

Maša Bešlin\*

University of Maryland

**RAISING AS A FREE SYNTACTIC OPERATION: EVIDENCE FROM  
BOSNIAN/CROATIAN/SERBIAN\*\***

---

\* mbeslin@umd.edu

\*\* I am grateful to Tanja Milićev for inspiring this research project, and to her, Masha Polinsky and Omer Preminger for their generous feedback on the paper. I would also like to thank Norbert Hornstein, Howard Lasnik, Aida Talić, the participants of S-lab at UMD, and the participants of the *IATL 36* and *SinFonJA 14* conferences for helpful comments and discussion. All remaining errors are my own.

# Raising as a free syntactic operation: Evidence from Bosnian/Croatian/Serbian

Maša Bešlin, University of Maryland

**Abstract:** This paper examines the syntactic properties of the Bosnian/Croatian/Serbian (BCS) modal verb *trebati* ‘need’, which appears in the environment ‘NP – *trebati* ‘need’ – finite *da*-clause’. I show that *trebati* is a raising verb and that the preverbal NP is a (raised) subject. *Trebati* ( $\varphi$ -)agrees with the preverbal NP only optionally, which is surprising since other BCS verbs agree with their subjects obligatorily. Furthermore, the subject is free to remain in the embedded clause, suggesting that the raising operation is not triggered by the need to satisfy unvalued features of the nominal or another head (contra e.g., Chomsky 1981, 2008). I instead propose that A-movement (of this kind) is ‘free’; more precisely, it is fully optional, it can occur at any stage of the derivation (or not), and it is constrained only by the requirement that the output be well-formed. I show that this analysis accounts for the full range of data with *trebati*, but that it can also be applied to English-style raising constructions.

**Keywords:** raising-to-subject, free movement,  $\varphi$ -agreement, timing analysis, Bosnian/Croatian/Serbian

## 1. Introduction

In this paper, I examine the syntactic properties of the Bosnian/Croatian/Serbian (BCS) modal verb *trebati* ‘need’, which can appear in two configurations that look quite similar on the surface (1)-(2).<sup>1</sup> In (1a) and (2a), *trebati* ‘need’ is in the present tense, while in (1b) and (2b) it is in the past tense. The complement *da*-clause in both (1) and (2) is finite, and the only obvious difference between (1) and (2) is the presence versus absence of subject agreement morphology on the modal *trebati* (and on the auxiliary in the past tense). I will show that both (1) and (2) involve subject-to-subject raising, and argue that the lack of agreement in (2) arises because the raising of the subject NP occurs too late for the matrix agreement probe to ‘see’ it. Ultimately, I will conclude that accounting for the full range of data with *trebati* necessitates a theory of raising-to-subject on which (this type of) A-movement is free (in a way that is to be specified).

- (1) a. Marija i ja treba-mo da ide-mo na pijacu.  
Mary and I need-PRES.1PL DA go- PRES.1PL on Market  
b. Marija i ja smo treba-l-e da idemo na pijacu.  
Mary and I AUX.1PL need-LPTCP-FEM.PL DA go- PRES.1PL on market
- (2) a. Marija i ja treba- $\emptyset$  da ide-mo na pijacu.  
Mary and I need- PRES.3SG DA go- PRES.1PL on market  
b. Marija i ja je treba-l-o da ide-mo na pijacu.

---

<sup>1</sup> I gloss *trebati* as ‘need’ throughout for consistency, although its meaning is slightly weaker. That is, *trebati* is likely not a true necessity modal, and as such does not involve universal quantification over possible worlds. Its meaning lies somewhere between the English modals *need* and *should*. I leave the issue of modal force aside in this paper; see Lassiter 2011, 2020 for a discussion of similar cases. In terms of its modal flavor, both agreeing and non-agreeing *trebati* can be used epistemically and deontically. In this paper I focus on the deontic flavor of modality with the aim of making the two structures as parallel as possible in all contexts. *Trebati* seems to have unique properties among the BCS modals; for an analysis of the modals *morati* ‘must’ and *moći* ‘can’, see Veselinović 2019.

Mary and I AUX.3SG need-LPTCP-NEUT.SG DA go-PRES.1PL on market  
 ‘Mary and I need/needed to go to the market’

I should mention at the outset that I will continue to refer to the language in which both agreeing and non-agreeing *trebati* are used as BCS, though a more precise characterization would be *in certain dialects of BCS*. For example, an informal survey revealed that speakers from central Bosnia (Zenica) may prefer the option in (1), whereas speakers from Sarajevo use both options equally. The situation in Serbia is comparable, with some dialects preferring one option over the other, and others using them interchangeably. Notably, speakers from Croatia are not likely to use *da*-complements with *trebati*, instead opting for infinitival complements (3). Infinitival complements are available in all dialects of BCS and the agreement on *trebati* is then obligatory.

(3) Marija i ja treba\*(-mo) ići na pijacu.  
 Mary and I need-1PL go.INF on market  
 ‘Mary and I need to go to the market’

The paper is organized as follows. Section 2 offers a general overview of agreement in BCS, which will be useful in understanding how the pattern in (2) might arise. In section 3, I analyze various properties of *trebati* ‘need’; I show that both agreeing and non-agreeing *trebati* ‘need’ take clausal complements (section 3.1), and that *trebati* is a raising-to-subject verb with raising out of a finite clause (3.2). In section 3.3, I consider and reject the possibility that the sentence-initial NP in (2) is in an A’ position (which could explain why it does not trigger agreement). Instead, I conclude that the sentence-initial NPs in both (1) and (2) are in an A position. Section 4 offers two analyses in an attempt to account for the optionality of agreement with *trebati*. The first is a timing analysis that relies on the presence of two features ([N\*] and [uφ]) on T, and capitalizes on the order in which these features are satisfied. I will reject this approach due to its inability to account for a portion of the relevant data. The second analysis, which I ultimately adopt, allows A-movement to occur freely at any step of the syntactic derivation. This view of raising diverges from mainstream generative analyses of the phenomenon, on which the movement operation is triggered by the need to satisfy unvalued features (Chomsky 1981, 2008). In section 5, I look at raising beyond BCS and argue that the analysis proposed in this paper can account for English-style raising-to-subject constructions equally well.

