

CLITIC PLACEMENT IN BULGARIAN COMPOUND TENSES: PF–SIDE VERSUS SYNTACTIC APPROACHES*

Steven Franks

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 + auxiliary]. These involve a participle fronted for focus reasons. I argue that prosodic and morphological approaches are inadequate, 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 Introduction

1.1 The 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

- (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. Over the years, there has been much debate over the nature and status 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 & Noyer (2001), but rather through successive syntactic head movements. (1) should therefore be ascribed a syntactically created complex head structure, as in (2a) or (2b).

- (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 our eventual examination of (1) in more depth in section 4.

* This article has benefited greatly from the comments of several anonymous reviewers, as well as from discussions with Željko Bošković, Andrea Calabrese, David Embick, Iliyana Krapova, Marijana Lambova, and Ljiljana Progovac. I also wish to thank the following Bulgarian speaking linguists for their judgments and advice (although this is not 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 For ease of identification, relevant clitics are italicized throughout this paper.

1.2 *The Tobler–Mussafia Effect*. Within a clause, clitics in Bulgarian ordinarily appear immediately before the verb, regardless of how much material precedes them.²

- (3) Včera v gradinata Daniela sigurno mu dade snimkite.
 yesterday in garden.DEF Daniela surely him.DAT gave pictures.DEF
 ‘Yesterday, in the garden, Daniela 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 Serbian/Croatian (SC). 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).³

- (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 then follow the verb instead. In the Romance linguistics tradition, I 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

² For an overview of Bg clitics, see Franks & King (2000: 48–67).

³ I gloss both second singular *si* and third singular *e* as “aux”, although, as discussed below, I regard them as occupying distinct positions, the former being a subject–agreement marker and the latter essentially a tense head.

initial position within the clause, a promising way of understanding (6) is to derive it through some kind of post-syntactic local reordering operation. 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 (6').⁴

(6') a. # [si mu gi] [pokazvala] → # [pokazvala] [si mu gi]

b. # [mu gi e] [pokazvala] → # [pokazvala] [mu gi e]

2 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).⁵ 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.⁶ As Embick & Noyer (2001: 556–557) 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.”⁷ Given this, the question raised by (1) is whether the word order simply reflects the output of the syntax, as depicted in (2), or 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 (7).

(7) [mu ja] [pročela] [beše] → [pročela] [mu ja] [beše]

2.1 Prosodic Inversion. 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 saving 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

⁴ The symbol “#” is merely meant to indicate the left edge of the clause; in the next section I show that its status cannot be phonological.

⁵ 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.

⁶ 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 (cf. e.g. Embick & Noyer 2001) and minimalism of various ilks (cf. e.g. Moro 2000).

⁷ 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.

of PI as the explanation for why clitics can split off nominal expressions (typically NPs but also PPs where the P is proclitic) in Serbian/Croatian (SC). Since the force of subsequent arguments is I believe that there is no real need to invoke PI in order to accommodate the SC splitting facts,⁸ in order to illustrate its effects I turn instead to a far more persuasive case for PI 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.⁹ In neutral Yes/No questions, this will be the verb.¹⁰

- (8) 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.

- (9) 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 that element is a clitic, then *ne* plus the now stressed clitic constitutes an independent prosodic word and provides a host for *li*, as in (10), from Rivero (1993).¹¹

⁸ See for example the discussions in Franks & King (2000), Bošković (2002), and Progovac (2005), as well as references therein.

⁹ The literature on the syntax and semantics of *li* (in Bg and other Slavic languages) is far too vast to do justice to it in this paper; see, among others, Englund (1977), Rivero (1993), King (1994), Rudin, King, & Izvorski (1998), Rudin, Kramer, Billings, & Baerman (1999), Franks & King (2000: 349–57), Rudnickaya (2000), and especially Bošković (2001: 197–253) for discussion of the special prosodic and focus properties of *li*.

¹⁰ When the verb is followed by clitics, *li* separates them from the verb:

- (i) Dade *li* *mu* *ja* Ana?
 gave Q him.DAT it.ACC Ana
 ‘Did Ana give it to him?’

This intervention effect could be derived in at least the following three ways, depending on how one conceives of TM effects and their interaction with *li* pronunciation: (i) by applying Local Dislocation to the clitics, as described in the section 2.2, and then letting PI of *li* target the minimal prosodic word *dade* to its right; (ii) by invoking scattered deletion, as discussed in section 3.2, to remove offending copies of the clitics in PF; (iii) by positioning *li* with respect to the prosodic word *dade* prior to application of Local Dislocation TM of *mu ja*. In Franks (2006), I argue for the third kind of approach.

¹¹ Rivero (1993) attempts a purely syntactic account of the *li* facts. She maintains that, whenever the auxiliary of verb precedes *li* it has undergone (sometimes long) head movement to *li* in C; but see Izvorski (1993) for arguments against movement to C and Franks & King (2000) and references therein for problems with LHM. Since this clearly cannot work for (14), Rivero proposes instead a syntactic lowering analysis, whereby *li* lowers from C, left-adjointing to the

- (10) Ne *mu* li ispratix kniga?
 neg him.DAT Q sent1SG 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 (11).

- (11) a. Ne *mu* li *ja* dade Ana?
 neg him.DAT Q it.ACC gave Ana
 ‘Didn’t Ana give it to him?’
- b. Ne *si* li *mu* *gi* pokazvala?
 neg aux.2SG Q him.DAT them.ACC given
 ‘Haven’t you shown them to him?’
- c. Ne *mu* 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.¹² The result is that, when the prosodic conditions so dictate, *li* ends up splitting clitic sequences that are otherwise never separable.¹³ (11c) thus has prosodic structure in (16), where “ω” indicates a prosodic word.

