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# HOW FAR IS TOO FAR: THE COMBINED EFFECT OF SYNCRETISM AND SYNTACTIC DISTANCE ON SUBJECT-VERB AGREEMENT IN SERBIAN\*\*

The aim of this research paper is to examine the joint effect of syncretism and syntactic distance on subject-verb agreement in Serbian. To do so, the paper employs one comprehension experiment, a speeded grammaticality judgment task. The task is designed to determine whether an attractor noun syncretic with the nominative plural elicits more erroneous judgments in environments of varying syntactic distance, those with either prepositional or clausal postmodifiers. The results of the speeded grammaticality judgment task point to an apparent joint effect of syncretism and syntactic distance on agreement. More specifically, there is an evident increase in the number of attraction errors with syncretic, as opposed to non-syncretic attractors in prepositional and clausal postmodifiers. This increase is greater with prepositional than with clausal postmodification. These observations are elaborated within the retrieval approach to agreement.

Key words: subject-verb agreement, syncretism, syntactic distance, retrieval approach, Serbian, comprehension

## INTRODUCTION

Agreement has been and still remains one of the most extensively researched phenomena within the field of linguistics. While numerous instances of agreement have been investigated, this paper centers on the phenomenon of subject-verb agreement.

Several factors have been pinpointed as relevant for establishing successful agreement between the subject and verb. Among them, one of the most prominent has been syntactic distance, used to explain the discrepancy in erroneous number

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agreement between the verb and local nouns, also termed attractors, embedded in phrasal and clausal modifiers.

(1a) \*The editor of the books were (...)

(1b) \*The editor who rejected the books were (...) (Franck, Lassi, Frauenfelder & Rizzi, 2006: 176)

In sentences (1a) and (1b), the linear distance between the attractor *the books* and the target verb *were* is the same. However, a difference is found in the syntactic distance between the attractor and verb in the two sentences. It has been argued that because the syntactic distance between the local noun and the node at which agreement occurs is shorter in (1a) than in (1b), the former construction is more prone to erroneous agreement. In other words, the discrepancy in position within the hierarchical structure accounts for the greater number of errors in cases where the local noun is in a prepositional, rather than a clausal modifier. Figures (1) and (2), taken from Franck et al. (2002), illustrate the two respective paths in more detail.

Figure 1: Agreement path for a subject with a prepositional postmodifier





Figure 2: Agreement path for a subject with a clausal postmodifier

However, while the role of syntactic distance has been continuously elaborated, other factors, specifically non-syntactic ones, have also been noted as relevant for subject-verb agreement. In this paper, I consider one such factor, syncretism. An increased number of attraction errors has been observed in instances where the local noun within a subject noun phrase is syncretic in case with the nominative, as in (2).

(2)	ssylka	na	dokumenty
			Russian
	reference-NOM.SG.	to-prep.	article-ACC.PL (=NOM.PL)
			(Slioussar, 2018: 52)

In cases such as (2), the verb is argued to be more prone to agree with the embedded noun, as its form is syncretic with a case associated with the subject position, the nominative. As a result, more erroneous judgments occur in instances where the local noun, "attractor" is syncretic with the nominative than in cases where it is not.

While both syncretism and syntactic distance have been individually examined across languages, their combined effect has not sparked substantial interest. Furthermore, the effect of syncretism has thus far been noted only with prepositional postmodifiers. Thus, this paper sets out to examine the combined effect of syntactic

<sup>(</sup>Franck et al., 2002: 378)

distance and syncretism on subject-verb agreement in Serbian. An effect of syntactic attractors within clausal postmodifiers would be in favor of an independent role of syncretism in subject-verb agreement.

In addition to these introductory remarks, the paper has four more sections. Section 2 provides a cohesive theoretical overview of the relevant work that has been conducted in reference to agreement. Section 3 provides a detailed description of the comprehension experiment used in this paper, while Section 4 presents the results. This is followed by a detailed discussion in Section 5 and subsequent concluding remarks in Section 6.

### 2. PREVIOUS STUDIES: A CONCISE THEORETICAL OVERVIEW

### 2.1. The argument for syntactic distance

Experimental research on subject-verb agreement has in most instances centered around the phenomenon of attraction, i.e., cases where the verb will agree with a local noun found in its vicinity, rather than with the head noun, as exemplified in (3).

(3) \*The time for fun and games are over.

(Bock & Miller, 1991: 46)

In the example above, the verb *are* does not agree with the head noun *time* found in subject position. Rather, it erroneously establishes agreement with the plural noun phrase *fun and games*, situated within the prepositional (post)modifier.

Some of the first attempts to describe this phenomenon linked these erroneous judgments to the notion of linear proximity (Francis, 1986; Quirk et al., 1972). Within this framework, the verb mistakenly agrees with the linearly closest noun, rather than with the one in subject position.

