PROJECT MUSE®

Clitic Placement, Prosody, and the Bulgarian Verbal Complex

Steven Franks

Journal of Slavic Linguistics, Volume 16, Number 1, Winter - Spring
2008, pp. 91-137 (Article)

Published by Slavica Publishers

DOI: <https://doi.org/10.1353/jsl.0.0011>

➔ *For additional information about this article*

<https://muse.jhu.edu/article/257806>

Clitic Placement, Prosody, and the Bulgarian Verbal Complex*

Steven Franks

Abstract. This paper compares competing ways of understanding the fact that clitics but nothing else freely and necessarily intervene between the two verbal heads in Bulgarian compound tenses of the type [participle + (clitics +) auxiliary]. These involve a participle fronted for focus reasons. The problem is then how the clitics get in the middle. I argue that prosodic and morphological approaches are not adequate, nor is any PF-filtering necessitated. Instead, the complex head structure [[participle + clitics] + [auxiliary]] must be created syntactically, with the participle adjoining to the clitics before the resulting complex adjoins to the auxiliary.

1. The Participle-Fronting Problem

This article explores conceptual and analytical issues surrounding the possibility of interpolating clitics between a focally fronted verbal participle and an auxiliary verb in Bulgarian (Bg), as shown in (1).¹

* The ideas herein have evolved considerably over the past few years, and the article has gone through various instantiations. An earlier version of the paper was presented in 2006 at the University of Connecticut, the University of Zagreb, and Belgrade University; that version also appears on-line as Franks 2007. Another version was presented as Franks 2008 and may appear in some form in a special issue of *Balkanistica*. The present paper has benefited greatly from all these audiences, from the comments of George Fowler and several anonymous reviewers, and from discussions with Željko Bošković, Andrea Calabrese, David Embick, Iliyana Krapova, Marijana Lambova, Roumyana Pancheva, and Ljiljana Progovac. I also wish to thank the following Bulgarian speaking linguists for their judgments and advice (although this is by no means to imply that all agree): Olga Arnaudova, Iliyana Krapova, Marijana Lambova, Vesselina Laskova, Natalya Nikolova, Roumyana Pancheva, Roumyana Slabakova, Mila Tasseva-Kurktchieva, Ivelina Tchizmarova, and Yovka Tisheva.

¹ The discourse effects of participle fronting are complex and are not explored in this paper. While it always indicates focus, participle fronting seems also to be compatible with contrastive focusing of a lower element in the clause (e.g., in (1), '...THE BOOK

- (1) Pročela *mu ja* beše.
 read_{FEM} him_{DAT} it_{ACC} had_{3SG}
 ‘She had READ it to him (and not sung it).’

The existence of this construction is used as a springboard for consideration and comparison of various mechanisms of clitic placement that have been proposed in the literature. While the syntactic operation of participle fronting has been well studied, the fact that clitics intervene in examples such as (1) has not been fully appreciated.² Do they appear after the participle because of a PF requirement, presumably prosodically motivated, that prevents the clitics from being initial, or do they follow the participle because that is where they are left by the syntax? In this paper I examine the data and conclude that the latter kind of approach is the correct one. The former alternative would be to position the clitics between the participle and the auxiliary through some kind of non-syntactically driven movement. I will argue that (1) is best handled not through PF-movement, either in the Prosodic Inversion sense put forward in Halpern 1992 or in the Morphological Merger sense articulated in Embick and Noyer 2001, but rather through successive syntactic head movements. I therefore ascribe (1) to a syntactically created complex head structure, as in (2a) or (2b); I will ultimately argue for (2b) over (2a).

- (2) a. [pročela + [[*mu ja*] + [beše]]]
 b. [[pročela + [*mu ja*]] + [beše]]

The first half of the paper considers more general issues of clitic placement in Bg, providing a context for the eventual reexamination of (1) in more depth in section 5.

² Over the years there has been much debate over the nature and status of participle fronting and participle + auxiliary constructions in Slavic. Relevant literature includes Embick and Izvorski (1995, 1997), Krapova (1997, 1999), Lambova (2002, 2003: 110–67, 2004a, 2004b, 2005), and Migdalski (2003, 2005, 2006). The earliest accounts, as in Lema and Rivero (1989), invoked Long Head Movement to C. Most subsequent analyses, e.g., Embick and Izvorski (1995), Lambova (2003), involved iterated head movements. One exception can be found in the work of Migdalski (2003, 2006), who argues that the participle phrase undergoes remnant movement to SpecTP. This gives it the appearance of head movement and also helps to explain why nothing (except material also under T) can intervene between it and T⁰.

2. The Tobler-Mussafia Effect

Within a clause, clitics in Bulgarian ordinarily appear immediately before the verb, regardless of how much material precedes them.³

- (3) Včera v gradinata Olga sigurno *mu* dade snimkite.
 yesterday in garden_{DEF} Olga surely him_{DAT} gave pictures_{DEF}
 ‘Yesterday, in the garden, Olga surely gave him the pictures.’

It is worth noting that this distribution distinguishes them from second position (or Wackernagel) clitics, which are found for example in the neighboring South Slavic language Bosnian/Croatian/Serbian (BCS). Moreover, as in other languages, when there is more than one clitic they appear in a fixed order. Consider some simple Bg sentences with several clitics, such as (4):⁴

- (4) a. Ti *si* *mu* *gi* pokazvala.
 you AUX_{2SG} him_{DAT} them_{ACC} shown_{FEM}
 ‘You have shown him them.’
 b. Tja *mu* *gi* *e* pokazvala.
 she him_{DAT} them_{ACC} AUX_{3SG} shown_{FEM}
 ‘She has shown him them.’

Descriptively, clitic auxiliaries precede the pronominal clitics, except for third singular *e*, which follows them, and, among the pronominals, the dative clitic precedes the accusative one, as schematized in (5).

- (5) AUX (except *e*) >> DAT >> ACC >> *e*

When, however, no overt element precedes the clitic group, they must follow the verb instead. In the Romance linguistics tradition, I

³ For an overview of Bg clitics, see Franks and King (2000: 48–67).

⁴ I gloss both second singular *si* and third singular *e* as “aux,” although, as discussed below, I regard them as occupying distinct positions and playing distinct roles: the former is a subject-agreement marker in Agr and the latter is (a possibly pleonastic element) in T.

will refer to this phenomenon as the Tobler-Mussafia (TM) effect. Compare the examples in (6) with those in (4):

- (6) a. Pokazvala *si* *mu* *gi*.
 shown_{FEM} AUX_{2SG} him_{DAT} them_{ACC}
 ‘You have shown him them.’
 (**Si mu gi pokazvala*.)
- b. Pokazvala *mu* *gi* *e*.
 shown_{FEM} him_{DAT} them_{ACC} AUX_{3SG}
 ‘She has shown him them.’
 (**Mu gi e pokazvala*.)

Since the generalization is that the clitics are pre-verbal unless this would leave them in absolute initial position within the clause, a promising way of understanding (6) is to derive it through some kind of post-syntactic local reordering operation.⁵ That is, the syntax would produce an output in which the clitics precede the verb, and this order would be adjusted on the PF-side to comply with the prohibition in Bg against initial clitics, as in (7).⁶

- (7) a. // [*si mu gi*] [pokazvala] → // [pokazvala] [*si mu gi*]
 b. // [*mu gi e*] [pokazvala] → // [pokazvala] [*mu gi e*]

⁵ I put aside here situations in which there is no finite verb. Hauge (1999: 196) comments that the clitics “occur as enclitics only... with hosts that are nominal and adverbial verb forms (participles and gerunds), and with the presentatives... *éto*, *éj*, and *ná*.” I take this to be a matter of syntax, not prosody, since even in Macedonian—where there is no prosodic non-initiality restriction—similar facts hold. Imperatives (in Bulgarian, but not in Macedonian), however, exactly pattern with finite verbs; cf. Franks and King (2000: 238).

⁶ The symbol “//” is merely meant to indicate the left edge of the clause; in the next section I show that its status is that of the edge of the Utterance prosodic unit.

3. PF-Side Approaches

In this section, two types of PF-side operations that likely “reorder” Bg clitics are evaluated and rejected as candidates for producing (1).⁷ I assume that the syntax proper makes no statements about linear order *per se*. Linearization is instead a property imposed on language by virtue of the temporal exigencies of articulation, and ordering arises only as part of the Spell-Out process mapping from syntax to PF.⁸ As Embick and Noyer (2001: 556–57) put it: “Syntax generates and moves terminals according to its own principles and is oblivious to morphophonological processes. PF takes the output of the syntax and resolves morphophonological dependencies according to its own principles.”⁹ Given this, the question raised by (1) is whether the word order simply reflects the output of the syntax, as depicted in (2), or whether it embodies a mismatch between syntax and morphology which can only be derived through some post-syntactic mechanism that reorders the clitics, along the general lines of (8).

(8) [*mu ja*] [pročela] [beše] → [pročela] [*mu ja*] [beše]

3.1. Prosodic Inversion and *li*

A long standing debate in the clitic literature concerns the need for prosodically motivated reordering of clitics with respect to their host. Those who adopt Prosodic Inversion (PI) argue that whenever the syntax leaves an enclitic stranded in initial position, the clitic is moved to the right edge of the adjacent prosodic word to its right, thereby sav-

⁷ I place “reorders” in quotes because this process need not be seen as literal PF movement, but rather as the imposition of ordering relations on unordered elements.

⁸ I thank an anonymous reviewer for drawing my attention to the discussion in Chomsky 1965 of the status of linear order in phrase-structure rules. The now widespread view that the syntax abstracts away from linear order was first, to my knowledge, developed in Sproat 1985. Since being suggested in Chomsky 1995, it has been at the core of much research, both within the Distributed Morphology framework (e.g., Embick and Noyer 2001) and minimalism of various ilk (e.g., Moro 2000).

⁹ With respect to clitics, this important line of research originally stems from Zwicky (1977) and is best exemplified by the detailed studies of Klavans (1982) and Halpern (1992), all of whom pursue a mixed clitic positioning system, whereby reference may be made both to syntactic and morphophonological criteria in anchoring the clitics.

ing the structure. Since the relevant elements are defined in prosodic terms, this inversion has traditionally been understood as a last-resort PF-side operation, as in the studies of clitics by Halpern (1992), Percus (1993), and Schütze (1994). These works concentrate on the applicability of PI as the explanation for why clitics can split nominal expressions (typically NPs, but also PPs where the P is proclitic) in BCS. Since the consensus of subsequent research is, I believe, that there is no real need to invoke PI to accommodate the splitting facts in BCS,¹⁰ to illustrate the effects of PI I turn instead to a far more persuasive case for it in Bg.

In Bg, as in all the Slavic languages which have it, the question particle *li* is unequivocally enclitic: it is always pronounced at the right edge of a host prosodic word.¹¹ In neutral Yes/No questions, this will be the verb:

- (9) Dade li Ana knjigata na Petko?
 gave Q Ana book_{DEF} to Petko
 'Did Ana give the book to Petko?'

Also, as in the other languages, the proclitic negative particle *ne* forms a prosodic word with the element to its right:

- (10) Ne dade li Ana knjigata na Petko?
 NEG gave Q Ana book_{DEF} to Petko
 'Didn't Ana give the book to Petko?'

However, since *ne* is post-stressing in Bg, if the following element is a clitic, then *ne* and the now stressed clitic constitute an independent prosodic word and provides a host for *li*, in (11) from Rivero 1993.¹²

¹⁰ See for example the discussions in Franks and King 2000, Bošković 2002, and Progovac 2005, as well as references therein.

