

PERCEPTUAL LINGUISTICS

INTRODUCTION

Perceptual linguistics is an emerging field that explores how native speakers perceive various language phenomena. It examines the perceptual distance between language variants – whether different languages, dialects, sociolects, or their specific features – based on the beliefs and assessments of a given community. This perceptual distance can provide insights into differences in language intuition among native speakers and reveal trends in contemporary language use.

Perceptual linguistics investigates native speakers' preferences for competing language variants – phonetic, prosodic, lexical, morphological, morphophonological, syntactic, and others – as shaped by perception. Empirical data from such studies help illustrate the functional dynamics of language and the evolving status of standard language norms, emphasizing their stability but also elasticity.

Another important area of investigation is how speakers perceive and evaluate standard and non-standard language phenomena in terms of correctness, euphony, aesthetics, salience, prestige, stigma, territorial association, mapping, etc. A crucial objective of this research is to determine the ethnic, social, demographic, and cultural factors shaping the perception of these phenomena.

Perceptual linguistics also encompasses a wide range of other research topics, objectives, and methodologies.

PROJECT GUIDELINES

This project aims to examine how native speakers of Bulgarian perceive three specific grammatical phenomena in contemporary Bulgarian. Additionally, it explores how perceptual differences correlate with socio-demographic factors such as age, gender, education level, type of specialty, profession, early linguistic environment, and primary place of residence.

The selected linguistic phenomena meet the following criteria:

- They are characterological features of Bulgarian.
- They are grammatical structures that have been subject to scholarly debate due to differing theoretical perspectives in Bulgarian linguistics.
- They reflect key development tendencies in the Bulgarian verbal system, particularly in contexts where competing forms coexist.
- Earlier, less comprehensive studies have indicated variations in their perception.
- The study of how native speakers perceive these language phenomena should serve as a crucial link between language perception and scholarly knowledge. This connection will provide new grounds for accepting or rejecting linguistic theoretical positions and will also play a role in the codification of language norms.

The three linguistic phenomena that fulfill these criteria are:

1. Differences in the degree of reliability expressed by the four evidentials: indicative, conclusive, renarrative and dubitative.
2. The substitution of the imperfect by the aorist and of the imperfect active participle by the aorist active participle in contexts where the imperfect or the imperfect past participle is conventionally expected.
3. The contextual dependence of verb tenses' use in subordinate clauses, which leads to varying temporal forms in them. From the perspective of logical and temporal agreement between the main and subordinate clauses, this variation constitutes a substitution of one tense for another.

METHODOLOGY

The studies of the perception of 3 selected grammatical phenomena are carried out by conducting 3 separate surveys using the voluntary sampling method. They are not based on a nationally representative sample according to certain socio-demographic characteristics of contemporary Bulgarians and therefore are not nationally representative. However, the considerable number of participants in the three surveys (1st survey – 3166 respondents, 2nd survey – 950 respondents, 3rd survey – 1610 respondents) provides a sufficient basis for assuming that the results are significant for the implementation of the perceptual studies on these respondents. When processing the results of the surveys, not only linguistic analysis is used, but also Pearson's chi-squared test.

RESULTS

First survey – 3166 respondents

The first survey tests hypotheses regarding the preferences of Bulgarian native speakers to competing temporal forms in different subordinate clauses, where the context permits the use of multiple temporal variants. This results from the context's influence, which allows for the neutralization of temporal oppositions that distinguish the nine tenses in modern Bulgarian language.

The respondents' answers in perception of a selected set of complex sentences demonstrate the differences in their preferences to a temporal form in the subordinate clauses. They are significant not only when ascertaining the perception of the linguistic phenomenon studied but convincingly reveal the contributory potential of the perceptual approach when verifying theoretical linguistic statements.

