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PROSODIC CORRELATES OF THE GRAMMATICALIZATION SCALE: A CASE STUDY OF THE SERBIAN LEXICAL, MODAL, AND AUXILIARY USES OF *HTETI* ('WANT') [a]

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Abstract

In Serbian dialects that allow the variation between infinitival and so-called '*da*+present' complements (DPC) (e.g. those of Vojvodina), the verb *hteti* (*Eng*. to want) allows for three different kinds of complements, corresponding to its three different uses. In its lexical use, it takes an NP complement; the volitional modal version combines with DPC; and the future auxiliary takes the infinitival complement. Assuming different syntactic structures for all three types of complements, we hypothesize that they exhibit different prosodic features. The hypothesis was tested experimentally by analysing the preboundary lengthening and the behaviour of F0 as signals of different prosodic constituency reflected in the Prosodic Hierarchy (PH). It was predicted that higher units of PH will show higher degree of preboundary lengthening, as well as that the presence of phrase accents and boundary tones will mark the right edge of PhPs and IPs respectively. We recorded 10 students at the University of Novi Sad as they pronounced 10 sentences per each of the three uses of this verb. The data partially confirms our hypothesis, as the modal verb *hteti* (*Eng.* to want) followed by DPC lengthens more than the auxiliary and lexical verb *hteti* (*Eng.* to want), which are followed by an infinitival and NP complement respectively. In contrast, the F0 contour remains unaffected by these differences, and phrase accents are not identified in any of the uses of the verb *hteti* (*Eng.* to want).

Key words: grammaticalization, infinitive, da+present construction, Serbian, preboundary lengthening.

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ПРОЗОДИЈСКИ КОРЕЛАТИ СКАЛЕ ГРАМАТИКАЛИЗАЦИЈЕ: СТУДИЈА УПОТРЕБЕ СРПСКОГ ГЛАГОЛА *ХТЕТИ* КАО ЛЕКСИЧКОГ, МОДАЛНОГ И ПОМОЋНОГ ГЛАГОЛА

Апстракт

У српским дијалектима у којима комплемент глагола хтети може бити реализован како као конструкција да+презент, тако и као инфинитив, што је случај у Војводини, овај глагол има три различите употребе, што се манифестује у употреби три различита комплемента. Лексички глагол хтети захтева комплемент реализован у виду именичке синтагме, модални глагол хтети, којим се исказује вољност/одсуство вољности субјекта, прати комплемент да+презент, док помоћни глагол хтети, којим се изражава будућност, захтева комплемент реализован као инфинитив. Узимајући у обзир да сваку од три употребе глагола хтети одликују различите синтаксичке структуре, наметнула се хипотеза да дате употребе имају различите прозодијске одлике. Хипотезу смо тестирали експериментално, тако што смо анализирали степен финалног дужења и кретање F0 као најбитније показатеље десне границе конституената прозодијске хијерархије. Ослањали смо се на ранију претпоставку да више конституенте прозодијске хијерархије одликује већи степен финалног дужења, као и да присуство фразних акцената указује на десну границу фонолошких фраза, док присуство граничних тонова сигнализира десну границу интонацијских фраза. У експерименту је учествовало десет студената Универзитета у Новом Саду, које смо снимили како изговарају по десет реченица за сваку од три употребе глагола хтети. Анализа снимака делимично је потврдила нашу хипотезу, будући да се модална употреба глагола хтети праћена конструкцијом да+презент дуже више како од помоћног глагола хтети кога прати инфинитив, тако и од лексичког глагола хтети кога прати именичка фраза. Такође, разлике у финалном дужењу нису утицале на контруру F0, а фразни акценти нису примећени ни у једној од анализираних употреба датог глагола.

Кључне речи: граматикализација, инфинитив, конструкција да+презент, српски језик, финално дужење.

INTRODUCTION AND HYPOTHESES

In Serbian, the verb *hteti* (*Eng.* to want) serves as a lexical verb (1a) with an NP complement, and as a modal verb expressing volition (1b), using a clausal complement, often in the '*da*+present construction' (DPC).