While convenient, this proposal was subsequently challenged, most notably by Bock and Cutting (1992), who argued that attraction was a phenomenon dependent on the clause in which the attractor was embedded, rather than on linear proximity. They proposed that attraction errors occur more frequently in constructions in which the local noun, i.e., the attractor, is situated in the same clause as the head noun, as in (4a), rather than when it is in separate clause, as in (4b).

(4a) The tradition of the Christmas trees (...)

(4b) The tradition that she lights the Christmas trees (...)

(Bock & Cutting, 1992: 124)

Upon further inspection, Franck, Vigliocco and Nicol (2002) suggested that the varying attraction rates found between phrasal and clausal postmodifiers could not be attributed to clausal boundaries. According to them, this discrepancy was related to the depth of syntactic embedding, specifically that of the local noun. Note examples (5a) and (5b) below:

(5a) \*The computer with the programs of the experiment are broken.

(5b) \*The computer with the program of the experiments are broken.

(Franck et al., 2006: 175)

In both sentences, the two local nouns *program(s)* and *experiment(s)* are situated within the same clause as the head noun *computer*. Following the argumentation from Bock and Cutting (1992), we would expect a consistent ratio of attraction in both instances. However, the results detailed in Franck et al. (2002) show a somewhat different picture. Namely, a higher number of attraction errors were reported with constructions such as (5a), where the attractor noun is situated higher in the hierarchical structure than in those like (5b), where the attractor is embedded deeper within the structure. In other words, the syntactic distance between the attractor noun *programs* and the node at which agreement with the verb occurs is shorter than the distance of the attractor *experiments*. It is precisely this difference in syntactic distance that makes the construction in (5a) more prone to erroneous agreement.

Subsequent work, most notably that conducted by Solomon and Pearlmutter (2004) and Franck et al. (2006), further developed on the importance of the syntactic distance hypothesis. However, as their research exceeds the scope of this paper, the reader is referred to Franck et al. (2006) for a more comprehensive overview.

### 2.2. Morphophonological factors: an argument in favor of syncretism

The aforementioned approach assumes that agreement occurs solely during the formation of the sentential structure, during which time syntactic functions and relation are established. Such a view leaves little if no room for the effect of other factors that might influence agreement, specifically morphophonological ones. However, several studies have reported a connection between attraction errors and morphophonological features. A notable one, conducted by Vigliocco, Butterworth, and Semenza (1995), reported an increased number of attraction errors with Italian nouns ambiguous with respect to their number marking. Yet another study, one investigating both Dutch and German, reported a similar increase in attraction errors, this time with nouns that were morphologically ambiguous in both number and case. In this particular study, the stronger attractors were indistinguishable in case and number from the nominative head noun (Hartsuiker, Schriefers, Bock, & Kikstra, 2003).

A final study of note, one conducted by Slioussar (2018), details the relationship between attraction errors and morphophonological form in Russian. More precisely, the paper examines the independent effect of case syncretism on attraction in subject-verb agreement. Accusative plural and genitive singular nouns were used as attractors, as both are syncretic with the nominative case associated with the subject position. Furthermore, using both plural and singular syncretic attractors allowed examining the role of syncretism independently from other factors, such as number. Results from both the comprehension and production experiments indicate an increased number of erroneous agreements with both accusative plural and genitive singular attractors, as opposed to their non-syncretic counterparts. Slioussar (2018) argues that these patterns point to an independent effect of syncretism in subject-verb agreement.

Thus far, this subsection has focused solely on detailing the role of morphophonological factors, from the perspective of number agreement. However, it would be unfair to claim that evidence in favor of the role of morphophonological features stems solely from research into number agreement. Rather, another substantial body of evidence comes from crosslinguistic research into gender agreement, most notably by Slioussar and Malko (2016) and Bedecker and Kuminiak (2007), who report an increased amount of attraction errors in cases with gender mismatched attractors. However, as the topic of these studies is beyond the present scope, they will not be examined further.

2.3. A few words about the Serbian case system

Seven cases are recognized in Serbian. They appear in one of three available forms: the free form (without a preposition or determiner) (6a), preceded by a preposition (6b), or preceded by a determiner (6c). The nominative appears solely in free form, while cases like the genitive, accusative, and instrumental can appear in all three forms.

(6a)	Marko	peva.			
	Marko-sg.m.nom. sing-pres.1.m.				
	"Marko sings."				
(6b)	) Izašao	je	iz	prodavnice.	
	left_ptcp.pst.1.M	be-prs.3.SG.	from <sub>-PREP.</sub>	store <sub>-SG.F.GEN.</sub>	
	"He left the st	tore."			
(6	c) Čekao	sam	je	taj	dan.
	wait.ptcp.pst.1.m be-prs.1.sg. her-sg.acc. that-adj.m.acc. day-sg.m.ac				
	"I waited for her all day."				