## 2. Agreement facts in BCS



The first step in arguing that *trebati* ‘need’ is a raising verb is to show that both its agreeing and non-agreeing forms take a clausal complement. Strong evidence for this comes from the licensing of NPIs. There are two types of NPIs in BCS, *ni*-NPIs and *i*-NPIs; *ni*-NPIs are licensed by clause-mate sentential negation (6a-b), whereas *i*-NPIs are only licensed by superordinate negation (6c-d), see Progovac 1991.<sup>2</sup>

- (6) a. **Ni-ko**     **ne**    voli     **ni-šta.**  
          NEG-who   NEG   loves    NEG-what  
          ‘Nobody loves anything’
- b. \***Marija**   **ne**    tvrdi    da     **ni-ko**     želi    **ni-šta.**  
       Mary     NEG   claims   DA    NEG-who   wants   NEG-what  
       *intended:* ‘Mary is not claiming that anybody wants anything’
- c. \***I-ko**     **ne**    voli     **i-šta.**  
       i-who     NEG   loves    i-what  
       *intended:* ‘Nobody loves anything’
- d. **Marija**     **ne**    tvrdi    da     **i-ko**     želi     **i-šta.**  
       Mary        NEG   claims   DA    i-who    wants    i-what  
       ‘Mary is not claiming that anybody wants anything’

In (7), I show that *ni*-NPIs are licit as subjects of our target sentences when negation targets the modal, but not when it targets the lexical verb, regardless of the presence/absence of agreement. Note that both of these positions are independently available for negation in BCS (7c). If the *trebati* construction were monoclausal, we would expect both (7a) and (7b) to be grammatical, since *ni*-NPIs are licensed by clause-mate negation (cf. (6a)).<sup>3</sup> Contrast this with the *i*-NPIs in (8). *I*-NPIs are only licit in the complement position of the lexical verb (8b), and only if the negation targets the modal verb (cf. (8a)). This is expected only if there is a clausal boundary between the modal and the lexical verb, since (6c-d) show that *i*-NPIs are only licensed by superordinate negation. The asymmetries in (7) and (8) are explained if the modal *trebati* ‘need’ takes a clausal complement like the verb *tvrditi* ‘claim’ in (6b) and (6d).

- (7) a. **Ni-ko**     **ne**    bi                    **treba(-l)-o**                    da    čita.  
          NEG-who   NEG   be.AOR.3SG   need-LPTCP.NEUT/MASC.SG   DA   read

<sup>2</sup> *Wh*- words appear in the gloss because BCS NPIs are formed by adding a prefix (*ni*- or *i*-) to a form that morphologically corresponds to a *wh*-pronoun (*ko* ‘who’ and *šta* ‘what’). This is a common strategy in BCS; for example, prefixes are added to *wh*-pronouns to form indefinite universal and existential pronouns (e.g., *ne-ko* ‘someone’ and *sva-ko* ‘everyone’).

<sup>3</sup> One takeaway from this discussion is that NPI-licensing in BCS cannot take place solely at the point of Merge. The reason for this is that, if *trebati* is a raising verb as I will argue, we would then make the wrong prediction that (7b) can be licensed in the subject position of the lower clause (before it moved to the matrix subject position).

‘No one should read’

- b. \*Niko bi treba(-l)-o da ne čita.  
 NEG-who be.AOR.3SG need-LPTCP.NEUT/MASC.SG DA NEG read  
*intended*: ‘No one should read’
- c. Marko (ne) bi treba(-l)-o da (ne) plače.  
 Marko NEG be.AOR.3SG need-LPTCP.NEUT/MASC.SG DA NEG cry  
 ‘Marko should(n’t) (not) cry’
- (8) a. \*Marko bi treba(-l)-o da ne radi išta.  
 Marko be.AOR.3SG need-LPTCP.NEUT/MASC.SG DA NEG do i-what  
*intended*: ‘Marko should be not doing anything’
- b. Marko ne bi treba(-l)-o da radi išta.  
 Marko NEG be.AOR.3SG need-LPTCP.NEUT/MASC.SG DA do i-what  
 ‘Marko should not be doing anything’

A possibility that I will now consider and reject is that *trebati* ‘need’ is a restructuring verb (see Rizzi 1982, a.m.o.). Instead, I argue, *trebati* forms part of a bi-clausal structure throughout its syntactic life. Evidence for this claim comes from diagnostics offered in Wurmbrand 2014. Wurmbrand shows that restructuring verbs allow long object movement (9a); the restructuring verb is passivized and the object of the embedded clause becomes the subject of the matrix. This is impossible with *trebati* (9b).

- (9) a. Estas paredes están siendo terminadas de pintar por los obreros.  
 these walls are being finished to paint by the workers  
 ‘They (the workers) were finishing painting these walls’ (Wurmbrand 2014:276)
- b. \*Ovi zadaci su treba-n-i da uradi-mo  
 these tasks AUX.3PL need-PASS.PTCP-MASC.PL DA do-1PL  
 (od strane Marije i mene).  
 by side Mary and me  
 ‘These tasks should have been done by Mary and me’

Another hallmark of restructuring is the possibility of clitic climbing. In the Polish sentence (10a), the clitic-complement of the embedded verb *przeczytać* ‘read’ precedes the matrix verb. As shown in (10b-c), clitic climbing is very marginal when *trebati* takes a finite DA-complement; (10b) illustrates this for the agreeing form of *trebati*, and (10c) for the non-agreeing form. Now, the embedded clauses in both (10b) and (10c) are finite, while the Polish embedded verb in (10a) is in the infinitive form. Recall that, like the Polish verb *zdecydować* ‘decide’, BCS *trebati* ‘need’ can additionally take an infinitival complement, and clitic climbing is then possible (10c). It seems

that there is a structural difference between the finite DA-clause and the non-finite clause, which allows for clitic climbing only in the latter case.

- (10) a. Marek **ją** zdecydował się przeczytać tCL. (Wurmbrand 2014:276)  
 Mark it decided REFL read.INF tCL  
 ‘Mark decided to read it’
- b. ??Marija i Jovana su **ga** treba-l-e da kup-e tCL.  
 Marija and Jovana AUX.3PL it need-PTCP-FEM.PL DA buy-3PL tCL  
 ‘Marija and Jovana should have bought it’
- c. ??Marija i Jovana **ga** je treba-l-o da kup-e tCL  
 Marija and Jovana it AUX.3SG need-PTCP-NEUT.PL DA buy-3PL tCL  
 ‘Marija and Jovana should have bought it’
- d. Marija i Jovana su **ga** treba-l-e kupi-ti tCL.  
 Marija and Jovana AUX.3PL it need-PTCP-FEM.PL buy-INF tCL  
 ‘Marija and Jovana should have bought it’

### 3.2. *Trebati* ‘need’ is a raising verb

Having established that *trebati* ‘need’ appears in a bi-clausal structure, I will now provide evidence that it is a raising verb (and not a control verb). First, the matrix verb *trebati* and the verb in its complement may never have independent subjects, regardless of whether they are co-referential (11a) or not (11b). Now, compare (11a) with (12), which is a good candidate for a control verb. In both sentences, the two subjects are co-referential and the pronoun in the subordinate clause receives contrastive stress. The contrastive stress is likely necessary to license the overt subject in (12) because BCS is a *pro*-drop language. Yet, (11a) is still bad. I take this contrast to suggest that *želeti* ‘want’ in (12) is a control verb, while *trebati* ‘need’ in (11) is a raising verb. Recall also that the DA-clauses in (11) are finite, so there is no a priori reason to assume that the subject cannot be case-licensed in its base position.<sup>4</sup> The badness of (11) with two overt subjects is explained if the modal *trebati* has no external role to assign, and its subject in well-formed sentences is raised from the subordinate clause.

