# Introduction

# The Clausal Structure of South Slavic

Mila Dimitrova-Vulchanova Lars Hellan



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# INTRODUCTION THE CLAUSAL STRUCTURE OF SOUTH SLAVIC

#### MILA DIMITROVA-VULCHANOVA

The Norwegian University of Science and Technology

### LARS HELLAN

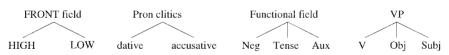
The Norwegian University of Science and Technology

#### 0. Introduction

In this Introduction we give an informal sketch of some of the main syntactic properties of the *clause* of the South Slavic languages, to serve as a background for the articles in this volume. The group of languages counting as South Slavic comprises Bulgarian, Serbian/ Croatian/ Bosnian, Slovenian, and standard literary Macedonian. Some of these languages are also counted among the Balkan languages (others in this group being Albanian, Greek and Rumanian), and many of the properties to be mentioned are salient 'Balkan' properties. To make the picture of the clausal structure of the South Slavic languages as holistic as possible, we give a fairly detailed exposition of Bulgarian as a system, and then comment on how the other languages may differ from the Bulgarian patterns.

Roughly viewed, the Bulgarian clause may be seen as having the following main 'fields' (ignoring the various types of adverbial constituents):

(1)



The 'FRONT' field can be filled up simultaneously by a large number of constituents, distributed over what we call a 'high' and a 'low' chamber. The pronominal clitics have a fixed position of occurrence next to FRONT. These clitics are able to reduplicate full NPs occurring in standard argument positions inside VP, and they also reduplicate fronted NPs. Then follows the 'Functional' field, consisting

of modal and related categories, inside which the pronominal clitics can take positions alternating with the position mentioned above. Last is the VP, where the verb precedes indirect and direct object, the latter in alternating orders. Bulgarian being a 'pro drop' language, the subject may be omitted; when present, it is not unreasonable to assume that its base position is VP final, as will be discussed below.

The pronominal clitics may be seen as acting as a 'glue' between the other fields: they functionally 'compete' with the VP-internal NPs for realizing object functions, in addition to reduplicating such NPs; they have a 'supporting' function relative to some types of fronted elements; and they distributionally intermingle with elements in the Functional field under certain conditions. We therefore start with a presentation of their forms, shown in contrast to full pronominal forms:

(2)	Forms of full pronominals:		Clitic forms: Pronominal:	
	Nom.	Acc.	Acc.	Dat.
1p.	az	mene	me	mi
2p.	ti	tebe	te	ti
2p. 3p.	toi/ tja/ to	nego/ neja/ nego	go/ ja/ go	mu/ i/ mu
	nie	nas	ni	ni
4p. 5p.	vie	vas	vi	vi
6p.	te	tjax	gi	im
			Reflexive: Acc: se	Dat: si

At most two pronominal clitics rooted in the same VP can occur simultaneously, and then in a cluster, always with the order 'Dative - Accusative'.

The following description of the fields in (1) and their interaction is phrased in fairly conservative transformational terms, although with some obvious features of more recent developments. We are not aiming at presenting any analysis, but will nevertheless point to 'contours' of analyses for expository reasons.

# 1. The 'Functional field'

The sequence in (3) represents one of the 'maximal' variants of the Functional field (in boldface, with indication of its immediate surroundings):

'CLarg' here stands for 'cluster of argument clitics', i.e., the pronominal clitics representing indirect and direct object. 'T/Agr[p,n]' and 'PartAgr[n,g]' stand for (in part syncretic) affixal morphemes representing, respectively, Tense, carrying