(1) a. Petar hoće bananu.
Peter wants banana
'Peter wants a banana.'
b. Petar hoće da jede.
Petar wants da eat.pres
'Peter wants to eat.'

The present tense clitic forms of *hteti* (*Eng.* to want) also serve as auxiliaries denoting future, but the full (non-clitic) form of the verb is not

permitted in this usage (2). While Standard Serbian and Northern dialects only utilize infinitival forms of the lexical verb for forming analytic future expressions (2a), Central and Southern Dialects (generally south of Belgrade) allow DPCs in these contexts as well (2b).

(2) a. Petar (*ho)će jesti.
Petar wants.(cl) eat.inf
'Peter will eat.
b. Petar (*ho)će da jede.
Petar wants.(cl) da eat.pres
'Petar will eat.'

Under negation, the full form of the verb *hteti* (*Eng.* want) is obligatorily reduced to a clitic (3a) and fused with the negative clitic forming a prosodic word while the use of the full form is ungrammatical (3b).

(3) a.Petar neće bananu.
Peter not.want banana
'Peter does not want a banana.'
b.*Petar ne hoće bananu.
Peter not want banana
'Peter does not want a banana.'

Consequently, the negative form of *hteti* (*Eng.* want) gives rise to three different meanings combining with three formally distinct types of complements (4).

(4) a. Petar neće bananu. (lexical verb)
Peter not.want banana
'Petar does not want a banana.'
b. Petar neće da jede. (volitional modal)
Peter not.want da eat.pres
'Peter does not want to eat.'
c. Petar neće jesti. (future auxiliary)
Peter not.want eat.inf
'Peter will not eat.'

Grammaticalization and Reduction (Hypothesis1)

The fact that the same verb is used as a lexical verb expressing desire, a modal verb with a volitional meaning, and a future auxiliary suggests a hallmark case of grammaticalization (Traugott, 1995; Bybee, 2003). In particular, Traugott (1995) and Bybee (2003) identify the process of *auxiliation* as a subspecies of grammaticalization whereby auxiliary verbs emerge from lexical verbs. This is a constrained diachronic process that tends to follow two partially overlapping paths. One form of this process starts out with verbs of motion (e.g. *to go* in English) where the meaning of physical change of location yields to a more abstract meaning of directedness to-

wards a goal, which is in turn abstracted even further towards the meaning of intention for a future outcome, and finally, the verb loses all of its lexical meaning and comes to denote simple future (e.g. the English future construction often referred to as *be going to*). The other avenue of this process begins with volitional verbs (e.g. *will* in English), where the meaning of desire is abstracted and then generalized to the meaning of intentionality, which again gives way to a simple future denotation. Importantly, in these processes, the lexical uses of these verbs can be retained so that the same verb is used as a future auxiliary and as a lexical verb, as is the case in English, for instance. The fact that English exhibits future auxiliaries derived through both of these broader processes with some semantic distinctions suggests that the lexical semantics might not be completely bleached in these cases.

We should also mention that the gradual replacement of infinitives by DPCs in Serbian (Ajdžanović & Dražić, 2016; Belić, 2005; Kovačević & Milićev, 2018; Kovačević, Milićev, & Paunović, 2018) seems to recapitulate, at least to some extent, the general pattern of the development of infinitives from purpose clauses despite the fact that infinitive is, of course, already present in the language (Ajdžanović et al., 2016; Belić, 2005; Kovačević & Milićev, 2018; Kovačević et al. 2018). According to Haspelmath (1989, p. 298), there is a broad cross-linguistic tendency for infinitives to develop from purpose clauses via another grammaticalization process. This grammaticalization path typically starts from prepositions which are used to express benefactive, allative or causal meanings.

It can be said that the gradual replacement of infinitives by DPCs in Serbian recapitulates the pattern identified by Haspelmath (1989), at least to some extent. In Standard Serbian, DPCs are much more frequent than infinitives in purpose clauses. Furthermore, all the other meanings on the scale proposed by Haspelmath (1989), except for the initial one, can be expressed with *da* complements; however, infinitives are never used in realis and realis-factive contexts, while there is still some variation between DPCs and infinitives in irrealis contexts. This pattern is, strictly speaking, not what is expected if the replacement of infinitives by DPCs follows the trajectory identified by Haspelmath (1989). The relative frequency of DPCs versus infinitives should fall monotonically, going from purpose clauses over irrealis and realis complements to realis-factive contexts.

