Summaries of the scientific publications of Gergana Ganeva, submitted to the competition for the academic position "Associate Professor" in a professional field 1.2. Philology (Bulgarian language – History of Bulgarian Language), announced in State Gazette, issue 55 of 28.06.2024

1. Modal notions of *possibility* and *probability* in the history of Bulgarian language, monograph. Sofia, 2023.

This monograph examines the history and interaction of some verbal constructions that express possibility and probability: 1) the conditional mood, which today expresses possibility when a given condition is fulfilled; 2) modal uses of the future tense, from which the presumptive verb forms (the so-called *shte da-forms*) arise; 3) modal verbs and periphrastic constructions with modal meaning. The work covers the period between the 14th and 18th centuries inclusive. Both works that show the intellectualization of the literary language and works that are traditionally considered to reflect the colloquial language and the historical changes are considered: The Troyan Parable, works by Patriarch Euthymius and Constantine of Kostenets, the Book of *Gregory Tsamblak*, the Wallachian-Bulgarian diplomas, Life of George the New of Sofia by presbyter Peyo, the Troyan and Svishtov Damascenes.

Chapter One ('Modality, Epistemic Modality and Presumptive Meaning') sets out the theoretical propositions underlying analysis of the linguistic data.

Chapter Two is devoted to the history of the conditional mood, which expresses a non-epistemic possibility. The aim of this chapter is to verify, on the basis of usages in Middle Bulgarian works, what the semantic invariant of the conditional mood was, and thus to confirm or reject various hypotheses about the development of certain modal categories in Bulgarian language. The analysis shows that, in the 14th – 15th centuries, the conditional mood expressed the speaker's assessment that the relation between action and reality was 'possible'. At that time, the Bulgarian conditional mood also had single and isolated conjunctive mood uses. Special attention is also given to the question of whether there is a connection between the conditional mood and the emergence, and grammaticalization, of evidentiality in Bulgarian. The work argues that no evidence for such a relationship can be found in our written sources, and that we should therefore accept the typologically common perfect tense → evidentiality development in Bulgarian, rather than the all too rare irrealis mood → evidentiality change.

Chapter Three examines the expression of epistemic possibility and probability through modal uses of the future tenses. The textual material is classified according to the context in which the epistemic notion is realized. It is argued that epistemic possibility notion is realized in interrogative utterances (including rhetorical and echo questions, and interrogative object clauses) and in counterfactual contexts. The notion of probability can appear in assertive sentences. That is, the epistemic uses of future tenses in the fourteenth century include both 'possibility' and 'probability'. In the Modern Bulgarian language only 'probability' is morphologized; epistemic possibility remains as a modal interpretation of the future tense. Thus, in the nineteenth century, the presumptive *shte da-forms* took shape as a morphological category indicating 'probability', which means that the degree of plausibility of a given statement (A) is evaluated in relation to the degree of plausibility of the contradictory statement (A'). This assessment is made in terms of the laws of logic; here there are some gaps in the speaker's awareness that he is trying to fill based on logical operations and his general knowledge of the world. The reasons why the presumptive *shte da-forms* remain only in the periphery of our verb system are its contextual limitations, dialectal character, complex semantics and competition with other forms.

Chapter Four presents the development of some modal verbs and periphrastic

constructions for expressing ‘possibility’ and ‘necessity’: **мощи/възмощи** + infinitive, **быти** + infinitive, **имѣти** + infinitive, **трѣбовати** + infinitive. The analysis of the linguistic data showed that the epistemic use of modal verbs was the latest to emerge and is only typical of the Modern Bulgarian language. Moreover, the ‘epistemic possibility’ preceded the ‘epistemic necessity’, i.e. the epistemic use of the verb *мога* appeared earlier than that of the verb *трябва*. In general, the verb *мога* is much more ancient, persistent in all Slavic languages, and developed its present meanings earlier than *трябва* did. This is due to the fact that, the notion of possibility implies the notion of necessity.

Two sets of findings are presented in the conclusion. The first concerns the reconstruction of the modal categories in Middle Bulgarian verb system. The second sheds light on the way the typological categories of the modality function in the Bulgarian language. Some semantic changes that resulted in the emergence of epistemic notions in Bulgarian are summarized. A hierarchy of modal notions in the Bulgarian language is also proposed.

2. Articles related to the problems of modality in the history of Bulgarian language.

2.1. Meaning and Uses of the Verbs **Мощи** and **Възмощи** (during the 14th and early 15th century). In: **РЪЦИ СЛОВО ТВРЪДО**. Studies in honour of Tatyana Slavova. Sofia, 2022, pp. 368–384.

The paper compares and contrasts the present meaning of the verb ‘мога’ (can, be able to, may) and the old Bulgarian verbs **мощи** and **възмощи**. It is proven that in Modern Bulgarian language the modal verb ‘мога’ expresses Ability, Root possibility, Permission and Epistemic possibility, but in the manuscripts of the 14th and early 15th century the verbs **мощи/възмощи** are mainly used to express Ability and Root possibility. In the paper we substantiate that in the 14th and early 15th century **могѫ** + infinitive is not a periphrastic construction used to denote Future.