¹¹ The literature on the syntax and semantics of *li* (in Bg and other Slavic languages) is far too vast to summarize in this paper. See, among others, Englund 1977, Rivero 1993, King 1994, Rudin, King, and Izvorski 1998, Rudin, Kramer, Billings, and Baerman 1999, Franks and King 2000: 349–57, Rudnickaya 2000, Bošković 2001: 197–253, and Franks 2006b for discussion of the special prosodic and focus properties of *li*.

¹² Rivero 1993 attempts a purely syntactic account of the *li* facts. She maintains that, whenever the auxiliary or verb precedes *li*, it has undergone (sometimes long) head

- (11) Ne *mú* li ispratix kniga?
 NEG him_{DAT} Q sent_{1SG} book
 ‘Didn’t I send him a book?’

This is true regardless of what the first clitic in the sequence happens to be or how many there are, as shown by (12).

- (12) a. Ne *mú* li *ja* dade Ana?
 NEG him_{DAT} Q it_{ACC} gave Ana
 ‘Didn’t Ana give it to him?’
 b. Ne *sí* li *mu* *gi* pokazvala?
 NEG AUX_{2SG} Q him_{DAT} them_{ACC} given
 ‘Haven’t you shown them to him?’
 c. Ne *mú* li *gi* *e* pokazvala?
 NEG him_{DAT} Q them_{ACC} AUX_{3SG} showed_{FEM}
 ‘Hasn’t she shown them to him?’

This striking property of *li* is most straightforwardly handled through Prosodic Inversion. If the syntax leaves *li*, which is a simple enclitic, in C⁰ with no host to its left, at Spell-Out it is linearized at the right edge of the prosodic word to its right.¹³ The result is that, when

movement to *li* in C. But see Izvorski 1993 for arguments against movement to C and Franks and King 2000 and references therein for problems with LHM. Since this clearly cannot work for (11), Rivero proposes instead a syntactic lowering analysis, whereby *li* lowers from C, left-adjoining to the finite verb in the Agr/T+V complex. Rivero 1993 unfortunately does not consider examples where the clitic group is split, as in (12), which syntactic lowering of this type obviously fails to produce.

¹³ While this is essentially the standard account, as put forward in King 1994, Rudin, King, and Izvorski 1998, Rudin, Kramer, Billings, and Baerman 1999, Franks and King 2000: 349–57, and Rudnickaya 2000, Željko Bošković (p.c.) objects that it begs several important issues. First, how does the finite verb end up to the right of *li*? (There are two possibilities: either it is for some reason in the next head down or it moves to C and adjoins to *li*.) Second, why can’t topic phrases provide a PF host for *li*, as in (i) from Bošković 2001: 225, with *kolata* ‘the car’ construed as a topic (as contrastive focus this is of course perfect). Instead, PI must apparently apply, as in (ii).

- (i) *Kolata li prodade (Petko včera)?
 book_{DEF} Q sold_{3SG} Petko yesterday
 ‘Did Peter sell the car yesterday?’

the prosodic conditions so dictate, *li* ends up splitting clitic sequences that are otherwise never separable.¹⁴ Thus (12c) has the prosodic structure in (13), where ω indicates a prosodic word.

- (13) *li* [ω *ne mÚ*] [ω *gi e* *pokázvala*] $\rightarrow$ [[ω *ne mÚ*] + *li*] [ω *gi e* *pokázvala*]

That is, *li* is enclitic on *ne mu* and *gi e* is proclitic on *pokázvala*. The participle, then, does not move to C^0 , but rather is left lower by the syntax, immediately to the right of *li*.¹⁵

The fact that *li* splits the two pronominal clitics indicates that its placement must be purely prosodic, since even aspectual adverbials such as *veče* ‘already’ or particles like *už*, *maj* ‘maybe’ that sometimes break up the clitics + verb sequence can never do this.¹⁶

- (14) a. *Az sâm už ti go dala.*
 I AUX_{1SG} maybe you_{DAT} it_{ACC} given_{FEM}
 ‘I have maybe already given it to you.’
 b. **Az sâm ti už go dala.*

-
- (ii) *Kolata prodade li* (Petko včera)?

While it is clear that *li* must be prosodified and linearized before topics are merged, fleshing out the derivational details is beyond the scope of this paper.

¹⁴ See Rudnickaya 2000 for obligatory splitting of otherwise inseparable phrases by *li* in Russian.

¹⁵ Note that if Bošković (1995) is correct that participles (in BCS and more generally) never move as high as *C*, then the fact that participles can freely host *li* in Bg further supports a string-adjacency PI account over one employing a structural syntactic movement. Also, comparison with BCS corroborates PI’s last-resort nature. In that language, as noted by Rivero (1993: 572), participles cannot host *li*:

- (i) **Čitao li sam knjigu?*
 read Q aux_{1SG} book
 ‘Did I read the book?’

However, BCS is able to rescue this without invoking PI of *li*, since unlike Bg it has tonic forms of the verbal clitics:

- (ii) *Jesam li čitao knjigu?*

¹⁶ The significance of adverb interpolation is discussed in section 4.3.3 below; cf. also Bošković 2001: 222, Billings 2002, and Franks 2006a. Thanks go to Marijana Lambova (p.c.) for drawing *už* and *maj* to my attention.

- (14) c. *Az sâm ti go uŕ dala.*

In sum, the grammar of Bg appears to countenance PI for *li*. We should therefore ask whether the TM effect is similarly amenable to a prosodically driven account.

3.2. The Status of Clitic Non-Initiality in Bulgarian and Macedonian

It is a relatively straightforward matter to dismiss this same kind of PI as the force behind whatever causes the clitics to follow the verb in (6), repeated as (15).

- (15) a. *Pokazvala si mu gi.*
 shown_{FEM} AUX_{2SG} him_{DAT} them_{ACC}
 ‘You have shown him them.’
- b. *Pokazvala mu gi e.*
 shown_{FEM} him_{DAT} them_{ACC} AUX_{3SG}
 ‘She has shown him them.’

Although most accounts motivate it with the assumption that the pronominal and auxiliary clitics are prosodically enclitic, there is clear evidence that this cannot be at the root of the TM reordering phenomenon. For one thing, as discussed in Franks and Bošković 2001 *inter alia*, elements such as *i* ‘and’ which cannot serve as prosodic hosts nonetheless obviate TM:¹⁷

- (16) *Kupix na Ivan edna kniga i mu ja pročeto.*
 bought_{1SG} for Ivan one book i him_{DAT} it_{ACC} read_{1SG}
 ‘I bought a book for Ivan and read it to him.’

As observed in Pancheva 2005: 114, the clitics can be supported in either direction and, in fact, are generally prosodically parsed as proclitic on what follows them. Even more telling are the examples in (17),

¹⁷ The proclitic invariant future marker *šte* has a similar effect, as does the negative element *ne*, discussed in the previous section. Note that in languages where the pronominal clitics are truly phonologically enclitic, such as BCS, the order in (16) would be impossible, showing that *i* is not a valid prosodic host for clitics.

where the clitics remain in front of the verb even when preceded by syntactic units which necessarily induce an Intonational Phrase (I-phrase) boundary; cf. Nespor and Vogel 1986:¹⁸

- (17) a. Petko, edin moj prijatel, *mi go dade*.
 Peter a my friend *me_{DAT} him_{ACC}* gave
 ‘Petko, a friend of mine, gave it to me.’
- b. Ako njakoj, kojto e s men, *mi dade* njakolko
 if someone who is with me *me_{DAT}* gives several
 čipa...
 chips
 ‘If someone who is with me gives me some chips...’
- c. Ivan, spored Marija, *go viždam* vseki den.
 Ivan according Maria *him_{ACC} see_{1SG}* every day
 ‘(Talking about) Ivan, according to Maria, I see him every day.’
- d. Sled kato si živjal dosta s edna žena, *ja*
 after as *AUX_{2SG}* lived enough with a woman *her_{ACC}*
 poznaváš mnogo dobre.
 know_{2SG} very well
 ‘After you have lived with a woman enough, you know her very well.’

This telling fact, sometimes noted in passing (e.g., by Bošković (2001: 218, fn 7), by Pancheva (2005: 114, fn 7)) but typically overlooked,

¹⁸ Copular *e* is even able to constitute a completely independent I-phrase, as in the following example:

- (i) Tova, koeto pravi neštata interesni, *e, če toj*...
 that which makes things interesting is that he
 ‘What makes things interesting is that he...’

It can furthermore bear stress when focused, in which case it hosts *li*, as in (ii), cited by Embick and Izvorski (1994: 109).

- (ii) *É li* dejanieto na Kostova prestâplenie i ako *é* kakvo?
 is Q deed_{DEF} of Kostova crime and if is what
 ‘Is Kostova’s act a crime and, if it is, what (kind of crime is it)?’

might suggest that the appropriate generalization should not be couched in prosodic terms. The examples in (17), in which the clitics are initial in their I-phrases, show that TM is neither a consequence of immutable lexical enclitic status, as is typically claimed, nor is it a consequence of some need for the clitics to be “second” in their I-phrase, as Pancheva (2005) proposes. The TM effect in Bg is apparently sensitive to initiality in some other sense, which has not previously been fully appreciated. I argue that this initiality should nonetheless still be couched in terms of prosodic terms.

One traditional insight about “second position effects,” often capitalized upon in Optimality Theoretic accounts of clitic placement, is that these are a minimal displacement from absolute initiality within some domain.¹⁹ The grammaticality of (17), therefore, can only be taken as evidence that the I-phrase is not the appropriate domain, and *not* that the domain should be defined in syntactic rather than prosodic terms. There are of course other prosodic domains. In their seminal work Nespor and Vogel (1986) treat a range of prosodic domains, which, in accordance with the Strict Layer Hypothesis are nested (rather than overlapping).²⁰ And the availability of additional domains opens the door also to expressing in prosodic terms the relevant notion for Bg clitic non-initiality. Indeed, the digression in the previous section on the behavior of *li* drew attention to the fact that the domain of non-initiality for *li* is the Prosodic Word, while for BCS second position enclitics it is the traditional I-phrase. Returning, then, to the question of the domain of non-initiality for the Bg clitics, my proposal is that the correct domain is the next larger unit of prosodic organization, the Utterance.²¹ Hence the presence of an I-phrase boundary, as in the

¹⁹ Within OT this can most readily be conceived of as an interaction between alignment constraints such as NONINITIAL and EDGEST, as in, e.g., Legendre 2000.

²⁰ Since that time there has been considerable work generalizing these domains, but the point remains that non-initiality can and must be able to pertain to different domains; for a collection of recent proposals and review of the literature, see the materials posted at the web site of the third Indiana University workshop on Prosody, Syntax, and Information Structure, which took place in September 2007: http://www.indiana.edu/~gpsi/wpsi_index.html.

²¹ In previous accounts I argued for syntactic motivation of TM in Bg, invoking syntactic units such as CPs or Spell-Out domains such as “phases.” While this temptation derives from the fact that all the I-phrases within a CP usually belong to

Bg examples in (17), does not induce the relevant kind of non-initiality. The clitics are still non-initial with their Utterances.

An argument for this kind of approach can be based on a comparison between Bulgarian and closely related Macedonian (Mac). In Franks (in press) I argue that Mac differs from Bg in that there is no such prohibition against Utterance initiality. Thus, the Mac versions of Bg (6)/(15) are as follows, essentially the opposite of Bg:

- (18) a. *Si mu gi pokazvala.* [Mac]
 AUX_{2SG} him_{DAT} them_{ACC} showed_{FEM}
 ‘(They say that) you showed them to him.’
 (*Pokazvala *si mu gi*.)
- b. *Mu gi pokazvala.*
 him_{DAT} them_{ACC} showed_{FEM}
 ‘(They say that) she showed them to him.’
 (*Pokazvala *mu gi*.)