An alternative diachronic pattern is proposed by Grković-Major (2004) who suggests that Serbian *da* complements originate from optative (irrealis) uses spreading towards purposive, on the one hand, and realis/indicative uses, on the other. This proposal still makes reference to the meanings/uses discussed by Haspelmath (1989), but the direction of diachronic development and the shapes of the proposed development trajectories are different. On Grković-Major's (2004) proposal, the use of *da*-

complements essentially starts from the middle of the scale identified by Haspelmath (1989) (irrealis uses), and then spreads in opposite directions towards purposive and realis uses forming a bifurcating trajectory as opposed to Haspelmath's (1989) simple linear one. We should point out here that Grković-Major's (2004) proposal about the diachronic development of *da*-complements is also not fully consistent with the synchronic relative frequencies of DPCs and infinitives in these environments. If the use of DPCs originates from irrealis contexts and spreads towards purpose clauses and realis complements, then one might expect the relative frequency of DPCs vs. infinitives to be the highest in irrealis contexts and to decrease proportionally in environments that represent subsequent stages on the development path. In reality, the complements of irrealis verbs are the only environment in which there is real variation between infinitives and DPCs out of all the options discussed by Haspelmath (1989) and Grković-Major (2004). Infinitives are very rare in purpose clauses, at least in Serbian, and *da*-complements are the only possible option in realis (non-factive) contexts.

Lamiroy and Drobnjaković (2009) discuss the relative frequencies of infinitives and DPCs also outside of the contexts that figure as focal points on Haspelmath's (1989) development pattern. For instance, in Serbian, the variation between infinitives and DPCs can be observed also with modal verbs, phasal verbs, verbs such as *pokušati* (*Eng.* to try) or, substandardly, with the future auxiliary form of *hteti* (*Eng.* to want). Lamiroy and Drobnjaković (2009) observe that the relative frequency of infinitive *vis a vis* DPC is positively correlated with the degree of grammaticalization of the matrix verb, i.e. the more grammaticalized the matrix verb, the more likely it is to combine with infinitives. One place where this tendency can be illustrated quite effectively is with the two uses of the verb *hteti* (*Eng.* to want) which is in the focus of the present study. Namely, the grammaticalized clitic form of this verb is used as a future auxiliary while the full form is used as a lexical verb taking an irrealis complement. Importantly, the future auxiliary form combines only with infinitives in the Standard variety and various Northern and Western varieties, while the full form allows both infinitives and DPCs. Again, Southern varieties of Serbian show very little to no variation and consistently use DPCs in all these contexts. Southern dialects of Serbian aside, the two uses of *hteti* clearly show that the more grammaticalized verb is more likely to combine with infinitives.

Regardless of the precise staging of the grammaticalization process, and taking into account both the properties of the matrix verb and the properties of the complement, it seems uncontroversial that the ranking of the three uses of *hteti* under investigation with respect to the degree of grammaticalization is as in (5).

(5) lexical > volitional modal > future auxiliary

The lexical form of this verb is clearly the least grammaticalized one, while the fact that the future auxiliary form is more grammaticalized than the volitional modal form is signalized not only by the more abstract future semantics but also by the reduced clitic form of the verb used as a future auxiliary, as opposed to the full form used as a volitional modal, as well as the choice of the complement where the future auxiliary combines with the infinitival form, while the volitional modal combines with a DPC (again, at least in the Standard variety).

Finally, since we are primarily interested in the phonological aspects of the grammaticalization process as it pertains to different uses of *hteti* in Serbian, we can hypothesize that the degree of grammaticalization should be positively correlated with phonological reduction. Haspelmath observes that the grammaticalization of items expressing tense or aspect is associated with both "phonological erosion and semantic generalization" (1998, p. 33). Phonological erosion can, in turn, be taken to mean qualitative reduction (centralization of the formants of both stressed and unstressed vowels), quantitative reduction (shortening and lower intensity), and finally a complete loss of phonemes. In that sense, we derive the hypothesis in (6).