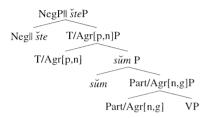
agreement features for person and number, and Participle, carrying agreement features for number and gender. The italicized forms explicitly refer to lexemes: li is a question word signalling yes-no-question, and  $s\check{u}m$  is a verb corresponding partly to English 'be'. Both of the Agr-items represent subject agreement, the first one appearing in all finite clauses, the second only in participial forms selected by  $s\check{u}m$ . The motivation for representing them separately from the stems they occur with, is to capture the distributional generalizations that T/Agr[p,n] always belongs to the first verb of the clause, whichever it may be, and PartAgr[n,g] belongs to the first verb following any occurrence of  $s\check{u}m$ . This being the type of motivation for the 'deep structure' position of Tense and other verbal affixes in English used in Chomsky (1957), we also assume the 'Affix Hopping' rule proposed there for associating the affixes with their stems; thus, in (3), this rule will, through movement of the affix to the right, associate PartAgr[n,g] with  $V_{main}$  and T/Agr[p,n] with  $s\check{u}m$ , the mode of association being generally either right-adjunction or a smaller or larger degree of fusion. Thus, in this respect, (3) represents a 'mildly underlying' structure.

To increase the level of detail somewhat, (4a) gives a list of items in the functional field, with indication of what material can follow each item to the right. In the latter specification, we adopt the current convention in GB/ Minimalism of regarding virtually any root and functional morpheme as a head of a projection, and what can follow it as its 'complement'; the sequence given in (3) has the tree structure in (4b) as its counterpart in these terms, and the environment specifications in (4a) refer to the constellations shown in (4b):

(4)	a.	'Functional head'	'Complement'
		T/Agr[p,n]	VP s timP ModP[class 1]
		sйm	PartAgr[n,g]P
		PartAgr[n,g]	VP sŭmP ModP[class1]
		Neg	T/Agr[p,n]P
		šte	T/Agr[p,n]P
		da	T/Agr[p,n]P
		Т	ModP[class 2]

<sup>1</sup> Cf. Krapova (this volume) and Caink (this volume) for distinct, but largely compatible accounts of the stucture of the functional field and likely mechanisms responsible for the distribution of its constituents.

b.



We now comment on the items in (4a).

The values of 'T' are 'past' and 'present'.

The category Neg is realized by the word *ne*.

*Šte* is normally counted as a noninflected modal, with the meaning 'will, want'.<sup>2</sup> It is in complementary distribution with *ne*.

Da has received varying analyses in the literature: Rudin (1985) considers it as an uninflected auxiliary, although not with a clear meaning, and Rivero (1994a) sees it as part of the modal projection, whereas Penčev (1993) simply states its noncomplementizer status. Da certainly does not fit readily into familiar complementizer categories: on the one hand, the Bulgarian counterpart to English 'that' is  $\check{ce}$ , which allows a FRONT complex under it, which da does not; on the other hand, da differs from putative 'infinitival complementizers' like English 'to' in that it is finite, i.e., followed by a T/Agr[p,n]P. By referring to it simply as da, we avoid taking a stand in the classificatory issue.

To Mod belong the following words:

# (5) a. class 1:

moga - 'can'

iskam - 'want'

imam/ njamam - '(not) have to'

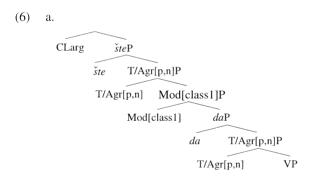
 $\check{s}tjax$  (past tense of  $\check{s}te$ , differing from  $\check{s}te$  in its ability to take a  $\underline{da}P$  as complement)

<sup>&</sup>lt;sup>2</sup> Cf. Krapova (this volume) for an alternative view.

b. class 2: trjabva - 'must', 'need' može - 'may' (ne) biva - 'ought to' nalaga se - 'become/ be necessary'

The difference between these classes is that members of class 1 occur with T/Agr[p,n] as full inflectional parameters, whereas members of class 2 occur with T only; in terms of the combinatorial building blocks and selections reflected in (4a), this difference is accounted for through the selection made by T vs. the selection made by T/Agr[p,n].

