

A Cross-Linguistic study of Grammatical Number of Russian and Arabic

¹Chandan Suman , ²Quamer Shaban

¹Department of Foreign Language, Faculty of Arts, Banaras Hindu University, Varanasi.

²Department of Arabic, Faculty of Arts Banaras Hindu University, Varanasi.

¹dr.chandansuman@gmail.com, ²q.shaban82@gmail.com

Abstract:

This study compares the grammatical number systems of Russian and Arabic, two languages from different language families, Slavic and Semitic, respectively. The investigation aims to identify similarities and differences in how these languages express singular and plural entities, elaborating on their respective grammatical features and linguistic structures. The paper delves at noun inflection, pronouns, and verb agreement to investigate the underlying mechanisms of number marking in both languages. The findings contribute to the broader field of linguistic typology and provide valuable insights into the complexities of grammatical number across diverse linguistic systems.

Keywords: Russian, Arabic, Grammatical Number, Noun Inflection, Pronouns, Verb Agreement, Linguistic Typology

1. Introduction:

Linguists have long been interested in the study of grammatical number, a fundamental linguistic feature, due to its intricate role in conveying number and plurality within languages. This research provides a thorough comparison of the grammatical number systems in Russian and Arabic, two languages from different language families, Slavic and Semitic, respectively. This study aims to contribute to the broader field of linguistic typology and provide a deeper understanding of cross-linguistic variation in grammatical number by examining the similarities and differences in how Russian and Arabic express singular and plural entities.

Grammatical number, a key component of morphosyntax, is an important indicator of linguistic diversity and universals. Different languages use a variety of mechanisms for indicating number, such as inflectional suffixes, lexical items, and word order changes. As representatives of different language families and geographical regions, Russian and Arabic provide an intriguing opportunity to investigate how grammatical number manifests itself in typologically diverse languages. Understanding the grammatical number systems of Russian and Arabic not only adds to our understanding of these languages, but also contributes to the larger field of linguistics.

The primary goals of this research are twofold: first, to investigate and analyse the mechanisms used in Russian and Arabic to express grammatical number in nouns, pronouns, and verbs; and second, to conduct a comparative analysis between the two languages to identify both shared and differing features. By achieving these goals, the research hopes to

elaborate on Russian and Arabic grammatical number systems and contribute to our understanding of cross-linguistic variation in this linguistic domain.

This research entails a thorough examination of the grammatical number systems in Russian and Arabic, including noun inflection, pronominal systems, and verb agreement. The study takes a qualitative approach, which allows for a thorough examination of the complexities and distinctive features of grammatical number in both languages.

The quantity or plurality of referents associated with a noun, pronoun, or verb is expressed by grammatical number. It is an essential component of morphosyntax, the study of how grammatical features interact with word and sentence structure. Investigating grammatical number in different languages aids in the finding of patterns of universality and variation, thereby contributing to a better understanding of linguistic typology.

Language typology is the classification of languages based on structural similarities and the identification of patterns of variation. The study of grammatical number in Russian and Arabic allows for a better understanding of language universals and specific features. Such studies contribute to our understanding of linguistic diversity and how languages adapt to express similar concepts in different ways (Owens, 2006, 2013; al-Sharkawi, 2016).

Russian, an Indo-European language of the Slavic language family, has a complex and rich grammatical number system. In Russian, nouns and pronouns undergo various inflectional changes to express singular and plural forms, reflecting the language's grammatical complexity (Wade, 2020; инокур, 1971; Morfill, 1889).

Arabic, a Semitic language, has a distinct root-and-pattern system that distinguishes grammatical number through both internal modifications and the use of external particles. The study of Arabic grammatical number provides valuable insights into how non-Indo-European languages deal with plurality (Owens, 2006, 2013; al-Sharkawi, 2016).

We delve into analysis process in both languages, aiming at noun inflection, pronominal systems, and verb agreement. The comparative analysis findings will be discussed, emphasising the similarities and differences in the grammatical number systems of Russian and Arabic, as well as their implications for language typology. Finally, the research concludes with a summary, contributions to the field of linguistics, and potential future research directions in the study of grammatical number across diverse languages.

2. Theoretical Framework

Grammatical number is a fundamental linguistic feature that expresses the number or plurality of referents associated with a language's nouns, pronouns, and verbs. It is essential in syntactic and semantic structures because it allows for effective communication about countable entities and their quantification. Grammatical number has been extensively studied in the field of linguistics (Greenberg, 1966; Corbett, 2000) and is regarded as a key feature in morphosyntax. Different languages use a variety of strategies to indicate grammatical

number, such as inflectional suffixes, prefixes, internal changes, and word order variations (Comrie, 1989; Haspelmath & Sims, 2010). A thorough understanding of grammatical number in various languages provides valuable insights into language typology, as well as the universals and variations in how languages express quantity.