- (11) a. Marija i ja treba(-mo) da (\*MI) ostane-mo kod kuće.  
 Mary and I need-PRES.1PL DA we.NOM.SG stay-PRES.1PL at home  
*intended*: ‘Mary and I need us to stay at home’
- b. Janko treba-∅ da (\*Petar) ostane-∅ kod kuće.  
 Janko need-3SG DA Peter stay-PRES.3SG at home

<sup>4</sup> In fact, we will see in the following section that the subject *can* be licensed in the embedded clause.

*intended*: ‘Janko needs Peter to stay at home’ (Arsenijević & Simonović 2014:299)

- (12) Marija želi-Ø da (ONA) ostane kod kuće.  
 Mary want-3SG DA she.NOM.SG stay-3SG at home  
 ‘Mary wants herself to stay home’

Wurmbrand (1999) argues that only verbs with underlying external arguments can be passivized. Control verbs, but not raising verbs, have thematic external arguments. Hence, if *trebati* ‘need’ was a control verb, it would project an external argument and it would be possible to passivize it. However, *trebati* cannot be passivized, which further suggests it is a raising verb. Illustrating with BCS data in (13a-c), transitives and (impersonal) unergatives can undergo passivization, but unaccusatives cannot. Crucially, *trebati* ‘need’ in (13d) patterns with unaccusative verbs.

- (13) a. Biljk-a je zalive-n-a.  
 plant-NOM.FEM.SG AUX-3SG water-PASS.PTCP-FEM.SG  
 ‘The plant was watered’
- b. Ovde je trča-n-o.  
 here AUX-3SG run-PASS.PTCP-NEUT.SG  
*lit.* ‘It was run here’
- c. \*Ovde je dođe-n-o.  
 here AUX-3SG arrive-PASS.PTCP-NEUT.SG  
*intended*: ‘It was arrived here’
- d. \*Treba-n-o je da se zalij-u biljk-e.  
 need-PASS.PTCP-NEUT.SG AUX-3SG DA SE water-3PL plant-FEM.PL  
*intended*: ‘It was needed to water the plants’

Finally, evidence from idioms points to the same conclusion. It is well known that idioms can survive under raising, but not under control (16a-b). The explanation that is given for this contrast is that the idiom forms a syntactic constituent in the raising structure,<sup>5</sup> but not in the control structure. For the BCS idiom in (17a), we observe that the idiomatic meaning is preserved with *trebati* ‘need’ (17b), but not with *želeti* ‘want’ (17c), further showing that *trebati* is a raising verb.

- (16) a. [The cat]<sub>i</sub> seemed t<sub>i</sub> to be out of the bag.  
 b. [The cat]<sub>i</sub> tried PRO<sub>i</sub> to be out of the bag.

- (17) a. I vrapci na grani to već cvrkuć-u.  
 Even sparrows on branch that already chirp-3PL

<sup>5</sup> At least before raising, depending on whether one subscribes to a trace or copy theory of movement.



‘Everyone knows that’, *lit.* ‘Even sparrows on the branch are chirping that already.’

- b. I vrapci na grani **treba(-ju)** da to već cvrkuć-u.  
 Even sparrows on branch need-3PL DA that already chirp-3PL  
 ‘Everyone should know that’
- c. I vrapci na grani **žel-e** da to već cvrkuć-u.  
 Even sparrows on branch want-3PL DA that already chirp-3PL  
 ‘Even sparrows on the branch want to chirp that already’, *no idiomatic meaning*

### 3.3. Sentence-initial NPs with impersonal *trebati* ‘need’ are raised subjects

Recall the examples from (1) and (2), repeated here as (18) and (19). *Trebati* ‘need’ is agreeing with its subject in (18), but not in (19). This contrast gives rise to one of the most puzzling questions about *trebati*: Why can *trebati* appear in the non-agreeing (default) form, particularly when subject-verb agreement seems to be obligatory in BCS?

- (18) a. Marija i ja treba-mo da ide-mo na pijacu.  
 Mary and I need-1PL DA go-1PL on market
- b. Marija i ja smo treba-l-e da ide-mo na pijacu.  
 Mary and I AUX.1PL need-LPTCP-FEM.PL DA go-1PL on market
- (19) a. Marija i ja treba-Ø da ide-mo na pijacu.  
 Mary and I need-3SG DA go-1PL on market
- b. Marija i ja je treba-l-o da ide-mo na pijacu.  
 Mary and I AUX.3SG need-LPTCP-NEUT.SG DA go-1PL on market  
 ‘Mary and I need/needed to go to the market’

Perhaps the most obvious hypothesis is that the sentence-initial NPs in (19) are A’-moving, possibly to a topic position; A’ movement does not trigger  $\phi$ -agreement in BCS. However, the NP in this position does not show any of the usual properties of topics. First, topics need to be under the scope of existential quantification (Reinhart 1976, a.o); universally and negatively quantified NPs are topic resistant, but they occur freely with *trebati* (20). Topicalization is also impossible in a new information context; sentence-initial NPs with *trebati* are fine in this same context (21).<sup>6</sup>

- (20) a. Svi treba(-ju) da prim-e vakcinu.  
 Everyone need-1PL DA get-1PL vaccine  
 ‘Everyone needs to get the vaccine’
- b. Ni-ko ne treba(-Ø) da primi-Ø vakcinu.  
 NEG-who NEG need-3SG DA get-3SG vaccine

<sup>6</sup> There also seem to exist some prosodic differences between (21a) and (21b).

‘No one should get the vaccine’

(21) Context: “What’s happening?”

- a. #[Marija i Jovana]<sub>i</sub> *pro* misli-m da *t<sub>i</sub>* id-u na pijacu.  
 Marija and Jovana pro think-1SG DA go-3PL on market  
 ‘Marija and Jovana, I think they’re going to the market’
- b. [Marija i Jovana]<sub>i</sub> treba-(ju) da *t<sub>i</sub>* id-u na pijacu.  
 Marija and Jovana need-1PL DA go-3PL on market  
 ‘Marija and Jovana need to go to the market’

However, the above examples only show that the sentence-initial NP with impersonal *trebati* is not a topic, but not necessarily that it is not in some other A’-position. Nonetheless, there are other diagnostics that indicate precisely that the NPs in question are in an A position, despite the fact that they do not trigger agreement on the verb.

