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# Linguistic Affinity between Russian and Sanskrit Language

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#### **Abstract**

This study investigates the linguistic affinity between Russian and Sanskrit, both belonging to the vast Indo-European language family. Cognates, words sharing a common origin, are explored to unveil historical connections and insights into language evolution. The research probes shared cognates and their implications, focusing on historical and cultural interactions between these languages. Basic cognate words shared between Modern Russian and Sanskrit highlight enduring linguistic connections, including inflectional systems, numeral systems, flexible word order, and limited use of auxiliary verbs. These parallels enrich our understanding of linguistic links between the languages. Finally, this study delves into linguistic affinity to unravel historical and linguistic connections between Russian and Sanskrit within the broader Indo-European language family.

#### **Keywords**

Russian language, Sanskrit language, Linguistic Affinity, Cognate Analysis, Language Evolution, Indo-European Heritage

#### Introduction

Russian and Sanskrit are both historical and linguistically significant languages. Russian is the most widely spoken language in Eurasia and belongs to the Indo-European language family (Künnap, 1999; Fortson, 2004; Gribble, 1981; Vinogradov & Zharnikova, n.d.). It is Russia's official language, and millions of people in neighbouring countries and diaspora communities speak it. Russian is well-known for its intricate grammar, extensive vocabulary, and adaptable word order. Its linguistic significance stems from its status as a major Slavic language, which adds to the diversity and depth of the Indo-European language family (Fortson, 2004; Gribble, 1981; Vinogradov & Zharnikova, n.d.; Comrie, 1989; Croft & Croft, 2001).

Sanskrit is an ancient Indo-Aryan language with deep historical, cultural, and religious roots in India. While it is no longer a common language, Sanskrit is still an important part of classical Indian literature, philosophy, and sacred texts. Its linguistic

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significance is essential because it is the language in which many ancient Indian scriptures, such as the Vedas and Upanishads, were written. The grammatical structure, precision, and expressive capabilities of Sanskrit have had a significant impact on the development of other Indian languages (Jamison & Brereton, 2014).

# **Cognates in Historical Linguistics**

Cognates are words from different languages that have the same origin and can be traced back to the same ancestral language. They are linguistic relatives who evolved independently in different language branches but retain traces of their common ancestors. The concept of cognates is extremely important in historical linguistics because it allows linguists to reconstruct proto-languages—the hypothetical common ancestors of language families.

Cognates are typically discovered by comparing similarities in sound correspondences, phonetic shifts, and semantic changes between languages. These shared linguistic features provide evidence of historical connections and provide insights into language evolution, migration patterns, and language family relationships.

# **Research Question and Significance**

The research question "What are the cognates shared by Russian and Sanskrit, and what do they reveal about linguistic connections?" is of great linguistic and historical significance.

Exploring Russian and Sanskrit cognates can shed light on the historical and linguistic relationships between these languages and their respective language families. Because both languages are members of the Indo-European language family (Künnap, 1999), the presence of cognates can indicate shared ancestry and ancient language contact.

Researchers can learn about the linguistic and cultural interactions that have occurred between Russian and Sanskrit-speaking communities by identifying cognates and analysing their phonological and semantic transformations over time. These cognates may also provide insights into areas such as trade, migration, or cultural exchange that have contributed to linguistic element.

The study of cognates shared by Russian and Sanskrit has the potential to unravel the intricate web of historical and linguistic connections between these languages, as well as to improve our understanding of their place within the larger context of Indo-European languages (Fortson, 2004; Gribble, 1981; Vinogradov & Zharnikova, n.d.).

#### **Proto-Slavic and Vedic Sanskrit**

Despite belonging to different language families and evolving in geographically distant regions, Proto-Slavic and Vedic Sanskrit share intriguing syntactical and structural similarities that highlight the complexity and richness of these ancient languages.

#### **Linguistic Structural Similarities**

*Synthetic Languages:* Proto-Slavic and Vedic Sanskrit are both synthetic languages. This means that through inflections and word endings, they convey a significant amount of grammatical information. To indicate their grammatical functions, words in synthetic languages undergo various changes, such as the addition of suffixes or prefixes. These inflections are critical for understanding sentence syntax and semantics (Baldi & Dini, 2004).

Inflections for Grammatical Expressions: To convey grammatical information, both languages use a reliable system of inflections. Inflections are changes to nouns, pronouns, verbs, and adjectives to indicate case, number, gender, tense, mood, and

voice. This extensive inflection system enables precise expression and disambiguation of grammatical relationships within sentences (Baldi & Dini, 2004).