Language typology is the study of patterns of variation across languages and the classification of languages based on shared structural features. Comparative studies of linguistic features, such as grammatical number, help us understand language universals and the unique characteristics of individual languages. The typological approach identifies similarities and differences in grammatical number expression across language families and geographical regions. This study aims to investigate the typological diversity in how these languages handle grammatical number and its implications for linguistic theory by comparing Russian and Arabic, two languages from distinct language families (Croft, 2002; Dryer, 2011).

Russian, an Indo-European language and a Slavic language, employs a complex grammatical number system. In Russian, nouns and pronouns go through various inflectional changes to express singular and plural forms (Corbett, 2000). Russian nouns are divided into three genders: masculine, feminine, and neuter, and each has its own pattern of number inflection. Furthermore, Russian has morphological dual forms that represent two items (Corbett, 2000). The study of Russian grammatical number provides compelling evidence for comprehending the complexities of a highly inflectional language (Wright et al., 2005; инокур, 1971; Morfill, 1889).

Arabic, a Semitic language, is distinguished by its distinctive root-and-pattern morphology. To indicate grammatical number, the language employs a combination of internal changes within root consonants and the use of external particles (Owens, 2006, 2013; al-Sharkawi, 2016). Nouns and adjectives in Arabic have singular, dual, and plural forms, with the dual denoting precisely two items (Kazasis & Bateson, 1969; Sawaie, 2015; Alhawary, 2011). Furthermore, Arabic pronouns display intricate patterns of number marking based on the referent's gender and person (Ryding, 2005). The study of Arabic grammatical number adds to our understanding of how a non-Indo-European language expresses plurality.

3. Noun Inflection:

Singular and Plural Noun Forms in Russian:

Noun inflection is an important part of the Russian grammatical number system. Nouns in Russian have separate forms for singular and plural entities. Singular nouns are usually unmarked or have nominative case endings, whereas plural nouns go through various inflectional changes (Corbett, 2000).

Singular	Plural	Gender	Meaning
отец	отцы	Masculine	Father

песня	песни	Feminine	Song
полотенце	полотенца	Neuter	Towel
пирог	пирог	Masculine	Pie
девочка	девочки	Feminine	Girl
крыло	крылья	Neuter	Wing

The plural forms of Russian nouns are predominantly marked by the addition of suffixes, which can vary based on the noun's gender and declension class. For example, masculine nouns often add "-ы" or "-и" to indicate plurality, while feminine nouns tend to add "-ы" or "-и" as well (Corbett, 2000). Neuter nouns, on the other hand, frequently add "-а" or "-я" to form their plural counterparts (Corbett, 2000). Additionally, Russian nouns have a distinct dual form, used to denote exactly two items, but it is less commonly used than the singular and plural forms (Corbett, 2000).

Singular and Plural Noun Forms in Arabic:

The grammatical number of nouns in Arabic is expressed using a combination of internal changes within root consonants and the use of external particles (Owens, 2006, 2013; al-Sharkawi, 2016). The singular form of Arabic nouns typically consists of three root consonants and lacks overt number markings. Plural nouns, on the other hand, go through internal changes within the root consonants and may include suffixes or prefixes (Owens, 2006, 2013; al-Sharkawi, 2016).

Sound plurals, broken plurals, and assimilated plurals are the three main patterns for plural formation in Arabic nouns (Owens, 2006, 2013; al-Sharkawi, 2016). Sound plurals are formed by the addition of suffixes or internal vowel changes, whereas broken plurals are formed by changes to the root consonants (Owens, 2006, 2013; al-Sharkawi, 2016). Assimilated plurals, on the other hand, exhibit patterns that combine both sound and broken plurals (Owens, 2006, 2013; al-Sharkawi, 2016).

Singular	Plural	Gender	Meaning
أب	آباء	Masculine	Father
أغنية	أغاني	Feminine	Song
منشفة	مناشف	Feminine	Towel
بنت	بنات	Feminine	Girl
جناح	أجنحة	Masculine	Wing

Comparative Analysis of Noun Inflection:

The study of noun inflection in Russian and Arabic reveals both similarities and differences in the ways these languages express grammatical number. To mark plural nouns, both languages use inflectional strategies, but the nature of these strategies differs. To indicate plurality, Russian primarily employs suffixes, (Alosh. 2005; Wright. 1974) whereas Arabic employs a combination of internal root changes and external particles. Another feature that distinguishes Russian from Arabic is the presence of a dual form. This comparative study emphasizes on the typological variation in noun inflection across languages from different families and geographical regions, adding to our understanding of cross-linguistic variation in grammatical number marking.