An example of a 'large' constellation involving some of the modal items is given in (6a); the level of representation is the same 'mildly underlying' one as before, and items subject to 'Affix Hopping' are shown in boldface. An actual construction realizing (6a) is given in (6b), and a construction realizing the 'Neg' structure in (4b) is given in (6c):



- b. Šte moga da rabotja.

  will can[1.p, sg, present] to work[1.p, sg, present]

  'I will be able to work.'
- c. Ne sửm bil rabotil dobre.
  not am[1.p, sg, present] had[Part, sg,m.] worked[Part, sg,m.] well
  'Reportedly, I don't work well'

#### 2. The clitics

The categories  $s \check{u}m$ , li and CLarg are instances of what we count as the constituent type *clitic*. Apart from the 'smallness' of putatively clitic items and their propensity for phonological dependence on a 'hosting' item, which need not be identical with an

item counting as a 'syntactic host'<sup>3</sup>, we adopt essentially two criteria for the notion 'clitic'. One sufficient condition in order for an item C to count as clitic is that it qualifies as what Zwicky (1977) refers to as a 'special clitic'; this is to say that the grammar motivates the classification of C as belonging to some category (most commonly word class) W where, however, C has a partly or completely different distribution than the other members of W. In Bulgarian, the present tense forms of  $s \tilde{u} m$  and CLarg are the categories that satisfy this criterion.

Another sufficient criterion, this one operative specifically in Bulgarian, is that the item in question belongs to a limited set E of elements which have the property that whenever they occur in a structure, they have to occur string-adjacent together, some of them in positions they would not occupy if the other putative clitic items were not in the structure. In Bulgarian, the items which have the 'special clitic' property (i.e.,  $s\check{u}m$  and CLarg) form a subset of such a set E, the additional item of E being li, which thereby also will be treated as a clitic. The cooccurrence restriction in question can be stated as in (7):

(7) All clitic elements in a clause have to occur string-adjacent together.

The strings instantiating such cooccurrences will be referred to as 'mixed clitic clusters', as opposed to 'pronominal clitic clusters' consisting only of pronominal clitics. We now address the clitic items in more detail.

The present tenses of the verb sum - namely,

sg.: sŭm, si, e pl.: sme, ste, sa

qualify as 'special clitics' by, contrary to the past tense and conditional forms of this verb, not being eligible for movement to a FRONT position (on V-movement to FRONT, see 4.2 below). We refer to these six forms throughout as 'CLaux'.

The placement of CLarg in 'surface' configurations is decided by the principle (7) in conjunction with the following rule (8). By the 'position P referred to in (8), we mean the position held by CLarg in (1), (3), (4b) and (6a), and the 'mildly underlying' level of representation reflected there we from now on refer to as 'Shallow Structure':

(8) CLarg occurs either in its Shallow Structure position P, or right-adjoined to one of the functional items ne, šte, or  $s\breve{u}m$ . The latter options take precedence over occurrence in P, and among the options, adjunction to  $s\breve{u}m$  and to ne are

<sup>&</sup>lt;sup>3</sup> Cf. van Riemsdijk (forthcoming) for an overview of considerations relevant to the issue of deciding 'hosts' for clitics.

<sup>&</sup>lt;sup>4</sup> This notion, albeit with a slightly different denotation, we borrow from Postal (1971).

equally preferable, and adjunction to  $s \tilde{u}m$  takes precedence over adjunction to  $\tilde{s}te$ .

The main verb, which is generated below the items mentioned in (8), is thus not eligible as a host, no matter whether it is finite or not, and likewise for Mod. Only in one case is the choice fixed, namely when  $s\breve{u}m$  is instantiated by one of its clitic forms, i.e., a present tense form (CLaux). CLarg then has to form part of a mixed cluster, and right-adjoins to CLaux. The schemata in (9) illustrate these possibilities:

- (9) a. ne go V<sub>main</sub> Neg CLarg
  - b. \*ne V<sub>main</sub> go
  - c. bjax go V<sub>main</sub> sŭm(past) CLarg
  - d. *ne bjax* **go** V<sub>main</sub> Neg sŭm(past) CLarg
  - e. *ne* **go** *bjax* V<sub>main</sub> Neg CLarg sŭm(past)
  - f. FRONT **go** ... FRONT CLarg
  - g. ne sǔm mu ja V<sub>main</sub> Neg sǔm(CLaux) CLarg Dat CLarg Acc
  - h. \*ne go s m Vmain Neg CLarg s m (CLaux) V

It appears that from the analytic perspective taken here, with P as the Shallow Structure location of CLarg, it has to be CLarg which moves down in the structure to find its host,<sup>5</sup> rather than the host which moves up. If the latter were the case, in examples like (9d) not only the host bjax but also ne, taking bjax as complement, would have to move.