2.2. Denoting a counterfactual condition (based on material from the Book of *Gregory Tsamblak*). In: **ШЬСТВОѴЬѪ ЊЫЊѢ ПО СЛѢДОѴ ОѴЧИТЄЛЮ**. Studies in honour of Anna-Maria Totomanova. Sofia, 2021, pp. 582–595.

Based on a full extraction of conditional constructions from the Book of *Gregory Tsamblak*, it is shown that the counterfactual conditional concept is symbolized either by a conditional mood or by a future in the past. In the protasis of real conditionals, these two forms do not generally occur. The work also shows that in other manuscripts of the same period a similar opposition of real and counterfactual conditionals is found, marked morphosyntactically by the use of distinct verb forms in the protasis. It is argued that in the protasis of counterfactual conditionals, the use of the future in the past should be defined as presumptive and associated with epistemic modality.

3. Scientific publications devoted to the problems of inflection and word formation in the history of Bulgarian language.

3.1. History of grammatical word stems, monograph. Sofia, 2018.

The monograph examines the history of the grammatical tense and aspect stems; it is an attempt to reveal at least part of the history of the categories of aspect and tense in the Bulgarian language through the history of the suffixes. The development of the grammatical stems in

Bulgarian is studied in a typological approach. The language material covers mainly the Old and Middle Bulgarian periods (from the 9th to early 15th century). Data from Bulgarian dialects, and the modern Bulgarian language in general, are also included and, in some cases, reconstructed Proto-Slavic forms are used. The verbs under consideration have mainly been extracted from dictionaries and indices.

The purpose of the First chapter ('Thematic vowels, Imperfective Suffixes, Derivational Suffixes in Old Bulgarian') is to present the theoretical perspective and the relevant features of Old Bulgarian language in order to trace historical changes in Bulgarian language further. The chapter is divided into four parts and has two appendices. First, the nature of affixes in fusional languages is discussed. The second part specifies to which of the existing theses on Modern Bulgarian aspect and tense the book adheres to. The third part is devoted to the inflected forms of the Old Bulgarian verbs. For each of the four Old Bulgarian conjugation types the functions of the affixes are defined: derivational or inflectional (tense or aspect suffixes). The fourth part draw a distinction between the tense stems of the present, aorist and imperfect in Old Bulgarian language.

Chapter Two examines the history of the suffixes -ne- and *-je/o-, as they are related to important issues concerning the Old Bulgarian conjugation types and the origin of the Slavic aspects. It is demonstrated that what originally manifested the distinction imperfective // perfective aspect was not the imperfective suffixes, but the lengthened grade of the root vowel and a palatal consonant or -j- before the e-affix (cf. **надѣкѫ** and **надѣчѫ**), i.e. the Proto-Slavic language assigned grammatical meaning to the non-palatal // palatal alternation, which arose for phonetic causes. Moreover, these morphophonological units were originally sufficient; there was no need for an imperfective suffix to form a secondary imperfective verb.

Chapter Three traces the history of the imperfective suffixes (-a-, -va-, -ova-/-uva-, -ava-/-'ava-, -ga-). First, some common views on the history of the imperfective suffixes are commented on and challenged. In the second part of this chapter, the rise of imperfective suffixes is traced by comparing the Modern Bulgarian language and the Old Bulgarian in terms of the conditions that determine the use of one or another suffix. At the end of the chapter attention is given to the importance of the word stress in the history of the imperfective suffixes. The work argues that the beginning of the division of Bulgarian dialects according to the use of morphophonological elements (stem alternations and word stress) in verb inflection, predates the division into Eastern and Western dialects based on the reflections of the Old Bulgarian **ѣ**.

Chapter Four describes some changes in the thematic vowels (tense affixes: -e-, -i-, -a-, -o/e-, 0, etc.) in the history of Bulgarian language. It is shown that there was an expansion of inflectional affixes on the first position after the lexical stems (imperfective suffixes and tense affixes). The dialectal differences regarding the tense stems predominantly emerged in the Modern Bulgarian language.

In the last, Fifth chapter, some historical changes in denominal verbs formation with **-н-** suffix are described shortly. The question about the corelation between the denominal verbs and aktionsart is raised. A typological approach to the Slavic-type aspect is offered. It is explained why modern Indo-European languages do not have aspectual systems similar to Slavic, even though they are all descendants of the Proto-Indo-European language and its grammatical aspect, and why the Slavic aspect did not develop from the Proto-Indo-European aspectual system.

The main conclusion, from the analysis in the book, is that there is a tendency for Bulgarian language to use agglutination, and it can explain several grammatical features. Being one of the means of increasing the degree of discreteness of the grammatical information, the

agglutination both contradicts the fusion of morphemes and supports the isomorphism between expression and meaning. The history of grammatical word stems in Bulgarian is therefore a history of the tension between the advantages of the agglutinative affixes and the effort to overcome them.

