



# Topics in Bulgarian morphology and syntax: a minimalist perspective

María Luisa Rivero

*University of Ottawa, 70 Av. Laurier East, Ottawa, Canada K1N 6N5*

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## Abstract

This paper offers a minimalist view of a variety of topics that in Bulgarian are at the crossroads of lexicon, syntax, morphology, and phonology. It discusses syntactic characteristics in periphrastic tenses with biclausal structures and the formal properties of Balkan control/raising constructions. It sketches accounts for clitic templates, person restrictions, and reflexive hapology that combine syntax and morphology, and assign an important role to person in postsyntactic morphology. It reviews some minimalist-oriented displacement analyses of the distribution of interrogative *li*. It examines the construction with an obligatory clitic *Trese me* “I am shivering,” proposing that lexical structure and syntactic conditions on clitic pronouns and doubling account for its characteristics. It compares two prominent GB/minimalist views on reflexive marking and applies them to inherent reflexive verbs. It ends by discussing word order in auxiliary complexes, and touches on left branch phenomena, and on the relation between displacement and information structure.

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## 1. Introduction

This paper offers a minimalist view of some selected topics that in Bulgarian are at the crossroads of lexicon, syntax, morphology, and phonology. The paper was originally written for a *Lingua* Gauntlet Issue proposed by Andrew Spencer, who gathered the database in [Appendix A](#) as a basis for discussion by linguists working on different theoretical frameworks. Here I use such a database to explore phenomena that in some cases have received little attention in the literature on Bulgarian. In some instances, I offer

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*E-mail address:* [mrivero@aixl.uottawa.ca](mailto:mrivero@aixl.uottawa.ca) (M.L. Rivero).

new answers combining the spirit of minimalism and distributed morphology (Halle and Marantz, 1993, among others). In other cases, I summarize and update earlier GB/minimalist proposals without being exhaustive, citing references from the framework that directly impinge on the specific topics I discuss (see Bošković, 2001; Franks and King, 2000 for more exhaustive lists of references).

In Section 2, I stress syntactic characteristics in tense formation in Bulgarian, arguing that some periphrastic tenses have biclausal structures with the formal properties of Balkan control/raising constructions. I do not discuss many important topics regarding clause structure for lack of space and energy, and a prominent omission is the analysis of Negation. In Section 3, I sketch accounts for clitic templates, person restrictions, and reflexive haplology, suggesting as unifying factor the effect of person in a postsyntactic morphological component. In addition, I review three minimalist-oriented displacement analyses of the much-debated distribution of interrogative *li*, without coming to a definite conclusion. In Section 4, I examine two constructions with obligatory clitic pronouns. Constructions such as *Trese me* “I am shivering” display an obligatory accusative clitic in Bulgarian, and I argue that principles of lexical structure and conditions of a primarily syntactic nature on clitic pronouns and doubling account for this situation. Some constructions contain ‘inherent’ reflexives, that is, an obligatory *se*, and I compare two prominent GB/minimalist views on reflexive marking, suggesting that each faces problems concerning this type of clitic. In Section 5, I apply some proposals in Sections 2 and 3 to the complex word order patterns of auxiliary complexes, I briefly examine the rather restricted left branch phenomena of Bulgarian, suggesting that they involve (syntactic) Gapping, and I conclude with some minimalist proposals on displacement and information structure, which I exemplify with auxiliary verb complexes.

## 2. Basic tense/aspect constructions

Bulgarian has a particularly rich system of tenses, including many periphrastic formations considered complex verb forms in traditional grammar. In GB/minimalism, such periphrastic tenses are viewed as syntactic formations regulated by phrase structure principles, as in the early (Rivero, 1988) or the more recent (Krapova, 1999).

Let us begin by mentioning three syntactic factors that contribute to formal complexity in the Bulgarian tense system. The first one is the general structure of Balkan clauses, since Bulgarian shares with other Balkan languages an unusually rich inventory of functional categories that can combine in building up clauses. The second and the third factors concern auxiliaries. On the one hand, it is a characteristic of Bulgarian auxiliaries to share properties with control and raising verbs. In the languages of the Balkans control and raising verbs take conjunctive complements, so as a result tense formation in Bulgarian displays syntactic recursivity. On the other hand, Bulgarian auxiliaries resemble *be*-auxiliaries in other Slavic languages, which take other nonfinite *be*-auxiliaries as complements. The rich inventory of (Balkan) functional categories in combination with auxiliaries makes Bulgarian tenses rather complex from the syntactic perspective.

## 2.1. Biclausal structures

In this section, I concentrate on periphrastic tenses in Bulgarian that closely resemble control and raising constructions in the Balkans.

Rivero (1988) proposes that the Past Future Perfect (Scatton, 1983: 329) and the negative Future Perfect are biclausal, with main clause auxiliary and subordinate auxiliary/verb both morphologically inflected for finiteness. On this analysis, *stjax* in the Past Future in (1) is similar to the control verb *iskashe* in (2), and *da* heads the Modal Phrase (MP) complement of (Rivero, 1994a).<sup>1</sup>

- (1) Stjax<sub>MP</sub>[da [sûm chel]].  
'I would have read.'
- (2) Petâr *iskashe*<sub>MP</sub> [da [chete]].  
'Peter wanted to read.'

In the negative Future Perfect in (3), auxiliary *njama* resembles a raising verb inflected for tense, with default person and number, and a modal complement.

- (3) Njama<sub>MP</sub>[da [sûm chel]].  
'I will not have read.'

The above analysis applies to many sentences in the Spencer's database in the Appendix, whose numbers I mention in italics. To illustrate, the Aux-MP structure in (4) serves for the Future Negative in (*Il*), the Past Future in (*Im*), the Negated Past Future in (*In*), the Future Past and Future renarrated in (*Io*) and (*Ip*), respectively, the Emphatic in (*Iq*), and the negative Future Perfects in (*Is*) and (*Iu*).

- (4) (Tja) njama<sub>MP</sub>[da pishe pismoto].

The same analysis serves for tenses of the renarrated mood such as (27a–d) partially reproduced in (5), (30a–d) whose structure is (6), (16a–b) and (17) in (7), and complexes such as (32a–e) = (8a–b), (33a–f) = (9), and (34) and (35a–b) = (10a–b).

- (5) Shtjala bila<sub>MP</sub> [da pishe pismoto].
- (6) Shteli li sme spored tjax<sub>MP</sub>[da sme im bili predstaveni utre] ?
- (7) Njamalo li e<sub>MP</sub> [da se e usmixvala]?
- (8) a. Shteshe<sub>MP</sub> [da ne ni gi e pokazvala].  
b. Shteshe<sub>MP</sub> [da ne ni gi bâde pokazvala].

<sup>1</sup> Krapova (1999) proposes that the subordinate clause is a CP with *da* in Tense. For Penchev (1998), *da* is a complementizer.

- (9) Dnes shteli li ste bili vie<sub>MP</sub> [da mi gi pokazvate] ?
- (10) a. <sub>MP</sub> [Da im cheta na decata] sâm shtjala [tazi prikazka].  
 b. \*<sub>MP</sub> [Da im cheta na decata] njama [tazi prikazka].

The biclausal hypothesis accounts for the following list of formal characteristics in the above constructions. (a) The modal particles are in all cases the first constituent of the subordinate clause, whether such a clause remains in situ, as in (9), or fronts as in (10a). (b) There are verbal items inflected for tense in each clause, as in (9). (c) There are sequences of auxiliaries in main and subordinate clauses, as in (6), and (d) participles inflected for gender and number complementing main or subordinate auxiliaries, as in (6). The negation may be in the subordinate clause, as in (8a–b). (f) The clitic pronouns must always be in the subordinate clause, as in (6–10).

The above list of characteristics suggests that biclausal constructions consist of two ‘phases’ as in Chomsky (2000, 2002). They also suggest that Bulgarian resembles other Balkan languages and lacks ‘restructuring’/clitic climbing, which is why clitic pronouns must remain in the embedded clause/phase without exception.

Each one of the clauses in (4–10) obeys independent syntactic and morphological principles. I first mention in passing some that are relevant for the main clauses in the database. Interrogatives must contain li in the main clause, as in (16a–b), (30c–d), and (33c–d), which is determined by syntax and semantics. The interrogative particle types the construction from a semantic perspective, and it is often assumed that it occupies the complementizer position (Rivero, 1993). In Section 3.4, I discuss the distribution of li in more detail, and mention some of the PF conditions this particle must obey.

Renarrated 3rd person patterns including (4o) and (4q) lack an overt auxiliary in standard dialects. In this paper, I consider such an absence as a (postsyntactic) morphological fact. In Sections 2.3.3 and 3.1, I propose that (4o), and similar examples contain a covert finite auxiliary in syntax and semantics, as in (Tja) e štjala<sub>MP</sub> [da piše pismoto]. On the one hand, this phonologically null auxiliary can be deleted or need not surface in postsyntactic morphology, because its person content is recoverable since it is unspecified for person. On the other hand, the features of such an auxiliary provide part of the compositional basis for a homogeneous interpretation of renarrated tenses. Semantic interpretation is beyond the scope of this paper, but interested readers can consult Izvorski (1997), who offers a formal semantic analysis of renarrated tenses.

Periphrastic tenses are subject to word permutations that result from displacement, which is discussed in Sections 3.4 and 5. For instance, displacement within main clauses results in the ‘long head movement’ order in (6) and (7) above, with nonfinite auxiliary preceding question particle and finite auxiliary. Parentheticals and adverbs, such as spored nego, spored tjax, and predvaritelno in (30a–d) may occupy different positions in the main clause, and in the minimalist program, it has been suggested that adjuncts of this type are merged postcyclically. Main clause nominative subjects such as tj in (30c) and vie in (33a–f) may be dislocated as topics or contrastive foci and precede main clause li; they can also be inverted. These options are briefly discussed in Section 5.

Main clause auxiliaries are of two types. When negative, they resemble raising verbs without gender or person: njamalo in (16b). When affirmative, they resemble control Vs,

with gender and number: *shtjala* in (30a–b–c) and (16a). Later, I mention a prominent syntactic approach to capture agreement in sequences of auxiliaries.

Turning to subordinate clauses, such clauses contain a syntactically independent tense complex, with ordinary morphological characteristics: the embedded finite form is inflected for tense, person, and number, and nonfinite forms are inflected for just gender and number. As noted above, subordinate clauses must contain clitic pronouns, as Balkan languages lack clitic climbing.

Since embedded complements are full clauses, they may display variations in auxiliary position that mirror those of monoclausal structures such as (32). In Section 2.2, we will see that Krapova (1999) proposes that in past perfects *bjax* may appear higher than Tense before clitic pronouns, as in (26b), or lower than tense after clitic pronouns, as in (26b). Krapova's idea can be used for embedded *bade* in (32), which can precede or follow clitic pronouns. On this view, the marginal nature of (32d–e) with the auxiliary preceding clitic pronouns indicates a preference of this auxiliary for the lower position.

In biclausal tenses, there are interactions between main and embedded clause. For instance, the two clauses can be permuted by syntactic movement in a standard way: (27a–b) and (34). In (27b), the subordinate clause fronts; (34) combines clausal fronting with the detachment of the NP object, reminiscent of 'remnant topicalization.' Main and embedded clause constituents, however, cannot be freely permuted. In sentences (27c–d), for instance, main clause *bila* and *shtjala* cannot appear in the subordinate clause, which illustrates a familiar prohibition against syntactic lowering. The deviance of (35a) and (35b) suggests that negative auxiliaries do not license clausal fronting, and thus induce an intervention effect. The general idea then is that interactions between constituents of the two clauses can be accommodated by familiar displacements of the syntax.

Let us now turn to principles for the general distribution of clitics in biclausal structures. Biclausal tenses resemble control/raising constructions, so may have two independent clitic clusters. Syntax determines the position of interrogative *li*; it is a complementizer in the main clause, so clusters with main clause clitics. Syntax also determines that clitic pronouns belong in the embedded clause, so they cluster with embedded auxiliaries. In syntax, similar principles apply to main and embedded auxiliaries in biclausal tenses. However in the PF branch there are special principles for clitic auxiliaries discussed later in this paper. On this view, the clausal position of clitic *sûm*, for instance, is determined by syntax, so this item plays in main and subordinate clauses the same syntactic (and semantic) role as nonclitic auxiliaries. Thus, it need not always be adjacent to a verb, as when it precedes parentheticals and adverbs in (30b–c).

The biclausal hypothesis sheds considerable light on the agreement features of participles in periphrastic tenses. All participles display some agreement morphology in both main and embedded clauses, as in the Future Perfects in (1s) and (1u). As stated, the main clause negative auxiliary resembles a 'raising verb.' If it is participle as in (33e) it has neuter/default agreement, and determines the marking of other auxiliary participles in the main clause. By contrast, embedded auxiliaries and verbs in participle form agree with the logical subject of the sentence defined by the lexical verb, as in Balkan raising and control



auxiliaries. A difference with other Balkan languages is that in Bulgarian perfect auxiliaries are clitics, as in other Slavic languages.

(12)  $_{MP}[[\text{Tja}]_{M}[\text{shte}] \text{ pishe pismoto}]$ .

With shte as modal particle, futures formally resemble main da-sentences as in (18) with the structure in (13), which in turn resemble da-clauses in periphrastic tenses.

(13)  $_{MP}[[\text{Da mu ja pokazvame!}]$ .

Nominative NP ‘subjects’ usually precede shte and da. Under the MP hypothesis, they are in Spec-of-MP, as in (12) and (14) (they could also be dislocated, i.e. in a higher projection).