4. Pronouns:

Pronominal Systems in Russian:

The Russian pronominal system is inextricably linked to the language's grammatical number features. Russian pronouns are inflected for both singular and plural forms, reflecting the referent's grammatical number. The first, second, and third person singular pronouns in Russian have distinct forms for the nominative, genitive, dative, accusative, instrumental, and prepositional cases (Corbett, 2000). Plural pronouns, on the other hand, go through additional inflectional changes, with plural forms appearing in all six cases (Corbett, 2000). Furthermore, Russian pronouns, like nouns, have a dual form that is used to indicate precisely two referents, but it is not as commonly used as the singular and plural forms (Corbett, 2000).

Pronominal Systems in Arabic:

The Arabic pronominal system is distinguished by its rich and intricate expression of grammatical number and gender. Arabic pronouns, like Russian pronouns, have different forms for singular, dual and plural referents, as well as first, second, and third person. Arabic pronouns have three genders. They differ in three ways, with separate pronoun forms for masculine, feminine, and plural entities (Ryding, 2005). Furthermore, Arabic pronouns distinguish between second-person singular pronouns to differentiate between the masculine "anta" and the feminine "anti" (Ryding, 2005). In Arabic, plural pronouns are further marked for the dual form to represent precisely two referents (Ryding, 2005).

Comparative Analysis of Pronouns:

A comparison of Russian and Arabic pronominal systems reveals significant differences in the expression of grammatical number and gender. While both languages inflect pronouns for singular, dual and plural forms, Arabic stands out by including a three-way gender distinction for pronouns, which Russian does not. Furthermore, the use of a dual form in pronouns for precisely two referents in Arabic is another notable difference from the Russian pronominal system (Ryding, 2005; Corbett, 2000). This comparative study of pronouns emphasizes the distinct typological features in how Russian and Arabic handle grammatical number and

gender in their pronominal systems, adding to our understanding of cross-linguistic variation in this linguistic domain.

5. *Verb Agreement:*

Subject-Verb Agreement in Russian:

The grammatical number system in Russian is characterised by subject-verb agreement. Verbs in Russian agree with the subject's grammatical number, indicating whether the subject is singular or plural. The agreement is manifested through verb suffixes that vary depending on the number of subjects (Corbett, 2000). When dealing with singular subjects, the verb is usually left unmarked, whereas when dealing with plural subjects, the verb undergoes inflectional changes to indicate plurality (Corbett, 2000). In Russian, subject-verb agreement is an important component of sentence structure that ensures grammatical coherence in discourse.

Subject-Verb Agreement in Arabic:

Subject-verb agreement is a complex and extensive aspect of the grammatical number system in Arabic. Arabic verbs, like Russian verbs, agree with the subject's number. However, in Arabic, agreement is not limited to singular, plural, and dual forms; rather, it extends to a more complex system of grammatical number, which includes singular, dual, and plural, as well as masculine and feminine genders (Owens, 2006, 2013; al-Sharkawi, 2016). Depending on the number and gender of the subject, the verb undergoes various inflectional changes (Owens, 2006, 2013; al-Sharkawi, 2016). Furthermore, Arabic has a complex system of sound and broken plurals, which influences subject-verb agreement (Owens, 2006, 2013; al-Sharkawi, 2016). The subject-verb agreement in Arabic is an important aspect of its verbal morphology.

Comparative Analysis of Verb Agreement:

The study of subject-verb agreement in Russian and Arabic reveals the differences in approaches to expressing grammatical number and gender concord in verb forms. While both languages have subject-verb agreement, Russian's agreement is simpler and limited to mostly singular and plural, with no gender distinctions (Corbett, 2000) only past verbal forms have genders Russian language. However, Arabic's subject-verb agreement is far more complex, incorporating a broader range of grammatical number and gender distinctions (Owens, 2006, 2013; al-Sharkawi, 2016).

The presence of broken plurals in Arabic complicates the subject-verb agreement even more (Owens, 2006, 2013; al-Sharkawi, 2016). This comparative analysis adds to our understanding of cross-linguistic variation in grammatical number marking and verb morphology by providing valuable insights into the typological variation in how Russian and Arabic handle verb agreement (Greenberg, 1866).