- (12) li [_ω ne *mú*] [_ω *gi e* pokazvala] → [[_ω ne *mú*] + li] [_ω *gi e* pokazvala]

finite verb in the Agr/T+V complex. Rivero (1993) unfortunately does not consider examples where the clitic group is split as in (11), which syntactic lowering of this type obviously fails to produce.

¹² While this is essentially the standard account, as put forward in King (1994), Rudin, King, & Izvorski (1998), Rudin, Kramer, Billings, & Baerman (1999), Franks & King (2000: 349–57), and Rudnickaya (2000), Željko Bošković (p.c.) objects that this account 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 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?’

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

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

¹³ See Rudnickaya (2000) for obligatory splitting of otherwise inseparable phrases by *li* in Russian.

That is, *li* is enclitic on *ne mu* and *gi e* is proclitic on *pokazvala*.¹⁴ The fact that *li* splits the two pronominal clitics indicates that its placement must be purely prosodic, since even aspectual adverbials such as *veće* ‘already’ or particles like *už*, *maj* ‘maybe’ that sometimes break up the clitics + verb sequence can never do this.¹⁵

- (13) 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*.

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.

2.2 *Morphological Merger*. It is a relatively straightforward matter to dismiss PI as the force behind whatever causes the clitics to follow the verb in (6), repeated below.

- (14) 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 & Bošković (2001) *inter alia*,

¹⁴ Note that, if Bošković (1995) is correct that participles (in SC 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 a structural syntactic movement one. Also, comparison with SC 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, SC 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?

¹⁵ The significance of adverb interpolation is discussion in section 4.1 below; cf. also Bošković (2001: 222), Billings (2002), and Franks (2006). Thanks go to Marijana Lambova for drawing *už* and *maj* to my attention.

elements such as *i* ‘and’ which cannot serve as prosodic hosts nonetheless obviate TM.¹⁶

- (15) Kupix na Ivan edna kniga i *mu* *ja* pročetox.
 bought.1SG for Ivan one kniga 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 (16), where the clitics remain in front of the verb even when preceded by syntactic units which necessarily induce an intonational boundary; cf. Nespor & Vogel (1986):¹⁷

- (16) 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 čipa ...
 if someone who is with me me.DAT gives several 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* poznaváš
 after as aux.2SG lived enough with a woman her.ACC know.2SG
 mnogo dobre.
 very well
 ‘After you have lived with a woman enough, you know her very well.’

This telling fact, sometimes noted in passing (cf. e.g. Bošković (2001: 218, fn. 7); Pancheva (2005: 114, fn. 7)) but typically suppressed, shows us that the appropriate generalization should

¹⁶ 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 SC, the order in (15) would be impossible, showing that *i* is not a valid prosodic host for clitics.

¹⁷ Copular *e* is even able to constitute a completely independent intonational phrase, as in the following example:

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

not be couched in prosodic terms. The examples in (16), in which the clitics are initial in their intonational phrases, show that TM is neither a consequence of lexical enclitic status, as typically claimed, nor is it a consequence of some need for the clitics to be second in their intonational phrase, as Pancheva (2005) proposes. The TM effect is apparently sensitive to clause-initiality in a morphosyntactic sense, and should therefore be viewed as the result of some kind of morphosyntactic rather than prosodic process.

What additional properties must this process have? First, it applies obligatorily when needed but never otherwise. Second, it never disturbs the ordering of the clitics among themselves. Third, in order for it to apply, the clitic group cannot contain any intervening material, but must instead be treated as a seamless whole. To see this, compare ungrammatical (17b) with (13a), repeated as (17a).

- (17) 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 that targets the clitics, as a group, and combines them with the adjacent verb so that they follow rather precede this verb.¹⁸ This can be handled in the morphology by rebracketing the clitics as a “Clitic Group” and subjecting them to the (reordering) Morphological Merger process of Local Dislocation, as follows:¹⁹

- (18) 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*]] ...

As discussed in Embick & Noyer (2001), Local Dislocation is a type of Merger which applies after Vocabulary Insertion to manipulate already linearized strings.

The following scenario seems reasonable. As will be argued in section 4.1, 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 AgrS⁰, 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.²⁰ It is only subsequent to Vocabulary

¹⁸ Note that very closely related Macedonian differs from Bg in lacking TM effects, supporting the view that the reordering found in Bg is the result of a last resort operation.

¹⁹ The morphological “Merger” operation (of which PI may well also be an instance) must be kept distinct from the term “merge,” which I reserve for its syntactic sense.

²⁰ While complex PF–side adjustment of elements within the clitic group is not common in Slavic, it is well-known in Romance linguistics. As discussed in Bonet (1995) *inter alia*, rules manipulating morphological structure must precede insertion of actual phonological forms. I

Insertion that a Local Dislocation process applies when necessary, as in (18). However, as shown earlier in this section, “necessary” here cannot mean to avoid prosodic ill-formedness, but rather so as not to be initial in the clause. While it is not easy to pin down the correct characterization of non-initiality relevant here, the evidence suggests that it must refer to the clausal Spell–out domain. This could be understood in syntactic terms as the highest phase in the verb’s extended domain.²¹ Alternatively, it may be still be possible to translate the relevant notion back into prosodic terms if something like Nespor & Vogel’s (1986) Utterance ultimately turned out to be the correct domain.²² For the purposes of this paper, however, it suffices merely to distinguish the TM effect as a Local Dislocation process, one that seems to rectify clitic initiality in the clause, from the kind of PI that applies to *li*.