(14)  $_{MP}[[\text{Vseki lingvist}]_{M}[\text{da chete tazi kniga!}]$ .

Many have noted that if future markers and other functional items in the Balkan clause head independent projections, excessive numbers of Specifiers for which there is no empirical evidence may be projected. An EPP feature seems to be a way to avoid this problem. If modal and future markers form an extended projection with the verb (Grimshaw, 1991), and there is only one EPP-feature for the complex, then subjects can be generated in the VP, that is, next to chete in (14), and may raise to the highest projection in one swoop, without intermediate specifiers.

The negation ne is often treated as the head of a functional projection NegP, which I do not discuss for lack of space (and energy).

The auxiliaries in the Present and Past Perfects in (*Ih-i*) are usually considered allomorphs that differ in tense: present vs. past. Krapova (1999), however, considers them lexical entries with different semantics, selectional restrictions, and syntax. A semantic difference is that in the renarrated mood the evidential meaning is found only with the present and not with the past auxiliary. As to selection, sûm can freely occur with both aorist and perfect participles of perfective and imperfective verbs, while bjax can only combine with aorist participles. A syntactic difference is that bjax can precede several adverbs, and sûm only a few. Based on these differences, Krapova calls sûm a functional auxiliary generated/merged under Tense. Krapova calls bjax a lexical auxiliary generated in a lower AuxP that can raise (another option is to merge it at two different points, dispensing with movement).<sup>3</sup> On Krapova’s view, in (26a) and (28c) bjax would be in an AuxP below clitic pronouns, and in (26b) and (28a), it would be in Tense above clitic pronouns.

As for interpretation, I refer the reader to Iatridou et al. (2001) and Pancheva (in press) for sophisticated proposals on the formal semantics of perfects, paying particular attention to Balkan languages.

Present and Past Perfects illustrate that participle(s) agree in gender/number with subjects. Kayne develops an influential proposal based on Romance (1993: Section 7.2) where participle agreement indicates syntactic movement. If we applied Kayne’s

<sup>3</sup> See Rivero (1994b, 2000) for the distinction between functional and lexical auxiliaries in Slavic on different grounds.

view to Bulgarian (more generally Slavic), this language would have a BE auxiliary, and a participial complement with a Subject Agreement Projection, an Object Agreement projection, and a VP-complement. The subject would then raise through Subject Agreement, and trigger agreement on the participle. An updated version of Kayne's view would be to assume that the participle has an EPP feature that forces the projection of a Specifier for the subject to transit through on its way to Tense.

Future perfects as in (*It*) combine modal head šte with the Perfect complex as complement (Rivero, 1988), resembling Balkan structures such as Greek tha exo diavasi 'I will have read.' A difference is that, as stated, Greek exo is not a clitic while the Bulgarian auxiliary is. Such a contrast seems immaterial in the syntactic component but acquires relevance in the PF branch, including morphology, as we shall later see. The sketched analysis serves for (*It*) that contains a nonclitic finite auxiliary. In sum, clitic and nonclitic auxiliaries display similar phrase structures in syntax, but may differ at other levels of representation.

To sum up, I concentrated on the considerable syntactic complexity of the Bulgarian tense system, showing that Tenses of the renarrated mood often attributed to contact with Turkish offer the most interest from such a perspective. Formal complexity in tense formation results from a combination of the rich functional structure of clauses in Balkan languages with two structural properties of auxiliaries. On the one hand, Bulgarian auxiliaries resemble Balkan raising/control verbs, so take full clauses as complements. On the other hand, Bulgarian auxiliaries resemble their counterparts in other Slavic languages; so can also take nonfinite be-auxiliaries as complements.

### 3. Clitics

This section begins with some partially new proposals for clitic templates, person restrictions, and reflexive hapology, based on a postsyntactic morphology where person plays a crucial role. It concludes with a summary of three minimalist analyses of the distribution of the famous interrogative particle li, based on displacements, and does not come to a conclusion.

#### 3.1. Basic template

A familiar view in GB/minimalism is that clitic templates are in some measure regulated by syntactic principles. Here I adopt for Bulgarian a version of this idea, and combine it with a person principle in postsyntactic morphology. In addition, I propose that morphological principles for person are relevant for the null 3rd person auxiliary of the renarrated mood, person restrictions in Section 3.2, and a licit instance of reflexive hapology in Section 3.3. In sum, person in postsyntactic morphology plays an important role in the account of several phenomena in Bulgarian.

Hauge (1976) and Ewen (1979) tell us that clitics in Bulgarian appear in the templatic order in (15), with 3rd person e as precise vocabulary item following pronouns, and auxiliaries in other persons before pronouns.

(15) Neg Mod Aux Dat Ace e

In GB/minimalism, templates such as (15) are not considered language specific, but the reflection of deeper organization principles (see, for instance, Franks and King 2000: Section 5). Here, taking inspiration in Distributed Morphology I develop a version of this idea that combines syntax with morphology acting as filter.

The Bulgarian template finds close counterparts in other Slavic languages. On the one hand, it is usual for Slavic pronouns to be arranged by case, with dative preceding accusative. On the other hand, the 3rd person auxiliary usually follows pronouns in South Slavic. I propose that the Aux > Dat > Acc portion of (15) is determined by syntactic principles for double object constructions, the e portion reflects a morphological principle for *person*, and such principles are not language-particular.

Setting aside the 3rd person auxiliary for the moment, the idea that clitics are ordered by case can also apply to the auxiliary—Aux in (15)—, if it counts as the ‘nominative’ item in the cluster. On this view, the Bulgarian template reflects the hierarchical organization of double object constructions; that is, ‘subject’ corresponds to Aux, which is structurally superior to the indirect object (Dat), which in turn is higher than the object (Acc). This proposal fits the view that in clitic doubling languages, Dat > Acc order shares properties with the English double object construction *I gave Mary the book* (among others, Demonte, 1995 for Spanish, and Anagnostopoulou, 2003 for Greek). Combinations of Aux > Dat > Acc clitics, then, result in morphologically transparent forms with fixed positions, and surface order as determined by syntax is in most cases not altered by postsyntactic morphology.

The idea that (15) is the morphological reflection of a double object hierarchy can be implemented in various ways, depending on the phrase structure of auxiliaries and pronouns (Franks and King, 2000: Section 10.3 for a summary of proposals; Bošković, 2001: 180 for recent references, and Section 3.4 for relevant discussion). Here, I mention one option with clitics closely reflecting argument structure. The auxiliary is outside the VP as in (Rivero, 1994a), which fits the idea that external arguments are not introduced by the verb (Kratzer, 1996 among others). Following Anagnostopoulou (2003), clitic pronouns are inside the VP as Specifiers in a Larsonian shell, with the dative as higher argument, the accusative as lower argument. Both clitics raise to little *v* to check features, and subsequently to Tense.<sup>4</sup>

So far, then, Bulgarian clitic auxiliaries and pronouns reflect syntactic arrangement. However, Bonet (1991, 1995) argues convincingly that clitic order cannot be determined exclusively by syntax, with morphological mechanisms filtering its output. This approach can shed light on Bulgarian phenomena that have received no satisfactory account, such as the position of the 3rd person auxiliary. The template in (15) tells us that e appears last, while other auxiliaries precede pronouns. A similar situation is true of Serbocroatian *je*, so it would seem that the Bulgarian template does not make crucial reference to phonological form but to person, a morphological feature. I thus propose that Bulgarian finite auxiliaries of the same paradigm always occupy in syntax a position external to the VP, which is structurally superior to Dat and Acc pronouns for reasons given above. I also adopt the

<sup>4</sup> Another option (Franks and King, 2000: Chapter 11) is with auxiliaries outside VP, and clitic pronouns in Agr heads above VP (Rudin, 1997). For other structures for clitic pronouns and additional references see (Rivero, 1997).

common idea that 1st/2nd forms bear a morphological specification for person, while 3rd persons are nonperson forms. In the mapping from syntax to morphology, a rule sensitive to person status permutes the nonperson auxiliary with the clitic pronouns; alternatively, all auxiliary clitics are mapped into a morphological structure specified for person, with the exception of the 3rd person auxiliary, which is unspecified and mapped into the last slot of the clitic template.<sup>5</sup>

Person can also account for why the 3rd person is null in renarrated tenses in standard dialects: this form undergoes morphological deletion/non-insertion because its person content is recoverable. By contrast, 1st and 2nd person renarrated auxiliaries are specified for person, so must obligatorily surface.

In sum, the template in (15) is neither category nor family-specific. It reflects syntactic principles for double object constructions, and a morphological principle for person that becomes operative after syntax.

### 3.2. *Person constraints*

This section inspired by and restricted to recent minimalist views on person restrictions aims to stimulate new discussion. In [Section 3.2.1](#), I briefly examine familiar person restrictions in ditransitive sentences, which have attracted much attention in the literature ([Haspelmath, 2002](#) for a recent overview). In [Section 3.2.2](#), I take inspiration in the literature on Icelandic to point to person restrictions in quirky constructions in Bulgarian that to my knowledge have escaped notice. I go on to propose a preliminary account for these new restrictions mentioning Distributed Morphology, and exploiting syntactic information encoded in bundles of features for clitic pronouns.

#### 3.2.1. *Bulgarian ditransitives*

Let us begin with a person restriction in ditransitives familiar in the recent literature, but not general in Slavic. Looking at French and Spanish, [Perlmutter \(1971\)](#) observed that accusative clitics combined with dative clitics must be 3rd. To capture this phenomenon, [Bonet \(1991, 1994\)](#) proposed the morphological restriction in (16), and considered it universal:

- (16) Person Case Constraint (PCC) ([Bonet, 1994: 36](#))  
If DAT then ACC-3rd

Bonet shows that the PCC applies in Arabic, Basque, Georgian, Greek, English, several Romance languages, and Swiss German, and while she does not mention Bulgarian, [Hauge \(1976: 14\)](#) tells us that in this language non-3rd person accusative clitics do not cooccur with dative clitics, as (5a) in the database illustrates. In the core case, the constraint affects in active ditransitive sentences combinations of weak elements standing for arguments of the verb, such as clitics, agreement affixes, or weak pronouns. It does not apply if one item

<sup>5</sup> For [Mišeska-Tomić \(1996: Section 3\)](#), Serbocroatian *je* surfaces last as a verb below Inflection. For [Franks and King \(2000: Section 11.3.2\)](#) SC *je* is in Tense, and clitic pronouns bypass it in syntax. For [Bošković \(2001: Section 3.2\)](#) SC *je* is losing clitic status, but is nevertheless subject to a right edge PF constraint.

is strong, as Bulgarian (5*b*) also illustrates: a 1st person accusative clitic can co-occur with a 3rd person dative pronoun.

While Bulgarian obeys the PCC, it nevertheless differs from some of the Romance languages mentioned by Bonet. Bonet tells us that Romance reflexive clitics pattern with 1st and 2nd person pronouns, so in her view French (17) violates the PCC:

- (17) \*Elle se lui est donnée entièrement French  
 She Refl to.him is given completely  
 ‘She has completely given herself to him’

Bulgarian reflexives combined with dative clitics are possible, as (18) illustrates. If reflexives are nonperson forms in Bulgarian, as I argue later, this example does not violate the PCC.

- (18) Az im se preporâchvam.  
 I to.them Refl recommend  
 ‘I am recommending myself to them.’

Anagnostopoulou (2003) uses Bonet’s valuable observations to develop a syntactic analysis of PCC effects. She argues that the condition is an effect of movement when both direct and indirect object raise to check features with little *v* in a VP with a Dat > Acc structure. If such a view is applied to Bulgarian, (5*a*) shows that the dative must raise first, checks person in *v*, and prevents the accusative from checking person. A 3rd person accusative as nonperson form is grammatical because it does not check person. Sentence (5*b*) is fine because clitic and full pronoun do not check features with the same functional head. Sentence (18) is unproblematic because the reflexive is a nonperson form that does not check person. Some Slavic languages lack PCC effects. In Polish, for instance, accusatives in ditransitives can be 1st or 2nd, as (19) illustrates (Cetnarowska, 2003 for discussion; Slovenian is similar to Polish, but is not illustrated).

- (19) Przedstawiłem cię jej. Polish  
 introduced. 1S you. Acc she.Dat  
 ‘I introduced you to her’

At first sight, the contrast between Bulgarian and Polish seems to favor the syntactic approach to person restrictions based on feature checking. Franks and King (2000) tell us that the usual order of Polish clitics is Dat > Acc, but with 1st and 2nd person pronouns Acc > Dat order is possible, as in (19). We could then take such an alternation as support for the view that the Acc in (19) raises first and checks person, which is why PCC effects are absent. In sum, clitic order is flexible in Polish in contrast with Bulgarian, and the difference between the two languages seems to fit a syntactic approach to person restrictions.

However, the Polish situation is also compatible with a morphological view, and the final answer remains unclear. If Polish clitic pronouns move to (or are generated in) different functional projections and do not cluster in syntax, the morphological and syntactic

approaches make similar predictions. On the one hand, Bonet tells us that the PCC is for clitics that reside in the same functional head in syntax (in her terminology Infl). So if we follow Franks and King (2000), place Polish clitics in independent syntactic slots, and do not map them into a fixed morphological template, (19) is unproblematic for the PCC. On the other hand, if Polish clitics are in, or move to, different projections, they are not likely to check features with the same head, so the syntactic account also predicts that ditransitives should be free of person restrictions. In sum, Polish and Bulgarian ditransitives differ in person effects, but the formal interpretation of this interesting contrast remains open.