Apart from variation in form, there are also more than a few syncretic patterns observed within the Serbian case system. However, only one is of particular interest for this paper, the syncretism between the nominative and accusative. It appears across all three grammatical genders in Serbian (feminine, neuter, and masculine). However, syncretism between the nominative and accusative is dependent on other factors, including animacy and the declension group of the noun<sup>1</sup>. For the purposes of this paper, it is only important to note that the nominative plural of feminine nouns and neuter nous, are syncretic with the accusative plural. For instance, the plural form of the inanimate feminine noun *lopte* (balls) is ambiguous between the nominative plural and accusative plural in Serbian. The same is true for

<sup>&</sup>lt;sup>1</sup> The description of the declension system referenced in the present study has been developed by Stevanović (1964). It recognizes three separate groups of nouns based on their ending in the genitive singular. Therefore, there is the first group referred to as the a-declension, the second also known as the e-declension, and the third referred to as the i-declension, respectively.

the plural forms of inanimate neuter nouns such as *ogledala* (mirrors), which are again ambiguous between the nominative plural and accusative plural.

## 3. COMPREHENSION EXPERIMENT

## 3.1. Initial hypothesis

Before discussing the comprehension experiment in detail, it will be useful to precisely define both the research question and initial hypotheses that stem from it. In reference to the first of these issues, this paper aims to investigate the combined role of syncretism and syntactic distance on subject-verb agreement in Serbian. More specifically, it examines whether syncretism will have an independent effect on agreement, regardless of the depth of syntactic embedding.

Based on the research question above, the paper also puts forth two initial assumptions. Firstly, attraction errors are expected to be more prominent in sentences where (subject) nouns are postmodified by a phrase rather than a relative clause. Our second hypothesis concerns syncretism. Namely, we expect to see an increased number of attraction errors in cases where the attractor noun is syncretic with the nominative plural. We expect this effect to be seen in sentences with both phrasal and clausal postmodification.

## 3.2. Materials and design

The administered comprehension experiment is a speeded grammaticality judgment task. It represents a modified version of a comprehension experiment designed by Slioussar (2018). Within the present task, participants are asked to judge the acceptability of sentences that contained a singular nominative head noun, a plural accusative attractor noun within either a prepositional or clausal modifier, a predicate comprised of the verb 'to be' and a past participle, and a final non-obligatory modifier in the form of either a prepositional or noun phrase. For a more straightforward overview, two examples are provided below, as (7a) and (7b).

(7a) Fioka za komode
drawer<sub>-F.SG.NOM</sub>. for-PREP. dresser<sub>-F.PL.ACC</sub>. (=NOM.PL.)
je nakrivljena na levo.
be-PRES.3.SG. crook-PTCP.PST.F.SG. ON-PREP. left-ADV.

"The drawer for the dressers is crooked to the left."

(7b) Mašina koja proizvodi machine-<sub>F.SG.NOM.</sub> which-<sub>PRO.F.SG.</sub> make-<sub>PRES.SG.</sub> grejalice je pokvarena heater-<sub>F.ACC.PL.</sub> (=NOM.PL.) be-<sub>PRES.3.SG.</sub> break-<sub>PTCP.PST.F.SG.</sub> od juče. since-<sub>PREP.</sub> yesterday-<sub>ADV.</sub>
"The machine which makes heaters has been broken since

yesterday."

There are three important points to note about the experimental materials. Firstly, to determine the effect of syntactic distance on agreement, both prepositional phrases and relative clauses were used. According to the syntactic distance hypothesis, more attraction errors are expected in sentences with a prepositional, rather than a clausal modifier.

Secondly, to determine whether there was indeed an effect of syncretism on agreement, both syncretic and non-syncretic attractors were used, all plural and in the accusative case. Because they exhibit syncretism between the nominative and accusative plural, inanimate feminine and neuter nouns were used as the syncretic attractors. Inanimate masculine nouns were used as attractors in the control condition because they do not exhibit syncretism with the nominative plural. Furthermore, no previous research has indicated that grammatical gender could affect number agreement. In other words, there is no evidence that nouns of a particular grammatical gender are stronger attractors than those of other grammatical genders, at least not in the domain of number agreement.

Furthermore, only accusative attractors were used, as accusative has been shown to elicit a stronger attraction effect than other cases syncretic with the nominative. In addition, all attractors were plural, as previous studies have reported a notably greater attraction effect of plural forms, as opposed to singular ones.

Finally, both grammatical and ungrammatical sentences were included. The ungrammatical sentences agreed in number with the attractor rather than with the head noun. Both grammatical and ungrammatical conditions were included primarily to determine whether syncretism and syntactic distance could override correct agreement once it had already been established in grammatical sentences.

A total of 24 stimuli sentences were constructed. Half included prepositional modifiers while the other half included clausal ones. Moreover, half contained

syncretic, and half contained non-syncretic attractors and half were grammatical, and half were not. Finally, since the past participle is marked for gender in Serbian, the head and attractor always agreed in gender to control for its possible effect on agreement. For a clearer overview of all the experimental conditions, refer to Table 1 below.