As for the Shallow Structure location of CLarg itself, it is motivated by

- (i) the fact that it is one of the options for realization in any event, and
- (ii) the fact that in many dialects, and in other South-Slavic languages, it is the only realization possibility.<sup>6</sup>

We then consider the third type of clitic element, viz. the question word li, whose underlying position we have represented in (3), repeated:

<sup>&</sup>lt;sup>5</sup> We are not considering here the possibility that the pronominal clitics originate inside the VP, and thus move 'up' rather than 'down'; apart from lacking motivation on general grounds, this would also be of no avail in accounting for the distributional alternatives here in question.

<sup>&</sup>lt;sup>6</sup> For an argumentation of the viability of the 2nd (Wackernagel) position for pronominal clitics see Galabov (1950).

(3) ... li] LOWER FRONT CLarg Neg T/Agr[p,n]  $s \check{u}m$  Part/Agr[n,g]  $V_{main}P$ 

If either a verb ( $V_{main}$  or any other verb) or a focused NP occurs in FRONT, then li will stay in the position indicated. There are two items in the presence of which V cannot move to FRONT, namely Neg and  $\check{ste}$ . (Neg has the effect of blocking V-movement to FRONT also in the absence of li, while  $\check{ste}$  does not have such a general effect - see 4.2 below) When Neg is present, and no NP occurs with the relevant type of focussing, then li has to lower; then if CLaux obtains, principle (7) will force li to find a place in the mixed cluster. Likewise if there is a CLarg present and CLarg adjoins to Neg, then this situation too forces lowering of li in order to satisfy (7). In either case, a special restriction applies, namely (10):

(10) There has to occur at least one word between *ne* and *li*.

Examples of wellformed sequences in these situations are (11a, b), contrasted to (11c, d):

```
(11) a.
               sйт
                      li
                            ти
                                        ia
          Neg Claux CL-O him(CLarg) it(CLarg)
                          li
         ...ne
                                ia
          Neg him(CLarg)
                                CL-Qit(CLarg)
     c. *...ne
               li
                      sŭm
                            ти
                                       ia
          Neg CL-O Claux him(CLarg) it(CLarg)
     d. *...ne
               li
                      mи
          Neg CL-Q him(CLarg) it(CLarg)
```

Although we are not proposing any formal rule apparatus for accommodating these facts, it seems that in order for any system to accommodate (11b) while avoiding (11d) in a simple fashion, the CLarg-cluster should be adjoined to Neg first, so that li can in turn find a place between CLio and CLdo. Moreover, the effect of Affix Hopping has to be available in order for the category ' $s\check{u}m$ [tense]' (i.e., the clitic variant of  $s\check{u}m$  to arise), and since information about ' $s\check{u}m$ [tense]' is a prerequisite for the lowering of CLarg to take place, this means that Affix Hopping must precede lowering of CLarg. Also, the circumstance that li-lowering depends on whether other elements have moved into FRONT in turn makes it reasonable to assume that movements to FRONT take place before the local lowering processes in the functional field apply. Finally, all lowerings precede application of (7) and (10), since these act as some kind of final wellformedness conditions.

For frameworks that in principle do not avail themselves of rule ordering or movements to the right (and even down), the task of finding alternatives to the above account may not be straightforward, but obviously an interesting challenge.

Given this description of the 'Functional field', along with CLarg, we turn to FRONT, after a brief look at the phenomenon of clitic doubling.