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.

- (19) 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 after the participle, after the syntax has left them in position? In order to address this question, one important concern for the subsequent discussion will be the principle in (20), from Embick & Noyer (2001), their (47).

- (20) 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.

- (21) 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 (20) which, I will argue, creates a problem for treating clitic placement in Bg compound verb construction (19) in terms of Local Dislocation. I will further show that the order in (19) obtains even when TM should not be invoked, implying that it is never the reason why clitics split participles from auxiliary verbs.

thank Andrea Calabrese for drawing my attention to the need to form a clitic group on which the relevant rules can operate.

²¹ This phase is not necessarily CP since I assume, following Bošković (1997), among others, that only necessary functional structure is projected.

²² If so, the domain for non-initiality for *li* would be the Prosodic Word, for SC enclitics it would be Nespor and Vogel’s I–phrase, and for the Bg clitics it would be the Utterance.

3 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 (19). In this section we therefore consider some general issues and specific proposals about the syntax of clitic placement.²³

3.1 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.²⁴ 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).²⁵ 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 (22a), the eventual result is a complex head with the general structure in (22b), Bošković’s (16a) and (16b), respectively.²⁶

(22) a. $[_{VP} si [_{V'} [_{AgrIOP} mu [_{AgrDOP} gi [_{AgrDO'} [_{VP} dal]]]]]]]]]$

b. $[[si_n + [mu_1 + [gi_j + dal_i]_k]_m] [_{VP} t_n [_{V'} t_m [_{AgrIOP} t_1 [_{AgrIO'} t_k [_{AgrDOP} t_j [_{AgrDO'} t_i [_{VP} t_i]]]]]]]]]]]$

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.²⁷ In section 3.3, although I reject the kind of highly articulated structure in (22b), I too will exploit the LCA.

²³ There is a vast literature on this topic; for Slavic, see Franks & 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).

²⁴ 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 & Rudin (2005) we argue that Slavic pronominal clitics are merged as K^0 heads of argument KPs. In Bg (but not SC, 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.

²⁵ 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 as part of the mapping procedure to PF, as a desideratum of linearization.

²⁶ The precise labels of the categories are not crucial.

²⁷ 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 3.3, the result provides too much internal structure.

3.2 *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 (22) produced? I turn now to the second concern, postponing a more careful consideration of the first until the next section. The TM effect is of obvious concern here. Bošković (2001) and Franks & Bošković (2001) analyze TM in terms of scattered deletion of SWds.²⁸ Under this account, for example, (6)/(14) would have to be treated as follows, with pronounced copies underlined and in boldface:

- (23) a. [_{si} + [_{mu} + [_{gi} + **pokazvala**]]] [_{si mu gi} ~~pokazvala~~ ... [= (6a)/(14a)]
- b. [_e + [_{mu} + [_{gi} + **pokazvala**]]] [_{e mu gi} ~~pokazvala~~] ... [_{e mu gi} ~~pokazvala~~...
[= (6b)/(18a)]

This is Bošković’s alternative to the kind of Local Dislocation approach schematized in (18), repeated in (24).

- (24) 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}]] ...

For him, PF–side reordering mechanisms do not exist, so there should never be any need to invoke them.²⁹ Instead, the correct copies are pronounced through the complex interaction of PF requirements that filter out the offending copies. In order to produce (24), 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 (11c), repeated as (25a).

- (25) a. Ne *mu* li *gi* *e* pokazvala?
NEG him.DAT Q them.ACC aux.3SG showed.FEM
‘Hasn’t she shown them to him?’

²⁸ 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.

²⁹ Although Bošković (1995, 2001) does in fact assume a version of Morphological Merger, his view of it is highly restrictive. Bošković (2001: 84) states 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 the morphology to do, however; it seems tantamount to rejecting Distributed Morphology entirely, given the many arguments for reordering Merger in Embick & Noyer (2001) and other works.

(25) b. [ne + [e + [m u + {gi + pokazvala}]]] + li {ne e mu gi pokazvala] ... {ne e mu gi pokazvala ...

(25b) obtains by virtue of a third PF stipulation, 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 (21a)), so that the copies of the five clitics (*ne*, *mu*, *li*, *gi*, and *e*) in (25) that are actually pronounced each belong to different parts of the structure.

3.3 *A Finer Structure*. In this section, 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 below, can be handled in purely syntactic terms.³⁰

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

I do not see scattered deletion as a particularly elegant or explanatory solution, and here catalog some reservations about invoking this mechanism so cavalierly. First, it is not clear that extending the copy and delete approach to SWds is either desirable or necessary; its application, like that of ellipsis in general, might be restricted to syntactic constituents and limited from looking inside of complex X^0 s. Second, also on the conceptual side, I note that it requires prosodic properties of specific vocabulary items to determine which copy to pronounce, both of itself and of other items. Intuitively, this seems incorrect: if the syntax leaves undetermined which copy is to be overt, that 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 it 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 amounts to my mind to a sophisticated variant of templatic solutions to clitic ordering.³¹ Fifth, as shown by the contrast in (17) and the comparable minimal pair in (31), it is only when the clitics are grouped together that they can follow the verb, indicating that TM targets the clitic group as some kind of unit. As discussed in Franks (2006), aspectual adverbs can marginally intervene at certain points when the clitics precede the verb,³² but this is absolutely impossible when they follow.

(27) a. ?Az *sâm* veče *ti* *ja* *dala*?!
 I aux.1SG already you.DAT it.ACC given.FEM
 'I have already given it to you?!'