The first such diagnostic concerns binding. *Svoj* ‘own’ is a subject-oriented anaphor. In (22a), I show that *svoj* is bound by the subject even though another NP (*Jovani*) is structurally closer to the anaphor. The sentence-initial NP in the impersonal *trebati* construction also binds this anaphor (22b), suggesting that it is a subject. A potential problem for this account of the data could arise if the adverbial containing the reflexive *svoj* ‘own’ in (22b) is modifying the lexical verb *naslikati* ‘paint’ and being bound by the trace of *Marija* ‘Mary’ in the embedded clause. However, we can show that the adverbial containing the reflexive *svoj* ‘own’ in (22b) is modifying *trebati* and not the lexical verb because the two adverbials in (22b), namely ‘of her own accord’ and ‘on the authorities’ order’ cannot modify the same predicate—the result is a semantic anomaly (22c).

- (22) a. [Marija i Milica]<sub>i</sub> daju [Jovani]<sub>j</sub> [svoj-u]<sub>i/\*j</sub> torb-u.  
 Marija.NOM and Milica.NOM give Jovana.DAT own-FEM.ACC bag-FEM.ACC  
 ‘Marija and Milica are giving Jovana their bag’
- b. [Marija]<sub>j</sub> treba(-∅) svojom<sub>j</sub> voljom da *t<sub>i</sub>* naslika mural  
 Marija need-3SG own-FEM.INS will.FEM.INS DA paint mural  
 na naređenje vlasti.  
 on order authorities  
 ‘It needs to be of her own accord that Milica paints a mural on the authorities’ order’
- c. #[Marija]<sub>j</sub> je naslikala mural svojom<sub>j</sub> voljom na  
 Marija AUX.3SG painted mural own-FEM.INS will.FEM.INS on  
 naređenje vlasti.  
 order authorities  
 ‘Mary painted a mural of her own accord on the authorities’ order’

Furthermore, scope facts that also indicate that the sentence-initial NP with *trebati* moves to an A-position.<sup>7</sup> Namely, the sentence in (23) has two readings, resulting from the interaction of the negation and the universal quantifier. The inverse scope reading, where the negation scopes over the quantifier, may result from the quantifier’s position in the embedded clause before raising. Additionally, the quantifier may scope over the negation, suggesting that the NP *svi vakcinisani* ‘all vaccinated (people)’ has moved to an A-position above the matrix negation.

- (23) [Svi vakcinisan-i]<sub>i</sub> ne treba(-ju) da t<sub>i</sub> se oseća-ju sigurno.  
 all vaccinated-PL NEG need-3PL DA SE feel-3PL safe  
 ‘It is not the case that all vaccinated people should feel safe’ NEG > ALL  
 ‘For all vaccinated people, it is the case that they shouldn’t feel safe’ ALL > NEG

Finally, it is worth examining some data from relativization. I give an example of an ordinary BCS relative clause in (24a). In BCS relative clauses, it is generally impossible to place a nominative NP between the relative pronoun and the subject, *even if the subject is phonologically null* (24b); (24c) shows that the sentence is fine if *Marija i Jovana* stays in situ. Crucially, the NP that precedes *trebati* is still possible (24d).

- (24) a. [Čovek [kog Marija vidi]] je visok.  
 man who.ACC Mary sees is tall  
 ‘The man who Mary sees is tall’
- b. \*[Čovek [kog [Marija i Jovana]<sub>i</sub> Marko/*pro* tvrdi-∅  
 man who.ACC Mary.NOM and Jovana.NOM Marko.NOM claim-3SG  
 da t<sub>i</sub> vid-e]] je visok  
 DA see-3PL is tall  
*intended*: ‘The man who Mary and Jovana Marko claims see is tall’
- c. [Čovek [kog Marko/*pro* tvrdi-∅ da Marija i Jovana  
 man who.ACC Marko.NOM claim-3SG DA Mary and Jovana  
 vid-e]] je visok.  
 see-3PL is tall  
 ‘The man who Marko claims Mary and Jovana see is tall’
- d. [Čovek [kog [Marija i Jovana]<sub>i</sub> treba(-ju) da t<sub>i</sub> vid-e je visok.  
 man who.ACC Mary and Jovana need-3PL DA see-3PL is tall  
 ‘The man who Mary and Jovana need to see is tall’

<sup>7</sup> Although it is not (cross-linguistically) unheard of that A’-movement can change scope relations, A-movement regularly does so.

Regardless of the exact reason for the badness of (24b), the fact is that the relative clause with *trebati* in (24d) patterns with (24c) where no nominative phrases have been displaced, and not with (24b) where a nominative NP is placed between a relative pronoun and a (phonologically null) subject. This suggests that *Marija i Jovana* ‘Mary and Jovana’ in (22d) is moving to the subject position in the relative clause, rather than to an A’-position preceding the subject.

In this section, I have shown that the verb *trebati* ‘need’ takes a clausal complement, and that the subject of the embedded clause moves to the subject position of *trebati*. Furthermore, *trebati* can, but need not, agree with the raised subject. In what follows, I attempt to account for the optionality of agreement with *trebati*. In doing so, I also address the larger question that arises: What is the motivation for raising?

#### **4. The analysis**

In this section, I consider two possible analyses for the optionality of agreement with *trebati* ‘need’. The first is a timing analysis that relies on the presence of two features ([N\*] and [ $u\phi$ ]) on T, and capitalizes on the order in which these features are satisfied. I will reject this approach due to its inability to account for all of the relevant data. The second analysis, which I will ultimately adopt, allows A-movement to occur freely at any step of the syntactic derivation.

##### **4.1. A timing analysis**

This analysis draws inspiration from Müller (2009), who attempts to account for the differences between accusative and (morphologically) ergative alignments by invoking an indeterminacy in the order of Merge and Agree on the  $vP$  cycle. Applying this general idea to *trebati* ‘need’, suppose that the T node of the *trebati* matrix clause is merged into the structure with two features: a strong N feature [N\*] and an unvalued  $\phi$ -feature bundle [ $u\phi$ ]. A legitimate question on any approach that does not have an architecture where one head necessarily corresponds to only one feature (e.g., Nanosyntax, see Starke 2009) is which of the two operations applies first—movement of NP to satisfy [N\*], or probing for agreement to satisfy [ $u\phi$ ].