Condition	Head Noun	Modifier Phrase	Dependent noun	Predicate
Sg. $+$ Pl. (acc) $+$ Sg.	Sg.	PP	Acc.Pl. (=Nom.Pl.)	Sg. (grammatical)
Sg. $+$ Pl. (acc) $+$ Pl.	Sg.	PP	Acc.Pl. (=Nom.Pl.)	Pl. (ungrammatical)
Sg. $+$ Pl. (acc) $+$ Sg.	Sg.	PP	Acc.Pl. (≠Nom.Pl.)	Sg. (grammatical)
Sg. $+$ Pl. (acc) $+$ Pl.	Sg.	PP	Acc.Pl. (≠Nom.Pl.)	Pl. (ungrammatical)
Sg. $+$ Pl. (acc) $+$ Sg.	Sg.	СР	Acc.Pl. (=Nom.Pl.)	Sg. (grammatical)
Sg. $+$ Pl. (acc) $+$ Pl.	Sg.	СР	Acc.Pl. (=Nom.Pl.)	Pl. (ungrammatical)
Sg. $+$ Pl. (acc) $+$ Sg.	Sg.	СР	Acc.Pl. (≠Nom.Pl.)	Sg. (grammatical)
Sg. $+$ Pl. (acc) $+$ Pl.	Sg.	СР	Acc.Pl. (≠Nom.Pl.)	Pl. (ungrammatical)

### Table 1: Experimental conditions

Lastly, in addition to the experimental conditions, the comprehension experiment also included 12 filler sentences. The filler sentences were of the same length as the experimental ones and contained both prepositional and clausal modifiers. Both the head and local nouns were inanimate. Furthermore, half of the filler sentences were grammatical, while the other half contained gender agreement errors. A complete list of the experimental and filler items is provided in the Appendix.

### 3.3. Procedure

The comprehension experiment was run in PCIbex Farm software. Sentences appeared in the center of the screen one word at a time. Each word appeared for 500ms. A response screen then appeared after each sentence. Here, participants needed to choose whether the sentence they had just seen was acceptable or unacceptable, by pressing either A or L on the keyboard. After each response, there was a 2 s pause with a message to wait for the next sentence. Each participant saw each condition only once. Moreover, no more than two experimental sentences ever appeared in a row. After the experiment ended, participants were informed that their response had been successfully recorded.

Before the start of the experiment, an instruction screen appeared advising participants to read each sentence carefully and respond as quickly as possible.

Moreover, to allow participants adequate time to adjust to the speed and positioning, three practice items were included at the start of the experiment.

## 3.4. Participants

The comprehension experiment was administered to 33 participants, all students from the University of Novi Sad. Their ages ranged from 19 to 27. All participants were naïve with respect to the experimental hypothesis and provided informed consent before beginning the experiment.

### 4. RESULTS

There were 264 responses in total, of which there were 35 (13.26%) grammaticality judgment errors. Responses in grammatical and ungrammatical sentences are analyzed separately. This decision partially follows arguments put forward by Slioussar (2018) on the nature of agreement errors in these two conditions. Namely, while incorrect judgments in ungrammatical sentences indicate that the error was overlooked, those in grammatical sentences could be the result of several reasons, including but not exclusive to an attraction error, misreading a word, etc.

We first examine the responses in ungrammatical sentences. Incorrect judgments occurred in all conditions, except sentences with a non-syncretic attractor within a clausal modifier. Still, while erroneous judgments occurred in all other conditions, their distribution varied. Errors were most prevalent in sentences with a syncretic attractor embedded within a prepositional phrase, followed by ones with a syncretic attractor within a clausal modifier and finally those with a non-syncretic attractor within a prepositional phrase.

Condition	Modifier	Head	Dependent Noun	Correct	Incorrect
	Phrase	Noun		Responses	Responses
Experimental	PP	Nom.Sg.	Acc.Pl.(=Nom.Pl.)	26	7 (21.21%)
Control	PP	Nom.Sg.	Acc.Pl.(≠Nom.Pl.)	31	2 (6.06%)
Experimental	СР	Nom.Sg.	Acc.Pl.(=Nom.Pl.)	29	4 (12.12%)
Control	СР	Nom.Sg.	Acc.Pl.(≠Nom.Pl.)	33	0

#### Table 2: Ungrammatical sentence responses

Like the ungrammatical condition, judgment errors within grammatical sentences occurred in only three conditions, again with the exception of sentences with nonsyncretic attractors embedded in clausal postmodifiers. Once again, the largest number of errors occurred with syncretic attractors embedded in prepositional phrases, followed by those in clausal postmodifiers and then those with non-syncretic attractors embedded in prepositional phrases. Interestingly, while the number of errors either decreased or remained constant in three conditions, it increased in sentences with a syncretic attractor embedded in a clausal postmodifier.