I take the absence of the TM effect in Mac to mean that Bg obeys a restriction which Mac lacks. The operation in (7), which in Bg (re)linearizes the sequence with the clitic group after *pokazvala*, is thus not needed in Mac. In short, the clitic syntaxes of Bg and Mac are similar here, but the prohibition against Utterance initial clitics—operative in the former but not the latter—leads to a PF-side adjustment in Bg.²² Hence, whenever the two languages differ with respect to clitic placement, a PF-side adjustment has taken place in Bg that is absent in Mac. That is all that the Tobler-Mussafia effect is. As a consequence, the derivation of the Bg sentence inevitably passes through a Mac-like stage whenever there is a difference with respect to clitic placement. Following this reasoning, Bg (6)/(15) must look like Mac (18) *before* the adjustment necessitated by the need not to pronounce the clitics Utterance initially.

one Utterance, it is preferable consistently to attribute PF repair operations to the need to meet phonological and/or morphological requirements.

²² In Franks (in press) I argue that BCS and Slvn constitute a similar pair, since the clitics in the former have the lexical property of not being able to be initial in their I-phrases, but those in Slvn lack this property. Thus only BCS exhibits TM effects.

3.3. Some PF-Side Derivations and Operations

Let us return in this light to the *li* facts discussed in section 3.1. We saw that the negation element *ne* in Bg creates a separate prosodic word with a following clitic.²³ In the absence of negation, however, the order is as in (19):

- (19) Dade li *mu* *ja* Ana? [good in Bg but not in Mac]
 gave Q him_{DAT} it_{ACC} Ana
 'Did Ana give it to him?'
 (**Mu ja dade li* Ana?) [good in Mac but not in Bg]

Thus, when the verb is followed by clitics, *li* separates them from the verb. Note that while this is true of Bg, in Mac the clitics precede the verb, hence it is the starred order in (19) that is grammatical in this language. Extending the approach taken in the preceding paragraph, these data indicate that *li* precedes (*mu ja*) *dade* and then PF-side adjustments apply as needed.

In Franks 2006b, I argue for a strongly derivational account of the word order in (19) as follows: (a) the clitics, as always, are linearized to precede the verb, (b) *li*, since it merges in C⁰, precedes them; (c) *li* is then linearized with respect to the prosodic word *mu ja dade*; (d) TM applies to Utterance initial *mu ja*. These derivational steps, where the intonational units are ω for Prosodic Word; CG for Clitic Group;²⁴ # for Intonational Phrase; and υ for Utterance, are as follows:

²³ This is not so in Mac, although *ne* does define a new prosodic word which includes the clitics and the verb. Hence *li*, which is enclitic in all Slavic languages which have it, must follow *dade*:

- (i) Ne *mu* *ja* *dade* li Ana? [Mac]
 NEG him_{DAT} it_{ACC} gave Q Ana
 'Didn't Ana give it to him?'

The string *ne mu ja dade* functions as a single prosodic word and as such receives regular antepenultimate stress on *ja*; *li* is then linearized on the right edge of that prosodic word.

²⁴ While the status of Nespor and Vogel's "Clitic Group" as a prosodic unit is questionable, since it does not respect the Strict Layer Hypothesis, I adopt it here as a convenient target for linearization, without regard for its precise formal status as a prosodic domain.

- The general idea, as discussed below, is that all heads are first linearized to the left, following Kayne's Linear Correspondence Axiom, but the pronominal clitics are not considered Utterance-initial until after *li* has been merged and is itself linearized, as shown in (20c). Subsequently, only once the entire clause is sent to PF as an Utterance does the Clitic Group violate the Bg prosodic prohibition against Utterance initiality. Hence its linearization with respect to its host is erased and reevaluated to follow *dade li*, as in (20d). In Mac, on the other hand, since this language lacks the Utterance-initial constraint, this last TM step never applies. Hence, in Mac the final output remains as in (20c), without the TM effect.

(21) a. Az *sâm* už *ti* *go* *dala*.
I AUX_{1SG} maybe you_{DAT} it_{ACC} given_{FEM}
'I have maybe already given it to you.'
b. *Dala *sâm* už *ti* *go*.
c. Dala *sâm* *ti* *go*.

These properties suggest that TM is a last-resort PF-side reordering process, as depicted in (7). This process operates in Bg but not Mac: it targets the clitics as a group, erases the linearization when it violates their lexical non-initiality requirement, and recombines them with the adjacent verb so that they follow rather than precede this verb. This can be handled in the morphology by rebracketing the clitics as a Clitic

Group and subjecting them to the process of Local Dislocation, as follows:²⁵

- (22) a. [CG *si mu gi*] [V *pokazvala*]... → [V *pokazvala* + [CG *si mu gi*]]...
 b. [CG *mu gi e*] [V *pokazvala*]... → [V *pokazvala* + [CG *mu gi e*]]...

Embick and Noyer (2001) describe Local Dislocation as a type of Merger which applies after Vocabulary Insertion to manipulate already linearized strings. To avoid literal movement on the PF-side, contra Embick and Noyer, I think of this slightly differently: linear precedence is defined derivationally, as successively larger units are sent to Spell-Out. When precedence violates prosodic requirements, such as non-initiality, it can be erased and relinearized. This should *not* be taken as comparable to traditional feature-driven and hierarchically defined syntactic movement.

The following scenario seems reasonable. As will be argued in section 4.3, the output of the syntax does not in fact leave the clitics in a single, large head position. Specifically, it will be claimed that clitic auxiliaries (*sâm*, *si*, etc.) are in Agr_S⁰, third singular clitic *e* is really not an agreement marker, but rather in T⁰ (the next head down), and the pronominal subcluster (e.g., *mu gi*) is left-adjoined to T⁰. Adjacent clitics are, however, rebracketed into a Clitic Group, and it is this entity that is targeted by Vocabulary Insertion.²⁶ It is only subsequent to Vocabulary Insertion that a Local Dislocation process applies when it is necessary to avoid the clitics being Utterance initial, as in (22).

We then want to ask whether this is what accounts for the ordering of the clitics in the superficially similar compound verb construction in (1), repeated here.

²⁵ In the system of Embick and Noyer 2001 this operation is a kind of (reordering) Morphological Merger. This “Merger” (of which PI is surely also an instance) must be kept distinct from the syntactic term “merge” to describe tree-building concatenation.

²⁶ While complex PF-side adjustment of elements within the clitic group is not common in Slavic, it is common in Romance languages. As discussed in Bonet 1995 *inter alia*, rules manipulating morphological structure must precede insertion of actual phonological forms. I thank Andrea Calabrese (p.c.) for drawing my attention to the need to form a clitic group on which the relevant rules can operate.

- (23) Pročela *mu ja* beše.
 read_{FEM} him_{DAT} it_{ACC} had_{3SG}
 'She had READ it to him (and not sung it).'

Does Morphological Merger position the clitics to follow the participle after the syntax has left them in initial position? In order to address this question, one important concern for the subsequent discussion will be the principle in (24), from Embick and Noyer 2001, their (47).

- (24) If a Merger operation moves an element A to a target B, then A and the head of B are either both MWds or both SWds.
- (25) a. MWd = a maximal X^0
 b. SWd = a terminal X^0 contained in another X^0

This principle of morphology prevents Local Dislocation operations from attaching a subword (SWd) to a morphosyntactic word (MWd), where the former is defined as a terminal X^0 contained in another X^0 and the latter is defined as a maximal X^0 . It also prevents the morphology from situating a MWd internal to another MWd. It is this particular aspect of (24) which I will argue creates a problem for treating clitic placement in Bg compound verb construction (23) in terms of Local Dislocation. I will further show that the order in (23) obtains even when TM should not be invoked, implying that it is never the reason why clitics split participles from auxiliary verbs.

4. Syntactic Approaches

Approaches that make use of Morphological Merger are fundamentally syntactic in that they can only readjust what the syntax provides them with in the first place. It is for this reason important to have a clearer picture of how the syntax might treat clitics before resolving the question posed by (23). In this section we therefore consider some

general issues and specific proposals about the syntax of clitic placement.²⁷

4.1. Iterated Head Movement

A fairly popular view, deriving in part from the theory of phrase structure in Chomsky 1995, is that clitics are non-branching phrases.²⁸ Bošković (2002) argues that the clitics are generated as non-branching XPs and move as such (presumably for checking reasons) to specifier positions. Only once the verb has raised past them to the next higher head position can the clitics—now in their X^0 guise—undergo head movement themselves, adjoining to the left of the verb. For Bošković, left-adjunction is the consequence of Kayne's (1994) Linear Correspondence Axiom (LCA).²⁹ This process of head adjunction takes place successively, as target heads appear above the clitics in the course of building up the structure. Thus, given a base (or intermediate) structure as in (26a), the eventual result is a complex head with the general structure in (26b), Bošković's (16a) and (16b), respectively.³⁰

- (26) a. $[VP\ si\ [V'\ [AgrIOP\ mu\ [AgrIO'\ [AgrDOP\ gi\ [AgrDO'\ [VP\ dal]]]]]]]$
 b. $[si_n + [mu_l + [gi_j + dal_i]_k]_m] [VP\ t_n [V'\ t_m [AgrIOP\ t_l [AgrIO'\ t_k [AgrDOP\ t_j [AgrDO'\ t_i [VP\ t_i]]]]]]]$

²⁷ There is a vast literature on this topic; for Slavic, see Franks and King 2000 or Bošković 2001 and references therein. For reasons of space and cohesion, I concentrate in this paper on the account of Bg clitics put forward in Bošković 2002.

²⁸ For our purposes it does not matter whether they are introduced that way or become non-branching in the course of the derivation. Nor does it matter whether they are actually merged as arguments, within VP, or only as Agreement (or Case) heads in some functional projection above VP. In Franks and Rudin 2005 we argue that Slavic pronominal clitics are merged as K^0 heads of argument KPs. In Bg (but not BCS, which lacks doubling), they become non-branching—hence are able to adjoin as heads—at the point in the derivation when their complement DP vacates.

²⁹ Left-adjunction cannot actually be a syntactic property if linear order is only imposed once vocabulary items are available. We can however take the LCA to be part of the mapping procedure to PF, where it is an overarching desideratum of linearization.

³⁰ The categories in (26) are Direct Objects (DO) and Indirect Objects (IO), but these precise labels are not crucial.

In this system of iterated head movement, the clitics together with the verb constitute one large right-branching X^0 by the end of the derivation.³¹ In section 4.3, although I reject the kind of highly articulated structure in (26b), I too will exploit the LCA.

4.2. PF-Filtering and Scattered Deletion

The iterated head movement approach immediately raises two types of concerns: Does it really provide the right internal structure? and How are orders which deviate from (26) produced? I turn now to the second concern, postponing a more careful consideration of the first until the next section. The TM effect is an obvious issue here. Bošković (2001) and Franks and Bošković (2001) analyze TM in terms of scattered deletion of subwords (SWds).³² Under this account, for example, (6)/(15) would have to be treated as follows, with pronounced copies underlined and in boldface:

- (27) a. [*si* + [~~*mu*~~ + [*gi* + ***pokazvala***]]] [*si* *mu* *gi* ***pokazvala***...]
 [= (6a)/(15a)]
- b. [*e* + [~~*mu*~~ + [*gi* + ***pokazvala***]]] [*e* *mu* *gi* ***pokazvala***]... [*e* *mu* *gi* ***pokazvala***...]
 [= (6b)/(15b)]

This is Bošković's alternative to the kind of Local Dislocation approach, schematized in (22) and repeated in (28).