We may envision the details of this kind of an analysis in more than one way. For example, assume that probing for agreement is only downward, and based on c-command (crucially, not m-command). Then, if the [ $u\phi$ ] feature is satisfied before the [N\*] feature, *trebati* ‘need’ will bear the  $\phi$ -features of the subject (25a). This is because the subject is in the c-command domain of the

agreement probe before raising. If, on the other hand, the [N\*] feature is satisfied first, the subject NP will no longer be in the c-command domain of the agreement probe. Then, agreement probe will fail to find an appropriate target, and it will be spelled-out with default 3SG agreement (25b).

- (25) a. [Marija and Jovana]<sub>i</sub> T⟨[uφ], [N\*]⟩ need-3PL....da t<sub>i</sub> ...  
 b. [Marija i Jovana]<sub>i</sub> T ⟨[N\*], [uφ]⟩ need-3SG....da t<sub>i</sub> ...

However, this analysis leads to several undesirable consequences. For one, we would need to assume that this type of T, which is underspecified for the order of operations that apply, is unique to *trebati* ‘need’. For monoclausal structures, we are forced to say that T is always specified for agreement probing to apply first (⟨[uφ], [N\*]⟩), otherwise we would expect to see non-agreeing verbs all over the place, contrary to fact. While this is not a knock-down argument against this type of analysis, it would be desirable to avoid postulating a distinct T to account for the behavior of one BCS verb. More importantly, this story cannot account for a piece of data that I have not discussed so far: The subject can stay in its base-generated position if the verb is in the non-agreeing form (26a), but not if it is in the agreeing form (26b).<sup>8</sup> Since this analysis depends on the presence of a strong nominal feature on T, whose purpose is to raise the subject into the matrix clause, it is not clear how it could account for (26a). Note that (26a) also presents a problem for approaches on which the subject raises because it needs to satisfy its own (Case) features—the subject can clearly be licensed in situ (contra Chomsky 2001, 2008).<sup>9</sup>

- (26) a. **Treba-l-o**                    **je**            **da**    **Marija**    **i**            **ja**    **ide-mo**    **na**    **pijacu.**  
           need-PTCP-NEUT.SG    AUX.3SG    DA    Mary    and    I    go-1PL    on    market  
           ‘Mary and I should have gone to the market’
- b. \***Treba-l-e**                    **smo**            **da**    **Marija**    **i**            **ja**    **idemo**    **na**    **pijacu.**  
           need-PTCP-FEM.PL    AUX.3PL    DA    Mary    and    I    go-1PL    on    market  
           *intended:* ‘Mary and I should have gone to the market’

Could we save the timing analysis? We could suppose instead that agreement is downward-by-any-occurrence of the label (Béjar 2003, Béjar & Rezac 2009, Keine & Dash 2018), so that the agreement probe can also ‘see’ elements in its specifier. Next, we would need to assume that the

<sup>8</sup> In section 4.2, I show that the subject in (26a) is indeed below T; the subject can also move to spec TP of the embedded clause, in which case agreement with the matrix verb is possible. Neither of these options is predicted on an analysis that relies on the presence of strong (movement-triggering) features on matrix T.

<sup>9</sup> The contrast in (26) also undermines an idea put forth in Arsenijević & Simonović 2014, namely that the impersonal form of *trebati* ‘need’ arises because of a post-syntactic filter that deletes the agreement morphology. Were the agreeing and non-agreeing *trebati* appearing in identical syntactic configurations, we would not observe distributional differences of the kind seen in (26).

movement-triggering probe can ‘see’ a little farther than the agreement-triggering probe. Imagine, for example, that [ $u\phi$ ] can only see as far as the edge of the closest phase boundary, whereas [ $N^*$ ] has no locality restrictions (modulo islands). Assuming that the embedded subject in *trebati*-constructions is initially in a separate phase, it would have to move *before* being agreed with for its features to be accessible to the agreement probe. If the subject instead moved after agreement probing, we would get the desired default spell-out of [ $\phi$ ].

On these assumptions and in accordance with the Phase Impenetrability Condition given in (27), subjects in monoclausal configurations would be in the domain of the agreement probe regardless of whether they are moved first or agreed with first. The reason is that subjects originate in the specifier of the  $vP$  phase, which counts as an ‘edge’ for purposes of the PIC. The monoclausal subject is therefore always in the same phase as T, hence it always triggers agreement.

(27) **Phase Impenetrability Condition** (Chomsky 2000)

In phase  $\alpha$  with head H, the domain of H is not accessible to operations outside of  $\alpha$ , only H and its edge are accessible to such operations.

However, even on this revised analysis, it is unclear what happens with [ $N^*$ ] on T in cases like (26a), where the subject stays low. It seems that the only solution would be to assume there is an entirely separate kind of embedded clause, which is exactly the same as the regular clause embedded under *trebati* ‘need’, but is impenetrable to movement probes (e.g., because it has an additional, invisible structural layer). Since there is no independent evidence to assume that there are two different types of complements with *trebati*, I will attempt to go a different route.

#### 4.2. A-movement is ‘free’

Assume again that agreement probing is based on c-command and constrained by the PIC. Assume further that there is *no movement probe*: A-movement is ‘free’. More precisely, it is fully optional, it can occur at any stage of the derivation (or not), and it is constrained only by the requirement that the output be well-formed (see Baker & Vinokurova 2010 and Rezac, Albizu & Etxepare 2014 for explorations of this idea in different domains). With these assumptions in place, answers to several questions become clear. Why can the ‘movement probe’ see the subject even when the agreement probe cannot? Because there is no ‘movement probe’; the relevant NP is simply moving out of the lower clause freely. Why does it look like the ‘movement probe’ and the

agreement probe can be freely ordered with respect to each other, giving rise to the optionality of agreement with *trebati*? Because there is no ‘movement probe’; movement (of this kind) can freely occur at any step of the derivation, ipso facto it can occur before or after agreement probing.

Several aspects of the analysis still need to be fleshed out. The first one I will tackle concerns the position of the subject and, related to that, the phase status of the embedded complement. When or where is the subject (in)visible to the agreement probe? In answering this question, we first need to determine the identity of the embedded complement’s topmost projection. Two candidates immediately come to mind: TP and CP. On the one hand, this is a raising construction, and clauses that are raised out of in English are TPs. On the other hand, the embedded *da*-clause is finite, and all finite complements in English are usually taken to be CPs. Fortunately, Todorović & Wurmbrand (2020) have devised diagnostics that split BCS *da*-complements into three groups: *vP*, TP and CP. These diagnostics include, for example, the temporal interpretation of the embedded clause with respect to the matrix, the possibility of clitic climbing, the availability of the perfective aspect in the embedded clause, adverb positions, and others (see Todorović & Wurmbrand 2020:48). According to all of these, *trebati* behaves like a verb that takes a TP complement; I do not give examples here for reasons of space.

