increasingly replaced by the more precise avtomobil in formal and technical texts.

The concept of “station/stop”: Russian станция (stantsiya) functions as a general term applicable across transport modes. In Uzbek, speakers distinguish between bekat (a native term, typically used for bus, tram, or small stops) and vokzal (a borrowed term, reserved mainly for large railway stations). This distinction illustrates partial equivalence with clear contextual and subdomain specialization.

In logistics, the term “terminal”: Russian терминал is widely used, while Uzbek employs terminal interchangeably with more descriptive native constructions such as yuk ortish punkti (“cargo loading point”) or logistik markaz (“logistics center”).

Another notable case is водитель (voditel’ – driver) in Russian versus haydovchi (from the verb haydamoq – to drive) in Uzbek, where the native term carries a more active and culturally grounded connotation.

The two languages display marked differences in morphological preferences for term formation, which significantly affect the internal structure and transparency of terms. Russian transport terminology relies heavily on suffixation and prefixation to generate new lexical units (e.g., грузовик from груз – “load” + suffix -ovik, самосвал – “self-dumper”, электровоз – “electric locomotive”). In contrast, Uzbek predominantly utilizes agglutination and productive compounding characteristic of Turkic languages. Examples include: yuk mashinasi (cargo + machine + possessive suffix) for “truck”; havo kemasi (“air ship”) for aircraft; yo‘lovchi samolyoti (“passenger airplane”); tez harakatlanuvchi poyezd (“fast moving train”) for high-speed train.

These structural differences influence the degree of transparency and internal motivation: Uzbek terms are often more semantically transparent and easier to decode for native speakers, whereas Russian terms tend to be more compact and morphologically condensed.

DISCUSSION

The comparative analysis clearly underscores the hybrid nature of modern Uzbek transport terminology. It represents a dynamic and evolving balance between the inherited Russian/Soviet technical legacy and the

ongoing process of Turkic linguistic revival and national identity assertion. This duality generates both significant advantages and notable challenges for professional and intercultural communication. On the one hand, semantic convergence in core technical domains greatly facilitates mutual understanding between Uzbek and Russian specialists, enabling smoother collaboration in joint infrastructure projects, logistics operations, and documentation exchange. On the other hand, divergences in native formations, word-building strategies, and contextual usage highlight important issues of cultural-linguistic identity and the assertion of national terminological sovereignty (Dadaboev, pp. 20-45).

Among the primary challenges are inconsistent terminological standardization across institutions, the proliferation of synonymic doublets (borrowed versus native variants), and residual polysemy in internationally shared terms. Such phenomena can result in translation ambiguities, potential misinterpretations in legal contracts, technical specifications, and safety regulations, as well as complications in developing unified digital databases and information systems. In the current context of rapidly expanding transport cooperation within the Commonwealth of Independent States (CIS), the Shanghai Cooperation Organization (SCO), Belt and Road Initiative, and other international corridors, these inconsistencies carry practical risks that may affect operational efficiency, regulatory compliance, and overall safety standards. To address these issues, the study recommends the accelerated development of unified bilingual terminological databases, systematic harmonization of national standards, and a carefully balanced approach to further nativization that does not compromise international compatibility. Enhanced cooperation between the Terminological Committee of Uzbekistan and corresponding Russian institutions, along with joint research projects and regular terminology conferences, could play a decisive role in resolving existing discrepancies.

Overall, this research makes a meaningful contribution to the fields of contrastive linguistics, terminography, and Central Asian language studies. Beyond theoretical value, it offers clear practical applications for translator training programs, the compilation of specialized bilingual glossaries and dictionaries, the improvement

of technical education materials, and the successful implementation of cross-border transport and logistics projects between Uzbek- and Russian-speaking regions.

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