# 3. Clitic doubling and agreement

As mentioned earlier, Bulgarian object pronominal clitics are able to reduplicate full NPs, occurring either in their standard argument positions inside VP, or in FRONT. In the former case, reduplication is generally optional, whereas under certain conditions when the doubled NP is in FRONT, reduplication is obligatory. The clitics consistently agree with the NPs they double, with regard to person, number, and gender; they also consistently carry a meaning of specificity, shared with the NPs they double.<sup>7</sup> These properties are independent of whether CLarg occurs in the position indicated in (3), or in some of the ('derived') positions inside the Functional field.

(12) and (13) illustrate the case where the reduplicated NPs are inside VP. It will be noted that (13) constitutes a constructional minimal pair, the (b) option hinging upon the presence of the definite article as opposed to the 'bare' form, while the converse holds of the 'small clause' construal in (a):

- (12) a. *Čel sŭm ja knigata*. read am(cl-Aux)it(cl-Arg) the book 'I have read that book.'
  - b. \*Čel sŭm **ja** kniga. read am(cl-Aux)it(cl-Arg) book
- (13) a. Evaluated as a small clause construction:

  Naznačixa ja učitelka(\*ta).

  appointed(they) her teacher(\*the)

  'they appointed her as teacher.'
  - b. Evaluated as a plain transitive doubling construction: *Naznačixa ja učitelka\*(ta).* appointed(they) her teacher\*(the) 'they appointed the teacher.'

<sup>&</sup>lt;sup>7</sup> It should be noted here that there is a variation across the Balkan languages with respect to which features are relevant for agreement. While the purely grammatical features person, number and gender are relevant for all the languages in question, specificity applies, besides Bulgarian, to Albanian (cf. Kallulli 1995) and Rumanian (cf. Dobrovie-Sorin 1990), Assenova (1989)). In Modern Greek, however, the relevant feature is 'definiteness' as instantiated by DPs with the definite article (cf Anagnostopoulou, forthcoming). In addition, for Rumanian an important feature is 'human' (Dobrovie-Sorin 1990), whereas for Alabanian 'focus' also plays a role (cf. Kallulli 1995).

It should be noted that the presence of a specific NP inside VP does not necessitate doubling, neither of direct nor indirect object.<sup>8</sup> In this respect doubled NPs inside FRONT have a different effect, as will be seen in the next section.

# 4. The FRONT field

In this presentation we propose that what we call the 'FRONT field' can be decomposed into two parts, a 'higher' and a 'lower chamber', where the higher chamber contains topicalized phrases, and the lower chamber is the location of fronted verbs, of items central to the expression of questions (viz., wh-items on the one hand, and the particle li, on the other), and focussed constituents. The pronominal clitic cluster will be shown to stand in an agreement relation to the higher chamber.

# 4.1 The 'higher chamber' of FRONT

The following are constructions where up to three NPs occur in the FRONT area, and, when objects, the NPs require doubling clitics (the clitics in boldface):<sup>9</sup>

- (14) a. Na Ivan knigata (az mu ja dadox. to Ivan (IO) book-the(DO) I(Su) him(Dcl) it(Acl) gave 'I gave the book to Ivan.'
  - b. \*Na Ivan knigata (az) dadox. to Ivan(IO) book-the(DO) I(Su) gave(I) 'I gave the book to Ivan.'

The optionality of doubling when NPs occur in situ and the obligatoriness when they are fronted (in both cases given that they are specific) suggests that the pronominal clitics play an essential licensing role for the fronted NPs. It may be proposed that the properties with regard to which the fronted NPs have to be licensed are their grammatical functions, i.e., their functioning as subject, direct object or indirect object. NPs are not case-marked in Bulgarian, hence they carry little inherent indication of their functions when they are stacked together in FRONT; for any actual functions assigned to the NPs, these hence may be seen as being supported by the

<sup>&</sup>lt;sup>8</sup> This situation is unlike what one finds in Macedonian, in which specific direct and indirect objects instantiated by DPs (i.e. marked by the definite article), as well as when expressed by full pronominal forms, necessarily trigger clitic doubling.