- (28) a. [_{CG} *si mu gi*] [_V *pokazvala*... → [_V *pokazvala* + [_{CG} *si mu gi*]]...

³¹ Bošković (2002: 336, fn 13) does suggest a left-branching alternative as a way to resolve's Kayne's (1994) prohibition against multiple adjunction to the same head: each successive left-adjunction would then have to target the lowest head, producing [[[*si* + *mu*] + *gi*] + *dal*] instead of [*si* + [*mu* + [*gi* + *dal*]]]. Under either scenario, as I will argue in section 4.3, the result provides too much internal structure.

³² Assuming the copy theory of movement, Franks (1998, 2000) argues that a lower copy may be pronounced if and only if pronunciation of the highest copy would lead to a PF violation. This system is in keeping with the highly derivational view that each component is blind to the needs of other components with which it must eventually interface, so that, just as the syntax proper makes no statements about linear order neither does it determine which copy ultimately to pronounce. Instead, copy selection is best regarded be a property imposed by interface conditions.

- (28) b. [CG *mu gi e*] [_V pokazvala]... → [_V pokazvala + [CG *mu gi e*]]...

For him, PF-side reordering mechanisms do not exist, so there could never be any need to invoke them.³³ Instead, the correct copies are pronounced through the complex interaction of PF requirements that filter out the offending copies. In order to produce (28), Bošković needs to assume (i) that the auxiliary and pronominal clitics are prosodically enclitic and (ii) that third person singular *e* must be last in the sequence of clitics. To fully appreciate the power of this system, consider how it derives (12c), repeated as (29a):

- (29) a. Ne *mu* li *gi* *e* pokazvala?
 NEG him_{DAT} Q them_{ACC} AUX_{3SG} showed_{FEM}
 'Hasn't she shown them to him?'
 b. [ne + [e + [mu + [gi + pokazvala]]]] + li [ne e mu gi pokazvala] ... [ne e mu gi pokazvala] ...

It is by virtue of yet a third PF stipulation that (29b) obtains, namely, that *li* must be second in its intonational phrase. The result is a highly modulated scattered deletion of pieces of complex X^0 s (which can be considered MWds under the definition in (25a)), so that the copies of the five clitics (*ne*, *mu*, *li*, *gi*, and *e*) in (29) that are actually pronounced each belong to different parts of the structure.

4.3. A More Finely Grained Structure

This section presents arguments for distinguishing the structural position of the auxiliary clitics and the pronominal clitics, with an excursus on the special nature of third singular (*j*)*e*.

³³ Although Bošković (1995, 2001) does in fact assume a version of Morphological Merger, his view of it is highly restrictive. He states (2001: 84) that it “cannot reorder elements; it simply puts two adjacent elements together to form a single word... Morphological Merger has a very different effect than PI; it is less powerful since it cannot affect linear order.” It is not clear what this view leaves for the morphology to do, however; it seems tantamount to rejecting Distributed Morphology entirely, given the many arguments for reordering Merger in Embick and Noyer 2001 and other works.

4.3.1. Scattered Deletion

I first argue against Bošković's (2002) use of scattered deletion to obtain these facts and then show how the ordering of clitics in (5), repeated as (30), can be handled in purely syntactic terms.³⁴

(30) AUX (except *e*) >> DAT >> ACC >> *e*

I do not see scattered deletion as a particularly elegant or explanatory solution, and I list some reservations about invoking this mechanism so cavalierly. First, it is not clear that extending the copy and delete approach to SWds is either necessary or desirable. Its application, like that of ellipsis in general, might be restricted to syntactic constituents and prohibited from looking inside of complex X^0 s. Second, also on the conceptual side, I note that it requires the prosodic properties of specific vocabulary items to determine which copy to pronounce, both of itself and of other items. Intuitively, this seems incorrect, because if the syntax leaves undetermined which copy is to be overt, this should be resolved before any actual morphology or phonology can take place. Third, the scattered-deletion account ascribes the same sequence of clitics completely different constituencies depending on whether the sequence appears preverbally or postverbally (as the result of TM), although the actual clitic order internal to the clitic group remains immutable. Fourth, Bošković's approach to my mind amounts to a sophisticated variant of templatic solutions to clitic ordering.³⁵ Fifth, as shown by the contrast in (21) and the comparable minimal pair in (31), it is only when the clitics are grouped together that they can follow the verb, which indicates that TM targets the clitic group as some kind of unit. As discussed in Franks (2006a), aspectual adverbs can marginally

³⁴ See Billings (2004) and Franks (2006a) for additional critical discussion of Bošković (2001). See Mišeska Tomić (1996), Franks and King (2000), and Progovac (2005) for alternative ways of deriving (30) in terms of locating the various clitics in distinct head positions.

³⁵ Bošković's system can admittedly be viewed as less stipulative than traditional templates, since it is the artifact of constraint interaction and competing PF desiderata.

intervene at certain points when the clitics precede the verb, but this is absolutely impossible when they follow:³⁶

- (31) a. [?]Az *sâm* veče *ti* *ja* *dala*?!
 I AUX_{1SG} already you_{DAT} it_{ACC} given_{FEM}
 'I have already given it to you?!'
- b. *Dala *sâm* veče *ti* *ja*?!
 given_{FEM} AUX_{1SG} already you_{DAT} it_{ACC}

Sentence (31a) is imaginable in a context which appropriately emphasizes the adverb. For example, imagine that I gave you a book but then I forgot that I had already done so; later, you come and ask about the book, and I am surprised that I had given it to you already. In this case, I could certainly respond as in (31a). But, if I choose to leave out the subject pronoun *az* 'I' and thereby invoke TM, I could never say (31b). Sixth, there is reason even to doubt the empirical correctness of the PF stipulations Bošković needs in order to modulate the deletions. For example, when *li* is used to mark contrastive focus, it may freely follow multiple prosodic words, as in (32a–b), (from Bošković 2001: 232; 236), or (32c).³⁷

³⁶ While speakers differ in how felicitous they find adverb interpolation at different sites, the contrasts reported were confirmed by all speakers consulted. Crucially, the string *sâm veče ti ja* is credible before the verb but universally judged strongly ungrammatical after it.

³⁷ For ease of reference, I gloss this use of *li* as Foc; in (32a) and (32b) it bears both Yes/No [+Q] and [+Foc] features, whereas in (32c), where it occurs in a *wh*-question and hence lacks the Yes/No [+Q] component (an option available in South Slavic but not in Russian), *li* adds a sense of wonder to the *wh*-question. All speakers I have consulted find it natural in the right context; Yovka Tisheva (p.c.) comments that (32c) is a perfectly reasonable thing to ask oneself on one's birthday. Bošković (2001: 242, fn 60) does offer the very similar (i) as ungrammatical but comments that for some it is acceptable and that such speakers must have "lost the second position requirement on the focus *li*." (This would however wreak havoc with his scattered deletion approach, especially if Yes/No *li* also lost this requirement.)

- (i) (*)Koj kakvo li kupuva?
 who what FOC buys_{3SG}
 '(I wonder) who is buying what?'

The oddity of (i) may be related to a similar status for such questions in English, when the emphatic *wh*-phrase remains *in situ*, either in multiple *wh* (ii) or echo *wh* (iii):

- (32) a. Novata kola li prodade?
 new_{DEF} car FOC sold_{2/3SG}
 'Was it the new car that she/he/you sold?'
 b. Sâvsem nova li roklja noseše?
 completely new FOC dress wore_{2/3SG}
 'Was it a completely new dress that she/he/you were wearing?'
 c. Koj kakvo li *mi* *e* kupil?
 who what FOC you_{DAT} AUX_{3SG} bought
 '(I wonder) who has bought me what?'

Finally, simply requiring that *e* appear last obscures some likely larger generalizations about its special status, generalizations which lead to a finer structure of where in fact the various clitics go. I now turn to this problem.

4.3.2. On Idiosyncrasies of (j)e

In following rather than preceding the pronominal subcluster, the third singular auxiliary clitic behaves differently from the other auxiliary clitics in virtually all the South Slavic languages, as well as in West Slavic Upper and Lower Sorbian. This suggests that this element, which I represent generically as (j)e, in fact occupies a different position from the other auxiliary clitics and that two head positions are involved, one before the pronominal clitics and one after.³⁸ Elsewhere in

(ii) *Who buys what on earth?!

(iii) *John bought what on earth?!

The point is that the acceptability of multiple *wh* focal *li* questions in (i) or (32c) depends on the pragmatics of an appropriate context for the emphatic pair-list reading *li* entails and not on prosodic constraints on where *li* can appear within its I-phrase.

³⁸ Krapova (1999) also places *e* and the rest of the auxiliaries in different positions. Mišeska Tomić (1996) and Progovac (2005) reach the same conclusion for BCS. My account more closely resembles that of Mišeska Tomić, who places auxiliary clitics in T/Agr_S, pronominal clitics in the head below that (Agr_O, in her system), and third singular (j)e in the V head below that. Progovac, on the other hand, who develops a split system for both tense and agreement, generates BCS *je* in the high (subject layer) T_S position and the other clitic auxiliaries in a low (object layer) T_O position.

West Slavic (as well as in South Slavic Macedonian), the third-person auxiliary is null, indicating that there is in fact no morphological exponent of third person agreement and that, where it appears, it is marking something other than subject agreement. I suggest, therefore, that although the auxiliary clitics are person agreement markers in Agr_S, (*j*)*e* is actually inserted in T, one head down, where it seems to have a more or less expletive status.³⁹ Next, since the pronominal clitics precede (*j*)*e* but follow the other auxiliary clitics, these would have to be adjoined to T⁰. The structure I argue for is thus as in (33).

- (33) a. [Agr_S' [Agr_S *sâ**m*] [TP [T [*ti go*] + T⁰] ...
 b. [Agr_S' [Agr_S Agr⁰] [TP [T [*ti go*] + *e*] ...

One (small) reason to implicate tense as the locus of (*j*)*e* is that in Slovenian (Slvn) it is precisely the future tense auxiliary clitic *bom* 'will.1SG' which along with *je* comes after rather than before the pronouns.⁴⁰ There is however variation among the languages in whether the auxiliary clitic appears in Agr_S or T. Interestingly, not just (*j*)*e* but the other clitic auxiliaries also once came last, implying a historical

³⁹ George Fowler (p.c.) suggests that the fact that the absence versus presence of *e* in Bg signals the reported (renarrated) versus witnessed (evidential) opposition may be an additional argument that *e* is fundamentally different from the pure agreement auxiliaries. There must, however, be more to the story, since plural *sa* is also missing in the reported forms (although it, like the other auxiliaries, precedes the pronominal clitics). Treating singular and plural together is however consistent with the idea that third-person agreement is null, since whenever Slavic languages lack third person auxiliaries they lack both singular *and* plural forms. Perhaps (*j*)*e* is inserted to support tense and *sa* (*se/su/so*) is inserted to support tense plus plural number.

⁴⁰ Although in the other South Slavic languages the future marker comes higher, I take this not to be in T, but rather to be a Modal head, above Agr_S. It can be inflected, as in BCS, or not, as in Bg, where it is then in fact followed by subject agreement:

- (i) (Vie) šte *ste* *mu* *go* *kazali*.
 you will aux_{2PL} him_{DAT} it_{ACC} said
 'You will have told him it.'