(6) Hypothesis1 (Grammaticalization → Phonological shortening): future *hteti* (*Eng.* to want) should show the highest degree of phonological reduction, followed by the volitional modal, while lexical *hteti* (*Eng.* to want) should be the least reduced.

Syntax-to-prosody Mapping and Preboundary Lengthening (Hypothesis2)

As far as the prosodic properties of the three uses of *hteti* (*Eng.* to want) are concerned, in addition to the impact of grammaticalization, one needs to consider synchronic factors having to do with the syntax-to-prosody mapping. The reason behind this is that the three instances of *hteti* under investigation exhibit different properties with respect to the syntactic size of the complements that they select for. First, lexical *hteti* takes an NP complement, and in this sense, it is clearly different from the other two uses which are associated with verbal complements. We have already pointed out that the volitional modal use of this verb combines both with infinitives and with DPCs, with a significant preference for DPCs in Serbian, while the future auxiliary form combines only with the infinitive in the standard variety. Following the study by Wurmbrand, Kovač, Lohninger, Pajančič and Todorović (2020), this discrepancy in the choice of the formal realization of the complement is a signal of the difference in syntactic size, where the finite construction, i.e. DPC, is associated with a larger constituent. We follow these authors in assuming a biclausal structure for the volitional modal use, and a monoclausal structure for the future tense use, as indicated in (7) (cf. Wurmbrand et al. 2020).

(7) a. [VP want [NP]] – lexical
b. [VP want [TP]] – modal volitional
c. [TP want [VP]] – future

The biclausal character of the modal constructions is evidenced, among other things, by the possibility of having an independent subject in the embedded clause (8a) and the availability of independent temporal reference (8b).

(8) a.Petar neće da Marija pobedi.
Peter not.want da Marija win.pres
'Peter does not want Maria to win.'
b.Juče je Petar hteo da pobedi na sutrašnjem takmičenju.
Yesterday aux Peter want da win.pres on tomorrow's competition
'Yesterday Peter wanted to win tomorrow's competition.'

The properties illustrated in (8) for the volitional modal use are strictly absent from the future auxiliary use, which does not allow an independent subject with an embedded verb, and the tense form of the auxiliary is always present while the complement is non-finite (infinitival).

Because syntactic structure affects the prosodic properties of the utterance and the three structures in (7) are expected to have different effects on Prosodic Hierarchy (PH), we also expect that the differences in size of the three types of complements will affect the prosodic properties of *hteti* (*Eng.* to want). In order to make explicit the hypothesis regarding the effects of the differences in complement size on the phonological realizations of the three uses of this verb, we need to devote some attention to the notion of PH in linguistic theory.

The aim of PH is to develop a universal set of formal criteria for defining prosodic constituents. So far, many authors have proposed their versions of PH (Hayes, 1989; Nespor & Vogel, 2007; Selkirk, 1984, a.o.). However, their underlying properties are rather similar, i.e. after syntactic derivation, syntactic structures get their final Phonological Form (PF) which has a hierarchal arrangement.

Among the models of PH, one of the most influential ones was given by Selkirk (1984, 1986, 1996). According to her model, syllables are organized into feet, which primarily serve the purpose of identifying the metric strength of focus, while the prosodic phrasing essentially starts with higher hierarchically organized constituents, i.e. Prosodic Words (PWds) constitute Phonological Phrases (PPhs), PhPs constitute Intonational Phrases (IPs), and IPs constitute Utterances (Utts). The majority of prosodic constituents have clear phonological boundary cues, i.e. PWds are characterized by the presence of a single pitch accent and the process of clitization (Selkirk, 1984: 30-31; 1986) and IPs have optional pauses and pitch reset as left boundary cues, while right boundary cues include boundary tones and preboundary lengthening (Selkirk, 2005, a.o.). Re-

garding PhPs, Selkirk (1986, 1996) primarily defines them in terms of syntax. According to ALIGN-XP constraint, the edges of PhPs coincide with the edges of XPs, while their phonological features, except for pre-boundary lengthening, are disputable. However, research by Beckman and Pierrehumbert (1986) showed that the right edges of PhPs can be marked by phrase accents. Despite their language-specific nature, low (L-) and high (H-) phrase accents were later adopted as default markers of the right PhP edge.