### 3.2.2. Bulgarian quirky constructions

In this section, I explore a type of person restriction in Bulgarian of much potential interest for linguistic theory, which to my knowledge has gone unnoticed.

Icelandic quirky constructions display person restrictions, which have played an important role in the development of GB/minimalism (Boeckx, 2000; Chomsky, 1995; Anagnostopoulou, 2003; Sigurðsson, 2002a,b, among several others). Inspired by the literature on Icelandic, I take a fresh look at Bulgarian, showing that it has interesting quirky restrictions, and explore some of their theoretical consequences.

Let us begin by illustrating Icelandic. As (20a–b) from Sigurðsson (2002a: 719–720) show, in the presence of a dative logical subject, a nominative logical object triggering verb agreement must be 3rd and cannot be 1st, or 2nd person:

- (20) a. *ég veit að honum líka þeir.*  
I know that he.DAT like.3PL they.NOM  
'I know that he likes them.'
- b. *\*ég veit að honum líkið þið*  
I know that he.DAT like.2PL you.NOM.PL  
'\*I know that he likes you.'
- c. *\*ég veit að honum líkum við*  
I know that he.DAT like. 1 PL we.NOM  
'\*I know that he likes us.'

Boeckx (2000) and Anagnostopoulou (2003) connect the restriction in (20b–c) to the one for ditransitives in Spanish and Greek. Anagnostopoulou, for instance, tells us that if person restrictions are the result of syntactic operations, they should not be reserved for clitics/agreement markers. Oversimplifying, her idea is that in Icelandic the dative phrase raises first to Tense and checks person. Thus, when the Nominative subsequently raises also to Tense, it cannot check person, and must adopt the nonperson form: *þeir* in (20a). On this view, restrictions on ditransitives and quirky constructions are similar because the features of two different items must be checked against a unique head in both instances, which raises a problem. The problem is solved by choosing the nonperson option for the accusative in ditransitives, and for the nominative in quirky constructions.

Bulgarian has several types of 'quirky' constructions with dative logical subjects and nominative logical objects that trigger verb agreement comparable to Icelandic (20) (Rivero, 2003 for discussion). Here, I show that two of those varieties contrast in person restrictions in interesting ways, which I think has gone unnoticed.

A relatively well-known type of quirky construction without person restrictions is with a psychological verb that selects an Experiencer, (21a). A less familiar type of quirky construction is in (21b). This has been called ‘feel-like’ (Dimitrova Vulchanova 1996), or ‘dispositional’ (Franks, 1995), or ‘productive inversion’ (Moore and Perlmutter, 2000), or ‘dative existential disclosure’ construction (Rivero and Sheppard, 2003). This second type of quirky construction may contain an action verb, denotes a predisposition and not an action/activity/eventuality, and displays person restrictions of the Icelandic-type, as I illustrate later in (24a–b).

- (21) a. Na Ivan mu (se) xaresvat tezi momicheta.  
Ivan.DAT Dat. CL (Refl) like.3PL these girls  
‘Ivan likes these girls.’
- b. Na Ivan mu se zelvaxa devojki.  
Ivan.Dat Dat.Cl Refl kissed.3Pl girls  
‘Ivan felt like kissing girls’

In the more familiar psychological type in (21a) there are no person restrictions, and the nominative can be 2nd or 1st, as illustrated in (22) and (23). Here, then, Bulgarian contrasts with Icelandic.

- (22) a. Na Ivan mu (se) xaresvame nie.  
Ivan.DAT Dat. CL (Refl) like. 1PL we.NOM  
‘Ivan likes us.’
- c. Na Ivan mu (se) xaresvate vie.  
Ivan.DAT Dat. CL (Refl) like.2PL you.PL.NOM  
‘Ivan likes you.’
- (23) a. Na Ivan mu se privizhdat tezi momicheta.  
Ivan.Dat Dat.Cl Refl imagine.3Pl these girls  
‘Ivan has a vision of these girls.’
- b. Na Ivan mu se privizhdame nie.  
Ivan.Dat Dat.Cl Refl imagine. 1Pl we.Nom  
‘Ivan has a vision of us.’
- c. Na Ivan mu se privizhdate vie.  
Ivan.Dat Dat.Cl Refl imagine.2Pl you.Pl.Nom  
‘Ivan has a vision of you.’

In the less familiar dispositional type with an action verb first illustrated in (21b), the nominative logical object must be 3rd, and cannot be 2nd or 1st, which is now illustrated in (24a–b). Here, then, Bulgarian resembles Icelandic in a way that has escaped notice.

- (24) a. \*Na Ivan mu se zelvaxme nie.  
Ivan.Dat he.Dat Refl kissed. 1Pl we.Nom  
‘\*Ivan felt like kissing us’

- b. \*Na Ivan mu se zelvaxte vie.  
 Ivan.Dat he.Dat Refl kissed.2Pl you.Nom. Pl  
 ‘\*Ivan felt like kissing you’

Bulgarian, then, is interesting because it exhibits some quirky constructions with person restrictions reminiscent of Icelandic, and some quirky constructions without restrictions. How can this double situation be captured? I propose an answer that lies in a postsyntactic morphology component, using the bundle of features clitic pronouns may contain at that level, which may be morphological or syntactic.

Let us begin by looking at the Bulgarian quirky constructions without person restrictions. Rivero (in press) notes a contrast between Bulgarian and Spanish when comparing apparently similar psych constructions in the two languages. Spanish differs from Bulgarian because constructions with psychological verbs formally identical to Bulgarian (23) display person restrictions of the Icelandic type since their nominative can only be 3rd: (25a–b).

- (25) a. A Ana se le ocurrió {un personaje/ella}  
 Ann.Dat 3.Refl Dat.Cl imagine.3SG {a character/she.Nom}  
 para su novela.  
 For her novel  
 ‘Ann {imagined/thought of} {a character/her} for her novel.’  
 b. \*A Ana nos le ocurrimos nosotros  
 Ann.Dat 1Pl.Refl Dat.Cl imagine.1Pl we.Nom  
 para su novela.  
 for her novel  
 ‘\*Ann {imagined/thought of} us for her novel.’

Another way to express the difference is that in Bulgarian but not in Spanish the person of the Theme can outrank the person of the Experiencer. Rivero uses the PCC as a preliminary tool to capture such a contrast. Spanish (25b) contains a dative clitic and a 1st person accusative reflexive clitic, so violates the PCC. Bulgarian (23a) and (23b) combine dative clitics with accusative reflexives that are nonperson forms so comply with the PCC. A later morphological elaboration of this preliminary idea (Rivero, 2004) is as follows. The dative clitic standing for the Experiencer is an essential ingredient in quirky psychological constructions in clitic doubling languages such as Bulgarian and Spanish. That is, in such constructions, dative phrases may be present or absent, but the clitic must always be present to signal the logical subject. Given such an essential role, the proposal is that the dative clitic is marked in syntax with the mental state feature [+m] proposed by Reinhart (in press) for Experiencers. Due to this feature, quirky dative clitics must be mapped to the Person Field, as in Bonet (1991), in the morphology component.

When quirky constructions contain a reflexive clitic in addition to the person dative, two situations must be distinguished. On the one hand, Spanish reflexives may contain an inherent person specification, which makes them be mapped to the Person Field and come in conflict with the quirky dative. This situation is behind the problem illustrated in (25b).

On the other hand, Bulgarian reflexives are nonperson forms, so do not map to the Person Field, and fail to conflict with quirky dative clitics, which accounts for the absence of person restrictions in (23).

The proposal that Bulgarian reflexives map to the Nonperson field in morphology does not capture the new restrictions depicted in (24), so is in need of further elaboration. The Bulgarian dichotomy is that in psych constructions of type (23), the person on the Theme as logical object may outrank the person on the Experiencer as logical subject. By contrast, in the ‘feel like’ constructions in (21b) and (24), the person of the Theme cannot outrank the person of the Experiencer-like logical subject. It is unlikely that such different effects are due to syntactic movement. The psych construction in (21a) and (24a–b) contain the prototypical dative Experiencers and nominative Themes that could be assumed to raise from the VP to Tense, but are nevertheless free of person restrictions.

Here I suggest that the contrast between the two Bulgarian quirky constructions lies in the feature-content of the reflexive clitic, once the syntactic derivation is complete, that is, in morphology. In the ‘feel-like’ construction with person restrictions, the reflexive clitic plays two roles that I assume are encoded in its bundle of features, and this may lead to a conflict. By contrast, the reflexive clitic of the Bulgarian psychological construction without person restrictions plays only one role, and I assume that it maps to the Nonperson field without conflict, as discussed above. Let us sketch this core idea, which I do not formalize, in a preliminary way.

Reflexive clitics in the ‘feel’ like construction are essential ingredients that encode syntactic and semantic relations with the dative logical subject. If a logical object is also present in this type of construction, the reflexive clitic must in addition encode a relation with it, which is where a feature clash may arise.

On the one hand, Rivero (2003) tells us that in the quirky construction with person restrictions in (21b) and (24a–b), the dative is a subject of predication in a high applicative phrase, not an argument of the verb. Rivero and Sheppard (2003) treat this dative as the ‘controller’ of an implicit external argument of the verb signaled by the reflexive clitic, which is a so-called passive *se*. The relation between the dative as oblique subject and the reflexive can be called ‘Control,’ and brings about a dispositional meaning glossed ‘feel like,’ which is not derived from the argument structure of an action verb such as *kiss*.

On the other hand, a standard assumption in generative grammar has often been that reflexive clitics indicate lack of accusative case, i.e. ‘case absorption,’ forcing the Theme into a relation with finite inflection. In recent terms, the relation between a logical object and finite inflection can be called ‘Agree.’

On the above view, the obligatory reflexive of the feel-like construction in (21b) signals both a ‘Control’ relation originating in the logical subject, which can be notated [+C], and an ‘Agree’ relation originating in the logical object, which can be notated [+A]. By contrast, in the psych construction in (21a) that is free of person restrictions, the reflexive clitic indicates just ‘Agree’ or [+A] originating in the nominative as logical object. There is no ‘Control’ or [+C] originating in the dative in this instance, because its role as Experiencer derives directly from the argument structure of the verb and is not mediated by the reflexive. In sum, in (21b), the reflexive bears a [+C] relation with the logical

subject, and an [+A] relation with the logical object. By contrast in (21a), the reflexive bears just an [+A] relation with the logical object.

When the Control and the Agree relations are both embodied in the reflexive clitic, the person of the item with the Agree relation cannot outrank the person of the item with the Control relation. The essential idea is that person restrictions in Bulgarian depend on a reflexive clitic that encodes syntactic (and semantic) relations established in the computation through various means, which can be captured in the postsyntactic morphology component.

This proposal captures differences and similarities between Bulgarian and languages such as Spanish (for Rumanian see Rivero and Geber, 2003). The contrast in person restrictions between Bulgarian and Spanish ordinary psych constructions is based on the different inherent morphological make-up of reflexive clitics. In Spanish, reflexives are intrinsic person forms, so all quirky constructions with datives and reflexives automatically trigger PCC effects. In Bulgarian reflexives are nonperson forms that do not necessarily induce PCC effects when combined with datives. In Bulgarian, bona fide psychological constructions with reflexives and datives are free of person restrictions, in clear contrast with both Spanish and Icelandic. However, when Bulgarian reflexive clitics inherit a double relation, as in the dispositional construction, they trigger PCC effects in quirky constructions, with similarities with both Spanish and Icelandic.

In sum, Bulgarian is quite interesting because it has both familiar and unfamiliar person restrictions. I have suggested that both the familiar restrictions and the unfamiliar ones in quirky constructions seem to be best captured in postsyntactic morphology once syntactic information is encoded in pronominal clitics, and in particular in reflexive clitics.

### 3.3. Reflexive clitic haplology

In this section, which has benefited from much help from Olga Arnaudova, I examine one case mentioned by Hauge where reflexive haplology seems ‘illicit,’ and another case where haplology is ‘licit,’ which has attracted less attention in the literature. I propose to capture the difference between the two by combining syntax and postsyntactic morphology. The illicit instance is the case when reflexive clitic si cannot play two roles, and the licit instance is the case when reflexive clitic se can play two roles in the quirky dispositional construction discussed in the previous section. I view person as the crucial feature in a deeper understanding of licit instances of reflexive haplology.

Perlmutter (1971) offers a first systematic discussion in generative grammar of (illicit) reflexive clitic haplology based on Spanish. He tells us that reflexive clitics play many syntactic functions, so several of them should in principle cooccur in the same sentence. However, only one clitic surfaces per designated slot in each sentence due to a postsyntactic template. Hauge (1976: 13–14) mentions a type of reflexive haplology in Bulgarian that can be used to introduce Perlmutter’s views and some problems they pose. On syntactic grounds, there could be two dative si clitics in (6a), but they would both compete for the Dat slot in the template. One such clitic would correspond to benefactive si in (26a)—‘for himself—the only interpretation if the object NP is not definite: baraban.

The other clitic would correspond to the possessive in (26b), the reading found if the object NP is definite: baraban – a ‘drum-the.’

- (26) a. Barabanchikât si potârsi baraban.  
 drummer.the Refl.Dat looked. for drum  
 ‘The drummer looked for (any) drum for himself’  
 b. Barabanchikât si potârsi baraban-a.  
 drummer.the Refl.Dat looked.for drum-the  
 ‘The drummer looked for the drum that belonged to him.’