*Numbers, Genders, and Persons:* In their inflectional paradigms, Proto-Slavic and Vedic Sanskrit both have three grammatical numbers (singular, dual, and plural), three genders (masculine, feminine, and neuter), and three persons (first, second, and third). This similarity in number and gender systems contributes to both languages' specificity and depth (Baldi & Dini, 2004).

*Case Systems:* Both languages have case systems. The syntactical roles of nouns and pronouns within sentences are marked by seven grammatical cases in Proto-Slavic. In parallel, Vedic Sanskrit has eight cases, each with a specific function in indicating grammatical relations and roles (Baldi & Dini, 2004).

*Numeral Systems:* The numeral systems of Proto-Slavic and Vedic Sanskrit are similar. They both have extensive number-expression systems, including cardinal and ordinal numbers. These numeral systems are required for quantity counting, enumeration, and description (Edgerton, 1965).

## **Syntactical Similarities**

Flexible Word Order: Flexible word orders are used in both Proto-Slavic and Vedic Sanskrit. This means that the order of words in a sentence can change without significantly altering its meaning. Because of this flexibility, speakers of these languages can emphasise certain elements or convey specific nuances through word placement (Maurer & Fields, 2009; Macdonell, 2014; Speyer, 1886; Speijer, 1886). It also demonstrates their ability to convey meaning through inflections rather than solely through word order (Baldi & Dini, 2004).

Inherent Syntactical Structure: Proto-Slavic and Vedic Sanskrit do not rely heavily on fixed syntactical structures due to their intricate inflectional systems (Maurer & Fields, 2009; Macdonell, 2014; Speyer, 1886; Speijer, 1886). These languages, unlike languages with strict word order requirements, such as English, can use a variety of word orders to convey meaning. This adaptability stems from inflections' ability to indicate the grammatical roles of words within sentences (Baldi & Dini, 2004).

Absence of Auxiliary Verbs: The limited use of auxiliary verbs in both languages is another notable syntactical similarity. Auxiliary verbs, which are important in constructing verb tenses and moods in many modern Indo-European languages such as English, are absent from Proto-Slavic and Vedic Sanskrit (Maurer & Fields, 2009; Macdonell, 2014; Speyer, 1886; Speijer, 1886). Instead, these languages use their extensive inflectional systems to convey temporal and modal distinctions directly within verb forms (Baldi & Dini, 2004).

Given their distinct geographic origins and separate language families, the linguistic structural and syntactical similarities between Proto-Slavic and Vedic Sanskrit are intriguing. These similarities highlight the intricate and sophisticated nature of these ancient languages while also providing valuable insights into their historical development and linguistic richness.

# Some Cognates of Proto-Slavic and Vedic Sanskrit

Despite their distinct language families and geographical separation, Proto-Slavic and Vedic Sanskrit share a number of basic cognate words, reflecting their common linguistic ancestry and providing valuable insights into their historical relationship (Fortson, 2004). Here are some examples of basic cognate words:

- 1. Father: In Proto-Slavic, the word for "father" is "отьсь," while in Vedic Sanskrit, it is "pitá." The word for 'father' is pətér, with reflexes in all branches of Indo -European, including Sanskrit pitá, Old Church Slavonic отьсь. The Proto-Indo-European (PIE) word pətér is the ancestor of the Russian word "отьсь" and the Vedic Sanskrit word "pitá." The PIE word pətér is reconstructed as meaning "father." (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)
- 2. Mother: The cognate word for "mother" in Proto-Slavic is "mati," and in Vedic Sanskrit, it is "mātā." The word for 'mother' is mắtēr , with reflexes in all branches of Indo-European, including Sanskrit mātā , Old Church Slavonic "mati." The Proto-Indo-European (PIE) word mắtēr is the ancestor of the Russian word "mati" and the Vedic Sanskrit word "mātā." The PIE word mắtēr is a compound word, made up of the root mā-"to wet" and the suffix -tēr. The root mā- is also found in the PIE words for "water" and "milk." The suffix -tēr is a nominal suffix that indicates a noun of the feminine gender. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)
- 3. Son: In Proto-Slavic, "son" is expressed as "synъ," and in Vedic Sanskrit, it is "sūnú." And there is 'suta'. In the Ramayana, Hanuma is referred to as 'Pawansuta'. The word for 'son' is sūnús, with reflexes in all branches of Indo-European, including Sanskrit sūnú-. The Proto-Indo-European (PIE) word sūnús is the ancestor of the Russian word "synъ" and the Vedic Sanskrit word "sūnú." The word sūnús is reconstructed as meaning "son." The PIE word sūnús is a compound word , made up of the root su- "to grow" and the suffix -ns. The root su- is also found in the PIE words for "good" and "well." The suffix -ns is a nominal suffix that indicates a noun of the masculine gender. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)
- 4. Daughter: The word for "daughter" in Proto-Slavic is "dъсьга," while in Vedic Sanskrit, it is "duhitŕ." The word for 'daughter' is dhughtér, with reflexes in all branches of Indo-European, including Sanskrit duhitŕ, Old Church Slavonic dъсьга. The Proto-Indo-European (PIE) word dhughtér is the ancestor of the Russian word "dъсьга" and the Vedic Sanskrit word "duhitŕ." Word dhughtér is reconstructed as meaning "daughter." The PIE word dhughtér is a compound word, made up of the root dhugh- "to milk" and the suffix -tér. The root dhugh- is also found in the PIE words for "milk" and "to suckle." The suffix -tér is a nominal suffix that indicates a noun of the feminine gender. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)
- 5. Water: Proto-Slavic uses "voda" for "water," and Vedic Sanskrit employs "udán" for the same concept. The word for 'water' is wốdhor, with reflexes in all branches of Indo-European, including Sanskrit udán, Greek ὕδωρ (hydōr), Old Church Slavonic voda." The Proto-Indo-European (PIE) word wốdhor is the ancestor of the Russian word "voda" and the Vedic Sanskrit word "udán." The PIE word wốdhor is reconstructed as meaning "water." The PIE word wốdhor is a compound word, made up of the root wốdhor wet" and the suffix -hor. The root wốd- is also found in the PIE words for "to wash" and "to moisten." The suffix -hor is a nominal suffix that indicates a noun of the neuter gender. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)
- 6. Night: In Proto-Slavic, "night" is referred to as "nočь," and in Vedic Sanskrit, it is "náktam."

The word for 'night' is nók<sup>w</sup>ts, with reflexes in all branches of Indo-European, including Sanskrit náktam, Greek νύξ (núx), Latin nox, Old Church Slavonic nočь. The Proto-Indo-European (PIE) word nók<sup>w</sup>ts is the ancestor of the Russian word "nočь" and the Vedic Sanskrit word "náktam." The PIE word nók<sup>w</sup>ts is reconstructed as "night." The PIE word nók<sup>w</sup>ts is a compound word, made up of the root nek- "to be dark" and the suffix -ts. The root nek- is also found in the PIE words for "darkness" and "shadow." The suffix -ts is a nominal suffix that indicates a noun of the neuter gender . The Proto-Slavic word "nočь" is a direct descendant of the PIE word nók<sup>w</sup>ts . It is pronounced as /'n<sup>j</sup>o:t͡c<sup>j</sup>/in Modern Russian. The Vedic Sanskrit word "náktam" is also a direct descendant of the PIE word nók<sup>w</sup>ts. It is pronounced as /na:k:tam/ in Vedic Sanskrit. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)

7. Sun: Proto-Slavic uses "słъпьсе" for "sun," while Vedic Sanskrit employs "súrya." The word for 'sun' is sóuel, with reflexes in all branches of Indo -European, including Sanskrit súrya, Old Church Slavonic słъпьсе. The Proto-Indo-European word sóuel is the ancestor of the Russian word "słъпьце" and the Vedic Sanskrit word "súrya" The word sóuel is reconstructed as meaning "sun." The PIE word sóuel is a compound word, made up of the root sū- "to burn" and the suffix -el. The root sū- is also found in the PIE words for "to shine" and "to be hot." The suffix -el is a nominal suffix that indicates a noun of the masculine gender. The Proto-Slavic word "słъпьсе" is a direct descendant of the PIE word sóuel. It is pronounced as /'słunjtcə/ in Modern Russian. The Vedic Sanskrit word "súrya" is also a direct descendant of the PIE word sóuel. It is pronounced as /'su:rja:/ in Vedic Sanskrit. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)

8. Moon: The cognate word for "moon" in Proto-Slavic is "měsęcь," and in Vedic Sanskrit, it is "māsá." The word for 'moon' is méh₂sōs, with reflexes in all branches of Indo-European, including Sanskrit māsá, and old Church Slavonic měsęcь. The Proto-Indo-European word méh₂sōs is the ancestor of the Russian word "měsęcь" and the Vedic Sanskrit word "māsá." The PIE word méh₂sōs is reconstructed as meaning "moon." The PIE word méh₂sōs is a compound word, made up of the root meh₂- "to measure" and the suffix -sōs. The root meh₂- is also found in the PIE words for "month" and "measure." The suffix -sōs is a nominal suffix that indicates a noun of the masculine gender. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)