<sup>&</sup>lt;sup>9</sup> Note that in Rumanian, constructions of the Bulgarian type with indirect objects in FRONT, treated in the generative tradition as 'left-dislocation' constructions (Dobrovie-Sorin 1990), obligatorily require clitic doubling.

clitics. A proposal may then be that this support relation is grammaticalized to the extent that no NP will be licensed as an indirect object unless it is supported by a CLdat, and no NP is licensed as a direct object unless it is supported by a CLacc; only for the licensing of the subject function is no clitic required.<sup>10</sup>

This is not to say that the constellation of NPs in FRONT would not be interpretable if there were no clitics - sufficient ordering principles exist for the NP combinations to enable disambiguation with regard to grammatical function. The main ordering is (15) (ignoring orders that arise when items are focused; see below):

(15) The order of NPs in FRONT is 'indirect object - direct object - subject', or 'direct object - indirect object - subject'.

In addition, one of the grammatical functions is also morphologically marked, in that an indirect object invariably consists of the preposition *na* followed by a NP. Moreover, the following configurations never obtain:

(16) \*IO - Su in FRONT, DO in VP \*DO - Su in FRONT, IO in VP

These circumstances reduce the possible ambiguities arising in FRONT to the extent that the requirement of clitic doubling is not strictly necessary for disambiguation purposes, but must rather be regarded as a grammaticalized device of partial redundancy, which however is highly useful for grammatical processing.

If we shift perspective from that of functionality and functional interpretation to that of generation, possible rules and mechanisms might involve the following.

First, one might postulate an iterative 'take all'-rule which fronts NPs from VP, starting from the left, presupposing an initial order 'indirect object-direct object/ direct object-indirect object - subject' in the VP,<sup>11</sup> the latter with the following 'base' structure, with the arguments in boldface:

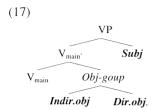
(i) a. Pristignaxa knigi came books b. Skačaxa klouni jumped clowns

Another reason for assuming the subject to be VP-final is that when a transitive verb is fronted, the preferred order in the VP is direct object followed by subject.

(ii) a. Kupixa mu kniga studentite. bought him book the students

For an analysis of the conditions on clitic doubling in Bulgarian, cf. Guentcheva (1994).

<sup>&</sup>lt;sup>11</sup> One reason for assuming VP-final subjects is that subjects frequently occur in this position, especially if they are 'bare' (non-specific, non-definite, such as *knigi* and *klouni* in (i). (Their final position thus cannot be seen as resulting from a process like 'heavy NP shift' or the like.)



Given that the order between indirect and direct object inside the VP can be reversed, this reversed order can also be straightforwardly mirrored by the rule mentioned.

An additional possibility is to have a 'take one'-rule moving a single NP, no matter which one, out of a full VP. This rule allows for the fact that FRONT can consist of only one NP - an indirect object, a direct object, or a subject. Given that the *Object group*, italicized in (17), is recognized as a possible constituent, <sup>12</sup> then no rules other than the two mentioned are needed for producing the acceptable patterns and blocking those in (16).

Given a mechanism of movement worked out along these (or other) lines, the second ingredient of the analysis would be a mechanism imposing the occurrence of CLarg when FRONT is filled in the ways seen. In the framework of GB/Minimalism, a device that would come to mind is 'Spec-Head agreement', presupposing a constellation where the items in FRONT now mentioned constitute the 'Spec' of a projection and CLarg constitutes the 'Head' of that projection. Leaving the possible details of such an analysis, or alternative ones, open, we now look at further types of constituents that can occur in FRONT.

# 4.2 The 'lower chamber' of FRONT

In all the examples considered so far, if an indirect or direct object NP occurs in clause initial position, then an agreeing CLarg occurs in the position of clitics. We

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'The students bought him a book.'
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From the point of view of economy there would seem to be no point in analyzing this VP-final occurrence of the subject as the result of rightward movement or object scrambling. For further argumentation, see Dimitrova-Vulchanova and Hellan (forthcoming).

b. ??Kupixa mu studentite kniga.
bought him the students book

c. ... ala naj-mnogo običal sladkoto malkijat Mečo.