The template prohibits two clitics sharing the same case/slot, not two reflexive clitics, so Dat and Acc slots can contain one clitic each, as in (27):

- (27) Barabanchikât si se usmixva.  
 drummer.the Refl.Dat Refl.Acc smile.3SG  
 ‘The drummer smiles at himself.’

Perlmutter was mainly interested in cases where one unique clitic cannot play two roles, as in the Bulgarian example mentioned by Hauge. In (26a), the reflexive clitic cannot at the same stand for the possessor and the beneficiary found in the English sentence The drummer looked for the drum that belonged to him for himself (= his own benefit). In (26a), the clitic must be the beneficiary, and I think that syntax can provide an answer as to why this is so. The analysis known as ‘possessor raising’ has a long tradition in generative grammar and captures the reading where si is interpreted as possessor of the drum by moving such a clitic from the object NP to the verb (see [Stateva, 2002](#) for a recent proposal along these lines in the case of Bulgarian). The possessive reading cannot associate with a bare NP in Bulgarian; on the raising view, then, the clitic in (26a) cannot stand for a possessor since the derivational source baraban si ‘\*his drum’ is ungrammatical. By contrast, the possessor reading seems to be the only option in (26b), which suggests that there is either a movement or a binding relation between the clitic on the verb and an empty slot in a definite NP that is obligatory. In both (26a) and (26b), then, syntax guides us in choosing which is the role of the unique clitic filling the dative slot in the template, which is a topic that neither Perlmutter nor Hauge discussed.

[Bonet \(1991\)](#) argues that Perlmutter’s proposals need to be supplemented by post-syntactic morphological mechanisms because one clitic can sometimes play two roles. In Bulgarian, there is a certain type of se-hapology where one clitic plays two roles, which I think involves person as a morphological feature. To this effect let us turn to a different instance of the dispositional quirky construction in [Section 3.2](#) now illustrated in (28). The contrast between (28a) and (28b) shows that such a construction must contain an obligatory reflexive se called here ‘modal’ for ease of reference:

- (28) a. Na decata im se spi.  
 P children.the they.DaT Refl sleep.3SG  
 ‘The children feel like sleeping. The children feel sleepy.’  
 b. \*Na decata im spi.  
 P children.the they.DaT Refl sleep.3SG

With verbs that are inherently reflexive such as usmixvam se ‘to smile,’ the quirky sentence now under discussion should contain two se’s on syntactic/lexical grounds: obligatory ‘modal se’ and the ‘inherent se’ required by the verb. However, as (29a–b) illustrate well-formed dispositional constructions with inherent reflexive verbs contain just one se.

- (29) a. Na decata im se usmixva.  
 P children.the they.Dat Refl smile.3SG  
 ‘The children feel like smiling.’  
 b. \*Na decata im se se usmixva.

Example (29a), then, illustrates licit se-hapology with a reflexive playing two functions: the verb requires one se, the quirky construction must be signaled by a se, and only one is found.<sup>6</sup> Thus, competition of two phonologically identical reflexives for one slot can result either in a surviving clitic that cannot play two roles as Perlmutter and Hauge tell us, or in a situation where the clitic can play two roles as Bonet tell us. This double faceted situation suggests that haplology is not a purely phonological phenomenon, so I develop a morphological approach sensitive to syntactic information.

Recall that Bulgarian (Slavic) reflexive clitics are nonperson forms that serve for all persons. I showed in Section 3.2 that Bulgarian reflexives escape PCC effects in ditransitive sentences, which I attributed to their nonperson status. Haplology reinforces the same idea, as it can be proposed that when two se-clitics compete for the same Ace slot in the template as in (29a), only one surfaces given that their person content is recoverable.

However, not all reflexives are subject to haplology. I propose that the difference between licit se and illicit si-haplology in Bulgarian, or the idea that se can play two roles and si cannot, can be captured in postsyntactic morphology. The idea is that when reflexive clitics inherit a person specification from an appropriate syntactic relation, they cannot undergo deletion in morphology, because their person content would not be recoverable. The si-clitics in (6a) bear a (binding) relation with a nominative NP specified for person, and in addition signal a semantic role, or are ‘argument clitics.’

Thus, they are intrinsic non-person forms but inherit a feature specification in the derivation, so cannot be deleted in the post-syntactic morphology.

The approach to haplology just suggested raises a new question that has proven consequential for morphology. Bonet tell us that when two clitics compete for the same slot, and only one surfaces with two formal roles, the morphological form that is chosen is the one that is more specific, or contains more morphological information. The issue, then, is that in the case of two clitics, inherent se and modal se identical in phonological shape, but with different feature compositions, the more specific one must be chosen as the morphological item that surfaces embodying both functions in (29a). I suggested in Section 3.2 that modal se bears a control relation with the dative responsible for the

<sup>6</sup> In Slavic reflexive haplology is general in this type of quirky construction. For Polish, such a haplology is noted by Kušpć (1999), for Macedonian by Fici et al. (2001), and for Slovenian by Rok Žaucer (p.c). Reflexive haplology is also found in Czech clitic climbing contexts (see Avgustinova and Oliva (1995: Section 2.2.1), who suggest a phonological account; also Franks and King, 2000). Bulgarian lacks clitic climbing.

modal interpretation of the sentence. In [Section 4.2](#), I will relate inherent reflexives and argument suppression. If inherent se indicates suppression, and modal se has syntactic specifications that include the one called Control above, then it looks as if modal se should be the one that surfaces in morphology because inherent se is less specified.

In sum, I suggest that haplology belongs in a postsyntactic morphological component, and is not a phonological but a morphological operation. I have implemented this general idea by assuming that Slavic reflexive clitics are nonperson forms that can undergo a form of licit haplology based on their feature content, which may include information on syntactic relations, but not phonology.

### 3.4. *Li*-placement

The placement of li in Bulgarian has attracted much recent attention in several theoretical frameworks, and numerous proposals now exist on this topic, whose summary and comparison would require a complete book. There are many alternative treatments of li-placement in minimalism as well; they are usually characterized by displacement, but otherwise differ in basic philosophy and implementation.

When examining the ever-growing number of proposals on li-placement for the present paper, I came to the conclusion that the topic does not seem to have been exhausted, but that it had totally exhausted me. Thus, I have chosen to summarize three analyses that combine syntax and/or the PF branch with displacement, but differ in philosophy. I mention technical and philosophical problems in each approach, but do not come to a conclusion. Some remarks on the information structure of some sentences with li can also be found in [Section 5](#).

One proposal I review is by [Rudin et al. \(1999\)](#) (R&K&B&B from now on), who use movement for phrases, finite verbs, and clitics in syntax, and prosodic reordering of the question particle in PF (also [Franks and King, 2000](#): Section 12.1.2)). A second proposal is my own work around 1999 ([Rivero, 1999b](#) and references there), where I assign the movement of phrases to syntax, the movement of finite and nonfinite verbs as heads to PF, and also use a restricted type of prosodic reordering of li in PF. The third work is by [Bošković \(2001\)](#), who proposes copy-and-deletion movement in syntax to check features in all instances, and couples such movement with PF conditions functioning as filters.

A brief idea cast in GB terms in [Rivero \(1993\)](#) triggered much of the subsequent interest on li-placement in several theoretical frameworks left unmentioned here, so I begin with its summary. I saw li is an interrogative complementizer in C syntactically independent from auxiliaries and pronouns located in a lower IP/TP/MP in the Balkan skeleton of [Rivero \(1994a, 1988\)](#). Li requires support in PF, which can be provided in syntax by raising other constituents as in (31–34), or by lowering li itself (i.e. Li Hopping) as in (35):

(31) Vidjaxme li knjigata? ‘Did we see the book?’  
Saw.1PL Q book.the

(32) Izpratix li mu kniga ?  
Sent. 1s Q to.him book? ‘Did I send him a book?’

- (33) a. Vizhdal li si go ? ‘Have you seen him?’  
 b. Vizhdal li go e? ‘Has he seen him?’
- (34) a. Novata zelena riza li ti podari Krasi? (Ewen, 1979: 111)  
 New.def green shirt Q to.you gave.3S Krasi  
 ‘Did Krasi give you the new green shirt?’  
 b. [<sub>CP</sub>Novata zelena riza [<sub>C</sub> li [<sub>IP</sub> ti podari Krasi ]]]
- (35) Ne mu li izpratix kniga? ‘Didn’t I send him a book?’

On this view, phrasal movement to Spec-CP fronts a complex constituent in (34) (also (7b) in the data base). If a complement clause raises as in (8a) in the database, *li* surfaces in final position. My main interest at the time was the movement of verbs as heads, including finite V raising to C in (31) or (32) leaving clitics behind, and Long Head Movement (LHM) to C for the nonfinite V across an auxiliary in (33) (also (16a–b), (30d), (33c), and (33d) in the data base). With *ne* as barrier to V-movement, an instance of *Li*-Hopping with lowering of the particle is (35) (also (7a), (8b), (13a) and (14a) in the database).

*Li*-Hopping as a syntactic lowering rule has attracted criticism (Izvorski et al., 1997, among others). LHM has attracted much later attention and also criticism.<sup>7</sup> One problem is that LHM as syntactic rule ‘looks ahead’ to PF, which in part could be solved if the process is located in PF, as in my proposal summarized next. Another problem in the GB framework was that LHM bypasses intervening heads in violation of the Head Movement Constraint. In the minimalist program, the Head Movement Constraint has been replaced by more flexible notions of locality (Fitzpatrick, 2002 for relevant discussion), so the new issue is which type of locality suits verb movement, including LHM. Roberts (2001) argues for a version of Relativized Minimality; recently Billings and Konopasky (2003) invoke (Collins, 1997), when they propose that finite/nonfinite verbs move up without clitics as in my 1993 analysis.

A GB/minimalist treatment of *li*-placement without *Li*-Hopping or LHM is by R&K&B&B (1999). It combines movement for phrases, verbs, and clitics in syntax, with Prosodic Inversion (PI) of *li* in PF (Halpern, 1995). Since *li* is in C, they propose that phrases as in (34) and finite Vs as in (31) front in syntax. Sentences (32), (33), and (35) involve head-movement in syntax coupled to PI in PF. In (32), V right adjoins to the pronoun, and the resulting complex right adjoins to *li* in syntax; in PF, *li* undergoes reordering to follow V as prosodic word. The derivation of (35) is similar; in syntax, V right adjoins to the pronoun, the resulting complex adjoins to negation, and the complex adjoins to *li*. As Hauge (1976) and Ewen (1979) note, *ne* has postaccenting properties so *ne + mu* forms a prosodic word, and in PF PI places *li* after such a prosodic word.

The proposal now under discussion runs into technical problems with ‘long head movement’ orders (see Billings and Konopasky, 2003 for other problems). Consider (58) in their paper which is equivalent to my (33a–b), and is repeated here as (36a). This sentence is assigned the basic structure in (36b): *li* in C, 2nd person Aux in AuxP, pronoun in AgrOP, and V in VP (but see below for another alternative elsewhere in the same paper).

<sup>7</sup> Caink (1998a,b) offers a critical review of GB analyses of LHM between 1991 and 1995 coupled to a ‘late’ lexical insertion proposal, which falls outside the theoretical framework of this paper. See Franks and King (2000: Section 12.3) and Roberts (2001) for additional discussion of LHM.

- (36) a. Gledali li ste go?  
seen.PL Q are.2PL it.ACC  
'Have you seen it?'
- b. [<sub>CP</sub> li [<sub>AuxP</sub> ste [<sub>AgroP</sub> go [<sub>VP</sub> gledali]]]]

A first problem the authors acknowledge is that the word order in (36a) cannot be derived by the proposed mechanisms. Gledali right adjoins to go resulting in go + gledali, which adjoined to ste is ste + go + gledali. If such complex right adjoined to li, and li underwent PI in PF, the output would be ill formed \*ste + li + go + gledali. To solve this problem, R&K&B&B propose "clitic inversion ... within the complex verb, giving the order [li [gledali ste go]]," which is the input to PI in PF. Clitic inversion seems ad hoc, applies within a syntactic complex, and is a 'look ahead' rule. A second problem that seems to have gone unnoticed is that clause structure elsewhere in the paper is (37), not (36b). A tree on p. 550 locates the 1st person auxiliary sme below both Tense and pronoun. Given that 1st and 2nd person auxiliaries should have the same distribution, the structure of (36a) should be (37), not (36b):

- (37) [<sub>CP</sub> li [<sub>T/AgroSP-ε</sub> [<sub>Aux</sub> st- [<sub>VP</sub> gledali]]]]]

However, adjunction gives bad results in (37): namely, \*st- + gledali, followed by \*go + st- + gledali, followed by \*-e + go + st- + gledali, and finally \*li + -e + go + st- + gledali. On this view, then, a nonfinite-V > li > 1st/2ndPAux > pronoun sequence such as (36a) requires a sort of affix-hopping, besides right adjunctions in syntax, clitic inversion inside the verb complex, and PI for li. Nonfinite-V > li > pronoun > 3rdP Aux orders such as Gledali li go e 'Has he seen it?' and (35b) raise similar difficulties; they require 'clitic inversion' and unspecified steps, depending on clause structure. In sum, there are some unresolved problems in the proposal just reviewed.