3.2. When did the enrichment of the Bulgarian verbal system begin. In: Bulgarian Speech. Journal of Linguistics and Language Culture. Issue 3/2017, pp. 77–83.

The paper starts from the assumption that the transformation and enrichment of the Bulgarian verbal system should have coincided with changes in morphophonology. It is necessary to look for evidence of two types of changes: the emergence of new verb forms and/or categories, and changes in morphophonological means. There is a co-occurrence of the two types of changes only in the second half of the Middle Bulgarian period. It should, therefore, be assumed that the enrichment of the verbal system is not an Old Bulgarian phenomenon but predates the division into Eastern and Western dialects based on the reflections of the Old Bulgarian ѣ.

3.3. The Temporal Stems of the Old Bulgarian Verb. In: Paleobulgarica. Issue 4/2015, pp. 3–16.

The paper discusses the formalization of the category of *Tense* combining the temporal stems and inflections of the verbs in Old Bulgarian. The focus is on the different types of temporal stems. A comparison between the present and the aorist stems in the old and the modern verbal systems is made. The paper pays particular attention to the historical change of the stem of the imperfect tense.

3.4. The Destiny of the Thematic Suffixes in the History of Bulgarian Language". In: Cyril and Methodius Readings 2015. Sofia, 2015, pp. 231–240.

The article attempts to explain some characteristics of the formation of nouns in Old Bulgarian language. A diachronic typological approach to the reorganization of the declension system according to the grammatical gender is presented. It is shown that in the history of Bulgarian language the noun inflection has lost the thematic suffixes while in verb system have developed new stems with inflectional suffixes.

4. Articles related to my participation in the creation of the histdict system (histdict.uni-sofia.bg).

4.1. Electronic Diachronic Corpus and Dictionaries of Old Bulgarian. In: Studia Ceranea. Journal of the Waldemar Ceran Research Centre for the History and Culture of the Mediterranean Area and South-East Europe, Issue 8/2018, pp. 111–119.

4.2. The Old Bulgarian Language and Computational Linguistics. In: Saint Clement of Ohrid in the Culture of Europe. Sofia, 2018, pp. 467–473.

4.3. A. Totomanova, T. Slavova, G. Ganeva. Morphosyntactic Tagset of Old Bulgarian Written Language. In: Informatics, Grammar, Lexicography BG051-3.3-06-0024/2012. Proceedings of the Final Conference, Sofia, 29-30.06. 2015. Sofia, 2015, pp. 17–117.

4.4. A. Totomanova, G. Ganeva. Digital Tools for Studying Medieval Lexis and Grammar. – In: Written Heritage and Information Technologies (El'Manuscript-2014). Proceedings of the Fifth International Conference, held in Varna, Bulgaria, September 15–20, 2014. Sofia – Izhevsk, 2014, pp. 171–173.

See below sect. 5.2.

The electronic system histdict is designed as a tool for research, adequate presentation and popularization of a part of Bulgaria's cultural and historical heritage: the Bulgarian language and its medieval literature. The articles (4.1., 4.2., 4.3., 4.4.) describe the various steps in the development of histdict. Attention is paid to each component of the resource: specialized Unicode fonts, electronic diachronic corpus, dictionary of Old Bulgarian, historical dictionary equipped with tools for writing and editing dictionary entries, grammatical dictionary, morphosyntactic tagset, prototypical search engine, and virtual keyboard.

5. Dictionaries.

5.1. T. Slavova, A. Totomanova, A. Dimitrova, G. Ganeva, V. Shalagin, M. Totomanova-Paneva, M. Dimitrova. Dictionary of Patriarch Euthymius's Language. Part II. Sofia, 2020.

Dictionary entries of words starting with Ф, Х, Ц, Ч.

5.2. A. Totomanova, T. Slavova, G. Ganeva. Grammatical dictionary of the Old Bulgarian language (online histdict.uni-sofia.bg; https://cyrillomethodiana.uni-sofia.bg/index.php/mdocs/category/10-grammar-dictionary 2015).

The electronic grammatical dictionary of the Old Bulgarian language (9^{th}–15^{th} century) presents complete paradigms of words, taking into account any phonetic and morphological changes in the endings; it also displays the shape of the relevant word forms according to the Russian and Serbian recensions of the Old Bulgarian (Old Church Slavic) language.

6. Others.

A Spanish Antology of Material on the Pre-Christian Religion of the Slavs [Fuentes para el estudio de la religión eslava precristiana. Ed. y coord. J. A. Álvarez-Pedrosa Núñez. Zaragoza, Libros Pórtico, 2017, 505 p.]. In: Paleobulgarica, 3/2018, pp. 86–89.

A book review of a Spanish antology of material on the pre-christian religion of the Slavs.