9. Fire: In Proto-Slavic, "fire" is expressed as "ognь," and in Vedic Sanskrit, it is "agní." The word for 'fire' is h<sub>1</sub>égnis, with reflexes in all branches of Indo-European, including Sanskrit agni, Greek ἄγνῖς (hēgnís), Old Church Slavonic ognь. The Proto-Indo-European (PIE) word h<sub>1</sub>égnis is the ancestor of the Russian word "ognь" and the Vedic Sanskrit word "agní." The PIE word h<sub>1</sub>égnis is reconstructed as meaning "fire." It is also the ancestor of many other Indo-European words for "fire". The PIE word h<sub>1</sub>égnis is a compound word, made up of the root h<sub>1</sub>eg-"to burn" and the suffix -nis. The root h<sub>1</sub>eg-is also found in the PIE words for "to ignite" and "to kindle." The suffix -nis is a nominal suffix that indicates a noun of the masculine gender (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)

10. Earth: The word for "earth" in Proto-Slavic is "zemlja," and in Vedic Sanskrit, it is "záman." The word for 'earth' is dh<sub>1</sub>ég<sup>h</sup>mōs, with reflexes in all branches of Indo-

European, including Sanskrit záman, old Church Slavonic zemljja. The Proto-Indo-European (PIE) word dh<sub>1</sub>ég<sup>h</sup>mōs is the ancestor of the Russian word "zemlja" and the Vedic Sanskrit word "záman." The PIE word dh<sub>1</sub>ég<sup>h</sup>mōs is reconstructed as meaning "earth." The PIE word dh<sub>1</sub>ég<sup>h</sup>mōs is a compound word, made up of the root dh<sub>1</sub>eg- "to dig" and the suffix -mōs. The root dh<sub>1</sub>eg- is also found in the PIE words for "to build" and "to create." The suffix -mōs is a nominal suffix that indicates a noun of the feminine gender. The Proto-Slavic word "zemlja" is a direct descendant of the PIE word dh<sub>1</sub>ég<sup>h</sup>mōs. It is pronounced as /'zeml<sup>j</sup>ə/ in Modern Russian. The Vedic Sanskrit word "záman" is also a direct descendant of the PIE word dh 1ég<sup>h</sup>mōs. It is pronounced as /'za:men/ in Vedic Sanskrit. (Mallory & Adams, 2006, 1997; Künnap, 1999; Tikhomirov & Tikhomirova, 2018; Renfrew, 1990; Díez, F. L.-M., n.d.; Szemerényi & Szemerényi, 1999)

## **Modern Russian and Sanskrit**

The linguistic structural similarities between Russian and Sanskrit are notable, and they reflect their Indo-European linguistic heritage. Let us broaden on these parallels.

Synthetic Languages: Russian and Sanskrit are both regarded synthetic languages (Krylova & Khavronina, 1988; Neidle, 2012; Zauber, 1997). The extensive use of inflections, which modify words to convey grammatical information, distinguishes synthetic languages. These inflections are important in the syntax and semantics of both languages (Crystal, 2012).

Inflections for Grammatical Expressions: Inflections are heavily used in Russian and Sanskrit to convey various aspects of grammar, such as tense, aspect, mood, case, number, and gender (Krylova & Khavronina, 1988; Neidle, 2012; Zauber, 1997). In Sanskrit, for example, verbs are conjugated to indicate tense, mood, and person (Macdonell, 1997; 2014). Russian verbs, too, are inflected for tense, aspect, mood, and person (Forsyth, 1970).

*Numbers, Genders, and Persons:* Both languages distinguish three grammatical numbers (singular, dual, and plural), three genders (masculine, feminine, and neuter), and three persons (first, second, and third) (Krylova & Khavronina, 1988; Neidle, 2012; Zauber, 1997). This fine distinction allows for precise expression in both languages (Lyovin et al., 2017).

Case Systems: Case systems are used in both Russian (Krylova & Khavronina, 1988; Neidle, 2012; Zauber, 1997) and Sanskrit to indicate the grammatical role of nouns and pronouns within sentences. Sanskrit has an eight-case system, while Russian has six (Comrie, 1989; Croft & Croft, 2001; Macdonell, 1997; 2014). These examples provide structural similarity and help to clarify meaning.