The most reliable distinguishing feature of prosodic constituents is the degree of preboundary lengthening, i.e. the lengthening of the final syllable rhyme in front of a prosodic boundary, which increases from PWds to PhPs and, finally, to IPs where it is the highest. The process of preboundary lengthening, which is based on temporal and spatial speech dynamics or the notion of *π-gesture* (Byrd & Saltzman, 2003), has proved to be a universal property of spoken languages (Turk & Shattuck Hufnagel, 2015, a.o.), and some authors go so far as to suggest that the degree of preboundary lengthening alone can distinguish between different domains of PH (Wightman, Shattuck-Hufnagel, Ostendorf, & Price, 1992).

Languages differ with respect to the scope of preboundary lengthening. Although this process typically affects final syllable rhyme, it can also affect non-final syllables, as in English (Turk & Shattuck-Hufnagel, 2007) or Serbian (Jakovljević, 2021, pp. 126-148, 182-209; Jakovljević & Marković, 2020). However, even in the languages where the scope of lengthening affects the rhyme of both final and pre-final syllable(s), the degree of lengthening of non-final syllables is rather low, while the lengthening of final syllable rhyme, which is by far the highest, is considered as informative enough.

Regarding the relation between complement size and boundary signals, including preboundary lengthening, we propose the hypothesis in (9).

(9) Hypothesis2: If PhPs are read off of syntactic structure, the three different complements of *hteti* (*Eng.* to want) will show different (degrees of) boundary effects such that the volitional modal form taking a TP complement will be most likely to exhibit a prosodic boundary followed by the auxiliary taking a VP complement, followed by the lexical form taking an NP complement.

We conducted an experimental acoustic analysis to tease apart the two competing hypotheses (Hypothesis1 and Hypothesis2) and our data lend support to the latter. The final syllable rhyme of the modal verb *hteti* followed by DPC lengthens more than the auxiliary and lexical *hteti*, which are followed by the infinitival and NP complement respectively. We discuss the implications of these findings for the syntactic structure of the clausal complements following the volitional and auxiliary uses of *hteti*, i.e. infinitives and DPCs.

RESEARCH METHODOLOGY

In the experimental analysis, we compiled a corpus which consisted of 3 sets of sentences containing negative forms of the three types of the verb *hteti* (*neće*), followed by the corresponding complements and preceded by NP subject (NP-Sb). Each set contained 10 sentences, resulting in the total number of 30 sentences realized as IPs, as illustrated in (10).

(10) a. Bane neće domaćicu. (lexical verb)
Bane not.want housewife
'Bane does not want a housewife.'
b. Bane neće da donosi. (volitional modal)
Bane not.want da bring/deliver.pres
Bane does not want to bring/deliver'
c. Bane neće donositi. (future auxiliary)
Bane not.want bringing/delivering.inf
'Bane will not bring/deliver.'

All the sentences in the corpus were identical with respect to the number of PWds, and PWds with the same syntactic function in 3 sets of sentences were uniform with respect to the number of syllables, final syllable structure, i.e. all final syllables were open, as well as the accentual pattens. The same applies to the PWds were we measured preboundary lengthening, i.e. NP-Sbs and negative forms of the three uses of the verb *hteti*.

The research participants were 10 students of the Faculty of Philosophy in Novi Sad from different parts of Vojvodina. They were recorded in a quiet room reading 30 randomized sentences (44.1kHz sampling rate) given on separate PowerPoint slides. After recording, the measurements of preboundary lengthening were performed in Praat software (Boersma & Weenink, 2021, version 6.2.03). We measured the duration of final rhyme of the negative forms *hteti* (*neće*) and NP-Sbs, then calculated the degree of preboundary lengthening between them and examined its statistical significance. The statistical analysis was also performed on the articulation rate of the recorded sentences, which did not show significant differences according to One-Way ANOVA ($F(2,299)=0.522$, $p=0.858$). Finally, we examined the presence of phrase accents between the constituents which exhibited statistically significant lengthening, thus being PhP candidates (see the section Discussion).