³⁰ See Billings (2004) and Franks (2006) for additional critical discussion of Bošković (2001). See Mišeska Tomić (1996), Franks & King (2000), and Progovac (2005), for alternative ways of deriving (26) in terms of locating the various clitics in distinct head positions.

³¹ Although his system can be viewed as less stipulative than traditional templates, since it is the artifact of constraint interaction and competing PF desiderata.

³² 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.

(27) b. *Dala *sâm* veče *ti* *ja?!*
 given.FEM aux.1SG already you.DAT it.ACC

(27a) 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 gave it to you already. In this case, I could certainly respond as in (27a). But, if I chose to leave out the subject pronoun *az* ‘I’ and thereby invoke TM, I could never say (27b). 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 (28a, b), from Bošković (2001: 232; 236), or (28c).³³

(28) 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?’

And lastly, 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

³³ For ease of reference, I gloss this use of *li* as “Foc”; in (28a) and (28b) it bears both Yes/No [+Q] and [+Foc] features, whereas in (28c), where it occurs in a *wh*-question 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 (28c) 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*.” (Although this would seem to 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 are in English, when the emphatic *wh*-phrase remains in situ, either in multiple *wh* (ii) or echo *wh* (iii):

(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 (28c) 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 intonational phrase.

clitics go.

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 generically represent as *(j)e*, in fact occupies a different position than the other auxiliary clitics, and that two head positions are involved, one before the pronominal clitics and one after.³⁴ Elsewhere in 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 AgrS, *(j)e* is actually inserted in T, one head down, where it seems to have a more or less expletive status. 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 (29).

(29) a. [_{AgrS} [_{AgrS} *sâm*] [_{TP} [_T [*ti go*] + T⁰] ...

b. [_{AgrS} [_{AgrS} Agr⁰] [_{TP} [_T [*ti go*] + *e*] ...

One (small) reason to implicate tense as the locus of *(j)e* is that, in Slovenian, it is precisely the future tense auxiliary clitic *bom* ‘will.1SG’, etc. which, along with *je*, comes after rather than before the pronouns.³⁵ There is however variation among the languages in whether the auxiliary clitic appears in AgrS or T. Interestingly, not just *(j)e* but the other clitic auxiliaries also once came last, implying a historical change from the auxiliary clitics surfacing in T to them surfacing in AgrS, as well synchronic T-to-AgrS movement. Morphological evidence from SC lends further support to this approach. In that language that the tonic forms of the auxiliaries consist of the morpheme *je*, which I take to originate in T⁰, plus an AgrS portion identical to the clitic: *jesam* ‘(I) am’ = *je* + *sam* ‘aux.1SG’; *jesi* ‘(you) are’ = *je* + *si* ‘aux.2SG’; *jesmo* ‘(we) are’ = *je* + *smo* ‘aux.1PL’; *jeste* ‘(you) are’ = *je* + *ste* ‘aux.2PL’; *jesu* ‘(they) are’ = *je* + *su* ‘aux.3PL’. These forms can be deriving by raising T to adjoin, in keeping with the LCA, to the left of AgrS. The one morphological exception is in the third singular, which is just a tonic *je*. This follows from the assumption that the AgrS portion is null for the third singular. It thus seems that at one time AgrS lowered to T (as a morphological operation, following Embick & Noyer’s (2001) account of Def(initeness) lowering in the Bg DP), but now T raises to AgrS; this change is apparently

³⁴ Mišeska Tomić (1996) and Progovac (2005) reach the same conclusion. My account more closely resembles that of Mišeska Tomić, who places auxiliary clitics in T/AgrS, 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 SC *je* in the high (subject layer) T_S position and the other clitic auxiliaries in a low (object layer) T_O position.

³⁵ 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 AgrS. It can be inflected, as in SC, or not, as in Bg, where it is then in fact followed by subject agreement.

(i) (Vie) *šće ste mu go kazali.*
 you will aux.2PL him.DAT it.ACC said
 ‘You will have told him it.’

complete in some Croatian dialects, where even *je* comes first. None of these facts finds any expression in a scattered deletion account, which treats the fact that (*j*)*e* is pronounced last as accidental, and are instead indicative of an approach that attempts to read fixed aspects of word order off of hierarchical structure.

The structures of (29) make certain predictions about the potential for interpolation of particles and adverbs.³⁶ These predications are indeed borne out. Recall the paradigm in (13) above, repeated as (30).

- (30) 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 u*ž *go dala*.
- c. Az *sâm ti go u*ž *dala*.

Assuming the structure in (29a), *u*ž can adjoin to TP in (30a), separating the auxiliary clitic from the pronominal ones. It can, as in (30c), also of course adjoin to the phrase below this (*v*P or some functional projection right above *v*P, given arguments in Izvorski (1993) and Lambova (2003, 2005), among others, that the participle undergoes short movement to outside of *v*P). It cannot, however, split the pronominal clitics in (30b), since these constitute a complex X^0 . Consider now (31), in the third person.

- (31) 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 u*ž *e dala*.

³⁶ Interestingly, according to Marijana Lambova (p.c.), it is even possible for the renarrated auxiliary to front under verum focus, 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_{S} P and a low Pol_{O} P, 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} .

(31) c. Tja *ti go e u*ž dala.

As expected, (31a) is ungrammatical and (31c) is grammatical. What is surprising here is the impossibility of (31b). This follows, however, from the structure in (29b), since *ti go* is adjoined to *e* in T^0 . Franks & Rudin (2005) and Franks (2006) report similar facts for aspectual adverbs. Consider where *veče* ‘already’ can go in (32).