Then, if the embedded TP is a phase, agreement should still be possible when the subject is in spec TP (the phase edge), but not when it stays in its base position (spec *vP*). If *da* ‘DA’ is in T, as Todorović & Wurmbrand suggest, the subject in sentences like (26a) is indeed lower than spec TP, and therefore inaccessible to the agreement probe. When the subject and *da* ‘DA’ switch places, the sentence becomes grammatical (28) *even with the agreement on the matrix verb*.

- (28) Treba-**mo** **Marija i ja** **da** ide-mo na pijacu.  
 need-1PL Mary and I DA go-1PL on market  
 ‘Mary and I need to go to the market’

Yet, SC is a language that allows rampant scrambling, so we cannot know from (28) alone whether the subject is in spec TP of the embedded clause, or whether it has A-moved to the matrix, and the verb was scrambled to the left of it. Recall, however, that SC has a class of NPIs (*i*-NPIs) that can only be licensed by superordinate negation; furthermore, there is a class of NPIs (*ni*-NPIs) that are licensed only by clause-mate negation (Progovac 1991). We can use this to test whether the subject in (28) is at the edge of the embedded clause, or whether it has moved to the matrix. In fact, it seems that both options are possible (29). In (29a), the subject is in spec TP of the embedded

clause; the *i*-NPI is licensed by the superordinate negation, and the matrix predicate can agree because the subject is at the edge of the phase. In (29b), the subject has raised into the matrix clause and the matrix material has been scrambled to the left of it; the *ni*-NPI is licensed by clause-mate negation, and the matrix predicate agrees with the subject.

- (29) a. **Ne** **bi** **treba-o** **i-ko** **da** **to** **uradi.**  
 NEG AUX.AOR.3SG need-PTCP.MASC.SG i-who DA that do  
 ‘No one should do that’
- b. **Ne** **bi** **treba-o** **ni-ko** **da** **to** **uradi.**  
 NEG AUX.AOR.3SG need-PTCP.MASC.SG ni-who DA that do  
 ‘No one should do that’

To test the validity of the above diagnostic, we can run it on similar examples for which our theory gives clear predictions. The predictions seem to be borne out. For example, (30a) is grammatical because the *i*-NPI is licensed by superordinate negation, and there is default agreement on the auxiliary/participle, reflecting the fact that the subject is too low to be agreed with. On the other hand, (30b) is ungrammatical because the agreement probe on the participle cannot reach the low subject; therefore, there is no way to get the masculine agreement. Furthermore, (30c) is bad regardless of the agreement on the participle because the *ni*-NPI is not licensed by clause-mate negation; the negation is in the superordinate clause.

- (30) a. **Ne** **bi** **treba-lo** **da** **i-ko** **to** **uradi.**  
 NEG AUX.AOR.3SG need-PTCP.NEUT.SG DA i-who that do  
 ‘No one should do that’
- b. \***Ne** **bi** **treba-o** **da** **i-ko** **to** **uradi.**  
 NEG AUX.AOR.3SG need-PTCP.MASC.SG DA i-who that do  
*intended:* ‘No one should do that’
- \***Ne** **bi** **treba(-l)-o** **da** **ni-ko** **to** **uradi.**  
 NEG AUX.AOR.3SG need-PTCP.NEUT/MASC.SG DA ni-who that do  
*intended:* ‘No one should do that’

We have established that the agreement probe can ‘see’ the subject when it is in spec TP of the embedded clause, but not when it is in its base position in spec  $\nu$ P. Let us now specify how combining this with the freedom of movement gives us the desired optionality of agreement with *trebati*. If probing for agreement occurs when the subject is in spec  $\nu$ P of the embedded clause, it will fail. Nothing will go wrong in such derivations: agreement probing is free to happen and fail (Preminger 2011, 2014). Since A-movement is ‘free’, it is also free to not occur. The subject-NP



can clearly be licensed in situ (cf. (26a)). The NP stays low, out-of-reach of the higher agreement probe, which fails to find a target and therefore shows the characteristic morphology associated with unvalued  $\phi$ -features (31a). On the other hand, if movement to spec TP of the embedded clause applies first, the relevant NP will be in the domain of matrix T when agreement probing takes place. The result is  $\phi$ -feature agreement between the subject and the matrix T (31b). As before, movement of the subject to the matrix clause is free to apply after this or not. This analysis allows us to explain the 5-out-of-6 grammaticality pattern I represent schematically in (32).

- (31) a. *agreement first*: T[u $\phi$ ] need-3SG....[TP da [vP Marija and Jovana ...  
 b. *movement first*: T[ $\phi$ :3PL] need-3PL....[TP [Marija and Jovana]<sub>i</sub> da [vP t<sub>i</sub> ...

(32)

NP.3PL – need-3SG – da...	need-3SG – NP.3PL – da...	need-3SG – da – NP.3PL
NP.3PL – need-3PL – da...	need-3PL – NP.3PL – da...	*need-3PL – da – NP.3PL

Note that this empirical picture provides some evidence for the phasehood of the embedded TP: the agreement probe sees elements at the edge of the lower phase, but not those that are inside the phase. While there are some other indications that the phase-based analysis may be on the right track (e.g., the impossibility of clitic climbing in (10)), coming up with convincing evidence for phasehood turns out to be tricky, often for independent reasons.<sup>10</sup> Furthermore, that TP is a phase in the *trebati* construction may look strange at first sight, since the more common candidates for phasal status are vP and CP. However, CP is absent in the complement of *trebati*, and there is evidence that vP is not behaving as a phase either. We may be seeing here a case of Phase Extension (Den Dikken 2007) or Phase Sliding (Gallego & Uriagereka 2007), where the phase status of XP (vP) is extended to a dominating YP (TP) due to (in this case) v-to-T head movement.

To see this, it is interesting to look at what happens when *trebati* ‘need’ is embedded in a *da*-complement of another *trebati* verb. We can, in fact, use such data to answer two questions, namely (i) is there evidence for vP phasehood, and (ii) are the predictions we make in relation to

<sup>10</sup> For example, binding facts have been used to argue that CP is a phase in English based on the ambiguity of examples such as *Which picture of himself did John say Mark liked?*. For the anaphor to be bound by ‘John’, it would have had to “stop over” in a position where it is above ‘Mark’ but in the c-command domain of ‘John’, and spec, CP of the embedded clause is an excellent candidate. However, BCS does not have the equivalent of English *himself*; *svoj* is always subject-oriented, as we saw in (22), and *trebati* constructions do not allow for two independent subjects (11).