Regarding the relation between the duration of final syllable rhyme and grammaticalization, based on our Hypothesis1, we predict the following: (Prediction 1) due to grammaticalization/reduction, the final syllable of *hteti* (*neće*) will be the shortest with the auxiliary form (reduction via grammaticalization), longer with the volitional modal form, and the longest with the lexical form (no reduction).

As for the complement size, based on our Hypothesis2, we predict the following: (Prediction 2) due to the varying sizes (syntactic complexi-

ty) of the complements, the final syllable of *neće* will be the shortest with the lexical form (NP complement), longer with the auxiliary (VP complement), and the longest with the volitional modal form (TP complement).

RESEARCH RESULTS

The results of our measurements show that with the lexical verb use, preboundary lengthening is significantly different when compared to preboundary lengthening with the modal and auxiliary *hteti*. While lexical verbs exhibit statistically significant shorter duration than NP-Sbs ($t(198)=-13.35$, $p<0.001$), modal ($t(198)=9.37$, $p<0.001$) and auxiliary verbs ($t(198)=4.13$, $p<0.001$) exhibit statistically significant longer duration. In other words, with lexical verbs, we observe a shortening of the final syllable rhyme relative to the duration of the rhyme of NP-Sb, whereas we observe the lengthening of the corresponding syllable rhyme with the modal and auxiliary verbs. The preboundary lengthening is greater with DPCs when compared with infinitives. Finally, One-Way ANOVA shows that the degrees of lengthening of the three uses of the verb *hteti* are statistically different ($F(2,299)=242.27$, $p<0.001$).

DISCUSSION

The analysis of preboundary lengthening suggests a different prosodic structure of IPs containing the three types of the verb *hteti* (*neće*). The statistically significant difference in preboundary lengthening between the modal volitional and auxiliary *hteti* suggests the presence of different degrees of prosodic independence of their complements. Although DPCs and infinitival complements fit into the formal description of PhPs, i.e. they are syntactically realized as XPs and prosodically placed between PWds and IPs, DPCs exhibit greater prosodic independence than infinitives. This is consistent with the fact that DPCs tend to resist, but do not completely block, clitic climbing which is obligatory with infinitives (Aljović, 2005, a.o.). In contrast, NP complements of the lexical verb *hteti* (*neće*) do not have the status of PhPs, as the lexical *hteti* exhibits a statistically significant shortening relative to NP-Sb, which results in the absence of a prosodic boundary between the lexical verb and NP complement.

Moreover, we did not find phrase accents in the IPs containing either lexical or grammaticalized negative forms of the verb *hteti* (*neće*), i.e. F0 contours illustrating the use of the lexical, volitional modal and auxiliary verb for the sentences in (10) are almost identical (Figures 1-3). Slight differences could only be observed in the realization of pitch accents, e.g. a slightly steeper F0 rise coinciding with NP-Sb followed by

the modal verb (Figure 2). However, these differences are not systematic, as they vary significantly across subjects.

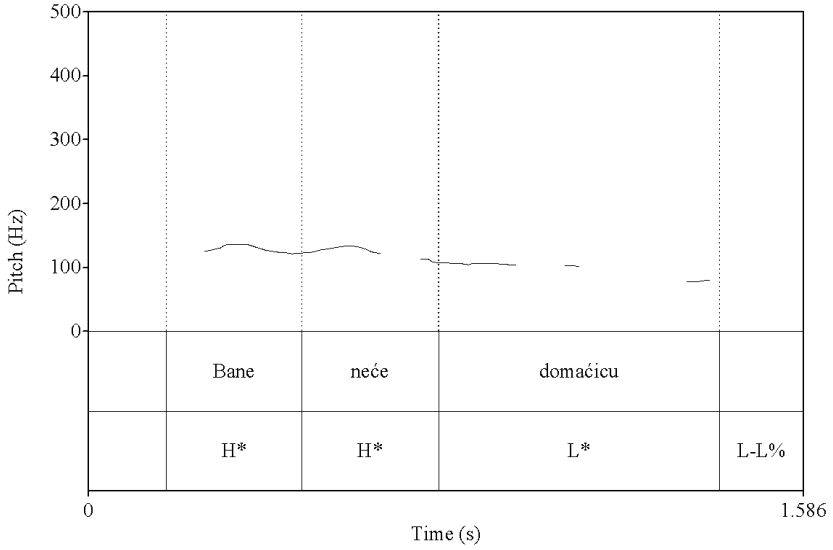

Figure 1. F0 illustrating the use of the lexical verb hteti (neće)