(32) 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 (32b). As we saw in (27a), repeated as (33), this contrasts with far more acceptable attempt to interpolate an aspectual adverb on the other side of the pronominals.

(33) ?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 (29), where the clitics do not all occupy the same functional head, is warranted for Bg.

4 Splitting of Compound Verb Constructions

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

(34) 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.

4.1 *When the Auxiliary Precedes the Participle.* Bg has several compound tenses with tonic auxiliaries, as in pluperfect (35).³⁷

³⁷ 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.

- (35) 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 (35), since certain material is able to split them. Consider the following examples:³⁸

- (36) a. Ivana beše veče pročela knjigata.
 Ivana had.3SG already read book.DEF
 ‘Ivana had already read the book.’
- b. Marija beše napâlno zavrnila za sreštata.
 Maria had.3SG completely forgotten about meeting.DEF
 ‘Maria had completely forgotten about the meeting.’
- c. Studentite bjaxa vsički 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.’

(36c) is of particular interest, since 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 (37), again from Krapova (1997):³⁹

³⁸ (36a) is from Krapova (1997), (36b) is from Izvorski (1993), and (36c–f) are from Krapova (1999). The translation of (36a) is corrected from Krapova’s original. While these 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, (36) contrasts with attempts to split a fronted participle from its auxiliary, which are completely out, for all speakers and in all contexts.

³⁹ Some authors, such as Izvorski (1993), explicitly reject splitting by subjects in questions. She offers the following minimal pair, but notes that native speakers’ intuitions vary:

- (37) 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 (38).

- (38) Beše *mu* *ja* pročela.
 had.3SG him.DAT it.ACC read.FEM
 ‘She had read it to him.’

While the order in (38) is the only one possible, we do not actually know whether this is the order provided by the syntax or is the consequence of post-syntactic Local Dislocation, repositioning the clitics *mu ja* after *beše*. That is, it could simply be that the syntax provides something like (39), where *beše* is merged in a high Aux position. In keeping with the LCA approach to head movement, I indicate the clitics as adjoining to T^0 . 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 vP-external position occupied by the participle is an outer Asp.

- (39) [_{Aux} beše] [_T *mu ja* + T^0] [_{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 (40). When initial, the clitic group will subsequently undergo Morphological Merger with *beše*, as shown in (40b), to produce the desired surface order

-
- (i) Za kakvo beše napâlno zabravila Marija.
 about what had.3SG completely forgotten Maria
 ‘What had Maria completely forgotten about?’
- (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 SpecvP 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). Be that as it may, the point again is that splitting by subjects when the participle fronts is unequivocally out, whereas judgments with the order in (37) are merely strained to varying degrees.

in (38).⁴⁰

(40) 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 (39) and (40) may be correct.^{41, 42} When anything is added in front of (38), obviating the TM effect, two grammatical orders emerge. Both (41a) and (41b) are possible, with no special difference in meaning.⁴³

(41) 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*.

⁴⁰ The idea that this could be done without AuxP, merging *beše* instead directly in AgrS when it is high and in T when it is low is appealing, but putting *beše* in T would cause problems since, as shown in (43), *veče* can separate the clitics from *beše*.

⁴¹ As pointed out to me by an anonymous reviewer, Progovac (2005) also proposes two auxiliary positions in her analysis of SC auxiliaries.

⁴² Additional support for the proposal that there are (at least) two auxiliary positions in Bg might be drawn from the other tonic auxiliaries. The renarrated, like the perfect, according for example to Hauge (1999: 195), seems to be able to appear in both high and low auxiliary positions, although speakers I have consulted ascribe semantic consequences to the different orders.

(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.’

b. Tja *bila mu* *kazala* *vsičko*.

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

(ii) 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.’

b. Tja *bila mu* *kazala* *vsičko*.

‘(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 a Mood head), implying a structure as in (iv).

(iii) 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*.

(iv) [_{Mood} *bix*] [_T *mu ja*] [_v *pročela*]

⁴³ This variation is reported in standard reference grammars, such as Andrejčin et al. (1977). Stojanov (1999) or Hauge (1999). While, as Marijana Lambova (p.c.) points out, *beše* may receive verum focus in (41), i.e. ‘She HAD read it to him.’, a poll of five other speakers confirms that the discourse neutral interpretation is perfectly natural.

The possibility of (41a) alongside expected (41b) tells us that something akin to structure (39) must be available. This is corroborated by application of the adverb interpolation test to (41a): the aspectual adverb *veče* ‘already’ can appear between any of the postulated X^0 s.

(42) 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 (41b). This is indeed the case, as show by (43):

(43) 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 , but rather the pronominal clitics simply move to T (and the auxiliary clitics which show person agreement are in AgrS). While Bošković (2001, 2002) contends that the clitics in Bg differ from those in SC in that they form a single complex head, necessarily encompassing the verb, the adverb interpolation evidence discussed here and in Franks (2006) argues against this. Bošković applies various tests which show that the clitics occupy distinct head positions in SC, 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 discussed in Progovac (1996, 2000), and, for another, they consistently also fail in very closely related Slovenian, as meticulously demonstrated by Golden & Milojević Sheppard (2000), despite the fact that, as shown by Bošković (2001) and Franks & King (2000), clitics in Slovenian have a virtually identical syntax (but not phonology!) to SC. To take just one example, consider the following (near) minimal pair, from Bošković (2002: 331, fn. 5):

- (44) a. Oni *su*, kao što sam vam rekla, predstavili *se* Petru. [SC]
 they aux.3PL as that aux.1SG you.DAT said introduced refl.ACC Peter.dat
 ‘They, as I told you, introduced themselves to Peter.’
- b. *Te *sa*, kakto ti kazax, predstavili *se* na Petâr. [Bg]
 they aux.3 PL as you.DAT said.1SG introduced refl.ACC to Peter
 ‘They, as I told you, introduced themselves to Peter.’