(im)possible agreement patterns borne out? Consider the contrast in (33); in (33a) the highest *trebati* is not agreeing with the subject but the embedded one is, and in (33b) we have the reverse.<sup>11</sup>

(33) Context: Chomsky and Lasnik have agreed to come to our summer school, where we usually ask the teachers to attend as many lectures as they can. However, my colleague does not think Chomsky and Lasnik should be required to go to introductory classes, so she says:

- a. Čomski i Lasnik ne treba-∅ da treba-ju da idu.  
 Chomsky and Lasnik NEG need-3SG DA need-3PL DA go
- b. \*Čomski i Lasnik ne treba-ju da treba-∅ da idu.  
 Chomsky and Lasnik NEG need-3PL DA need-3SG DA go  
 ‘Chomsky and Lasnik shouldn’t be made to go’

Focusing for now on (33a), I will show that its agreement pattern can be derived if TP is a phase, but not if only *vP* is a phase, nor if both *vP* and TP are phases. Let us show the structure of (33a) schematically in (34). If only TP is a phase, we get the agreement pattern in (33a) as follows: The subject moves from its base position to spec TP of the most embedded clause; there, it is at the edge of the most embedded TP phase, so it is accessible to the agreement probe on embedded *trebati* ‘need’, but not to the one on matrix *trebati*. The subject stays in this position until matrix T is merged and probes for agreement. The probing fails, giving rise to 3SG agreement, and the subject is then raised to spec TP of the matrix clause (or not). If only *vP* were a phase, we would first need to allow movement to spec *vP*, since each agreement probe on T would only be able to see the NP that is in the spec of its closest phasal *vP*. Then, since the final raising of the subject should be optional (with no repercussions for agreement, cf. the default agreement on the matrix in (33a)), we predict the word order in (35) to be possible, contrary to fact.

(34) [TP [Chomsky and Lasnik]<sub>i</sub>; T[*u*φ] [NEGP not [*vP* need [TP T DA[φ:3PL] [*vP* need [TP t<sub>i</sub> DA [*vP* t<sub>i</sub>...

- (35) \*Ne treba-∅ da Čomski i Lasnik treba-ju da id-u.  
 NEG need-3SG DA Chomsky and Lasnik need-3PL DA go-3PL  
*intended*: ‘Chomsky and Lasnik shouldn’t be made to go’

Additionally, it is unclear how the phasal *vP* account would rule in sentences like (29a), where the subject is in spec TP of the embedded clause and yet the agreement probe on matrix T is able to see it. If matrix *vP* were a phase, we would not expect (29a) to be grammatical. Moreover,

<sup>11</sup> I confine the discussion to the examples in (33) because the judgements for these cases are the most reliable. Our analysis predicts sentences where both verbs *trebati* agree or both do not agree with the subject to be grammatical. In fact, these sentences are somewhat degraded (though significantly less than (33b)), but this is possibly an effect of repetition.

if both  $\nu$ P and TP were phases, we again run into the same problems; we incorrectly predict (35) to be grammatical and (29a) to be ungrammatical. Both of these alternatives would also struggle to account for the existence of ‘hybrid forms’, which I discuss in the following section. The data therefore support an analysis where, in a *trebati* construction, (i) the complement of an embedded T head is opaque to agreement probing outside of that TP, and (ii) A-movement, which is not feature-driven, does not obey such locality restrictions.

### 4.3. Hybrid forms support the free movement analysis

So far, we have seen that, in complex tenses, the auxiliary and the participle either both agree (1b) or both do not agree with the subject (2b). There are additionally what we can call ‘hybrid forms’, where one member of {auxiliary, participle} agrees with the subject, and the other one does not. Such constructions are not at all uncommon (see Klikovac 2011:8). Crucially, the element that agrees in these hybrid forms is always the auxiliary and never the participle (36).

- (36) a. Sada **bi-h** ja **treba-lo** da se naljutim.  
 now AUX.AOR-1SG I need-PTCP.NEUT.SG DA SE get\_angry  
 ‘Now I should become angry’
- b. Iako su koncerti **treba-lo** da predstavljaju...  
 although AUX.3PL concerts need-PTCP.NEUT.SG DA represent  
 ‘Although concerts were supposed to represent...’
- c. Takođe **bi-ste** **treba-lo** da budete pažljivi prilikom  
 also AUX.AOR-2PL need-PTCP.NEUT.SG DA be careful while  
 korišćenja rumenila...  
 using blush  
 ‘You should also be careful while using blush...’

If agreement probing happens in lockstep with structure building, our analysis predicts the pattern in (36). In the first step of deriving the pattern in (36c), the subject is low; the participle probes for agreement and does not find a goal—the  $\phi$ -features of the participle stay unvalued and are spelled-out as neuter singular (37a). Before matrix T is merged, the subject can either move or stay in situ. If the subject stays in situ (or moves after agreement probing), we get the familiar non-agreeing pattern, e.g. (2b) and (26a). If the subject moves to the specifier of the embedded TP before agreement probing, matrix T will agree with it, and we will get the hybrid pattern in (36c), see (37b).

- (37) a. *first step: [ $\mu\phi$ ] on Part spelled-out as NEUT.SG.*  
 [PARTP Part [ $\mu\phi$ ] need-PTCP.NEUT.SG [TP DA you...]]
- b. *second step: T agrees with the moved subject*

[TP T [ $\phi$ :2PL] AUX.2PL [PARTP Part [ $u\phi$ ] need-PTCP.NEUT.SG [TP [you]<sub>i</sub> DA t<sub>i</sub>...]]

The free movement analysis accounts for the existence of hybrid forms without introducing any additional assumptions. Importantly, this analysis also predicts the reverse case to be impossible. In order for the participle to agree, the subject must move to spec of the embedded TP. At that point, the subject is also accessible to the agreement probe in matrix T. We then correctly predict that it is impossible for the participle to agree with the subject when the auxiliary does not also do so.

## 5. Raising beyond BCS

In this section, I will briefly reflect on the generalizability of the proposed analysis to raising constructions beyond BCS. On the surface, the empirical picture in English is quite different. Namely, the embedded subject in a raising construction *must* move when the complement clause is an infinitival TP (38a), and it *cannot* move when the complement clause is a finite CP (38b). The standard explanation for this contrast is that the subject in (38a) must move because it cannot get Case in its original position and/or because it needs to satisfy the EPP feature on matrix T (Chomsky 1981, 2008). On the other hand, mainstream analyses of (38b) claim that the embedded subject there cannot move because the PIC makes it inaccessible to operations outside the embedded CP (Chomsky 2000, 2001) and/or because nominals whose Case/ $\phi$ -features have been checked cannot move (Activity Condition, Chomsky 2001).

- (38) a. John seemed [TP <John> to like Mary].  
b. It seemed [CP that John liked Mary].