Numeral Systems: The numeral systems of Russian and Sanskrit are similar. Numbers one through ten have distinct words in both languages (Krylova & Khavronina, 1988; Neidle, 2012; Zauber, 1997). In Russian, "один" (odin) means one, whereas "एकम्" (ekam) means one in Sanskrit. These linguistic similarities reflect historical and cultural ties.

Flexible Word Order: Russian (Krylova & Khavronina, 1988; Neidle, 2012; Zauber, 1997) and Sanskrit allow for more flexible word orders than analytical languages due to their rich inflectional systems and extensive case markings. This adaptability allows for stylistic changes to word order without changing the core meaning of a sentence (Hock, 1991).

Auxiliary Verbs: Russian and Sanskrit, unlike many modern Indo-European languages, do not rely heavily on auxiliary verbs (helping verbs) to express tense, aspect, mood, or voice. Instead, such information is encoded directly within the verb through inflections in these languages (Forsyth, 1970; Macdonell, 1997; 2014). This feature reduces the need for additional words in sentences while emphasising their synthetic nature.

These linguistic similarities between Russian and Sanskrit reflect their Indo-European linguistic ancestors and contribute to their intricate and expressive identities. Both languages have structural features that have shaped their grammar, syntax, and overall linguistic character.

*Future Research:* Future research into the linguistic affinity between Russian and Sanskrit should delve deeper into a number of promising directions.

Expanded Cognate Analysis: Beyond basic vocabulary, researchers can conduct a more comprehensive analysis of cognates, examining cognates in more specialised domains such as science, technology, and culture. This can help us gain a more nuanced understanding of how language interactions have evolved over time.

*Phonological and Semantic Shifts:* The study of phonological and semantic shifts in cognates between Russian and Sanskrit can provide insights into language evolution and contact. Understanding how these shifts occurred and what they mean for both languages can be a rewarding area of research.

Historical Documentation and Textual Analysis: Historical documents, archives, and texts from Russian and Sanskrit-speaking regions can be used to reconstruct the historical context of language contact and cultural exchange. Textual analysis can shed light on how linguistic interactions influenced literature, philosophy, and other disciplines.

*Dialectal Variations:* Dialectal variations within Russian and Sanskrit, as well as their relationships to cognates and language evolution, can provide a more complete picture of linguistic connections.

Computational Linguistics: Using computational linguistic methods like natural language processing and machine learning can help with large-scale cognate detection and comparative analyses, thereby accelerating research in this field.

*Interdisciplinary Approach:* Collaborations with historians, anthropologists, and archaeologists can provide a broader historical and cultural context for linguistic interactions between Russian and Sanskrit-speaking communities.

Language Contact and Sociolinguistics: Examining the sociolinguistic aspects of language contact, including bilingualism and code-switching, can shed light on how daily interactions between speakers of these languages influenced their linguistic development.

Incorporating these directions into future research will further unravel the linguistic and historical connections between Russian and Sanskrit, enriching our understanding of their shared Indo-European heritage and the broader tapestry of language evolution.

# **Conclusion**

The study successfully investigated the linguistic affinity between Russian and Sanskrit, two languages of historical and linguistic significance within the Indo-European language family. The research has highlighted on the historical connections and

language evolution between these two languages and their respective language families by identifying and analysing cognates, or words with a shared origin.

The research question, which centred on identifying shared cognates and their implications, revealed evidence of a common linguistic ancestry as well as ancient interactions between Russian and Sanskrit-speaking communities. These findings not only add to our understanding of linguistic history, but they also suggest at historical phenomena such as trade, migration, or cultural exchanges that have influenced linguistic development.

Furthermore, despite differences in geographical origins and language families, the study has highlighted the intriguing structural and syntactical similarities between Proto-Slavic and Vedic Sanskrit, highlighting their intricacies and richness. This new understanding heightens our recognition for the sophistication of these ancient languages.

The research question, which focused on identifying shared cognates and their implications, revealed evidence of a common linguistic commonality and ancient interactions between Russian and Sanskrit-speaking communities. These findings not only add to our understanding of linguistic history, but also hint at historical phenomena such as trade, migration, or cultural exchanges that have influenced linguistic development.

Furthermore, the study has highlighted the intriguing structural and syntactical similarities between Proto-Slavic and Vedic Sanskrit, highlighting their complexity and richness despite differences in geographical origins and language families. This realisation heightens our appreciation for the sophistication of these ancient languages.

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