Bg *šte* does however fully inflect when followed by modal *da*, as in (ii), or even reported (iii); note that auxiliary *e* is missing only in the higher, renarrated portion:

- (ii) Vie štjaxte *da* *ste* *mu* *go* *kazali*.
 you would_{2PL} MOD aux_{2PL} him_{DAT} it_{ACC} said
 'You would have told him it.'

change from the auxiliary clitics surfacing in T to their surfacing in Agr_S, as well as their synchronic T-to-Agr_S movement.⁴¹

Morphological evidence from BCS lends further support for this approach. In that language the tonic forms of the auxiliaries consist of the morpheme *je*, which I take to originate in T⁰, plus an Agr_S portion identical to the clitic:

- (34) a. *jesam* '(I) am' = *je* + *sam* 'AUX_{1SG}' [BCS]
 b. *jesi* '(you) are' = *je* + *si* 'AUX_{2SG}'
 c. *jesmo* '(we) are' = *je* + *smo* 'AUX_{1PL}'
 d. *jeste* '(you) are' = *je* + *ste* 'AUX_{2PL}'
 e. *jesu* '(they) are' = *je* + *su* 'AUX_{3PL}'

These forms can be derived by raising T to adjoin to the left of Agr_S, in keeping with the LCA. The one morphological exception is in the third singular, which is just a tonic *je*. This follows from the assumption that the Agr_S portion is null for the third singular. It thus seems that at one time Agr_S lowered to T—as a morphological operation following Embick and Noyer's (2001) account of Def(initeness) lowering in the Bg DP—but now T raises to Agr_S. This change is apparently complete in some Croatian dialects where even *je* comes first.

As an anonymous reviewer points out, the details of this proposal require considerable fleshing out. It seems that in moving to Agr T⁰ must excorporate from the pronominal clitics to prevent them from preceding the auxiliary and to allow material such as *už* in (14a)/(37a) to intervene. On the other hand, *je* must be inserted so as to follow the pronominal clitics, i.e., just in case T⁰ does not raise to Agr. Now, if I am correct in characterizing third singular Agr in these languages as having no features and it is the features of Agr that attract those of T,

-
- (iii) Toj štjal da mu go e kazal.
 he would MOD him_{DAT} it_{ACC} aux_{3SG} said
 '(They say that) he would have told him it.'

This suggests the need for tense/agreement systems both above and below *da*. Investigation of how the complex range of Bg verbal forms should be implemented in a full-er system of functional projections remains however beyond the scope of this paper.

⁴¹ See Abel 1975 for relevant historical data and also Witcombe 2008 for discussion of BCS *je*.

then it stands to reason that T^0 will not raise just in case Agr is (featureless) third singular.

Be that as it may, the empirical idiosyncrasies find no expression in a scattered deletion account, which treats the fact that *(j)e* is pronounced last as accidental. Instead they point to an approach that attempts to read fixed aspects of word order off hierarchical structure.

Other idiosyncrasies of BCS *je* are that it participates in various well-known dissimilatory processes that the other auxiliaries do not. It forces selection of *ju* over *je* for the third singular feminine accusative pronoun, resulting in the sequence *ju je* and supporting the idea that the pronominal clitics plus *je* form a complex head. It can also be deleted (or not inserted) altogether, as when it would follow *se* (i.e., *se* instead of *se je* in the literary language) and also after pronouns ending in *-e*, namely, *me* 'me' and *te* 'you' (i.e., *me* or *te* instead of *me je* or *te je* colloquially). It can also occur initially in Yes/No questions, supporting *li*, as in (35), from Bošković 2001: 121, fn 33:

- (35) Je li (*je*) on istukao Petra.
 DUMMY Q AUX_{3SG} he beat Peter
 'Did he beat Peter?'

This *je* is not a clitic. Bošković calls it "a non-clitic counterpart of the clitic *li*," but I prefer to think of it as a pleonastic element inserted to provide support for *li*. In this regard it is very similar to BCS C^0 *da*. Note that, as (35) shows, it can cooccur with auxiliary/ T^0 *je*, which I suggest is also pleonastic, as well as with finite verbs when they themselves do not front:

- (36) Je li vole Mariju.
 DUMMY Q love_{3PL} Maria
 'Do they love Maria?'

4.3.3. The Argument from Interpolation

Returning to the structures in (33), these make certain predictions about the potential for interpolation of particles and adverbs.⁴² These

predications are indeed borne out. Recall the paradigm in (14) above, repeated as (37).

- (37) a. *Az sâm už ti go dala.*
 I AUX_{1SG} maybe you_{DAT} it_{ACC} given_{FEM}
 ‘I have maybe already given it to you.’
 b. **Az sâm ti už go dala.*
 c. *Az sâm ti go už dala.*

Assuming the structure in (33a), *už* can adjoin to TP in (37a) separating the auxiliary clitic from the pronominal ones. It can, as in (37c), also of course adjoin to the phrase below this (*vP* or some functional projection right above *vP*, given arguments in Izvorski 1993 and Lambova 2003, 2005, among others, that the participle undergoes short movement to outside of *vP*). It cannot, however, split the pronominal clitics in (37b), since these constitute a complex X^0 . Consider now (38), in the third person:

⁴² Interestingly, according to Marijana Lambova (p.c.), it is even possible for the renarrated auxiliary to front under verum focus (affirming the truth of the proposition, i.e., positive epistemic implicature), in which case it actually splits the person agreement clitic off from the pronominal clitics:

- (i) *Ti si bil mu go dal.*
 you aux_{2SG} REN_{MASC} him_{DAT} it_{ACC} given_{MASC}
 ‘(They say that) you HAVE given it to him.’

This can never happen when the participle is fronted, even in contexts where there is initial adverbial material:

- (ii) **Včera si dal mu go bil.*
 yesterday aux_{2SG} given_{MASC} him_{DAT} it_{ACC} REN_{MASC}
 ‘(They say that) yesterday you have GIVEN it to him.’
 (*Včera dal si mu go bil.*)

These facts also show that the position for verum focus is lower than that of contrastive focus. Perhaps, following Holmberg’s (2001) idea that this is best thought of as “polarity focus,” the low focus position is Pol^0 . If we furthermore adopt a system such as that of Progovac 2005, in which there is a high Pol_SP and a low Pol_OP , it may be that whereas in (i) *bil* ‘been’ fronts to Pol_O , when the (contrastively) focused participle *dal* ‘given’ fronts in (ii), it moves to Pol_S .

- (38) a. *Tja *ti* už *go* *e* *dala*.
 she you_{DAT} maybe it_{ACC} AUX_{3SG} given_{FEM}
 ‘She has maybe already given it to you.’
 b. *Tja *ti go* už *e dala*.
 c. Tja *ti go e* už *dala*.

As expected, (38a) is ungrammatical and (38c) is grammatical. What is surprising here is the impossibility of (38b). This follows, however, from the structure in (33b), since *ti go* is adjoined to *e* in T⁰. Franks and Rudin (2005) and Franks (2006a) report similar facts for aspectual adverbs. Consider where *veče* ‘already’ can go in (39):

- (39) a. *Tja *ti* veče *ja* *e* *dala*.
 she you_{DAT} already it_{ACC} AUX_{3SG} given
 ‘She has already given it to you.’
 b. *Tja *ti ja* veče *e dala*.
 c. Tja *ti ja e* veče *dala*.

Veče cannot appear anywhere inside of the complex head [T [*ti ja*] *e*]. And once again, the impossibility of separating the pronominal clitics from the auxiliary clitic only holds for *e* in (39b). As we saw in (31a), repeated as (40), this contrasts with the far more acceptable attempt to interpolate an aspectual adverb on the other side of the pronominals:

- (40) ?Az *sâm* veče *ti* *ja* *dala*?!
 I AUX_{1SG} already you_{DAT} it_{ACC} given_{FEM}
 ‘I have already given it to you?!’

I thus conclude that a structure as in (33), where the clitics do not all occupy the same functional head, is warranted for Bg.

4.4. A Note on Negation and Participle Fronting

As pointed out by Pancheva (in press), among others (e.g., Lema and Rivero 1989, Embick and Izvorski 1995, or Bošković 1995) participle fronting does not cooccur with negation in the modern South Slavic

languages, including Bg. Thus, whereas (41a) is perfectly normal, (41b) is ill-formed:

- (41) a. (Tja) *ne beše pročela knjigata.*
 she NEG had_{3SG} read_{FEM} book_{DEF}
 ‘She had not read the book.’
 b. *(Tja) *ne pročela beše knjigata.*

She argues that the negation marker *ne* and the finite verb form a complex syntactic head. Indeed, negation is not separable from the conjugated auxiliary or verb, except when the verb is immediately preceded by pronominal clitics (in Bg and Mac only, not in second position BCS or Slvn). This suggests to me that *ne* is right above Agr and proclitic on Agr (or on T, if Agr is phonologically empty). Pancheva (in press) considers various ways of blocking (41b), which need not concern us here although they certainly warrant more careful investigation. The interesting point she makes, however, is that Bg is in this regard different from Old Church Slavonic (OCS). In OCS the order *ne* + participle + auxiliary was clearly possible. Pancheva (in press) cites (42) and in the abstract for the talk on which the paper was based she offers (43):⁴³

- (42) *Ne mogli bi tvoriti ničesože.* [OCS]
 NEG could be_{COND.3SG} do_{INF} nothing_{GEN}
 ‘He couldn’t do anything.’ (John 9.33)

 (43) *Česo radi muro se ne prodano bystъ?* [OCS]
 why because perfume this NEG sold be_{PAST.3SG}
 ‘Why wasn’t this perfume sold?’ (John 12.5)

These examples form part of her general argument, contra Willis 2000, that OCS had basic T-final structures (alongside T-initial ones), whereas modern Bg is only T-initial. Thus they do not involve participle fronting in OCS, whereas in Bg that would be the only way to derive

⁴³ Roumyana Pancheva (in press and p.c.) comments that (42) is more revealing than (43), since the presence of the negative polarity item *ničesože* ‘nothing’ indicates sentential negation, whereas *ne prodano* ‘not sold’ might just be constituent negation.

them, and the participle cannot front to separate *ne* from the agreeing auxiliary.

5. Analysis of Compound Verb Constructions

This section examines the status of (1), repeated as (44), in light of the preceding discussion.

- (44) Pročela *mu ja* beše.
 read_{FEM} him_{DAT} it_{ACC} had_{3SG}
 ‘She had READ it to him (and not sung it).’

It is argued that the clitics here are not positioned by any type of TM mechanism but rather through successive syntactic adjunctions. But before turning to (44) it is necessary to examine compound verb constructions with the auxiliary before the participle, in order to show that in this order the two do not form a syntactic constituent.

5.1. When the Auxiliary Precedes the Participle

Bg has several compound tenses with tonic auxiliaries, as in pluperfect (45).⁴⁴

- (45) Ivana beše pročela knjigata.
 Ivana had_{3SG} read_{FEM} book_{DEF}
 ‘Ivana had read the book.’

It is clear that the auxiliary and the participle do not form a complex X^0 head in (45), since certain material is able to split them. Consider the following examples.⁴⁵

⁴⁴ Although their behavior supports the main claims made in this section, full consideration of additional compound verb forms is not possible within the confines of this article. Relevant auxiliaries which can co-occur with the *l*-participle are *bix* for the past conditional, *bâde* for the future perfect, and *bil* primarily for the perfect renarrated mood but with other much debated functions as well, such as (ad)mirative and dubitative.