6. Discussion:

6.1 Similarities in Grammatical Number: A comparison of grammatical number in Russian and Arabic reveals several striking parallels in the ways these languages express quantity and plurality. Inflectional strategies are used in both Russian and Arabic to indicate grammatical number in nouns, pronouns, and verbs. Both languages have distinct forms for singular and plural nouns, with Russian using suffixes and Arabic using a combination of internal root changes and external particles (Corbett, 2000; Ratcliffe, 2010). Furthermore, both languages use a dual form to indicate precisely two referents, though the dual form is used less frequently than the singular and plural forms (Corbett, 2000; Ratcliffe, 2010).

6.2 Differences in Grammatical Number: Despite their similarities, the grammatical number systems of Russian and Arabic differ significantly. One major distinction is found in the pronominal systems. While both languages inflect pronouns for singular and plural forms, Arabic stands out by including a three-way gender distinction for pronouns (Ryding, 2005). This feature is missing in Russian, where pronouns only have a binary gender distinction. Furthermore, Arabic subject-verb agreement is noticeably more complex than Russian, involving a broader range of grammatical number and gender distinctions, as well as sound and broken plurals influencing the agreement (Ratcliffe, 2010; Corbett, 2000).

6.3 Implications for Language Typology: This comparative study's findings have important implications for language typology and our understanding of cross-linguistic variation in grammatical number systems. The presence of a three-way gender distinction in Arabic pronouns distinguishes it from Russian and emphasises the various ways in which languages can encode gender information (Ryding, 2005). Furthermore, the complexities of Arabic subject-verb agreement highlight the complexities of its verbal morphology (Owens, 2006, 2013; al-Sharkawi, 2016). This study contributes to the larger field of linguistics by providing empirical evidence of the various strategies used to express grammatical number by languages from different families and regions. These typological considerations broaden our understanding of language structure and morphology's universals and variations.

The study of grammatical number in Russian and Arabic reveals the complexities and distinctive features in how languages express quantity and plurality. The similarities and differences in their noun inflection, pronominal systems, and subject-verb agreement help us understand the linguistic features that contribute to each language's distinct typological profile. As languages evolve and interact, more comparative linguistics research can provide new insights into the complexities of grammatical number systems and broaden our understanding of global linguistic diversity.

7. Conclusion:

The present study examines the grammatical number systems of Russian and Arabic, two languages from different language families, Slavic and Semitic, respectively. The study looked at how grammatical number is expressed in nouns, pronouns, and verbs in both

languages, highlighting similarities, differences, and typological implications. The findings of this cross-linguistic study offer important insights into the complexities of grammatical number in various linguistic systems.

A comparison of the grammatical number systems in Russian and Arabic revealed several significant findings. To mark grammatical number in nouns, both languages use inflectional strategies, with Russian using suffixes and Arabic using a combination of internal root changes and external particles. Both languages have separate forms for singular, plural, and dual entities. However, Arabic distinguishes itself by incorporating a three-way gender distinction in pronouns, which Russian does not have. Furthermore, subject-verb agreement in Arabic is much more complicated, involving a broader range of grammatical number and gender distinctions, as well as sound and broken plurals influencing the agreement.

This research makes several contributions to the field of linguistics. Firstly, it broadens our understanding of language typology, as well as the universals and variations in how languages express grammatical number. The study of Russian and Arabic exemplifies the various strategies languages use to deal with quantity and plurality. Second, an examination of noun inflection, pronominal systems, and subject-verb agreement in Russian and Arabic provides empirical evidence of the complexities and nuances found in both languages' grammatical number systems. This comparative study emphasises the complexities of their morphosyntactic structures as well as the impact of language family on grammatical features.

While this study provides useful insights, there are several possibilities for future research that can be pursued. Firstly, additional cross-linguistic research can broaden the scope of the comparative analysis to include more languages from different language families, providing a more comprehensive understanding of grammatical number variation. Focusing on other aspects of grammatical number, such as collective nouns or agreement patterns in more complex sentences, can also provide deeper insights into this feature of linguistic diversity. Investigating the historical development of grammatical number in Russian, Arabic, and other languages may focus specifically on the diachronic evolution of these systems. Furthermore, research into the cognitive implications of grammatical number and its relationship to language acquisition and processing can help us understand human language cognition.

Finally, this study presented a comparative study of grammatical number in Russian and Arabic, revealing shared and distinct typological features. The study of noun inflection, pronominal systems, and subject-verb agreement revealed the complexities of the grammatical number systems in these languages. The findings contribute to the larger field of linguistics and lay the groundwork for future research into the role of grammatical number in various linguistic contexts.

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