Note, however, that the English raising construction in (38a) is crucially different from its BCS counterpart in that the embedded clause is non-finite. It is independently known that English infinitival clauses cannot license a subject. Therefore, if the subject remained in situ, the resulting sentence would be ungrammatical regardless of our assumptions about the need to satisfy features on the nominal or matrix T. Suppose instead that A-movement is in principle free. Still, in (38a), the subject “needs” to move because it cannot be licensed in its base position. In other words, only the derivation where the movement has occurred will generate a grammatical sentence. This contrasts with the BCS case, since the embedded clause there is finite, and the subject can be licensed in situ.<sup>12</sup> Crucially, however, there is no need to assume that movement is triggered by

---

<sup>12</sup> Recall that *trebati* ‘need’ can also take an infinitival complement. In that case, we get exactly the same result as in English. The infinitive cannot license a subject and the raising appears to be obligatory.

features on matrix T or on the nominal; the non-movement option in (38a) is ruled out for independent reasons. Are there similarly independent reasons to think that the output in (38b) would not be well-formed had the subject moved out of the embedded clause? Yes, assuming that the embedded CP is a phase, the subject would have to A'-move to spec CP, and then A-move to spec TP of the matrix clause—this would be a case of improper movement (Chomsky 1973, May 1979, Williams 2003, Abels 2008). We also have an answer for why the SC raising construction does not constitute a case of improper movement. According to the diagnostics in Todorović & Wurbrand 2020, the complement clause of *trebati* 'need' is a TP; there are no A' positions in which the subject is required to stop on its way to spec TP of the matrix clause.

## 6. Conclusion

In this paper, I explored the syntactic properties of the BCS modal verb *trebati* 'need'. I first showed that *trebati* is an unaccusative verb which takes a finite clausal complement. The embedded subject may raise to the subject position of *trebati*, and *trebati* can, but need not, agree with said subject. The embedded subject can also stay in situ, which is inconsistent with the mainstream view that raising-to-subject is a feature-driven operation. I considered two analyses for the optionality of agreement with *trebati*, a timing analysis and a 'free' movement analysis. I concluded that timing analyses run into problems, either with monoclausal subjects or with low subjects of *trebati*, depending on one's assumptions. The free-movement analysis seems to fare a lot better with respect to both of these issues, in addition to explaining the basic pattern of agreement optionality in simple terms. This analysis can also account for most of the data with multiple embeddings of *trebati*, and it is supported by agreement possibilities of what I termed hybrid forms. Finally, I showed that, coupled with independently needed restrictions, the free-movement analysis can be extended to English-style raising constructions.

## 7. References

- Abels, Klaus. 2008. Towards a restrictive theory of (remnant) movement. *Linguistic Variation Yearbook* 7. 52–120.
- Baker, Mark. C., & Nadya Vinokurova. 2010. Two modalities of case assignment: Case in Sakha. *Natural Language & Linguistic Theory*, 28(3), 593–642.
- Béjar, Susana. 2003. Phi-syntax: A theory of agreement. PhD thesis, University of Toronto.
- Béjar, Susana & Milan Rezac. 2009. Cyclic Agree. *Linguistic Inquiry* 40, 35–73.
- Chomsky, Noam. 1973. Conditions on Transformations. In S. R. Anderson & P. Kiparsky (eds.), *A Festschrift for Morris Halle*, 232–286. New York: Holt, Reinhart and Winston.

- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Chomsky, Noam. 2000. Minimalist Inquiries: The Framework. In R. Martin, D. Michaels & J. Uriagereka (eds.), *Step by Step: Essays in Syntax in Honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In: M. Kenstowicz (ed.) *Ken Hale: A Life in Language*, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2008. On phases. In R. Freidin, C. Otero & M. L. Zubizarreta (eds.), *Foundational Issues in Linguistic Theory*, 133–166. Cambridge, MA: MIT Press.
- Den Dikken, Marcel. 2007. Phase extension contours of a theory of the role of head movement in phrasal extraction. *Theoretical Linguistics* 33(1). 1–41.
- Gallego, Ángel & Juan Uriagereka. 2007. A critique of phase extension, with a comparison to phase sliding. *Theoretical Linguistics* 33(1). 65–74.
- Keine, Stefan & Bhamati Dash. 2018. The ups and downs of agreement. Ms., University of Southern California.
- Lassiter, Daniel. 2011. Measurement and modality: The scalar basis of modal semantics. PhD thesis, NYU.
- Lassiter, Daniel. 2020. *Graded Modality: Qualitative and Quantitative Perspectives*. Oxford: OUP.
- May, Robert. 1979. Must comp-to-comp movement be stipulated? *Linguistic Inquiry* 10(4). 719–725.
- Müller, Gereon. 2009. Ergativity, accusativity, and the order of Merge and Agree. In K. Grohmann (ed.), *Explorations of phase theory: Features and arguments*, 269–308. Berlin: Mouton de Gruyter.
- Preminger, Omer. 2011. Agreement as a fallible operation. PhD thesis, MIT.
- Preminger, Omer. 2014. Agreement and its failures. Cambridge, MA: MIT press.
- Progovac, Ljiljana. 1991. Polarity in Serbo-Croatian: Anaphoric NPIs and pronominal PPIs. *Linguistic Inquiry* 22(3). 567–572.
- Reinhart, Tanya. 1976. The syntactic domain of anaphora. PhD thesis, MIT.
- Rezac, Milan, Pablo Albizu & Ricardo Etxepare. 2014. The structural ergative of Basque and the theory of Case. *Natural Language & Linguistic Theory*, 32(4), 1273–1330.
- Richards, Norvin. 1997. What moves where when in which language?. PhD thesis, MIT.
- Rizzi, Luigi. 1982. *Issues in Italian syntax*. Dordrecht: Foris.
- Simonović, Marko & Boban Arsenijević. 2014. Ličnost i bezličnost srpskog glagola trebati: Avanture teorijske lingvistike u prenormiranom domenu. *Jezik, književnost, marginalizacija*, 278–304.
- Starke, Michal. 2009. Nanosyntax: A short primer to a new approach to language. *Nordlyd* 36(1). 1–6.
- Todorović, Neda & Susi Wurmbrand. 2020. Finiteness across domains. In T. Radeva-Bork & P. Kosta (eds.), *Current developments in Slavic Linguistics: Twenty years after*, 47–66. Frankfurt am Main: Peter Lang.
- Veselinović, Dunja. 2019. The syntax and acquisition of modal verb flavors. PhD thesis, NYU.
- Williams, Edwin. 2003. *Representation theory*. Cambridge, MA: MIT Press.
- Wurmbrand, Susi. 1999. Modal verbs must be raising verbs. In *Proceedings of WCCFL 18*(1).
- Wurmbrand, Susi. 2014. Restructuring across the world. In *Complex visibles out there. Proceedings of the Olomouc Linguistics Colloquium*.