In a series of evolving papers, I reexamined the above finite and nonfinite verb movements, placing them in PF (Rivero, 1999a,b, 2000). I developed a comparative study of Bulgarian and Breton questions based on (Borsley et al., 1996). I also examined li, proposing that it is sensitive to a PF condition that mentions phrase-structure, not linear order. The effect of this condition is best observed in indirect questions such as (38a–c), which usually go unmentioned in other discussions:

- (38) a. Ne znam [kazaxa li ti.]  
Neg know [they.told Q you]  
'I do not know if they told you'
- b. Ne znam [chel li e knigata.]  
Neg I.know [read Q Aux.3S book.the]  
'I do not know if he read the book.'
- c. Ne znam [knigata li e chel.]  
Neg I.know [book.the Q PF.3S read]  
'I do not know if he has read the book (as opposed to the magazine)'

Li has the same distribution in direct and indirect questions, which I took to show that in PF, li must have an overt constituent in its checking domain in the sense of Chomsky (1995). That is, li in both main and subordinate clauses must cooccur with overt phonological material either in the Spec of C, or adjoined to such a C. A recent way to express this idea is that li has an EPP feature satisfied by any type of category, which is reminiscent of proposals by Holmberg (2000). On this view, \*Ne znam<sub>CP</sub>[li e chel knigata] is deviant because the main clause verb is not in the checking domain of li, so cannot satisfy EPP. A pattern that seems to support an EPP feature on li is with a subject and a verb before the particle: Maria dade li ti go učera ‘As for Mary, did she give it to you yesterday?’ This type of word order has attracted much attention; Billings and Konopasky (2003) offer a recent review of some proposals, and come to the conclusion that the verb is in C without the clitics, which is reminiscent of Rivero (1993). If Bulgarian has Clitic Left Dislocation, as argued in detail in Arnaudova (2001, 2003), and if Maria is a clitic left dislocated subject then this NP would be base-generated, that is directly merged in the higher domain of the clause called TopicP. That is, Maria would not be a specifier of li, and thus should not satisfy li’s EPP feature. If, similar to what happens in the embedded clause in (38a), the verb dade moves to C, it will then satisfy the EPP feature on li. While these ideas could be rephrased in prosodic terms, they are based on information and syntactic structure.

The idea that li has an EPP feature is interesting for recent views on the cycle. Bošković and Franks (2001: 178) argue that the distribution of li in coordinate sentences such as (39) supports Multiple Spell-Out (Chomsky, 2001, among others):

- (39) I dade li ti go Petko vchera?  
 And gave Q you.Dat it.Acc Petko yesterday  
 ‘And did Petko give it to you yesterday?’

Multiple Spell-Out is the idea that a cycle/phase such as a CP is sent to PF as soon as its derivation is complete, without waiting for higher cycles to be built. In Bošković and Franks’ view, that li follows the verb in (39) supports Multiple Spell-Out because it shows that li is not visible when computing first position. Their proposal is that the conjunction is outside the CP-phase with li sent to PF for Spell-Out: I<sub>CP</sub>[dade li ti]. At first sight, embedded li in (38a–c) also seems to support Multiple Spell-Out, but there is a caveat. That is, order in embedded questions suggests that li satisfies conditions in its own CP phase, and that the higher phase with the main verb is not visible when the embedded CP is sent to Spell-Out. However, the caveat is that li is the head of CP, Chomsky’s (2001) Phase Impenetrability Condition tells us that heads are accessible to operations in a higher phase/cycle, which means that main clause znam could be visible to li. By contrast, if the proposal that li has an EPP feature is adopted, znam would not in the appropriate structural position for this feature, making the Phase Impenetrability Condition irrelevant in this case.<sup>8</sup>

The second aspect of the analysis now under discussion is movement in PF. This proposal revives ideas of Chomsky and Lasnik (1977), considering the V-movements in (31–33) and (38a–b) stylistic, that is, of the PF branch and not syntax. Stylistic rules are sensitive to

<sup>8</sup> A notational variant is to equate cyclic nodes/ phases in syntax and Intonational Phrases in phonology. If CP is an Intonational Phrase, and C is not, then li should access Spec-of-C without crossing an Intonational Phrase, but not main clause material.

structure, but satisfy PF conditions, do not check formal features, and have no effect on LF. Thus, (31–33) and (38a–b) are neutral or unfocused sentences because verb movement has no semantic effect, while the phrasal frontings in (34) and (38c) are syntactic rules that check formal features and have effects on LF: the fronted constituents are contrastive foci.

This proposal fits well with a recent minimalist trend that assigns head movement to the PF branch, but still faces a variety of problems. One of them is a measure of redundancy. Besides finite and nonfinite verb movement, Prosodic Inversion or an equivalent is still needed in cases like (35), (Rivero, 1999a: 6–7) citing King (1995: 159) (see also King, 1996, 1997). The proposal by Billings and Konopasky (2003) also suffers from redundancy; since it combines a restricted form of PI with a form of LHM for finite and nonfinite verbs. Another problem mentioned by several is that if li, auxiliary clitics, pronominal clitics, and verbs {are in/move to} independent syntactic projections, it is unclear why they must be strictly adjacent. R&K&B&B (1999) derive strict adjacency from syntactic adjunction triggered by feature checking, but if PF V-movements do not check features, an alternative is needed. An option proposed by Bošković (2001: 222) for another purpose is that adjacency results from the filtering effect of PF conditions. To illustrate, Bošković (p. 219) tells us that veče in (40) cannot stand between li and ti go because Bulgarian has a PF condition requiring clause-mate clitics to be parsed into the same clitic group (he proposes another PF condition so that clitics cluster with verbs).

- (40) \*Dade li veche ti go Ana.  
 Gave Q already to.you it Ana  
 ‘Did Ana already give it to you?’

Such PF conditions are independent from derivations, so they can in principle serve as filters for syntactic or PF processes. Another option is to add templates in a postsyntactic morphology. Still, important generalizations seem to go missing in the analysis with verb movement in PF.

Bošković (2001: Section 4.3) proposes a (tentative) program for li-placement in Bulgarian with an optimality flavor based on copy-and-deletion movement in syntax coupled to PF filters. The general idea is that movement always checks formal features, must necessarily obey the Head Movement Constraint, and leaves a series of copies. PF constrains then ensure which copy is pronounced, which in most cases is the highest (Bobaljik, 1995; Franks, 1998). I exemplify this approach with ‘long head movement’ orders to ease comparison with analyses summarized above. I also fill in details left unspecified in the proposal now under discussion. Let us begin with an example on pp. 205–206 repeated here as (41), which is an instance of nonfinite-V > li > 1st/2nd PAux > pronoun(s) order:

- (41) Dal li si mu (gi) parite?  
 Given Q are he.dat they.acc money.the  
 ‘Have you given him (it) the money?’

The proposed clause structure is -li > AgrOP > Aux > V > complement clitics, so based on ideas elsewhere in the book, the simplified skeleton for (41) should be as in (42).

- (42) [li [AgrOP 0 [AuxP si [VP dal mu gi (parite) ]]]]



auxiliary order, not for checking needs. PF constrains in (46) are suffix-like conditions barring clitic auxiliary and pronoun from initial position, and the requirement that *e* appear at the right edge of the clitic cluster. With left to right scanning and backtracking, the chosen copies are 4 for vidjal, 3 for go and 2 for e, as in (47).

(47) [<sub>XP</sub> ~~e+go~~+vidjal [<sub>XP</sub> ~~e+go~~+vidjal [<sub>AuxP</sub> ~~e+go~~+vidjal [<sub>VP</sub> ~~go~~+vidjal go ]]]]

The above derivation raises a general problem, which is the justification from a checking perspective of each step that is postulated. I already noted that Step 4 in (46) is to obtain the required word order, which is problematic. Another problem is that if all steps are for checking, then sentences with similar items should involve similar numbers of steps because their checking needs should be the same. For instance, if all auxiliaries originate in the same clausal slot, a declarative such as (48a) with a non-3rd person auxiliary before pronouns should share the four-step derivation depicted in (48b), which is in tune with the steps in (47). Checking needs is similar in the two sentences, and word order differences should result from different PF constrains. For instance, non-3rd person auxiliaries do not display a right edge condition, so the chosen copies should be Step 4 V, and Step 3 auxiliary and pronoun.

(48) a. Vidjal si go.  
seen you.have him  
'You have seen him'

b. [<sub>XP</sub> ~~si+go~~+vidjal [<sub>XP</sub> ~~si+go~~+vidjal [<sub>AuxP</sub> ~~si+go~~+vidjal [<sub>VP</sub> ~~go~~+vidjal go ]]]]

Thus, if syntactic movement derives permutations based on checking needs, superfluous steps are needed whose justification seems dubious.<sup>9</sup> One alternative suggested in Section 3.1 is that the location of the 3rd person auxiliary in (47) is not sensitive to checking but to person (in the morphology component).

The interrogative counterpart of (47) is nonfinite-V > li > pronoun(s) > 3rd P Aux- in (49a), which should be derived as in (49b). The steps are as in (45) plus right adjunction to li. Pronunciation should be of Step 5 V with li, Step 4 go and Step 3 e:

(49) a. Vidjal li go e.  
'Has he seen him?'  
[<sub>CP</sub> ~~e+go~~+vidjal+li [<sub>XP</sub> ~~e+go~~+vidjal [<sub>XP</sub> ~~e+go~~+vidjal  
[<sub>AuxP</sub> ~~e+go~~+vidjal [<sub>VP</sub> ~~go~~+vidjal go ]]]]

<sup>9</sup> For Bošković (2001: 192–193), sentences with preverbal subjects such as (i) involve the derivation in (ii).

(i) Toj go e vidjal

(ii) Toj [<sub>AGR</sub>P ~~e+go~~+vidjal [<sub>AuxP</sub> ~~e+go~~+vidjal [<sub>VP</sub> ~~go~~+vidjal go ]]]]

The highest V is not pronounced because a PF condition requires that clitics be parsed into the same clitic group. The highest e is not pronounced due to a right edge condition. It seems to me that the checking needs of (i) and (47), which also contains an object, a pronoun, an auxiliary, and a verb should be similar. If that is correct, (i) should involve a four-step derivation, not three-steps.

Vidjal li si go ‘Have you seen him?’ with a 2nd person auxiliary should also involve the five steps of (49b); pronounced copies should be Step 5 V with li, and Step 4 si+go. In sum, syntactic movement and PF constraints require many steps with an obscure justification. The program thus shares a ‘look ahead flavor’ with earlier proposals (for other criticisms see Billings and Konopasky, 2003).

To conclude this section, the distribution of li has raised important questions for linguistic theory. In minimalism, those questions relate to the interface between phonology and syntax, the principles and rules of the syntactic branch and those of the PF branch, the role of head movement in the system, and the nature of locality. Several proposals formulated within the tenets of minimalism all imply the interaction of syntax with the PF branch, and some form of displacement. However, proposals differ as to the precise division of labor between components, and the specific nature of the displacement mechanisms.

#### 4. ‘Particle’ verbs

In this section, I examine constructions with two types of pronominal verbs. In Section 4.1, I argue that the trese me ‘I am shivering’ construction has an obligatory accusative clitic due to a combination of principles that regulate the projection of argument structure into syntax with morphosyntactic principles that affect clitic pronouns and clitic doubling in Bulgarian and other doubling languages. In Section 3.2, I examine inherently reflexive verbs in Bulgarian from the perspective of two prominent syntactic views on reflexive marking, finding some problems in each.

##### 4.1. Verbs with obligatory (clitic) complements: the trese me construction

In my view, the properties Bulgarian (14a) should be captured with two sets of principles: those that involve the projection of lexical structure into syntax and have exact counterparts in Russian (and other Slavic languages), and those in morphology and syntax that differentiate between clitic and strong pronouns, and regulate clitic doubling, without counterpart in Russian.

Let us begin with similarities between Bulgarian trese me and the Russian equivalent in (51). There are two features of (14a) and (50a–b) with close counterparts in Russian (51). One is the verbal complex with default morphology: i.e. the 3rd person auxiliary and Neuter Participle in (14a), and the 3rd person verb in (50a–b). The other is the lack of an overt nominative NP. In (50a), decata is an object Experiencer doubled by an accusative clitic, which does not trigger verb agreement, (50b). In (50c) mene is a clitic-doubled accusative pronoun. Similarities with (51) are that the Russian pronoun is also accusative, and that the construction lacks a nominative.

- (50) a. Decata gi trese ot sutrinta.  
Children.the they.Acc shiver.3S since morning.the  
‘The children are shivering since this morning.’
- b. \*Decata gi tresat ot sutrinta.  
children.the they.Acc shiver.3PL since morning.the

- c. Mene me trese.  
I.acc I.acc shiver.3S  
'I am shivering.'
- (51) Menja znobit. Russian  
I.Acc shiver.3S  
'I am shivering.'

Russian *\*znobit* 'It is shivering' is deviant, and the pronoun in (51) is representative of an obligatory complement (an NP is also possible). In Bulgarian (14a) and (50a) and (50c) the accusative clitic is also obligatory, whether alone, (14b–c), or doubling a NP, (50a), or a full pronoun, (50c).

In my view, the Bulgarian and the Russian constructions are similar because they share principles that map lexicon into syntax (Arad, 1998 for a summary of GB approaches to this issue). The Bulgarian and Russian Vs for 'shiver' have one participant traditionally called Experiencer, so lexical specification is similar. Such an Experiencer is lexicalized as the object, and marked accusative; thus, principles for the mapping of lexical information into syntactic structure and case are also identical. In both Bulgarian and Russian, the Experiencer as participant required by the argument structure of the verb is obligatory. The verb has no Agent/Causer, so argument structure projects as an unaccusative configuration, without external argument. Given this situation, one possible analysis is that the VP in (14a), (50) and (51) is defective, and the structure lacks the light *v* of Chomsky (1995), among others. In both languages, the EPP-feature on Tense can be satisfied by either a null expletive in 'subject' position or by the (default) morphology on V, which is a tangential issue for our purposes. In sum, in both Bulgarian and Russian, the verb glossed 'shiver' lexicalizes its obligatory Experiencer as an accusative in a nominativeless construction.