⁴⁵ (46a) is from Krapova (1997), (46b) from Izvorski (1993), and (46c–f) from Krapova (1999). The translation of (46a) is corrected from Krapova’s original. While these

- (46) a. Ivana beše veče pročela knjigata.
 Ivana had_{3SG} already read book_{DEF}
 'Ivana had already read the book.'
- b. Marija beše napâlno zabravila za sreštata.
 Maria had_{3SG} completely forgotten about meeting_{DEF}
 'Maria had completely forgotten about the meeting.'
- c. Studentite bjaxa vsíčki pročeli knjigite.
 students_{DEF} had_{3PL} all read books_{DEF}
 'The students had all read the books.'
- d. Ivana beše nabârzo pročela knjigite.
 Ivana had_{3SG} quickly read books_{DEF}
 'Ivana had quickly read the books.'
- e. Ivana beše vinagi čela ljubovni istorii.
 Ivana had_{3SG} always read love stories
 'Ivana had always read love stories.'
- f. ?Ivana beše vinagi mnogo razkazvala za svoja život.
 Ivana had_{3SG} always much told about her_{DEF} life
 'Ivana had always told the story of her life at length.'

Example (46c) is of particular interest because Q-float indicates the availability of a specifier position between *bjaxa* 'had' and *pročeli* 'read' through which the subject *studentite* 'the students' has passed. While subjects are generally postverbal in questions, under certain conditions even they can appear between the auxiliary and the main verb, as in (47), again from Krapova 1997:⁴⁶

orders are not preferred and speaker judgments vary, they are in principle acceptable. The variation presumably depends on where speakers allow which adverbs to attach. Crucially, (46) contrasts with attempts to split a fronted participle from its auxiliary, which result in sentences that are completely out for all speakers and in all contexts.

⁴⁶ Some authors, such as Izvorski (1993), explicitly reject splitting by subjects in questions. She offers the following minimal pair but notes that native speaker intuitions vary:

- (i) Za kakvo beše napâlno zabravila Marija?
 about what had_{3SG} completely forgotten Maria
 'What had Maria completely forgotten about?'

- (47) a. Beše li Ivan pročel knjigata?
 had_{3SG} Q Ivan read_{MASC} book_{DEF}
 'Had Ivan read the book?'
 b. Kakvo beše Ivan pročel?
 what had_{3SG} Ivan read_{MASC}
 'What had Ivan read?'

Once we conclude that *beše* 'had' and *pročela* 'read' occupy distinct head positions, it is of course hardly surprising that pronominal clitics can also intervene between the auxiliary and the participle when called for by the TM effect, as in (48).

- (48) Beše mu ja pročela.
 had_{3SG} him_{DAT} it_{ACC} read_{FEM}
 'She had read it to him.'

While the order in (48) is the only one possible, we do not actually know whether this is the order provided by the syntax or the consequence of post-syntactic Local Dislocation, which repositions the clitics *mu ja* after *beše*. That is, it could simply be that the syntax provides something like (49), where *beše* is merged in a high Aux position.⁴⁷

-
- (ii) *Za kakvo beše Marija zabravila?
 about what had_{3SG} Maria forgotten
 'What had Maria forgotten about?'

Consultation with speakers reveals that factors affecting the viability of pronouncing the subject above the verb are complex, and I do not know why leaving it in Spec ν P is so favored. My guess is that, as claimed by Izvorski (1993), preverbal subjects in Bg are generally either focus or topic, and here focus would conflict with the focusing effect of the question. Topic would place *Marija* in initial position (an order which is in fact very natural). In any event, the point again is that splitting by subjects when the participle fronts is unequivocally out, whereas judgments with the order in (47) are merely strained to varying degrees.

⁴⁷ In keeping with the LCA approach to head movement, I indicate the clitics as adjoining to T⁰. Also, for the sake of explicitness I assume that the clitics pass through an inner Asp projection where they have their case checked and that the low ν P-external position occupied by the participle is an outer Asp.

(49) [Aux *beše*] [T *mu ja* + T⁰] [Asp *pročela*... [_vP... [Asp ~~*mu ja*~~...

Alternatively, it could be that *beše* is merged in an Aux position just below T, so that the syntax produces something like (50). When initial, the clitic group will subsequently undergo Morphological Merger with *beše*, as shown in (50b), to produce the desired surface order in (48).⁴⁸

- (50) a. [T *mu ja* + T⁰] [Aux *beše*] [Asp *pročela*... [_vP... [AgrO ~~*mu ja*~~...
 b. [_{CG} *mu ja*] [*beše*] [*pročela*] → [*beše* + [_{CG} *mu ja*]] [*pročela*]

Surprisingly, it turns out that both (49) and (50) may be correct.^{49, 50} When anything is added in front of (48), obviating the TM effect, two

⁴⁸ The idea that this could be done without AuxP, merging *beše* instead directly in Agr_S when it is high and in T when it is low, is appealing, but putting *beše* in T would cause problems because, as shown in (50) below, *veče* can separate the clitics from *beše*.

⁴⁹ As pointed out by an anonymous reviewer, Progovac (2005) also proposes two auxiliary positions in her analysis of BCS auxiliaries. A different reviewer sends me in the opposite direction, noting that another logical possibility is worth exploring, namely that “the position of the auxiliary is the same and it is the clitics than can be attracted to two different positions.” Roumyana Pancheva (p.c.) in support of this contention offers the following pair, where *go* can either be proclitic on the auxiliary or on the participle:

- (i) a. Tja *go* *beše* *veče* *pokanila*.
 she him_{ACC} had_{3SG} already invited_{FEM}
 b. Tja *beše* *veče* *go* *pokanila*.
 she had_{3SG} already him_{ACC} invited_{FEM}
 ‘She had already invited him.’

This could be a matter of *beše* being either low (ia) or high (ib). Alternatively, there could indeed be two positions for the pronominal clitics, possibly exploiting two T⁰ slots in the clause. As observed by the reviewer, something like this may be needed to accommodate clitic climbing (in other languages).

⁵⁰ Additional support for the proposal that there are two auxiliary positions in Bg might be drawn from the other tonic auxiliaries. Hauge (1999: 195), for example, describes the renarrated, like the perfect, as being able to appear in both high and low auxiliary positions, although speakers I have consulted ascribe semantic consequences to the different orders, as follows:

- (i) a. Tja *mu* *bila* *kazala* *vsičko*.
 she him_{DAT} REN_{FEM} told_{FEM} all
 ‘(They say, although I suspect its veracity, that) she had told him everything.’

grammatical orders emerge, (51a) and (51b), with no special difference in meaning.⁵¹

- (51) a. Tja beše *mu ja* pročela.
 she had_{3SG} him_{DAT} it_{ACC} read_{FEM}
 ‘She had read it to him.’
 b. Tja *mu ja* beše pročela.

The possibility of (51a) alongside expected (51b) suggests that something akin to structure (49) must be available. This is corroborated by application of the adverb interpolation test to (51a), since the aspectual adverb *veče* ‘already’ can appear between any of the postulated X^0 s:

- (52) Tja (veče) beše (veče) *mu ja* (veče) pročela.

The claim that there is no compelling reason for the clitics to form a single complex X^0 head with the verb in Bg leads us to expect that *veče* should also be able to intervene in (51b). This is indeed possible (for speakers who tolerate adverb interpolation), as shown by (53):

- (53) Tja *mu ja* veče beše pročela.

This approach implies that the clitics do not move just in order to be adjoined to some X^0 ; rather, pronominal clitics necessarily move to

-
- (i) b. Tja bila *mu* kazala vsiĉko.

‘(They say, and I was very surprised to hear it, that) she had told him everything.’

The behavior of conditional *bix*, on the other hand, suggests that this only occupies the high auxiliary position (or an even higher Mood head), implying a structure as in (iv):

- (ii) a. Az bix *mu ja* pročela.
 I cond_{1SG} him_{DAT} it_{ACC} read_{FEM}
 ‘I would have read it to him.’
 b. *Az *mu ja* bix pročela.

- (iii) [Mood bix] [T *mu ja*] [_v pročela]

⁵¹ This variation is reported in standard reference grammars, such as Andrejĉin et al. 1977, Stojanov 1999, or Hauge 1999. While, as Marijana Lambova (p.c.) points out, *beše* in (51) may receive verum focus, i.e., ‘She HAD read it to him.’, a poll of five other speakers confirms that the discourse-neutral interpretation is perfectly natural.

T, whereas the auxiliary clitics which show person agreement are in Agr_S. While Bošković (2001, 2002) contends that the clitics in Bg differ from those in BCS in forming a single complex head together with the verb, the adverb interpolation evidence discussed here and in Franks 2006a argues against this. Bošković applies various tests which show that the clitics occupy distinct head positions in BCS, but one cannot conclude from the failure of these tests when extended to Bg that other factors do not complicate the data. For one thing, the tests are much debated, as noted by Progovac (1996, 2000), and, for another, they consistently also fail in very closely related Slvn, as meticulously demonstrated by Golden and Milojević Sheppard (2000), despite the fact that, as shown by Bošković (2001) and Franks and King (2000), clitics in Slvn have a syntax (but crucially not a phonology) that is virtually identical to BCS. To take just one example, consider the following (near) minimal pair, from Bošković (2002: 331, fn 5):

- (54) a. Oni *su*, kao što sam vam rekla, [BCS]
 they AUX_{3PL} as that AUX_{1SG} you_{DAT} said
 predstavili *se* Petru.
 introduced REFL_{ACC} Peter_{DAT}
 ‘They, as I told you, introduced themselves to Peter.’
- b. *Te *sa*, kakto ti kazax, predstavili *se* [Bg]
 they AUX_{3PL} as you_{DAT} said_{1SG} introduced REFL_{ACC}
 na Petâr.
 to Peter
 ‘They, as I told you, introduced themselves to Peter.’

One problem with (54b), however, is that Bošković has applied otiose TM to Bg, under the impression that this is prosodically driven. With the expected order, in fact, the sentence improves somewhat:

- (55) ??Te *sa*, kakto ti kazax, *se* predstavili na Petâr.

It improves considerably more if a pronominal rather than reflexive direct object clitic is employed:⁵²

- (56) ?Te *sa*, kakto ti kazax, *gi* predstavili na Petâr.
 they AUX_{3PL} as you_{DAT} said_{1SG} them_{ACC} introduced to Peter
 'They, as I told you, introduced them to Peter.'

It thus seems to me that many aspects of clustering in Bg (as in BCS if Bošković is correct) are on the PF side of the grammar, having to do with Morphological Merger and/or prosodic phrasing rather than with syntactic-head adjunction.

5.2. Participle Fronting is Adjunction

We now turn to the crucial construction, in which the participle precedes the auxiliary. As discussed by Lambova (2003, 2004b, 2005), among others, this has a focusing effect:

- (57) Pročela beše knjigata.
 read_{FEM} had_{3SG} book_{FEM}
 'She had READ the book.'

Crucially, here no splitting is possible, and any attempt to interpolate anything comparable to the examples in (46) is strongly deviant:⁵³

- (58) a. Pročela (*veče) beše knjigata.
 read already had_{3SG} book_{DEF}
 'She had (*already) READ the book.'
- b. *Zabravila (*napâlno) beše za sreštata.
 forgotten completely had_{3SG} about meeting_{DEF}
 'She had completely FORGOTTEN about the meeting.'
- c. Pročeli (*vsički) bjaxa knigite.
 read all had_{3PL} books_{DEF}
 'They had (*all) READ the books.'

⁵² The difference between (55) and (56) is possibly due to the difference in adjunction sites for the parenthetical, which depends on the locus of reflexive *se* versus pronominal *gi*.

⁵³ Note that in all these examples I have removed the subject from initial position, as fronting is incompatible with additional focal material preceding the participle.