The theoretical views on which the first survey is based, the hypotheses raised and their verification, the respondents' answers, the linguistic analyses of the data obtained, as well as the statistical analysis of the relationships between the variable *respondents' preferences to the temporal affiliation of the verb in the subordinate clause in contexts with permissible neutralization of temporal oppositions*, and the variable *type of specialty of the respondents associated with the presence or absence of specialized linguistic knowledge* can be traced in two publications:

Preferences for competing temporal forms in subordinate clauses in contemporary Bulgarian. An analysis of survey data. Authors: Prof. Krasimira Aleksova, DSc; Assoc. Prof. Dr. Danka Apostolova, PhD; Assoc. Prof. Yana Sivilova, PhD; Assist. Prof. Laska Laskova, PhD; Senior Assist. Prof. Mihaela Moskova, PhD; Diana Androva. Published in: *Bulgarian Language and Literature*, Vol. 66, Book 5, 2024, pp. 471 – 500. <https://doi.org/10.53656/bel2024-5-1A>, indexed in Web of Science.

Relationships between the preferences of Bulgarian respondents to competing temporal forms in subordinate clauses in contemporary Bulgarian and the factor type of specialty. Authors: Prof. Krasimira Aleksova, DSc; Assoc. Prof. Danka Apostolova, PhD. Published in: *Bulgarian Language and Literature*, vol. 66, book 6, 2024, pp. 662 – 676. <https://doi.org/10.53656/bel2024-5-4KA>, indexed in Web of Science.

Second survey – 950 respondents

The differences between the indicative, conclusive, renarrative and dubitative forms in contemporary Bulgarian based on their perceived degree of reliability, as evaluated through a survey conducted with 950 Bulgarian native speakers are explored and analyzed. The primary objective here is to investigate how the respondents perceive distinctions in reliability across six experimental scenarios that combine forms of all four evidentials. The results are used to examine the degrees of reliability in each pair of evidentials. Additionally, the study revisits the discussion on whether a subordinate relationship exists between the features of \pm subjectivity and \pm renarrativity (\pm reportedness) which form the oppositions between the four evidentials in contemporary Bulgarian.

In the questionnaire, 6 scenarios are sequentially presented in which participant **A** is looking for an object or other participants. In order to find them, **A** asks two of his interlocutors, **B** and **C**, about them. The answers of **B** and **C** contain different evidential forms and not same, but equally possible locations according to the description of the situation. The respondents are asked which of the two answers (**B** or **C**) they think **A** believed.

Through the results of this survey, the hypothesis is tested that, based on the respondents' evaluations which one of the statements in each pair with a different combination of all four evidentials is distinguished by a higher degree of reliability, conclusions can be drawn about the perception of reliability distances between the evidentials in modern Bulgarian language. Reliability distances are defined as a proportion between the percentage of the respondents (native speakers) who perceived as more reliable the first or the second of two opposing statements in the six combinations between all four evidentials.

The perception of the reliability distances between six pairs of evidentials

| Scenarios | Statement preferences | | | |
|-----------|-----------------------|-------|-----------------------|-------|
| | 1st statement | % | 2nd statement | % |
| 1 | Indicative imperfect | 91.68 | Conclusive imperfect | 8.32 |
| 2 | Renarrative future | 86.74 | Dubitative future | 13.26 |
| 3 | Conclusive imperfect | 84.42 | Dubitative imperfect | 15.58 |
| 4 | Conclusive imperfect | 58 | Renarrative imperfect | 42 |
| 5 | Indicative future | 92.53 | Renarrative future | 7.47 |
| 6 | Indicative future | 90 | Dubitative future | 10 |