One problem with (44b), 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:

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

It improves considerably more if a pronominal rather than reflexive direct object clitic is employed:⁴⁴

⁴⁴ The difference between (45) and (46) is presumably due to the difference in adjunction sites for the parenthetical, which depends on the locus of reflexive *se* versus pronominal *gi*.

- (46) ?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 SC if Bošković is correct) are on the PF side of the grammar, having to do with Morphological Merger and prosodic phrasing rather than with syntactic head adjunction.

4.2 *Participle Fronting is Adjunction.* We now turn to the crucial construction, in which the participle precedes the auxiliary.⁴⁵ As discussed by Lambova (2003, 2004b, 2005), among others, this has a focusing effect:⁴⁶

- (47) Pročela beše knjigata.
 read.FEM had.3SG book.DEF
 ‘She had READ the book.’

Crucially, here no splitting is possible, and any attempts to interpolate anything comparable to the examples in (36) are strongly deviant.⁴⁷

- (48) a. Pročela (*veče) beše knjigata.
 read already had.3SG book.DEF
 ‘She had (*already) READ the book.’
- b. *Zabavila (*napâlno) beše za sreštata.
 forgotten completely had.3SG about meeting.DEF
 ‘She had completely FORGOTTEN about the meeting.’
- c. Pročeli (*vsički) bjaxa knjigite.
 read all had.3PL books.DEF
 ‘They had (*all) READ the books.’
- d. Pročela (*nabârzo) beše knjigite.
 read quickly had.3SG books.DEF
 ‘She had (*quickly) READ the books.’

⁴⁵ There is a large literature on participle + auxiliary constructions in Slavic, originally discussed under the rubric of “Long Head Movement” by Lema & Rivero (1989). See, for example, Embick & Izvorski (1995, 1997), Krapova (1997, 1999), Lambova (2002, 2003: 110–167, 2004a, 2004b, 2005), or Migdalski (2003, 2005).

⁴⁶ The discourse effects of participle fronting are complex. 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 (42), ‘... THE BOOK (and not the newspaper)’).

⁴⁷ Note that in all these examples I have removed the subject from initial position, since fronting is incompatible with additional focal material preceding the participle.

- (48) 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 (37), all speakers find a clear contrast between (49a) and (49b):

- (49) 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* is able to intervene in (49b), just as it can in (49a). However, since I take this to be a consequence of PI as discussed in section 2.1, the fact that *li* can split the participle + auxiliary does not contradict their MWd status.

Much more troublesome than splitting by *li*, however, is the fact that the pronominal and verbal auxiliary clitics can also appear between the participle and the auxiliary. Thus, parallel to (38), we have (1), repeated again as (50):

- (50) 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 (20) faces a dilemma, since 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 (51):

- (51) a. *pro-*mu ja*-čela
 b. *proče-*mu ja*-la

(51) c. *pročel–*mu ja*–a

I therefore conclude that (50) cannot be analyzed in terms of post-syntactic Local Dislocation of the clitics onto the following verbal head.

4.3 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 (20). Since *mu ja* cannot undergo Local Dislocation to be placed inside of 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 noted in (2), there are only two possible alternatives. These structures are given again below, assuming movement is ultimately to Foc and, as always, the LCA gives rise to left-adjunction upon linearization.

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

b. [_{Foc} [pročela + [_{CG} *mu ja*]] + [beše]]

That is, either as in (52a) the clitics adjoin to *beše* before the participle *pročela* does, or else, as in (52b), the participle first adjoins to the clitics and then this unit adjoins to *beše*.

Recall that, on the basis of (41), 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. Let's see what happens when we take the high position for *beše*, as in (39). This produces the structure in (52b), with each adjunction indicated as follows:

(53) a. [_{Aux} beše] [_T *mu ja* + T⁰] [_{Asp} pročela] →

b. [_{Aux} beše] [_T [_{Asp} pročela] + [_T *mu ja* + T⁰]] →

c. [_{Aux} [_T [_{Asp} pročela] + [_T *mu ja* + T⁰]] [_{Aux} beše]]

Now we take the low position for *beše*, as in (40), again indicated the adjunction steps.

(54) a. [_T *mu ja* + T⁰] [_{Aux} beše] [_{Asp} pročela] →

b. [_T *mu ja* + T⁰] [[_{Asp} pročela] [_{Aux} beše]] →

c. [[[_{Asp} pročela] [_{Aux} beše]] [_T *mu ja* + T⁰]]

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 (55).

(55) ?Pročela beše *mu* *ja*, (a ne razkazala).
 read.FEM had.3SG him.DAT it.ACC and not told
 ‘She had READ it to him (and not told).’

This is predicted by the derivation in (54). We thus find support for the complex X^0 structure in (52b) over that in (52a).⁴⁸ Moreover, since I argue that only the participle + auxiliary order involves adjunction, there is no way to derive impossible (56):⁴⁹

(56) *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 (52a).

The claim that the order of elements in (1) is the output of syntax, so 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 these never happens with the participle + auxiliary order, a 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, but as shown in (57) 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:

⁴⁸ (52a) would require adjunction of the clitics to the auxiliary before merging of the Foc head that attracts the participle. While it is hard to be sure that this does not exist, as I argued above, nothing in the syntax seems to force the clitics to adjoin to anything except T. (This begs the question of what attracts them to T, of course.)