Bulgarian differs from Russian since the obligatory complement if pronominal must be lexicalized by a clitic, not by a full pronoun. This looks like an Avoid Pronoun strategy most likely in (postsyntactic) morphology. That is, V requires an accusative complement. When that complement bears pronominal features, the choice in Bulgarian is between a full pronoun and a clitic. The clitic has limited structure, and is chosen on economy grounds over the pronoun, whose structure is more complex. This choice, however, is not language-specific. In a rather similar construction in Spanish such as (52a–b), the obligatory (dative) Experiencer must be a clitic, not a full pronoun:

- (52) a. Me va bien. Spanish  
I.Dat.clitic go.3S well  
'Things go well for me. I am fine.'
- b. \*A mí va bien.  
To I.Dat.pronoun go.3S well

On the proposed view, then, the Bulgarian sequences *\*Mene trese* and *\*Trese mene* are ungrammatical because clitics are available. In Russian there are no clitic pronouns, so there is a contrast.

A second difference with Russian can also be attributed to pronominal clitics. In this Bulgarian construction, complement NPs and full pronouns must be doubled by a clitic. This is not an isolated property, and must be attributed to general syntactic characteristics not specific to Bulgarian. The sentences in (14a) and (50a–b) are quirky constructions, which in Bulgarian may belong to several syntactic and semantic kinds, but always share two properties: their ‘logical’ or quirky subject is (a) oblique, and (b) if a full pronoun or NP, it must be doubled by a clitic. Similar properties are found in the quirky constructions of clitic doubling languages like Albanian, Greek (Kallulli, 2001: 129), and Spanish. Thus, they are not language particular.

In sum, I have located the properties of the *trese me* construction in lexical structure combined with principles for clitic pronouns and clitic doubling. I have attributed similarities between Bulgarian and Russian as representative of Slavic to lexical structure: the Experiencer projects as an object in a nominativeless construction. I have located a contrast between Bulgarian and Russian in the presence/absence of clitic pronouns. Finally I have classified *trese me* as a quirky construction, making Bulgarian resemble clitic-doubling languages such as Greek.<sup>10</sup>

#### 4.2. *Inherently reflexive verbs*

Bulgarian *se* can function as a reflexive, reciprocal, passive, middle, and impersonal marker, and can also be attached to verbs known as inherently reflexive, such as *boja se* ‘I fear,’ and *usmixvam se* ‘smile’ in (16a–b). We know that reflexive clitics exhibit similar uses in many other languages, and that the generative literature contains many proposals to unify such uses, which I cannot review for lack of space. Here, I will compare two influential views and apply them to the inherent use, finding problems with both.

A view frequently encountered in generative grammar is that reflexive clitics indicate movement coupled to unaccusativity, i.e. a nominative subject with patient/Theme-like properties (Marantz, 1984; Burzio, 1986, among others). On this view, nominative subjects of verbs with reflexive clitics are derived from underlying internal arguments as objects, which must move due to, for instance, the idea that accusative case is absent (‘absorption’). Depending on analysis, the clitic may associate with the external Theta-role in the lexicon but not the syntax due to a reduction operation, or represent the external Theta-role structurally in the syntax (Reinhart and Siloni, *in press* for overview and references). The unaccusative approach is most familiar with passive *se*, which in Bulgarian would look like (53a), (Burzio, 1986, among others). However, it has also been proposed for reflexive *se*, which in Bulgarian would look like (53b) (Marantz, 1984 and several others later):

<sup>10</sup> Other aspects beyond the scope of this paper make the *trese me* construction important for linguistic theory. This construction bears interest for Burzio’s generalization (Reuland, 2000 for recent discussion): it cannot display Nominative, displays Accusative, and lacks an agent-like participant. Arad (1998) discusses similar sentences in Hebrew, and attributes their characteristics to features in so-called little *v*. The construction bears interest for issues connected to so-called object Experiencer verbs (and see Landau, 2003 for recent discussion and references).

- (53) a. Knigite<sub>i</sub> se chetjaxa t<sub>i</sub>, Passive se  
 Books.the Refl read.3PL trace  
 ‘The books were read.’
- b. Ivan se mie t<sub>i</sub> Reflexive se  
 John Refl washes  
 ‘John washes himself.’

Burzio (1986) extends the by now familiar unaccusative analysis of passive se to inherent reflexives in Romance. In languages such as French and Italian, inherently reflexive Vs have nonagentive subjects and show the signs of unaccusativity often associated with movement from object to subject. That is, reminiscent of passive sentences with se, inherent reflexives combine with auxiliary be, and display participle agreement: French Marie s’est enrhumée ‘Mary got a cold.’ If such an unaccusative view were adopted for Bulgarian inherent reflexives, ‘fear’ would then be represented as in (54):

- (54) Maria<sub>i</sub> se boje t<sub>i</sub>  
 Mary Refl fears ‘Mary is afraid.’

However, one problem with the above view is the absence of formal signs of unaccusativity in Bulgarian: all Vs conjugate with be, and all participles agree with subjects. Another problem is that both unergative verbs such as work and unaccusative verbs such as die participate in so-called ‘impersonal passivization,’ as in (55*a–b*), which makes it difficult to maintain that all uses of reflexive clitics are indicative of unaccusativity.

- (55) a. Tuk se raboti mnogo.  
 Here Refl works a.lot  
 ‘Here people work a lot.’
- b. Tuk lesno se umira.  
 here easily Refl dies  
 ‘Here people die easily.’

Still another problem is that some inherently reflexive Vs in Bulgarian (and other Slavic languages) do not seem unaccusative. One of them is usmixvam se in (16*b*) which corresponds to French rire conjugated with avoir without participle agreement, and with a subject with some agentive properties: J’ai ri ‘I laughed.’ If the unaccusative approach is applied to inherent reflexives in Bulgarian, then, it does not contribute to our understanding of reflexive marking.

An alternative approach that seems to shed more light also faces some problems. On this alternative view, reflexive verbs are the output of a reduction operation (Chierchia, *in press*; Reinhart, 1996, among others). Reduction applies to a two-place relation (predicate) or transitive entry, identifies the two arguments, and reduces the relation to a property producing an intransitive verb. Reinhart (1996, *in press*) proposes the same reduction operation for reflexive and unaccusative constructions. Reflexive entries are the output of reduction of the internal Theta role, with the external role syntactically realized. Unaccusatives are the output of reduction of the external Theta role, with the internal role syntactically realized. While

reflexive and unaccusative verbs may be marked by the same clitic due to a similar reduction, they do not share the same argument structure. Based on Dutch, Hebrew, and Romance, Reinhart and Siloni (in press) argue that reflexive constructions corresponding to (53b) are not unaccusative because their subject behaves like an external argument. They further propose that reduction can take place in the lexicon (Hebrew) or in the syntax (French). When reduction is syntactic, it can also affect dative reflexives.

On the reduction approach reflexive clitics can mark unaccusative, unergative and dative constructions. This seems suitable for Bulgarian inherently reflexive verbs, which may belong to three types. That is, some seem unaccusative such as the equivalent of *fear*, others seem unergative such as the equivalent of *smile* and *laugh*, and still other verbs can display an inherent reflexive, which is dative, such as *spomnjam si* ‘I remember.’

Still, inherently reflexive verbs in Bulgarian pose problems for the reduction view. One general problem mentioned by Reinhart and Saloni in passing is that reduction usually applies to a two-argument verb, but inherently reflexive verbs lack transitive alternates. Thus, reduction must in their case apply to an abstract transitive. A second problem is that Reinhart (in press) proposes that reduction applies to a Theta-role specified with the feature [+cause change], but this feature is not systematically present in all inherent verbs as far as I can tell. For Reinhart (in press) reflexive marking is an indication of one of two main operations: saturation as with passive *se*, and reduction as with reflexive *se* and so-called anticausative *se*. However, inherent reflexives do not easily fit into this picture.

In conclusion, I compared two influential approaches to reflexive marking and reflexive clitics, one that pairs them to unaccusativity (and movement) and one that does not. The approach that does not pair reflexive marking with unaccusativity seems better equipped to capture the role of inherent reflexive clitics in Slavic, but still faces problems.

## 5. Word order variation, with emphasis on the auxiliary verb complex

In this section, I first recapitulate proposals in Sections 2 and 3 applicable to word order variation in the auxiliary complexes listed in Section 5 in the database in the Appendix, adding new details. I then look at left branch phenomena, which in Bulgarian are restricted to clitic/nonclitic auxiliaries as in (24–25), and suggest that they should be analyzed in syntactic terms. Finally, I introduce some minimalist views on the relation between order and information structure, using word order variation in auxiliary complexes for exemplification.

Let us begin by recalling proposals in earlier sections that account for order characteristics in the examples of this section. The biclausal hypothesis in Section 2 for the renarrated mood and ideas on displacement in Section 3.4 for interrogative and declarative sentences prove of particular relevance. Recall the proposal in Section 2 that some Bulgarian tenses consist of two clauses. This applies to (27a–d), (30a–d), (32a–e), (33a–e), (34), and (35a–d), accounting in familiar syntactic terms for word order features that look puzzling if these complex verbs were unclausal, as assumed traditionally. Under the bisentential hypothesis, building blocks in auxiliary paradigms are (a) a main declarative/interrogative open to internal permutations, and (b) an ordinary embedded clause, such as *da mi gi pokazvate* in (33). Note that internal clause word order permutations in these paradigms including ‘long head movement’ are mainly found in main and not subordinate clauses, a situation familiar in discussions of clausal syntax. Recall that biclausal complexes may undergo clausal topica-

lization as in (27a–b), or ‘remnant topicalization’ as in (34). Syntactic lowering is impossible in them, as (27c–d) show. Permutations internal to each clause may affect main clause adverbs and parentheticals, as in (30a–b), or inverted main clause subjects, as in (33a–e). Kayne (1994) proposes that inverted subjects result from (a series of) syntactic leftward movements; on this view, all constituents of the main clause in (33) could move leftwards, stranding the main clause subject pronoun vi, with the da-complement clause unaffected. Another possibility is that the inverted subject of (33) occupies the Spec of the da-clause, with various movements affecting main clause constituents.

Displacements of nonfinite verbs/auxiliaries, as in Section 3.4, also apply to interrogative and declarative biclausal and monoclausal auxiliary complexes. Recall analyses for ‘long head movement’ questions, that is, with participles in initial position: (1) syntactic head-adjunction for feature checking and PF Prosodic Inversion, or (2) Long Head Movement in PF, or (3) syntactic copy movement coupled to PF filters. Those analyses serve for monoclausal declaratives of type (20b), and biclausal sentences with (main clause) initial nonfinite heads such as (30d), (33c), and (33d). In (30), for instance, the matrix of (30d) *Shteli li sme spored tjax* is a ‘long head movement’ li-interrogative with a displaced participle and a parenthetical in final position, likely merged postcyclically as contemplated in Chomsky (2001).

Matrix clauses in (30a) and (30c) with a parenthetical/subject before a (displaced) auxiliary participle raise the same issues as independent clauses. One view is that the constituent preceding the participle is syntactically dislocated, indicating an intonational boundary read off the syntactic structure.

Complement clauses in biclausal paradigms such as *da sme im bili predstaveni utre* in (30d), or those in (33a–f), (34), and (55) all participate in the phrase structure of ordinary embedded clauses. They may be affected by displacement; in Section 2, I suggested, for instance, that (34) involves Remnant Topicalization of the embedded clause, a process blocked by main clause negative auxiliaries in (35a–b). They may exhibit a clitic cluster independent from the matrix, and participate in syntactic analyses for ditransitives mentioned in Section 3, morphosyntactic conditions on templates in Section 3.1, person restrictions in Section 3.2, and reflexive haplology principles in Section 3.3.

Another idea in Section 2 applicable to the complexes in this section is the two syntactic slots for certain auxiliaries. If we analyze monoclausal (29a) and (29b) as in Rivero (1993), these sentences involve Li-Hopping, with the finite auxiliary in a high structural position, (29a), or a low one, (29b). If li is in C, and we assume Prosodic Inversion, the particle inverts in PF with a prosodic word to its right, which in (29a) is ne beshe with the auxiliary in a high position, and in (29b) is ne mu with the auxiliary in a low position. The third option involves a series of syntactic movements for checking, and scattered deletion of offending copies, which I leave to the interested reader. The sentences in (31a–b) exemplify the two positions of bjaxa (above or below clitic pronouns) with different effects on li-placement; no participle displacement is possible in view of (31c–d). Mutatis mutandis, two positions for auxiliaries are found in biclausal (32c–d–e), with a preference for a lower location for bade after clitic pronouns. In (28a) bjax is in Tense, so precedes the clitic pronoun(s), and in (28c) it is in AuxP, so follows the pronoun(s). Applying the LHM analysis, clitic pronouns in (28) trigger stylistic nonfinite verb fronting in PF; thus, the verb precedes bjax when the auxiliary stands in the lower position, (28b), not when it stands in

the higher position: (28e). Verb movement to an intermediate position as in (28e–f) is not needed, so impossible. Applying the syntactic movement with scattered deletion approach, the same sentence could involve local movements for checking purposes under the Head Movement constrain for three types of heads—clitic pronouns, verb, and auxiliary—and PF constrains to determine pronounced copies.