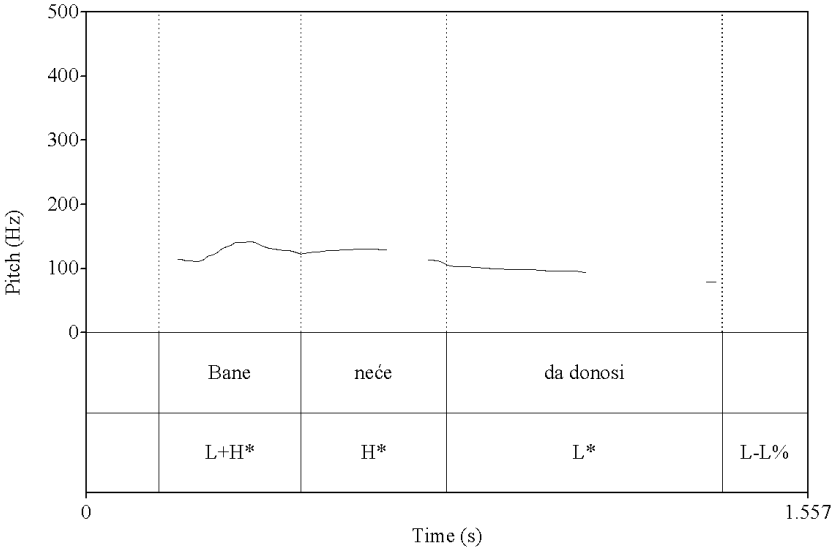

Figure 2. F0 illustrating the use of volitional modal verb hteti (neće)

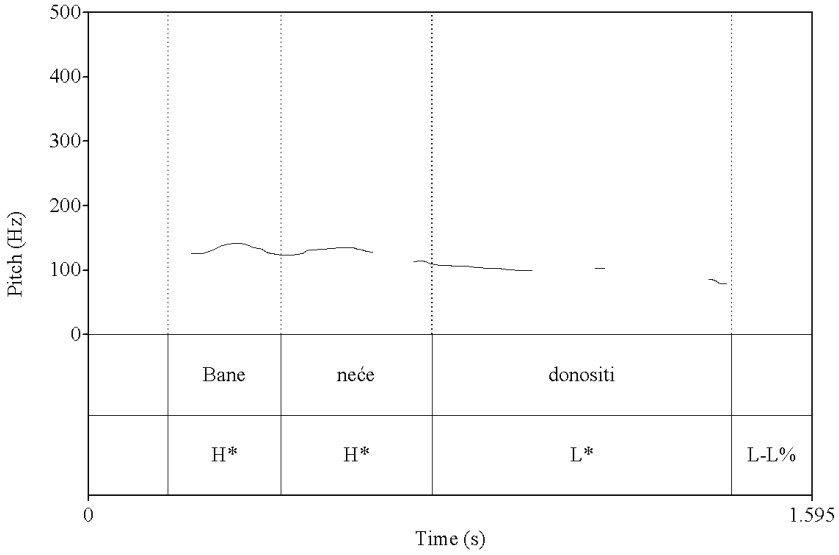

Figure 3. F0 illustrating the use of the auxiliary verb hteti (neće)

Our findings support the syntactic representations of the three uses of *hteti* ('want') as in (6). The significant point here is that our findings can be seen as a phonological/prosodic indication of the difference in the size of the complements of the future auxiliary and the volitional modal, speaking in favour of a biclausal analysis of (at least some) modal verbs as proposed by Wurmbrand et al. (2020), among others.