Condition	Modifier	Head	Dependent Noun	Correct	Incorrect
	Phrase	Noun		Responses	Responses
Experimental	PP	Nom.Sg.	Acc.Pl.(=Nom.Pl.)	22	11 (33.33%)
Control	PP	Nom.Sg.	Acc.Pl.(≠Nom.Pl.)	31	2 (6.06%)
Experimental	СР	Nom.Sg.	Acc.Pl.(=Nom.Pl.)	24	9 (27.27%)
Control	СР	Nom.Sg.	Acc.Pl.(≠Nom.Pl.)	33	0

#### Table 3: Grammatical sentence responses

#### 5. DISCUSSION

As apparent from the previous section, attraction errors occurred in the same three conditions in both grammatical and ungrammatical sentences. The exception in both cases was the control example in which a non-syncretic attractor was embedded in a relative clause.

Based on the attraction pattern, our first hypothesis seems to be borne out. The rate of attraction errors is greater in sentences with phrasal rather than clausal postmodification. However, upon further inspection, we see that syntactic distance cannot be considered the sole factor at play. When comparing the experimental and control conditions for both phrasal and clausal postmodifiers, we observe an evident increase in erroneous judgements in all cases with a syncretic attractor. In other words, both phrasal and clausal modifiers with attractors syncretic with the nominative plural had an increased number of attraction errors compared to their non-syncretic control counterparts. Relative clauses with syncretic attractors even saw an increase in the number of attraction errors in grammatical as opposed to ungrammatical sentences, a pattern that was not initially expected nor observed in previous research on syncretism. Together, the results from both the grammatical and ungrammatical conditions appear to point to a joint effect of syntactic distance and syncretism on agreement. Firstly, for an explanation of the effect of syncretism, we turn to Slioussar (2018) and her revision of the retrieval approach to agreement.

The retrieval approach assumes that the agreement mechanism retrieves all potential agreement sources from the elements active in our working memory. This process is cue-based, meaning that individuals search through their working memory with a set of cues, such as number, gender, and case. The element with the maximum number of matching cues is then selected as the agreement source (Slioussar, 2018). According to this approach, attraction errors occur because a local noun may match some of the retrieval cues, such as number or gender. The theory postulates that when a clear distinction becomes impossible, discerning the head and attractor noun becomes dependent on the number of structural distinctions that are maintained between them.

Within this approach, an attractor syncretic with the nominative plural would cause morphological ambiguity. This would, in turn, lead to all its feature sets being activated, including ones marked as [accusative singular] and ones marked [nominative plural] (Slioussar, 2018). However, in the case of both Russian and the present study, the preceding preposition, and in this case pronoun, should disambiguate these constructions. In other words, these cues should indicate that the attractor is not an element eligible for agreement. Still, attraction errors occur with these constructions, more commonly than with non-syncretic attractors.

Because of this, Slioussar (2018) argues for a revised version of the retrieval approach, one in which all potential feature sets would be activated regardless of whether the multiple interpretations are hindered by other elements, such as prepositions and pronouns. This would entail that the agreement mechanism would have access to both the accusative and nominative case cue, as well as both the singular and plural number cue of the attractor noun. As the attractor allows for multiple feature variants, one of them associated with the subject position, the chance for erroneous judgements is assumed to increase. While Slioussar (2018) observes this pattern with prepositional postmodification, this paper takes note of it in relative clauses as well. Thus, it appears that neither the preposition nor relative pronoun are capable of completely disambiguating a syncretic attractor and thus preventing erroneous agreement. Furthermore, the observations found with relative clauses point to an effect of syncretism even across clausal boundaries.

On a final note, we must mention one pattern that neither our assumptions nor the retrieval analysis could explain. This is the increased number of erroneous judgments in grammatical sentences with syncretic attractors in clausal modifiers as opposed to ungrammatical ones of the same type. While this pattern has not yet been reported, we argue that it may not be the product of attraction. As mentioned, erroneous judgments in grammatical sentences are not solely the result of attraction and could be caused by a multiplicity of factors. Further research, preferably involving production experiments, is needed for a more comprehensive understanding and re-examination of this particular pattern.

### 6. CONCLUSION

This paper aimed to examine the combined effect of syntactic distance and syncretism on subject-verb agreement in Serbian. One comprehension experiment, a speeded grammaticality judgment task was administered for this purpose.

Based on previous crosslinguistic research, it was hypothesized that both factors would elicit erroneous judgments in both grammatical and ungrammatical conditions. The results of the comprehension experiment verified these assumptions. For one, more attraction errors were observed in conditions with a phrasal, than a clausal modifier, showing that the effect of syntactic distance was indeed in effect in Serbian. Furthermore, the results also suggest that syncretism affected agreement independently of syntactic distance, as attraction errors occurred with both prepositional phrases and relative clauses.

The revised retrieval approach allows for both syntactic and morphophonological factors to be taken into consideration when discussing agreement. It assumes that the morphological ambiguity, produced by syncretic forms, leads to attraction errors even when other sentential cues, such as prepositions or in our case relative pronouns, disambiguate the role of the syncretic attractor.