Having looked at displaced nonfinite auxiliaries/verbs, let us recall ideas in Section 3.4 for displaced phrases. There, it was mentioned that interrogatives with the order of the declarative in (20a) involve syntactic focalization, with the initial constituent as contrastive focus (and see Rudin, 1993; Rudin et al., 1996; Bošković, 2001, among others, for different implementations of this hypothesis); the same idea is now valid for (20a), which lacks *li* (Arnaudova, 2003 for focus in declaratives).

The syntactic parallelism of declaratives and questions raises an important question. What is the information structure role of *li*? Is it a focus marker or not? Let us see how this question has been answered in the GB/minimalist literature, which serves to introduce ideas on information structure.

Sentences with fronted nonfinite verb/auxiliaries or fronted phrases have similar derivations, but can be interrogative or declarative. Interrogatives and declaratives also resemble one another in information structure, even though *li* is restricted to the first. To illustrate, the initial phrase in declarative (20a) is a contrastive focus, and so is the initial phrase in the parallel interrogative, but *li* appears only in the last. Declaratives with initial verbs such as (20b) and interrogatives with a similar order can both be neutral or in focus in their entirety, but only the interrogatives contain *li*. So does this particle contribute to information structure or not?

For Rudin, King and Izvorski (1985), the difference in information structure between interrogatives with fronted verbs and those with fronted phrases resides in *li*: this item carries a [+focus] feature when phrases front, or a [-focus] feature when verbs front. For Rivero (1999b and references there) the parallelism between interrogatives and declaratives supports the idea that the focus feature is not on *li*, but elsewhere in the sentence. Focalization is a syntactic rule that feeds LF in interrogatives (with *li*) and in declaratives (without *li*), so it has a semantic effect. Verb frontings that include Long Head Movement apply in PF in both interrogatives and declaratives, and cannot feed LF or have a semantic effect (and see Schafer, 1997 for LHM and out of the blue readings in Breton). Bošković (2001) develops two views on the information status of *li*. It can be a carrier of the focus feature checked by the element that fronts (Section 5.3.1.4); alternatively, it can be an inflectional element added in PF to focused elements (Section 5.3.2), not an intrinsic carrier of a focus feature. So here we see different views on the correlation between order and information structure, and related proposals are mentioned below.

Another aspect of *li* noted in Section 3.4 is that it can have the same distribution in main and embedded clauses, as illustrated in (22). By contrast, sentences (20a–b) and (21) show that clitic auxiliary *e* does not have the same distribution in main and embedded clauses, so let us see how the difference between auxiliaries and *li* can be captured. When *li* is the complementizer of an embedded question, it must be preceded by a constituent of that subordinate clause such as *pisala* in (22). In Section 3.4, I attributed this situation to an EPP feature on *li* that must be satisfied in PF. Namely, the interrogative particle must have overt material in its ‘checking domain,’ so in (22) the verb incorporates to *li*, and satisfies this

condition. By contrast, auxiliary clitics do not have the same distribution in main and subordinate clauses. For them, I have proposed (Rivero, 1999b, 2000) a PF condition that mentions a complement domain, not a checking domain. On this view, the embedded clause structure of (21) is [<sub>CP</sub> che [<sub>TP</sub> e. . .]], and the auxiliary is in the complement (domain) of che, which satisfies its PF condition. In (20a–b), the fronted constituent as head or phrase lands in a higher projection than the auxiliary in TP—[<sub>XP</sub> Pismoto [<sub>TP</sub> e]]—, so the PF condition is also satisfied. Wh-phrases front to Spec-CP (Rudin, 1988 and later work), so if the clitic auxiliary is in TP the same idea is valid for (23a). PF verb fronting does not apply in (23b), because the auxiliary condition is satisfied if at least one Wh-phrase raises. The PF condition on Bulgarian auxiliaries is sensitive to Tense (Borsley et al., 1996; Rivero, 1999b), not to cliticity, so this is why the same condition applies to Breton finite auxiliaries, which are not clitics.

In Section 3.4, I mentioned two alternative approaches to ‘long head movement,’ so let us see now how they account for the order in (20–21). On R& K& B& Bs analysis (1999), (20b) would illustrate Prosodic Inversion of the auxiliary. On Bošković’ copy movement approach (2002), similar feature-checking local movements for the auxiliaries in (20b) and (21) would combine with PF constraints to select pronounced copies (see Lambova, 2003 for a precise analysis under this option).

Let us now turn to the interesting left branch phenomena depicted in (24) and (25), which are rather restricted in Bulgarian, are mentioned by Caink (1998b: 97), but have not attracted particular attention in the minimalist framework. In Serbocroatian, Wh-movement may front to clause initial position a wh-adverb that modifies an adjective, and leave the adjective stranded. Given such a situation, a prominent view in GB/minimalism is that Serbocroatian orders with the characteristics of Bulgarian (24c) and (25c) result from syntactic focalization (Franks and King (2000: Section 12.2), Bošković (2001: Section 2.1) for recent overviews and references). However, in Bulgarian Wh-movement must extract the Adjective phrase in toto, not just its wh-modifier, so orders such as (24c) and (25c) do not seem to be the result of ordinary syntactic movement. However, such orders cannot involve phonological movement of the type of Prosodic Inversion, because while left branch phenomena in Bulgarian are restricted to auxiliaries, they affect both nonclitic and clitic auxiliaries. The auxiliary in (24c) is a clitic, so it could be proposed that PI inverts it with the adjective, which is a prosodic word. However, the auxiliary in (25c) is not a clitic, so it cannot be inverted by means of PI. Since all types of auxiliaries undergo this type of inversion, a suitable analysis is likely to involve operations with syntactic properties. Bošković (2001: 4.3.3.2) mentions relatively similar order phenomena in li interrogatives, and treats them by means of Sluicing. A parallel treatment for the declaratives now under discussion would be with Gapping.

As a concluding topic, let us look at the relation between word order and information structure on the basis of auxiliary complexes. A leading idea in minimalism is that information structure is in great measure connected to displacement, which has received different implementations. Recall that ‘long head movement’ orders such as (20b) with the participle preceding auxiliary sum receive an out-of-the-blue interpretation. I connected (Rivero, 1999b and later) this information structure to displacement of the verb in PF, which does not feed LF, and Lambova (2003) develops an alternative where out-of-the-blue readings derive from a participle not marked in the lexicon with a (strong) [+focus] feature, which undergoes

copy-movement in syntax. Within the scattered deletion approach, Lambova further proposes that stress assignment and intonation conspire to select which are the pronounced copies. These two approaches differ in basic philosophy, but both combine syntax and PF to capture the information structure of sentences with initial participles.

Another type of auxiliary order where information structure plays an important role is (26*b*). Embick and Izvorski (1994, 1995) note that when participles precede nonclitic *bjax*, sentences cannot be neutral so are in contrast with (20*b*). For (26*c*), Embick and Izvorski propose Stylistic Inversion, and for (20*b*) postsyntactic Morphological Merger/Prosodic Inversion. By contrast, for Lambova (26*c*) involves the focalization of a Participle marked in the lexicon with a strong [+focus] feature, which copy-moves in syntax; stress assignment and intonation are PF filters that ensure which copy is pronounced. So here we have two different approaches to information structure, which suggest the need for research on how to pair intonation to well-defined notions of focus.

Still another way to relate displacement and information structure is developed by Arnaudova (2001, 2003) based on Zubizarreta (1998). Arnaudova argues in favor of Prosodic Movement in Bulgarian. To illustrate, in V-O-S orders such as (21), Prosodic Movement raises the object above the subject, which is the information focus and occupies the slot chosen as prosodically most prominent by the Nuclear Stress rule (Chomsky and Halle, 1998). On this view, movement allows the item that is intonationally more prominent to coincide with the semantic (information) focus. Prosodic Movement differs from the PF rules I have called stylistic. This process applies after the checking rules in a postsyntactic level called Sigma Structure where sentential stress rules also operate, and does not check/value formal features, but affects information structure.

In sum, the general idea that certain displacements are linked to information structure and are not semantically vacuous has been implemented in a variety of ways in minimalism, within approaches that differ as to the role of syntax and PF, and as to the links between the different components in the grammar.

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## Appendix A. Bulgarian data

- Section 1: the basic tense/aspect system
- Section 2: clitic ordering
- Section 3: ‘particle’ verbs, in which reflexive or other pronouns are an obligatory part of the lexical entry (the obligatory clitics, however, behave just like normal clitics)
- Section 4: Word order variation, with particular emphasis on the auxiliary verb complex.

## Glosses:

NEG	negation
PRES	present tense
IMPF	imperfect (past) tense
AOR	aorist (past) tense
PRT	1-participle
IMPFVRT	imperfective 1-participle (for renarrated forms)
FUT	uninflected future particle ( <i>_te</i> )
FUT.IMPF	imperfect (past) form of (inflecting) future particle
NEG.FUT	fused negative future formative (derived historically from fused negative form of <i>imam</i> ‘have’)
NEG.FUT.IMPF	imperfect (past) form of fused negative (inflecting) future particle
FUT.PRT	1-participle form of (inflecting) future particle
NEG.FUT.PRT.NEUT	1-participle form of fused negative (inflecting) future particle (obligatorily in neuter singular form)
NEG.IMPER	fused negative imperative formative
BE	auxiliary verb ‘be’
BE.FUT	special (inflecting) future form of ‘be’: <i>bâda</i> , <i>bâdesh</i> , etc.
DA	subordinating conjunction (used also in various periphrastic TAM constructions)
ACC	Accusative (clitic pronoun)
DAT	Dative (clitic pronoun)
COND	Conditional (form of ‘be’)
Q	Interrogative clitic ‘ <i>li</i> ’
REFL	reflexive (clitic)

## Appendix B. Basic tense/aspect constructions

(cf. Scatton, 1984: 331) 3SG forms

## Present

- (1) a. **(Tja) (ne) pishe pismoto**  
 she NEG write.PRES the.letter  
 ‘She is(n’t) writing the letter’

## Imperfect

- b. **(Tja) (ne) pisheshe pismoto**  
 she NEG write.IMPF the.letter  
 ‘She was(n’t) writing the letter’

## Present/Imperfect Renarrated

- c. **(Tja) (ne) pishela pismoto**  
 she NEG write.IMPFVRT the.letter  
 ‘She is/was(n’t) writing the letter apparently’

## Emphatic

- d. **(Tja) (ne) bila pishela pismoto**  
 she NEG be.PRT write.IMPFVRT the.letter  
 ‘She is/was(n’t) writing the letter apparently’

## Aorist

- e. **(Tja) (ne) pisa pismoto**  
 she NEG write.AOR the.letter  
 ‘She wrote/didn’t write the.letter’

## Renarrated

- f. **(Tja) (ne) pisala pismoto**  
 she NEG write.PRT the.letter  
 ‘She wrote/didn’t write the.letter (apparently)’

## Emphatic

- g. **(Tja) (ne) bila pisala pismoto**  
 she NEG be.PRT write.PRT the.letter  
 ‘She wrote/didn’t write the.letter (apparently)’

## Present Perfect

- h. **(Tja) (ne) e pisala pismoto**  
 she NEG be.PRES write.PRT the.letter  
 ‘She has(n’t) written the letter’

## Past Perfect (Pluperfect)

- i. **Tja (ne) beshe pisala pismoto**  
 she NEG be.IMPF write.PRT the.letter  
 ‘She had(n’t) written the letter’  
 Perfect (Pres/past) Renarrated
- j. **(Tja) (ne) bila pisala pismoto**  
 she NEG be.PRT write.PRT the.letter  
 ‘She has/had(n’t) written the letter (apparently)’

## Future

- k. **(Tja) shte pishe pismoto**  
 she FUT write.PRES the.letter  
 ‘She will write the letter’
- l. **(Tja) njama da pishe pismoto**  
 she NEG.FUT DA write.PRES the.letter  
 ‘She won’t write the letter’

## Past Future

- m. **(Tja) shteshe da pishe pismoto**  
 she FUT.IMPF DA write.PRES the.letter  
 ‘She would write the letter’  
 ‘She was about to write the letter’
- n. **(Tja) njamashe da pishe pismoto**  
 she NEG.FUT.IMPF DA write.PRES the.letter  
 ‘She wouldn’t write the letter’  
 ‘She wasn’t about to write the letter’

## Future/Past Future Renarrated:

- o. **(Tja) shtjala da pishe pismoto**  
 she FUT.PRT DA write.PRES the.letter  
 ‘She would write the letter (apparently)’  
 ‘She was about to write the letter (apparently)’

- p. **(Tja) njamalo da pishe pismoto**  
 she NEG.FUT.PRT.NEUT DA write.PRES the.letter  
 ‘She wouldn’t write the letter (apparently)’  
 ‘She wasn’t about to write the letter  
 (apparently)’

Emphatic:

- q. **(Tja) bila shtjala da pishe pismoto**  
 she BE.PRT FUT.PRT DA write.PRES the.letter  
 ‘She would write the letter (apparently)’  
 ‘She was about to write the letter (apparently)’

Future perfect

- r. **(Tja) (ne) shte e pisala pismoto**  
 she NEG FUT BE.PRES write.PRT the.letter  
 ‘She will/won’t have written the letter’
- s. **(Tja) njama da e pisala pismoto**  
 she NEG.FUT DA BE.PRES write.PRT the.letter  
 ‘She won’t have written the letter’
- t. **(Tja) (ne) shte bade pisala pismoto**  
 she NEG FUT BE.FUT write.PRT the.letter  
 ‘She will/won’t have written the letter’
- u. **(Tja) njama da bade pisala pismoto**  
 she NEG.FUT DA BE.FUT write.PRT the.letter  
 ‘She won’t have written the letter’