⁴⁹ Note that Bošković's (1995) account of similar facts in SC involves adjunction under either order. He analyzes SC (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. (SC)
were aux.2PL waited Marija's friend

'You had been waiting for Marija's friend.

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

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

(iii) (*) Čekali bili ste Marijinu prijateljicu. (SC)
waited were aux.2PL Marija's friend

'You had been waiting for Marija'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 clitic *ste* that do not hold in Bg), but (iv) is not derivable since *bili* must adjoin first.

Curiously, these facts (and others about SC compound tenses not discussed in Bošković (1995) but corroborated through personal communication) are comparable to Bg, despite other obvious differences in clitic placement between the two languages.

- (57) 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 (57), 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 (58), with the auxiliary first hence no focusing, are generated by the syntax and are, as expected, perfectly grammatical:

- (58) 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 (20) never even arises.

5 Conclusion

In this paper, I have assumed, along with Embick & 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 a pure 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, while I claimed is likely otherwise motivated to resolve 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 argued for a solution that instead creates the necessary

structure directly in the syntax, crucially by fronting and adjoining the participle to the clitics, and showed how such an approach might work in a variety of constructions.

References

- ANDREJČIN, L. K. POPOV, & S. STOJANOV. 1977. *Gramatika na bálgarskija ezik*. Sofia.
- BILLINGS, L. 2002. Why clitics cluster together in Balkan Slavic: non-templatic morphology. In *Formal Approaches to Slavic Linguistics: The Second Ann Arbor Meeting, 2001*, ed. J. TOMAN, 75–96. Ann Arbor, MI: Michigan Slavic Publications.
- BILLINGS, L. 2004. Review of Bošković 2001. *Journal of Slavic Linguistics* 12, 291–328.
- BONET, E. 1995. Feature structure of Romance clitics. *Natural Language and Linguistic Theory* 13, 607–647.
- BOŠKOVIĆ, Ž. 1995. Participle movement and second position cliticization in Serbo-Croatian. *Lingua* 96, 245–66.
- BOŠKOVIĆ, Ž. 1997. *The syntax of nonfinite complementation: An economy approach*. Cambridge, MA: The MIT Press.
- BOŠKOVIĆ, Ž. 2001. *On the nature of the syntax–phonology interface*. Amsterdam: Elsevier.
- BOŠKOVIĆ, Ž. 2002. Clitics as nonbranching elements and the linear correspondence axiom. *Linguistic Inquiry* 33, 329–40.
- CHOMSKY, N. 1965. *Aspects of the Theory of Syntax*. Cambridge, MA: The MIT Press.
- CHOMSKY, N. 1995. Bare phrase structure. In *Government and binding theory and the minimalist Program*, ed. G. WEBELHUTH, 383–439. Cambridge, MA: Blackwell.
- EMBICK, D. & R. IZVORSKI. 1995. On long head movement in Bulgarian. In *Proceedings of ESCOL '94*, ed. J. M. FULLER, H. HAN, & D. PARKINSON, 104–115.
- EMBICK, D. & R. IZVORSKI. 1997. Participle–auxiliary word order in Slavic. In *Formal Approaches to Slavic Linguistics: The Cornell Meeting, 1995*, ed. W. BROWNE et al., 210–239. Ann Arbor, MI: Michigan Slavic Publications.
- EMBICK, D. & R. NOYER. 2001. Movement operations after syntax. *Linguistic Inquiry* 32, 555–595.
- ENGLUND, B. 1977. *Yes/no questions in Bulgarian and Macedonian*. Stockholm: Almqvist & Wiksell International.
- FRANKS, S. 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/franks.pdf>.]
- FRANKS, S. 2000. Clitics at the interface. In *Clitic phenomena in European languages*, ed. F. BEUKEMA & M. DEN DIKKEN, 1–46. Amsterdam: J. Benjamins.
- FRANKS, S. 2006. Adverb interpolation in the Bulgarian clitic cluster. In *Studia Caroliensia: Papers in Linguistics and Folklore to Honor Charles Gribble*, ed. R. ROTHSTEIN, E. SCATTON, & C. TOWNSEND, Bloomington, IN: Slavica.
- FRANKS, S. & Ž. BOŠKOVIĆ. 2001. An argument for multiple Spell–out. *Linguistic Inquiry* 32, 174–183.
- FRANKS, S. & C. RUDIN. 2005. Bulgarian clitics as K⁰ heads. In *Formal Approaches to Slavic Linguistics: The South Carolina Meeting, 2004*, ed. S. FRANKS, F. Y. GLADNEY, & M. TASSEVA-KURKTCHIEVA, 104–116. Ann Arbor, MI: Michigan Slavic Publications.