While in line with previous findings, the above results require further elaboration. At present, they provide only starting point for understanding the joint effect of syntactic and morphophonological factors on subject-verb agreement. However, the data above needs to be elaborated, most notably by production experiments. The data pool should also be expanded to include non-binary systems, such as the Serbian gender system. Iva Dozet

## KOLIKO DALEKO JE PREDALEKO: ZAJEDNIČKI EFEKAT SINKRETIZMA I SINTAKSIČKE DISTANCE NA SLAGANJE SUBJEKTA I PREDIKATA U SRPSKOM JEZIKU

#### REZIME

Ovaj rad izučava zajednički uticaj sinkretizma i sintaksičke distance na slaganje subjekta i predikata u srpskom jeziku. Iako su prethodna istraživanja zapazila individualni uticaj oba gorenavedena faktora, do sada nije bilo reči o njihovom zajedničkom uticaju. Zbog ovoga, primarni cilj ovog istraživanja jeste da ispita na koji način sinkretizam može uticati na pravilno slaganje subjekta i predikata u broju na različitim sintaksičkim distancama.

Za svrhe ovog rada je sačinjen eksperiment koji od kandidata zahteva da procene gramatičnost rečenica koje vide pred sobom. Svaka od rečenica se sastoji iz imenice u jednini u ulozi subjekta, zavisne imenice u okviru predloške konstrukcije ili odnosne rečenice, predikata u jednini ili množini i prateće imeničke sintagme ili predloške konstrukcije. Sve zavisne imenice se nalaze u akuzativu množine. Kako bismo ispitali ulogu sinkretizma, polovina zavisnih imenica ostvaruje sinkretizam sa nominativom množine dok druga polovina to ne čini. Ako bi sinkretizam uticao na slaganje subjekta i predikata, očekivali bismo više grešaka u rečenicama u kojima sinkretizam između akuzativa i nominativa množine postoji, tačnije u onim u kojim zavisna imenica izgleda kao potencijalni subjekat. Takođe, kako bismo ispitali uticaj sintaksičke distance, polovina zavisnih imenica se nalazi u predloškoj konstrukciji, dok se druga polovina nalazi u odnosnim rečenicama. U ovom slučaju, veći broj grešaka je očekivan u slučaju odnosnih rečenica.

Rezultati ovog istraživanja ukazuju na zajednički uticaj sinkretizma i sintaksičke distance na slaganje subjekta i predikata u srpskom jeziku. Naime, veći broj grešaka se pojavljuje u rečenicama u kojima postoji sinkretizam između akuzativa i nominativa množine, kako u onim sa predloškom konstrukcijom tako i u onim sa odnosnim rečenicama. Ovi rezultati ukazuju ne samo na relevantnost sinkretizma, već i na potrebu daljeg razvitka teorije o slaganju subjekta i predikata koja će obuhvatiti i sintaksičke i morfofonološke faktore.

*Ključne reči*: slaganje subjekta i predikata, sinkretizam, sintaksička distanca, slaganje subjekta i predikata u srpskom jeziku

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## APPENDIX

### Experimental sentences

- Fioka za komode je drawer-F.SG.NOM. for-PREP. dresser-F.PL.ACC. be-PRES.3.SG. nakrivljena na levo. crook-PTCP.PST.F.SG. ON- PREP. left-ADV. "The drawer for the dressers is crooked to the left."
- 2. Činija za biljke je bowl-<sub>F.SG.NOM</sub>. for-<sub>PREP</sub>. plant-<sub>F.PL.ACC</sub>. be-<sub>PRES.3.SG</sub>. kupljena prošle nedelje. buy-<sub>PTCP.PST.SG</sub>. last-ADJ. week-<sub>F.SG</sub>. "The bowl for the plants was bought last week."
- 3. Ogledalo za kupatila mirror- N.SG.NOM. for- PREP. bathroom- N.PL.ACC.
  je završeno pre be- PRES.3.SG. finish- PTCP.PST.N.SG. before-PREP. useljenja.
  moving-F.SG.
  "The mirror for the bathrooms was finished before moving in."
- 4. \*Čokolada za torte chocolate- F.SG.NOM. for-PREP. cake- F.PL.ACC.
  su ostale u kolima.
  be-PRES.3.PL. leave- PTCP.PST.F.PL. in- PREP. car-F.SG.
  "\*The chocolate for the cakes were left in the car."
- 5. \*Navlaka za stolice su

cover-ESGNOM for-PREP chair-EPLACC be-PRES.3.PL iz kancelarije. premeštene move-ptcp.pst.f.pl, from-prep. office-f.SG. "The cover for the chairs were moved from the office." 6 \*Gorivo za vozila **S**11 fuel-<sub>N.SG.NOM.</sub> for-<sub>PREP.</sub> vehicle-<sub>N.PL.ACC.</sub> be-<sub>PRES.3.PL.</sub> poskupela ove become more, expensive-ptcp.pst.N.PL. this-pro. godine. year-F.SG. "\*Fuel for vehicles became more expensive this year."