## 2. Clitics

[Mainly taken from Hauge, 1976] Basic template:

- |     |    |                           |                       |
|-----|----|---------------------------|-----------------------|
| (2) | a. | <b>Az sâm mu go dala</b>  | I gave him it         |
|     | b. | <b>Ti si mu go dala</b>   | Thou gave him it      |
|     | c. | <b>Tja mu go e dala</b>   | She gave him it       |
|     | d. | <b>Nie sme mu go dali</b> | We gave him it        |
|     | e. | <b>Vie ste mu go dali</b> | You (pl.) gave him it |
|     | f. | <b>Te sa mu go dali</b>   | They gave him it      |

Cooccurrence restrictions: Non-3rd person accusative clitics do not cooccur with dative clitics (Hauge, 1976: 14)

- (5)
- |    |                                   |  |
|----|-----------------------------------|--|
| a. | <b>*Az im te preporâchvam</b>     | I to.them you recommend                                    |
| b. | <b>Az te preporâchvam na tjax</b> | I you recommend to them<br>‘I am recommending you to them’ |

si-hapology:

- (6)
- |    |   |  |
|----|---|--|
| a. | <b>Barabanchikât si (*si) potârsi barâban</b> | drummer REFL.PTCL (REFL.DAT) looked.for drum   |
| b. | <b>Barabanchikât si potârsi baraban si</b>    | drummer REFL.PTCL looked.for drum REFL.POSS<br>‘The drummer looked for a drum (for himself)’ |

## Li-placement:

- (7) a. **Shte otide li Masha dnes na teatâr?**  
 FUT go Q Masha today to theatre  
 ‘Is Masha going to the theatre today?’  
 b. **Masha li shte otide dnes na teatâr?**  
 Masha Q FUT go today to theatre  
 ‘Is it Masha who is going to the theatre today?’
- (8) a. **Shte mu go vârnete li?**  
 FUT him.DAT it.ACC return Q  
 ‘Are you going to return it to him?’  
 b. **Ne ste li mu go dali?**  
 NEG be.PRES Q him.DAT it.ACC give.PRT  
 ‘Haven’t you given it to him?’
- (9) a. **Tja ne bi mu go dala**  
 she NEG COND him.DAT it.ACC give.PRT  
 ‘She wouldn’t have given it to him’  
 b. **Az bil sâm mu kazala**  
 I be.PRT be.PRES him.DAT said.PRT  
 ‘I have told him (reportedly)’
- (10) a. **Az mu go bjax dala**  
 I him.DAT it ACC be.MPF give.PRT  
 ‘I had given it to him’  
 b. **Az sâm go bila chela**  
 I be.PRES it.ACC be.PRT read.PRT  
 ‘I have read it (reportedly)’
- (11) a. **\*Az mu go bix kazala**  
 I him.DAT it.ACC COND said.PRT  
 b. **Az bix mu go kazala**  
 I COND him.DAT it.ACC said.PRT  
 ‘I would have said it to him’
- (12) a. **Shte ja bâda prochela**  
 FUT it.ACC be.FUT read.PRT  
 ‘I will have read it’  
 b. **\*Shte bâda ja prochela**  
 FUT be.FUT it.ACC read.PRT
- (13) a. **Shte bâdesh li se vârnala do 5 chasât?**  
 FUT be.FUT Q REFL returned by 5 o’clock  
 ‘Will you have returned by 5 o’clock?’

- b. \***Shte se bâdesh li vârnala do 5 chasât?**  
FUT REFL be.FUT Q returned by 5 o'clock

### 3. 'Particle' verbs

Illustrating inherently reflexive verbs and verbs with obligatory pronominal complements, e.g. **trese mi** 'I shake,' **boja se** 'I fear' [Mainly adapted from Avgustinova (1997)]

- (14) a. **Ne te li e treslo ot sutrinta (i tebe)?**  
NEG you Q BE.PRES shake.PRT from morning (and you)  
'Haven't you been shaking since morning (too)?'  
b. \***Ne e li treslo ot sutrinta i tebe?**  
NEG BE.PRES Q shake.PRT from morning (and you)  
c. \***Ne treslo li e ot sutrinta I tebe?**  
NEG shake.PRT Q BE.PRES from morning (and you)

- (15) **Ne se li go e bala?**  
NEG REFL.ACC Q him BE.PRES fear.PRT  
'Didn't he fear him?'

- (16) a. **Shtjala li e da se e usmixala?**  
FUT.PRT Q BE.PRES DA REFL BE.PRES laugh.PRT  
'Would she have laughed?'  
b. **Njamalo li e da se e usmixala?**  
NEG.FUT.PRT.NEUT Q BE.PRES DA REFL BE.PRES laugh.PRT  
'Wouldn't she have laughed?'

- (17) **Nedej da mu ja pokazvash!**  
NEG.IMPER DA him.DAT her.ACC you.show  
'Don't show her/it to him!'

- (18) **Da mu ja pokazvame!**  
DA him.DAT her.ACC we. Show  
'Let's show her/it to him!'

- (19) **Vseki lingvist da chete тази книга!**  
every linguist DA read.PRES this book  
'Let every linguist read this book'

### 4. Word order variation

LHM and related phenomena:

- (20) a. **Pismoto e pisala Radka**  
the.letter be.PRES write.PRT Radka  
'Radka has written the letter'  
b. **Napisala e Radka pismoto**  
write.prt be.pres Radka the.letter  
'Radka has written the

- (21) **Znam che e pisala pismoto Radka**  
 I.know that be.PRES write.PRT the.letter Radka  
 ‘I know that (it’s) Radka (who) has written the letter’
- (22) **Pitam pisala li e pismoto**  
 I.ask write.PRT Q be.PRES the.letter  
 ‘I ask whether she has written the letter’
- (23) a. **Koga kakvo e pisala?**  
 when what be.PRES write.PRT  
 ‘What has she written when?’  
 b. **\*Koga kakvo pisala e?**  
 when what write.PRT be.PRES
- (24) a. **Az sâm mnogo dovolna**  
 I be.1SG.PRES very happy  
 ‘I am very happy’  
 b. **Dovolna sâm**  
 very happy be. 1SG.PRES  
 ‘I am happy’  
 c. **Mnogo sâm dovolna**  
 very be.1SG.PRES happy  
 ‘I am very happy’  
 d. **?Mnogo dovolna sâm**  
 very happy be. 1SG.PRES  
 ‘I am very happy’  
 e. **\*Sâm (mnogo) dovolna**  
 be.1SG.PRES (very) happy
- (25) a. **Az bjax mnogo dovolna**  
 I be.1SG.PAST very happy  
 ‘I was very happy’  
 b. **Dovolna bjax**  
 very happy be. 1SG.PAST  
 ‘I was happy’  
 c. **Mnogo bjax dovolna**  
 very be. 1SG.PAST happy  
 ‘I was very happy’  
 d. **Bjax (mnogo) dovolna**  
 be.1SG.PAST (very) happy  
 ‘I was very happy’

‘Auxiliary complex’

[Mainly taken from Avgustinova 1997]

- (26) a. **Az mu bjax dala knigata**  
I him.DAT BE.IMPF give.PRT the.book  
'I had given him the book'
- b. **Az bjax mu dala knigata**  
I BE.IMPF him.DAT give.PRT the.book  
'I had given him the book'
- c. **(Az) dala mu bjax knigata**  
I give.PRT him.DAT BE.IMPF the.book  
'I had given him the book'
- (27) a. **Shtjala bila da pishe pismoto**  
FUT.PRT BE.PRT DA write.PRES the.letter  
'She would write the letter (apparently)'  
'She was about to write the letter (apparently)'
- b. **Da pishe pismoto shtjala bila**  
DA write.PRES the.letter FUT.PRT BE.PRT  
'She would write the letter (apparently)'  
'She was about to write the letter (apparently)'
- c. **\*Shtjala da pishe bila pismoto**  
FUT.PRT DA write.PRES BE.PRT the.letter
- d. **\*Bila da pishe shtjala pismoto**  
BE.PRT DA write.PRES FUT.PRT the.letter
- (28) a. **Az bjax vi ja pokazvala**  
I BE.IMPF you.DAT her.ACC show.PRT  
'I had shown it/her to you'
- b. **Pokazvala vi ja bjax**  
show.PRT you.DAT her.ACC BE.IMPF  
'I had shown it/her to you'
- c. **Az vi ja bjax pokazvala**  
I you.DAT her.ACC BE.IMPF show.PRT  
'I had shown it/her to you'
- d. **\*Pokazvala bjax vi ja**  
show.PRT BE.IMPF you.DAT her.ACC
- e. **\*Az vi ja pokazvala bjax**  
I you.DAT her.ACC show.PRT BE.IMPF
- f. **\*Az bjax pokazvala vi ja**  
I BE.IMPF show.PRT you.DAT her.ACC
- (29) a. **Ne beshe li mu predstavena na zabavata?**  
NEG BE.IMPF Q him.DAT introduced at the.party  
'Wasn't she introduced to him at the party?'
- b. **Ne mu li beshe predstavena na zabavata?**  
NEG him.DAT Q BE.IMPF introduced at the.party  
'Wasn't she introduced to him at the party?'

- (30)
- a. **Spored nego shtjala sâm da sâm vi ja pokazala**  
 according.to him FUT.PRT BE.1SG.PRES DA BE.1SG.PRES you.DAT her.ACC  
 show.PRT  
 ‘According to him, I would have shown her/it to you’
- b. **Shtjala sâm spored nego da sâm vi ja pokazala**  
 FUT.PRT BE.1SG.PRES according.to him DA BE.1SG.PRES YOU.DAT her.ACC  
 show.PRT  
 ‘According to him, I would have shown her/it to you’
- c. **Ti shtjala li si predvaritelno da si ni ja pokazala**  
 you FUT.PRT Q BE.2SG.PRES in.advance DA BE.2SG.PRES us.DAT her.ACC  
 show.prt  
 ‘Would you have shown her/it to us in advance?’
- d. **Shteli li sme spored tjax da sine im bili predstaveni utre?**  
 FUT.PRT Q BE.IPL.PRES according.to them DA BE.IPL.PRES them.ACC BE.PRT  
 introduced tomorrow  
 ‘According to them, would we have been introduced to them tomorrow?’
- (31)
- a. **Ne ti li ja bj axa pokazala?**  
 NEG you Q her.ACC BE.IMPF show.PRT ‘Hadn’t you shown it/her?’
- b. **Ne bjaxa li ti ja pokazala?**  
 NEG BE.IMPF Q you her.ACC show.PRT  
 ‘Hadn’t you shown it/her?’
- c. **\*Ne pokazala li ti ja bjaxa?**  
 NEG show.PRT Q you her.ACC BE.IMPF
- d. **\*Ne bjaxa li pokazala ti ja?**  
 NEG BE.IMPF Q show.PRT you her.ACC
- (32)
- a. **Shteshe da ni gi e pokazvala**  
 FUT.IMPF DA US.DAT them.ACC be.PRES show  
 ‘She would have shown them to us’
- b. **Shteshe da ne ni gi e pokazvala**  
 FUT.IMPF da neg us.DAT them.ACC be.PRES show  
 ‘She would not have shown them to us’
- c. **Shteshe da ne ni gi bâde pokazvala**  
 FUT.IMPF DA NEG US.DAT them.ACC be.FUT show  
 ‘She would not have shown them to us’
- d. **?Shteshe da bâde ni gi pokazvala**  
 FUT.FMPF DA be.FUT US.DAT them.ACC show  
 ‘She would have shown them to us’
- e. **?Shteshe da ne bâde ni gi pokazvala**  
 FUT.IMPF DA NEG be.FUT US.DAT them.ACC show  
 ‘She would not have shown them to us’

- (33) a. **Shteli ste bili dnes vie da mi gi pokazvate**  
 FUT.PRT be.PRES be.PRT today you.NOM DA me.DAT them.ACC show  
 ‘You will show them to me today (reportedly)’
- b. **Dnes ste bili shteli vie da mi gi pokazvate**  
 today be.PRES be.PRT FUT.PRT you.NOM DA me.DAT them.ACC show  
 ‘You will show them to me today (reportedly)’
- c. **Dnes shteli li ste bili vie da mi gi pokazvate?**  
 today FUT.PRT Q be.PRES be.PRT you.NOM DA me.DAT them.ACC show  
 ‘Will you show them to me today (reportedly)’
- d. **Dnes bili li ste shteli vie da mi gi pokazvate?**  
 today be.PRT Q be.PRES FUT.PRT you.NOM DA me.DAT them.ACC show  
 ‘Will you show them to me today (reportedly)’
- e. **Dnes njamalo bilo vie da mi gi pokazvate**  
 today NEG.FUT.PRT be.PRT you.NOM DA me.DAT them.ACC show  
 ‘You will not show them to me today (reportedly)’
- f. **\*Dnes bilo njamalo vie da mi gi pokazvate**  
 today be.PRT NEG.FUT.PRT you.NOM DA me.DAT them.ACC show
- (34) **Da im cheta na decata sâm shtjala tazi prikazka**  
 DA them.DAT read.PRES to children be.PRES FUT.PRT this story  
 ‘I shall read this story to the children (reportedly)’
- (35) a. **\*Da im cheta na decata njama tazi prikazka**  
 DA them.DAT read.PRES to children NEG.FUT this story
- b. **\*Da im chetesh na decata nedej tazi prikazka!**  
 DA them.DAT read.PRES to children NEG.IMPERS this story

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