The strength of the prosodic boundary is a gradable (non-categorical) property, which might explain why some other properties at the syntax-phonology interface, such as the acceptability of clitic climbing out of DPCs, seem to show varying degrees of acceptability instead of clear-cut grammaticality distinctions (see Aljović, 2005; Ivanović, Kovačević, & Milićević 2023) for some quantitative data; Progovac, 1993). Thus, the degree of preboundary lengthening is the highest with modal and auxiliary *hteti*, followed by DPC and infinitival complement respectively, whereas lexical *hteti* followed by an NP complement exhibits shortening effects.

CONCLUSION

By focusing on the length of the final syllable rhyme of the Serbian verb *hteti* ('want') in its three uses (lexical, auxiliary and modal), we have shown that its phonetic realization is predicted by synchronic syntactic factors rather than by phonological reduction induced through grammaticalization. Specifically, we observed that the final syllable rhyme is the longest with the modal use of this verb and the shortest with the

lexical use, with the auxiliary use being the intermediate category. This ranking is expected based on synchronic syntactic factors, given that the final syllable tends to be lengthened at the right I-boundary, and larger syntactic constituents are more likely to function as IPs. The three uses of *hteti* take complements of different sizes, i.e. lexical *hteti* takes an NP complement, the auxiliary form takes a VP complement, and modal *hteti* takes a TP complement. Since a VP is larger than an NP, and a TP is larger than a VP, we correctly expect to observe an I-boundary before a TP rather than before a VP, and before a VP rather than before an NP. The alternative hypothesis from grammaticalization predicts a reduction (shortening) of the final syllable (as well as all other syllables) with more grammaticalized forms. From this perspective, we would expect, contrary to fact, the final syllable of *hteti* to be the longest with the lexical use followed by the modal use, and the shortest with the auxiliary version of this verb.

More broadly, this study showcases an interesting instance of the interplay between grammaticalization and synchronic syntactic factors at the level of phonology/phonetics, where the effects of grammaticalization are overridden by syntactic factors. What remains to be seen, and where future research is needed is the disentanglement of the competing effects of these two sets of factors on other phonological properties of the verb under investigation in its three different uses, pertaining particularly to the first/stressed syllable.

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ПРОЗОДИЈСКИ КОРЕЛАТИ СКАЛЕ ГРАМАТИКАЛИЗАЦИЈЕ: СТУДИЈА УПОТРЕБЕ СРПСКОГ ГЛАГОЛА *ХТЕТИ* КАО ЛЕКСИЧКОГ, МОДАЛНОГ И ПОМОЋНОГ ГЛАГОЛА

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Резиме

У српским дијалектима у којима комплемент глагола хтети може бити реализован како као конструкција да+презент, тако и као инфинитив, што је случај у Војводини, овај глагол има три различите употребе, што се манифестује у употреби три различита комплемента. Лексички глагол хтети захтева комплемент реализован у виду именичке синтагме, модални глагол хтети, којим се исказује вољност/одсуство вољности субјекта, прати комплемент да+презент, док помоћни глагол хтети, којим се изражава будућност, захтева комплемент реализован као инфинитив. Узимајући у обзир да сваку од три употребе глагола хтети одликују различите синтаксичке структуре, наметнула се хипотеза да дате употребе имају различите прозодијске одлике. Хипотезу смо тестирали експериментално, тако што смо анализирали степен финалног дужења и кретање F0 као најбитније показатеље десне границе конституената прозодијске хијерархије. Осланјали смо се на раније претпоставку да више конституенте прозодијске хијерархије одликује већи степен финалног дужења, као и да присуство фразних акцената указује на десну границу фонолошких фраза, док присуство граничних тонова сигнализира десну границу интонацијских фраза. У експерименту је учествовало десет студената Универзитета у Новом Саду, које смо снимили како изговарају по десет реченица за сваку од три употребе глагола хтети. Анализа снимака делимично је потврдила нашу хипотезу, будући да се модална употреба глагола хтети праћена конструкцијом да+презент дуже више како од помоћног глагола хтети кога прати инфинитив, тако и од лексичког глагола хтети кога прати именичка фраза. Такође, разлике у финалном дужењу нису утицале на контруру F0, а фразни акценти нису примећени ни у једној од анализираних употреба датог глагола.