7. Prijava koja potresa report-F.SG.NOM. which-PRO.F.SG. shock-PRES.SG. redakcije je stigla newsroom-F.PL.ACC. be-pres.3.SG. arrive-ptcp.pst.F.SG. jutros. rano early-ADV. morning-NOUN "The report which shook the newsrooms arrived early in the morning." 8. Mašina koja proizvodi machine-F.SG.NOM. which-PRO.F.SG. make-PRES.SG. grejalice je pokvarena heater- F.PL.ACC. be- PRES.3.SG. break- PTCP.PST.F.SG. juče. od since-prep. yesterday-ADV. "The machine which makes heaters has been broken since yesterday."

- 9. Tenda koja prekriva awning- F.SG.NOM. which- PRO.F.SG. COVER-PRES.SG.
  terase je dostupna terrace-F.PL.ACC. be- PRES.3.SG. available- PTCP.PST.F.SG.
  na popustu.
  on- PREP. discount-M.SG.
  "The awning which covers terraces is available at a discount."
- 10. \*Skica koja prikazuje sketch-ESGNOM, which-PRO.E.SG, show-PRES.SG, sobe su završene room-F.PL.ACC. be-pres.3.SG. complete-pres.3.F.PL. prošle nedelje. last-ADL week-ESG. "\*The sketch which shows the rooms was completed last week." 11. \*Knjiga koja analizira book-F.SG.NOM. which-pro.F.SG. analyze-pres.SG. bajke predstavljene SII fairy-tale-F.PL.ACC. be-PRES.3.SG. showcase-PRES.3.F.PL.

na sajmu.

at-prep. fair-m.sg.

"\*The books which analyses fairy tales were showcased at the fair."

12. \*Osiguranje koje pokriva insurance-<sub>N.SG.NOM</sub>. which-<sub>PRO.N.SG</sub>. cover-<sub>PRES.SG</sub>. putovanja su rasprodata veoma trip-<sub>N.PL.ACC</sub>. be-<sub>PRES.3.SG</sub>. sell out-<sub>PRES.3.F.PL</sub>. very-<sub>ADV</sub>. brzo

fast-ADJ.

"\*The insurance which covers the trip were sold out very fast."

13. Ključ sefove za ie key-F.SG.NOM. for-prep. safe-M.PL.ACC. be-pres.3.SG. skriven u podrumu. hide-ptcp pst M sg in-prep basement-M sg "The key to the safe is hidden in the basement." 14. Šraf za motore screw-M.SG.NOM. for-PREP. motorcycle-M.PL.ACC. je naručen prošle nedelje. be-pres.3.SG. order-ptcp.pst.m.SG. last-ADJ. week-F.SG. "The screw for the motorcycles was ordered last week." 15. Ram za crteže frame-MSGNOM for-PREP. picture-MPLACC. je išaran tokom be-pres.3.SG. color-ptcp.pst.m.SG. during-prep. časa. class-m.sg. "The frame for pictures was colored during class." 16. \*Prozor uz radijatore window-M.SG.NOM. next to-PREP. radiator-M.PL.ACC. su prefarbani pre

be-<sub>PRES.3.SG</sub>, paint over-<sub>PRES.3.M.PL</sub>, before-<sub>ADV</sub>, useljenja, moving-<sub>N.SG</sub>, "\*The window next to the radiators were painted over before moving in."

telefone 17. Punjač za charger-M.SG.NOM. for-PREP. phone-M.PL.ACC. **S**11 ukradeni iz kofera be-pres.3.SG steal-pres.3.M.PL from-prep. suitcase-M.SG. "\*The charger for the phones were stolen from the suitcase." 18. \*Lanac bicikle za chain-M.SG.NOM. for-PREP. bicycle-M.PL.ACC. tržnom centru. su nađeni u be-pres.3.sg. find-pres.3.M.PL in-prep. mall-m.sg. "\*The chain for the bicycles were found in the mall." 19. Poster koji najavljuje

poster- M.SG.NOM. which-PRO.M.SG. announce-PRES.SG.
koncerte je okačen
concert- M.PL.ACC. be-PRES.3.SG. hang- PTCP.PST.SG.
na vratima.
on- PREP. door-F.SG.
"The poster which announces the concerts is hung up on the door."
20. Ormar koji prekriva
closet- M.SG.NOM. which- PROM.SG. cover-PRES.SG.

zidove je išmirglan

wall-M.PL.ACC. be-pres.3.SG. polish-ptcp.pst.M.SG.

tokom dana.

during-PREP. day-M.SG.

"The closet which covers the walls was polished during the day."

21. Otirač koji prekriva doormat-M.SG.NOM. which- PRO.M.SG. COVER-PRES.SG. parkete je isprljan floor-M.PL.ACC. be-PRES.3.SG. dirty-PTCP.PST.M.SG. tokom selidbe. during-PREP. moving out-F.SG. "The doormat which covered the floors was dirtied during moving."

22. \*Časopis koji sadrži

magazine-M.SG.NOM. which-PRO.M.SG. have-PRES.SG.

kupone su iscepani

coupon-M.PL.ACC. be-pres.3.SG. rip-pres.3.M.PL.

pred prodavnicom.

in front of-PREP. store-F.SG.