- (58) d. Pročela (*nabârzo) beše knjigite.
 read quickly had_{3SG} books_{DEF}
 'She had (*quickly) READ the books.'
- e. *Čela (*vinagi) beše ljubovni istorii.
 read always had_{3SG} love stories
 'She had (*always) READ love stories.'
- f. *Razkazvala (*vinagi mnogo) beše za svoja život.
 told always much had_{3SG} about her_{DEF} life
 'She had (*always) TOLD the story of her life (*at length).'

This can be taken as evidence that participle fronting in Bg involves left-adjunction of the participle to the auxiliary, so that they form a complex maximal X^0 , i.e., a MWd. For this reason, no phrasal material or anything adjoined to an XP can interrupt them. This adjunction is driven by a Focus Projection (FocP), which is situated immediately below CP. Foc attracts the participle whenever it bears focus features. On its way up to Foc, the participle adjoins to the auxiliary, creating a complex head, and the two continue to raise together.

Similarly, whatever their judgments about (47), all speakers find a clear contrast between (59a) and (59b):

- (59) a. Beše li (??Marija) kupila (Marija) kâšta?
 had_{3SG} Q Maria bought_{FEM} Maria house
 'Had Maria bought a house?'
- b. Kupila li (**Marija) beše (Marija) kâšta?
 bought_{FEM} Q Maria had_{3SG} Maria house
 'Had Maria BOUGHT a house?'

It will be noted that the question particle *li* can intervene in (59b), just as it can in (59a). However, since I take this to be a consequence of PI as discussed in section 3.1, the fact that *li* can split the participle + auxiliary complex does not contradict its MWd status.

Much more troublesome than splitting by *li*, on the other hand, is the fact that the pronominal and verbal auxiliary clitics can also appear between the participle and the auxiliary. Thus, parallel to (48), we have (1), repeated again as (60):

- (60) Pročela *mu ja* beše.
 read_{FEM} him_{DAT} it_{ACC} had_{3SG}
 'She had READ it to him (and not sung it).'

If the TM effect involves Morphological Merger, and if *pročela beše* constitute a complex X^0 , as indicated by their otherwise impenetrable cohesion, then the principle in (24) faces a dilemma: there is no credible sense in which the clitic cluster is analyzable as a SWd. Local Dislocation of SWds, but not of MWds, places them internal to a MWd. This is clearly inconceivable with Bg clitics, as demonstrated by any attempt for the clitics to target the prefix *pro-*, the participial suffix *-l-*, or the agreement inflection *-a* of *pročela* in (61):

- (61) a. **pro-mu ja-čela*
 b. **proče-mu ja-la*
 c. **pročel-mu ja-a*

I therefore conclude that (60) cannot be analyzed in terms of post-syntactic Local Dislocation of the clitics onto the following verbal head.

5.3. Getting the Right Order in Compound Tenses

In this final section I sketch the form a solution might take that does not come up against the Distributed Morphology principle in (24). Since *mu ja* cannot undergo Local Dislocation to be placed inside the complex head *pročela beše*, the only way to construct this order is to create it through successive adjunctions in the syntax, creating one large X^0 . As expressed in (2), there are only two possible alternatives. These structures are given again in (62), assuming movement is ultimately to Foc and the LCA as always gives rise to left-adjunction upon linearization.

- (62) a. [_{Foc} pročela + [[_{CG} *mu ja*] + [beše]]]
 b. [_{Foc} [pročela + [_{CG} *mu ja*]] + [beše]]

That is, either, as in (62a), the clitics adjoin to *beše* before the participle *pročela* does, or else, as in (62b), the participle first adjoins to the clitics and then this unit adjoins to *beše*.

Recall that on the basis of (51) we were led to posit two base positions for the auxiliary, one high and the other low with respect to T. Since the pronominal clitics have been argued to be in T, fronting of the participle should interact with the posited structures in specific ways. Consider what happens if the high position is used for *beše*, as in (49). This produces the structure in (62b), with each adjunction indicated as follows:

- (63) a. $[_{\text{Aux}} \text{beše}] [_{\text{T}} \text{mu ja} + \text{T}^0] [_{\text{Asp}} \text{pročela}] \rightarrow$
 b. $[_{\text{Aux}} \text{beše}] [_{\text{T}} [_{\text{Asp}} \text{pročela}] + [_{\text{T}} \text{mu ja} + \text{T}^0]] \rightarrow$
 c. $[_{\text{Aux}} [_{\text{T}} [_{\text{Asp}} \text{pročela}] + [_{\text{T}} \text{mu ja} + \text{T}^0]] [_{\text{Aux}} \text{beše}]$

Now we take the low position for *beše*, as in (50), again indicating the adjunction steps:

- (64) a. $[_{\text{T}} \text{mu ja} + \text{T}^0] [_{\text{Aux}} \text{beše}] [_{\text{Asp}} \text{pročela}] \rightarrow$
 b. $[_{\text{T}} \text{mu ja} + \text{T}^0] [[_{\text{Asp}} \text{pročela}] [_{\text{Aux}} \text{beše}]] \rightarrow$
 c. $[[[_{\text{Asp}} \text{pročela}] [_{\text{Aux}} \text{beše}]] [_{\text{T}} \text{mu ja} + \text{T}^0]]$

Interestingly, this does not result in splitting at all. It turns out, however, that contrastive focusing of the *l*-participle can also lead to the (admittedly marked) order in (65).

- (65) [?]*Pročela beše mu ja, (a ne razkazala).*
 read_{FEM} had_{3SG} him_{DAT} it_{ACC} and NEG told
 ‘She had READ it to him (and not related it).’

This is predicted by the derivation in (64). We thus find support for the complex X^0 structure in (62b) over that in (62a).⁵⁴ Moreover, since I ar-

⁵⁴ Example (62a) would require adjunction of the clitics to the auxiliary before the merging of the Foc head that attracts the participle. While it is hard to be sure that this does not occur, as argued in the text, nothing in the syntax seems to cause the clitics to adjoin to anything except T. (This of course begs the important question of what attracts them to T.)

gue that only the participle + auxiliary order involves adjunction, there is no way to derive the impossible (66):⁵⁵

- (66) *Beše pročela *mu* *ja*.
 had_{3SG} read_{FEM} him_{DAT} it_{ACC}

I conclude that (1) is indeed created in the syntax, with a structure as in (62a).

The claim that the order of elements in (1) is the output of syntax, which means that the kind of mismatch between morphological and syntactic structures elsewhere observed in Bg is not at play here, makes one further interesting prediction. Since there is no syntactic representation in which the clitics precede the participle, hence no reason to invoke Local Dislocation, we would not expect an order with the clitics preceding the participle to reemerge in constructions where the complex is non-initial. That is, TM as a last-resort operation implies “anti-TM” effects as well, just in case its conditioning factors are not met. But this never happens with the participle + auxiliary order, a

⁵⁵ Note that Bošković’s (1995) account of similar facts in BCS involves adjunction under either order. He analyzes BCS (i) and (ii) in terms of participles *bili* and *čekali* each independently adjoining to clitic auxiliary *ste*, with direction of adjunction free, contra Kayne 1994:

- (i) [[Bili₁ ste] čekali₂] t₁ t₂ Marijinu prijateljicu. [BCS]
 were aux_{2PL} waited Maria’s friend

‘You had been waiting for Maria’s friend.’

- (ii) [Čekali₂ [ste bili₁]] t₁ t₂ Marijinu prijateljicu.

However, he further compares (iii) and (iv)

- (iii) (*)Čekali bili ste Marijinu prijateljicu. [BCS]
 waited were aux_{2PL} Maria’s friend

‘You had been waiting for Maria’s friend.’

- (iv) **Bili čekali ste Marijinu prijateljicu.

Bošković states that, while (iv) is egregious for all speakers, (iii) is acceptable to the extent that an intonational break can follow the initial participle *čekali* ‘waited’. That is, the syntax can produce (iii), the only question is whether or not it is filtered out at PF (by prosodic requirements on the clitic *ste* that do not hold in Bg), but (iv) is not derivable since *bili* must adjoin first. Curiously, these facts and others about BCS compound tenses not discussed in Bošković 1995 but corroborated by Željko Bošković (p.c.), are comparable to Bg, despite other obvious differences in clitic placement between the two languages.

quite surprising fact given the usual behavior of Bg clitics. While no other focus can precede the participle, other non-focus material is acceptable in various contexts. Crucially, as shown in (67), this material invariably fails to provide support for the clitics. Instead, the only way these sentences can emerge is with the participle preceding the clitics:

- (67) a. *...če *mu ja* pročela beše.
 that him_{DAT} it_{ACC} read_{FEM} had_{3SG}
 ‘...that she had READ it to him.’
 (...če pročela *mu ja* beše.)
- b. *...i *mu ja* pročela beše.
 and him_{DAT} it_{ACC} read_{FEM} had_{3SG}
 ‘...and she had READ it to him.’
 (...i pročela *mu ja* beše.)
- c. *Tâkmo *mu ja* pročela beše.
 just him_{DAT} it_{ACC} read_{FEM} had_{3SG}
 ‘She had just READ it to him.’
 (Tâkmo pročela *mu ja* beše.)

Since we know that there is absolutely nothing wrong on the PF-side with the orders in (67), it must be that they do not arise for the simple reason that the syntax never produces them in the first place. On the other hand, the orders in (68), with the auxiliary first hence no focusing, are generated by the syntax and are, as expected, perfectly grammatical:

- (68) a. ...če *mu ja* beše pročela.
 ‘...that she had read it to him.’
- b. ...i *mu ja* beše pročela.
 ‘...and she had read it to him.’
- c. Tâkmo *mu ja* beše pročela.
 ‘She had just read it to him.’

These facts corroborate my claim that the reason the participle precedes the clitics in (1) is because it adjoins to them in the syntax and

not through any type of Local Dislocation operation. Thus, the problem of coming up against the Distributed Morphology principle in (24) never even arises.

Macedonian also displays anti-TM effects that support a syntactic analysis for ordering the participle before the clitics. Recall that Mac lacks the Bg prohibition against Utterance initial clitics, hence is not expected to have any TM effects at all. There are nonetheless constructions in which clitics fail to be in initial position and, predictably, participle fronting is one of them. While the particular pluperfect construction considered in this paper is lacking in Mac, Olga Mišeska Tomić (p.c.) provides the following comparable paradigm:

- (69) a. *Go imam kupeno.* [Mac]
 it_{ACC} have_{1SG} bought
 ‘I have bought it.’
 (**Imam go kupeno.*)
- b. *Kupeno go imam (ama ne go imam pročitano).*
 bought it_{ACC} have_{1SG} but NEG it_{ACC} have_{1SG} read
 ‘I have BOUGHT it (but not read it).’
 (**Go kupeno imam...*)

The clitic is, as expected, initial in (69a), but when the participle fronts the clitic must follow it. Since there is no PF-side reason why the ungrammatical order *go kupeno* in (69b) should not be acceptable, it must be that the syntax simply fails to produce it.

6. Conclusion

In this paper, I have assumed, along with Embick and Noyer (2001: 560), that “morphological structure is, unless further operations apply at PF, simply syntactic structure.” In this context, I first considered two classes of approach to positioning clitics within the clause in Bulgarian, specifically with regard to the Tobler-Mussafia effect, and noted problems for each. One kind of approach relies exclusively on head-adjunction in the syntax and another makes use of additional post-syntactic Local Dislocation mechanisms. I argued against an integrated head-adjunction approach, which, although it eschews PF-movement,

still requires heavily modulated PF-filtering in the guise of word-internal scattered deletion. Morphological Merger, although it is likely to be needed elsewhere for resolving mismatches between prosodic or morphological requirements and the output of the syntax, cannot straightforwardly accommodate placement of the clitics between a fronted participle and its auxiliary. I have proposed a solution that instead creates the necessary structure directly in the syntax, crucially by fronting and adjoining the participle to the clitics, and I have shown how such an approach might work in a variety of constructions.