- GOLDEN, M. & M. MILOJEVIĆ SHEPPARD. 2000. Slovene pronominal clitics. In *Clitic phenomena in European languages*, ed. F. BEUKEMA & M. DEN DIKKEN, 191–207. Amsterdam: J. Benjamins.
- HALPERN, A. 1992. *Topics in the placement and morphology of clitics*. Doctoral dissertation, Stanford University, Stanford, CA.
- HAUGE, K. 1999. *A short grammar of contemporary Bulgarian*. Bloomington, IN: Slavica.
- HOLMBERG, A. 2001. The syntax of yes and no in Finnish. *Studia Linguistica* 55, 141–175.
- IZVORSKI, R. 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, R. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- KING, T. H. 1994. Focus in Russian yes–no questions. *Journal of Slavic Linguistics* 2, 92–120.
- KLAVANS, J. 1982. *Some problems in a theory of clitics*. Ph.D. dissertation. University College, London.
- KRAPOVA, I. 1997. Auxiliaries and complex tenses in Bulgarian. In *Formal Approaches to Slavic Linguistics: The Cornell Meeting, 1995*, ed. W. BROWNE et al., 320–344. Ann Arbor, MI: Michigan Slavic Publications.
- KRAPOVA, I. 1999. The system of auxiliaries in Bulgarian. In *Topics in South Slavic syntax and semantics*, ed. M. DIMITROVA-VULCHANOVA & L. HELLAN, 59–89. Amsterdam: J. Benjamins.
- LAMBOVA, M. 2002. Is head movement syntactic: evidence from Bulgarian? *MIT Working Papers in Linguistics* #43, ed. T. IONIN, H. KO, & A. NEVINS, 89–102.
- LAMBOVA, M. 2003. *On information structure and clausal architecture: evidence from Bulgarian*. Ph.D. dissertation. University of Connecticut.
- LAMBOVA, M. 2004a. V(P) fronting and V raising in Bulgarian. In *Formal Approaches to Slavic Linguistics: The Ottawa Meeting, 2003*, ed. O. ARNAUDOVA, W. BROWNE, M.-L. RIVERO, & D. STOJANOVIĆ, 269–292. Ann Arbor, MI: Michigan Slavic Publications.
- LAMBOVA, M. 2004b. On triggers of movement and effects at the interfaces. In *Triggers*, ed. A. BREITBARTH & H. VAN RIEMSDIJK, 231–258, *Studies in generative grammar* # 75, Berlin/New York: Mouton de Gruyter.
- LAMBOVA, M. 2005. On adjunction and excorporation. In *Formal Approaches to Slavic Linguistics: The South Carolina Meeting, 2004*, ed. S. FRANKS, F. Y. GLADNEY, & M. TASSEVA-KURKTCHIEVA, 181–194. Ann Arbor, MI: Michigan Slavic Publications.
- LEMA, José, & M.-L. RIVERO. 1989. Long Head Movement: ECP vs. HMC. In *Proceedings of NELS 20*, 333–347. Amherst, MA: GLSA, University of Massachusetts.
- MIGDALSKI, K. 2003. Participle Preposing in Bulgarian. In *Generative linguistics in Poland: Morphosyntactic investigations*, ed. P. BAŃSKI & A. PRZEPIÓRKOWSKI, 79–91. Warszawa: Instytut Podstaw Informatyki PAN.
- MIGDALSKI, K. 2005. To have or to be: On the syntax of perfect tenses in South Slavic. In *Formal Approaches to Slavic Linguistics: The South Carolina Meeting, 2004*, ed. S. FRANKS, F. Y. GLADNEY, & M. TASSEVA-KURKTCHIEVA, 230–240. Ann Arbor, MI: Michigan Slavic Publications.
- MIŠESKA TOMIĆ, O. 1996. The Balkan Slavic clausal clitics. *Natural Language and Linguistic Theory* 14, 811–872.
- MORO, A. 2000. *Dynamic antisymmetry*. Cambridge, MA: MIT Press.
- M. NESPOR & I. VOGEL. 1986. *Prosodic phonology*. Dordrecht: Foris

- PANCHEVA, R. 2005. The rise and fall of second position clitics. *Natural Language and Linguistic Theory* 23, 103–167.
- PERCUS, O. 1993. The Captious Clitic. Unpublished ms., MIT.
- PROGOVAC, L. 1996. Clitics in Serbian/Croatian: Comp as the second position. In *Approaching second: Second position clitics and related phenomena*, ed. A. HALPERN & A. ZWICKY, 411–428. Stanford: CSLI Publications.
- PROGOVAC, L. 2000. Where do clitics cluster? In *Clitic phenomena in European languages*, ed. F. BEUKEMA & M. DEN DIKKEN, 249–258. Amsterdam: J. Benjamins.
- PROGOVAC, L. 2005. *A syntax of Serbian: Clausal architecture*. Bloomington, IN: Slavica.
- M.-L. RIVERO. 1993. Bulgarian and Serbo-Croatian Yes–No questions: V⁰-raising to *–li* versus *–li* hopping. *Linguistic Inquiry* 24, 567–575.
- RUDIN, C., T. H. KING, & R. IZVORSKI. 1998. Focus in Bulgarian and Russian YES–NO questions. In *UMass Occasional Papers* 21, 209–225.
- RUDIN, C., C. KRAMER, L. BILLINGS, & M. BAERMAN. 1999. Macedonian and Bulgarian *li* questions: beyond syntax. *Natural Language and Linguistic Theory* 17, 541–586.
- RUDNICKAYA, E. 2000. The derivation of Yes–No *Li* questions in Russian: Syntax and/or phonology? *Formal Approaches to Slavic Linguistics: The Philadelphia Meeting, 1999*, ed. T. H. KING & I. SEKERINA, 347–362. Ann Arbor, MI: Michigan Slavic Publications.
- SCHÜTZE, C. 1994. Serbo-Croatian second position clitic placement and the phonology syntax interface. *MIT Working Papers in Linguistics*, Vol. 21, 373–473.
- SPROAT, R. 1985. *On deriving the lexicon*. Cambridge, MA: MIT Working Papers in Linguistics.
- STOJANOV, S. 1999. *Gramatika na bâlgarskija knižoven ezik*. Sofia. Veliko Târnovo: Abagar.
- ZWICKY, A. 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