"\*The magazine which has coupons was ripped up in from the store."

23. \*Suncobran koji zaklanja parasol-<sub>M.SG.NOM.</sub> which- PRO.M.SG. cover-PRES.SG. peškire su izbledeli towel- M.PL.ACC. be- PRES.3.SG. fade-- PRES.3.M.PL. tokom godina.

during-prep. year-F.SG.

"\*The parasol covering the towels faded out during the years."

24. \*Aparat koji pravi device- M.SG.NOM. which- PRO.M.SG. make-PRES.SG. čajeve su sklopljeni

tea-M.PL.ACC. be-PRES.3.SG. assemble-PRES.3.M.PL.

bez uputstva.

without-PREP. instruction-NOUN

"\*The tea maker were assembled without instructions."

### Filler sentences

 Ručka za šporet je handle-F.SG. for-PREP. stove-M.SG. be-PRES.3.SG. pokvarena kasno sinoć. brake-pres.3.F.SG. late-ADV. last night-ADV. "The stove handle was broken late last night." 2. Klupa uz bazen ie bench-F.SG. next to--PREP. pool--M.SG. be-PRES.3.SG. uništena zbog osvete. destroy-pres.3.F.SG. because-conj. revenge-F.SG. "The bench next to the pool was destroyed out of revenge." 3. Narukvica priveskom je sa bracelet-F.SG. with-PREP. charm-M.SG. be-PRES.3.SG. uručena slavljenici. give-pres.3.F.SG. birthday girl-F.SG. "The bracelet with a charm was given to the birthday girl." 4. \*Pošiljka rođendan za ie

package-F.SG. for--PREP. birthday--M.SG. be-PRES.3.SG.

kasnio nekoliko dana.

late-pres.3.M.SG. several-ADJ. day-M.PL.

"\*The birthday package was several days late."

5. \*Činija za doručak je

bowl-ESG for-PREP breakfast-MSG be-PRES.3.SG buvljaku. kuplien na buy-pres.3.M.SG. on-prep. flea market-M.SG. "\*The breakfast bowl was bought at a flea market. " 6. \*Koverta 117 paket ie envelop-F.SG. next to-PREP. package-M.SG. be-PRES.3.SG. vreći. ostao u leave-pres.3.M.SG. in-prep. bag-F.SG. "\*The envelope that came with the package was left in the bag."

7. Saksija koja drži kaktus pot- F.SG. which- PRO.F.SG. hold-PRES.SG. cactus-M.SG.
je napukla po sredini.
be- PRES.3.SG. break- PRES.3.F.SG. in-PREP. middle-F.SG.
"The pot which holds the cactus is broken across the middle."

8. Žalba koja sadrži complaint- <sub>F.SG</sub>. which<sub>-PRO.F.SG</sub>. contain-<sub>PRES.SG</sub>. potpis je odbačena signature-<sub>M.SG</sub>. be-<sub>PRES.3.SG</sub>. dismiss- <sub>PRES.3.F.SG</sub>. zbog nepravilnosti. because-<sub>CONJ</sub>. irregularity-<sub>F.PL</sub>. "The complaint containing the signatures was dismissed because of irregularities."

- 9. Suknja koja doseže pod
- 10. skirt-F.SG. which-PRO.F.SG. reach-PRES.SG. floor-M.SG.

je dozvoljena u školi. be-<sub>PRES.3.SG.</sub> allow-<sub>PRES.3.F.SG.</sub> in-<sub>-PREP.</sub> school-<sub>F.SG.</sub> "A skirt which reaches the floor is allowed in school."

11.	*Krpa	koja	prekriva	kolač		
	cloth- <sub>F.SG.</sub> which- <sub>PRO.F.SG.</sub> cover- <sub>PRES.SG.</sub> cake <sub>M.SG.</sub>					
	je	pocrneo.				
	be-pres.3.SG	become black	PRES.3.F.SG.			
	"*The clot	h covering the	cake turned b	lack."		
12.	*Gumica	koja	briše	mastilo		
	rubber- <sub>F</sub>	.sg. which- PRO.F	.sg. erase-pres.	<sub>SG.</sub> ink- <sub>-N.SG.</sub>		
	je	zabranjeno	na	fakultetu.		
	be-pres.3.5	G. forbid-PRES.3.	N.SG. ON-PREP.	faculty- <sub>M.SG.</sub>		
	"*Rubber	which erases in	nk is forbidde	n at university."		
13.	*Igla	koja	probada	pamuk		
	needle- <sub>F.</sub>	sG. which- PRO.F.S	SG. pierce-PRES	.SG.		
	pamuk	je	ispala			
	cottonM.SG. be- PRES.3.SG. fall out- PRES.3.F.SG.					
	iz	kutije				
	from-prep. box-f.sg.					
	"*The needle which can pierce through cotton fell out of					
	the box."					