References

- Abel, V. P. (1975) "The transposition of pronominal and verbal enclitics in the štokavian dialect of Serbo-Croat". *The Slavonic and east European review* 53(130): 1–16.
- Andrejčin, L., K. Popov, and S. Stojanov. (1977) *Gramatika na bŕlgarskija ezik*. Sofia: Nauka i izkustvo.
- Billings, Loren. (2002) "Why clitics cluster together in Balkan Slavic: Non-templatic morphology". Jindřich Toman, ed. *Formal approaches to Slavic linguistics: The second Ann Arbor meeting*. Ann Arbor, MI: Michigan Slavic Publications, 75–96.
- . (2004) "Review of Bošković 2001". *Journal of Slavic linguistics* 12: 291–328.
- Bonet, Eulàlia. (1995) "Feature structure of Romance clitics". *Natural language and linguistic theory* 13: 607–47.
- Bošković, Željko. (1995) "Participle movement and second position cliticization in Serbo-Croatian". *Lingua* 96: 245–66.
- . (1997) *The syntax of nonfinite complementation: An economy approach*. Cambridge, MA: MIT Press.
- . (2001) *On the nature of the syntax-phonology interface*. Amsterdam: Elsevier.
- . (2002) "Clitics as nonbranching elements and the linear correspondence axiom". *Linguistic inquiry* 33: 329–40.
- Chomsky, Noam. (1965) *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.

- Chomsky, Noam. (1995) "Bare phrase structure". Gert Webelhuth, ed. *Government and binding theory and the Minimalist Program*. Cambridge, MA: Blackwell, 383–439.
- Embick, David and Roumyana Izvorski. (1995) "On long head movement in Bulgarian". *Proceedings of the Eastern States Conference on Linguistics* 11: 104–15.
- . (1997) "Participle-auxiliary word order in Slavic". Wayles Browne et al., eds. *Formal approaches to Slavic linguistics: The Cornell meeting*. Ann Arbor, MI: Michigan Slavic Publications, 210–39.
- Embick, David and Rolf Noyer. (2001) "Movement operations after syntax". *Linguistic inquiry* 32: 555–95.
- Englund, Birgitta. (1977) *Yes/no questions in Bulgarian and Macedonian*. Stockholm: Almqvist and Wiksell International.
- Franks, Steven. (1998) "Clitics in Slavic". Paper presented at the Comparative Slavic Morphosyntax Workshop, Spencer, IN, June, 1998. [Available on line at <www.indiana.edu/~slavconf/linguistics/frnks.pdf>.]
- . (2000) "Clitics at the interface". Frits Beukema and Marcel den Dikken, ed. *Clitic phenomena in European languages*. Amsterdam: John Benjamins, 1–46.
- . (2006a) "Adverb interpolation in the Bulgarian clitic cluster". Robert A. Rothstein, Ernest Scatton, and Charles E. Townsend, eds. *Studia caroliensia: Papers in linguistics and folklore in honor of Charles E. Gribble*. Bloomington, IN: Slavica, 117–33.
- . (2006b) "Another look at *li* placement in Bulgarian". *The linguistic review* 23: 161–211.
- . (2007) "Clitic placement in Bulgarian compound tenses: PF-side versus syntactic approaches". *IULC working papers online*. [Available at: <<https://www.indiana.edu/~iulcwp/contents.cgi?which=7>>.]
- . (2008) "The fine structure of the Bulgarian compound tenses". Paper presented at *Balkan and south Slavic conference* 16, Banff, May 1–4, 2008.
- . (in press). "South Slavic clitics: Balkanization or unification?". Boštjan Dvořák, ed., *Proceedings of Slavic Linguistics Society* 2, Berlin, August 2007.
- Franks, Steven and Željko Bošković. (2001) "An argument for multiple Spell-Out". *Linguistic inquiry* 32: 174–83.

- Franks, Steven and Catherine Rudin. (2005) "Bulgarian clitics as K^0 heads". Steven Franks, Frank Y. Gladney, and Mila Tasseva-Kurktchieva, eds. *Formal approaches to Slavic linguistics: The South Carolina meeting*. Ann Arbor, MI: Michigan Slavic Publications, 104–16.
- Golden, Marija and Milena Milojević Sheppard. (2000) "Slovene pronominal clitics". Frits Beukema and Marcel den Dikken, eds. *Clitic phenomena in European languages*. Amsterdam: John Benjamins, 191–207.
- Halpern, Aaron. (1992) *Topics in the placement and morphology of clitics*. PhD dissertation, Stanford University.
- Hauge, Kjetil Rå. (1999) *A short grammar of contemporary Bulgarian*. Bloomington, IN: Slavica.
- Holmberg, Anders. (2001) "The syntax of yes and no in Finnish". *Studia linguistica* 55: 141–75.
- Izvorski, Roumyana. (1993) "On *wh*-movement and Focus-movement in Bulgarian". Paper presented at the second Conference of the Student Organization of Linguistics in Europe (CONSOLE), University of Tübingen.
- Kayne, Richard. (1994) *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- King, Tracy H. (1994) "Focus in Russian yes–no questions". *Journal of Slavic linguistics* 2: 92–120.
- Klavans, Judith. (1982) *Some problems in a theory of clitics*. PhD dissertation, University College, London.
- Krapova, Iliyana. (1997) "Auxiliaries and complex tenses in Bulgarian". Wayles Browne et al., eds. *Formal approaches to Slavic linguistics: The Cornell meeting*. Ann Arbor, MI: Michigan Slavic Publications, 320–44.
- . (1999) "The system of auxiliaries in Bulgarian". Mila Dimitrova-Vulchanova and Lars Hellan, eds. *Topics in south Slavic syntax and semantics*. Amsterdam: John Benjamins, 59–89.
- Lambova, Mariana. (2002) "Is head movement syntactic: Evidence from Bulgarian?" *MIT Working Papers in Linguistics* 43: 89–102.
- . (2003) *On information structure and clausal architecture: Evidence from Bulgarian*. PhD dissertation, University of Connecticut.

- Lambova, Mariana. (2004a) "V(P) fronting and V raising in Bulgarian". Olga Arnaudova, Wayles Browne, Maria Luisa Rivero, and Daniela Stojanović, eds. *Formal approaches to Slavic linguistics: The Ottawa meeting*. Ann Arbor, MI: Michigan Slavic Publications. 269–92.
- . (2004b) "On triggers of movement and effects at the interfaces". Anne Breitbarth and Henk van Riemsdijk, eds. *Triggers*. Berlin: Mouton de Gruyter, 231–58. [*Studies in generative grammar*, 75]
- . (2005) "On adjunction and excorporation". Steven Franks, Frank Y. Gladney, and Mila Tasseva-Kurktchieva, eds. *Formal approaches to Slavic linguistics: The South Carolina meeting*. Ann Arbor, MI: Michigan Slavic Publications, 181–94.
- Legendre, Géraldine. (2000) "Morphological and prosodic alignment of Bulgarian clitics". J. Dekkers, F. van der Leeuw, and J. van de Weijer, eds. *Optimality Theory: Syntax, phonology, and acquisition*. Oxford: Oxford University Press, 423–62.
- Lema, José and María-Luisa Rivero. (1989) "Long head movement: ECP vs. HMC. *Proceedings of the North East Linguistics Society* 20: 333–47.
- Migdalski, Krzysztof. (2003) "Participle preposing in Bulgarian". Piotr Bański and Adam Przepiórkowski, eds. *Generative linguistics in Poland: Morphosyntactic investigations*. Warsaw: Instytut Podstaw Informatyki PAN, 79–91.
- . (2005) "To have or to be: On the syntax of perfect tenses in South Slavic". Steven Franks, Frank Y. Gladney, and Mila Tasseva-Kurktchieva, eds. *Formal approaches to Slavic linguistics: The South Carolina Meeting*. Ann Arbor, MI: Michigan Slavic Publications, 230–40.
- . (2006) *The syntax of compound tenses in Slavic*. Utrecht: LOT Dissertation Series.
- Mišeska Tomić, Olga. (1996) "The Balkan Slavic clausal clitics". *Natural language and linguistic theory* 14: 811–72.
- Moro, Andrea. (2000) *Dynamic antisymmetry*. Cambridge, MA: MIT Press.
- Nespor, Marina and Irene Vogel. (1986) *Prosodic phonology*. Dordrecht: Foris

- Pancheva, Roumyana. (2005) "The rise and fall of second position clitics". *Natural language and linguistic theory* 23: 103–67.
- . (in press) "Head-directionality of TP in Old Church Slavonic". Andrei Antonenko et al., eds. *Formal approaches to Slavic linguistics: The Stony Brook meeting*. Ann Arbor, MI: Michigan Slavic Publishers, 313–32.
- Percus, Orin. (1993) "The captious clitic". Unpublished ms., MIT.
- Progovac, Ljiljana. (1996) Clitics in Serbian/Croatian: Comp as the second position". Aaron Halpern and Arnold Zwicky, eds. *Approaching second: Second position clitics and related phenomena*. Stanford: CSLI Publications, 411–28.
- Progovac, Ljiljana. (2000) "Where do clitics cluster?" Frits Beukema and Marcel den Dikken, eds. *Clitic phenomena in European languages*. Amsterdam: John Benjamins, 249–58.
- . (2005) *A syntax of Serbian: Clausal architecture*. Bloomington, IN: Slavica.
- Rivero, María-Luisa. (1993) "Bulgarian and Serbo-Croatian yes–no questions: V⁰-raising to *-li* versus *-li* hopping". *Linguistic inquiry* 24: 567–75.
- Rudin, Catherine, Tracy King, and Roumyana Izvorski. (1998) "Focus in Bulgarian and Russian yes–no questions". *UMass occasional papers* 21: 209–25.
- Rudin, Catherine, Christina Kramer, Loren Billings, and Matthew Baerman. (1999) "Macedonian and Bulgarian *li* questions: Beyond syntax". *Natural language and linguistic theory* 17: 541–86.
- Rudnickaya, Elena. (2000) "The derivation of yes–no *Li* questions in Russian: Syntax and/or phonology?" Tracy H. King and Irina Sekerina, eds. *Formal approaches to Slavic linguistics: The Philadelphia meeting*. Ann Arbor, Mich: Michigan Slavic Publications, 347–62.
- Schütze Carson. (1994) "Serbo-Croatian second position clitic placement and the phonology syntax interface". *MIT working papers in linguistics* 21: 373–473.
- Sproat, Richard. (1985) *On deriving the lexicon*. Cambridge, MA: Dept. of Linguistics and Philosophy, Massachusetts Institute of Technology. (MIT working papers in linguistics.)
- Stojanov, S. (1999) *Gramatika na bâlgarskija knižoven ezik*. Sofia: Abagar.

- Willis, David. (2000) "Verb movement in Slavonic conditionals". Susan Pintzuk, George Tsoulas, and Anthony Warner, eds. *Diachronic syntax: Models and mechanisms*. Oxford: Oxford University Press, 322–48.
- Witcombe, Melissa. (2008) "Verbal auxiliary *je* behavior in Serbo-Croatian". Unpublished ms., Indiana University.
- Zwicky, Arnold. (1987) *On clitics*. Bloomington, IN: Indiana University Linguistics Club.

Steven Franks
Indiana University
Memorial Hall 322
1020 East Kirkwood Avenue
Bloomington, Indiana 47405-7103
USA
franks@indiana.edu

Received: August 2007
Revised: May 2008