CONCLUSION

Second survey

Statements expressed with the maximally unmarked indicative ($-$ subjectivity, $-$ renarrativity ($-$ reportedness)) are perceived as most reliable (90% and above). This applies both when the indicative imperfect is used to represent witnessed (firsthand) information about a past action and when the future tense of the verb does not indicate the type of perspective, i.e. whether it is witnessed or non-witnessed (firsthand or non-firsthand). The differences in reliability distances between each of the three indirect evidentials and the indicative are minimal: **10% for the dubitative** vs. 90% for the indicative, **8.32% for the conclusive** vs. 91.68% for the indicative, **7.47% for the renarrative** vs. 92.53% indicative). According to data from this perceptual study, the greatest reliability distance is between the indicative ($-$ subjectivity, $-$ renarrativity) and the renarrative ($-$ subjectivity, $+$ renarrativity). This is followed by the distance between the indicative ($-$ subjectivity, $-$ renarrativity) and the conclusive ($+$ subjectivity, $-$ renarrativity), while the smallest distance is between the indicative ($-$ subjectivity, $-$ renarrativity) and the dubitative ($+$ subjectivity, $+$ renarrativity). This pattern arises because some responses suggest that the $+$ subjectivity (subjective reservation) of the reported information about (future) actions, expressed by the dubitative form, may not necessarily evoke distrust.

The results indicate that the perception of statements with different evidentials leads to significant reliability distances, particularly between the dubitative – the most semantically marked form, expressing subjective reservation towards reported information – and each of the other evidentials. However, the differences in reliability distances between each of the other three evidentials and the dubitative are minimal: conclusive – dubitative (**84.42% vs. 15.58%**), renarrative – dubitative (**86.74% vs. 13.26%**), indicative – dubitative (**90% vs. 10%**). As these results indicate, there is a slight increase in reliability from the conclusive to the renarrative, and finally to the indicative.

The comparisons predictably show that, according to respondents' perception, greater reliability distances exist between the indicative and the three indirect evidentials than between the dubitative and the other three evidentials. The indicative encodes *non-subjective, non-reported* (firsthand) information, which, in past tenses, is also witness-based, making it the most reliable in perception.

The reliability distance between the dubitative ($+$ subjectivity) and the renarrative ($-$ subjectivity), 13.26% vs. 86.74%, is smaller than the reliability distance between the indicative ($-$ renarrativity) and the renarrative ($+$ renarrativity), 92.53% vs. 7.47%. A similar pattern is observed for the distance between the dubitative ($+$ renarrativity) and the conclusive ($-$ renarrativity), 15.58% vs. 84.42%, and the indicative ($-$ subjectivity) and the conclusive ($+$ subjectivity), 91.68% vs. 8.32%. The difference in reliability distance between the dubitative ($+$ subjectivity) and the renarrative ($-$ subjectivity), 13.26% vs. 86.74%, on the one hand, and the dubitative ($+$ renarrativity) and the conclusive ($-$ renarrativity), 15.58% vs. 84.42%, on the other hand, is very small.

Based on the survey data, it cannot be concluded that perception reveals a significant difference in the degree of reliability assigned to forms that contrast in terms of *subjectivity* (dubitative vs. renarrative) and in terms of *renarrativity* (dubitative vs. conclusive) within the group of indirect evidentials. Additionally, the smallest reliability distance is observed between the conclusive ($+$ subjectivity, $-$ renarrativity: 58%) and the renarrative ($-$ subjectivity, $+$ renarrativity: 42%). These findings support the problematic nature of the assumption that *subjectivity* and *renarrativity* are in a subordinative relationship when perceiving forms that express these features. The detailed analysis of the data obtained can be found in the publication:

Differences in the perceived reliability of information expressed by the four evidentials in contemporary Bulgarian: a survey-based study. Authors: Prof. Krasimira Aleksova, DSc; Senior Assist. Prof. Mihaela Moskova, PhD; Assoc. Prof. Danka Apostolova, PhD; Assoc. Prof. Yana Sivilova, PhD; Senior Assoc. Prof. Laska Laskova, PhD; Patrik Mihaylov. Published in: *Bulgarian Language and Literature*, Vol. 66, Issue 6, 2024, pp. 677–694. [DOI: 10.53656/bel2024-6-5KM](https://doi.org/10.53656/bel2024-6-5KM), indexed in Web of Science.

Third survey – 1610 respondents

Its objective is to examine the perception of contexts in which, in written and spoken communication among native Bulgarian speakers, a replacement occurs between the imperfect, which is expected or required by the context, and the aorist, or between the imperfect active participle and the aorist active participle. The survey has been completed, and statistical processing of the results is now underway.

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