<sup>...</sup> but best liked the jam the little Bear

<sup>&#</sup>x27;But it was the little Bear who liked the jam best.'

d. \*... ala naj-mnogo običal malkijat Mečo sladkoto.
... but best liked the little Bear the jam

<sup>&</sup>lt;sup>12</sup> For discussion, see Hellan (1990).

have identified all of these examples as cases of *topicalization*, which is to say that an informationally 'old' item is presented as an 'entrance' point to a construction whose contribution of 'new' information is carried by constellations later in the construction. In (18), however, a different pattern obains:

(18) KNIGATA dadox na Ivan, a ne ... (with contrastive stress) book-the(DO) gave(I) to Ivan, and not...
'It was the book I gave to Ivan (and not ...)'

*Kniga* in this example may be said to be 'focused', i.e., it is emphasized (and thereby given the status of new information) that what I gave to Ivan was a book, as opposed to other, contextually given, alternatives. At the same time, no clitic occurs. We may refer to this construction as *Contrastive fronting*, characterized by the two properties mentioned.

Another construction with fronting but without clitics is given in (19):

(19) Na kogo kakvo koga sa dali? to whom what when are given(3pl) 'What have given to whom when?'

Here the fronted items are wh-items, sharing with Topicalization constructions the circumstance that there is no upward limit to how many items can be fronted; put differently, in Bulgarian multiple questions, all the 'questioned' constituents have to occur fronted. (In contrast to Topicalization, the order of wh-items is not fixed; their function, however, is retrievable by their case marking, which may explain why their ordering can be left free.) The lack of clitics in this construction is not due to a ban against clitics per se in question constructions: (20a, b) show that in yes-no questions (signalled by li), NPs can be topicalized and doubled by a clitic; (20c) shows that even in a constituent question, an NP can be topicalized to a position preceding the wh-item and then agreeing with a clitic; and (20d, e) show that in constituent questions with many wh-items, one, but not more than one, clitic may occur agreeing with the respective wh-constituent:

- (20) a. Knigata dadoxte li mu ja na Ivan? book-the gave(2pl) cl-Q him(cl-Arg) it(cl-Arg) to Ivan 'Did you give the book to Ivan?'
  - b. Knigata Ivan li ja dade na Petŭr? book-the Ivan cl-Q it(cl-Arg) gave to Peter 'Was it Ivan that gave the book to Peter?'
  - c. Knigata na kogo ja dadoxa? book-the to whom it(cl-Arg) gave(3pl) 'Whom did they give the book to?'

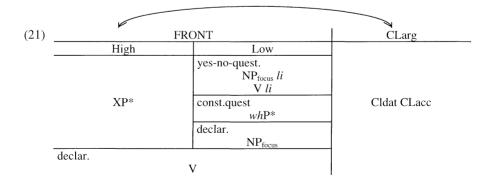
- d. Na kogo kakvo mu dadoxa?
  to whom what him(CLdat)gave(3pl)
  'What did they give to whom?'
- e. \*Na kogo kakvo mu go dadoxa? to whom what him(CLdat) it gave(3pl)

A possible analysis of these data may go as follows:

The FRONT area consists of two areas, to be referred to as the 'higher' and the 'lower' chamber (of FRONT). Topicalized constituents occur in the higher chamber, while all items whose semantic function is distinct from the 'entrance' function particular to topicalized items, occur in the Lower chamber. Clitic agreement only applies for items in the Higher chamber. (For items in the Lower chamber, as mentioned, they either carry morphological case (the *wh*-items), or there is only one item (when carrying contrastive focus), hence the functional need for agreeing clitics is less.)

A way of accounting for the possibility of (20d) is to assume that here, the wh-constituent *na kogo* 'to whom' occurs in the higher chamber of FRONT, hence the possibility for agreement with the argument clitic *mu* 'him(D)'. What motivates this assumption is a specific or 'rhetorical' reading of *na kogo* found in (20d), where the speaker has somebody/something specific in mind, whereas what the question is really about resides in the non-doubled wh-constituent.

To complete the picture of fronting, in Bulgarian both main verbs and non-clitic auxiliaries can move to FRONT in matrix clauses, and this can happen both in declarative and yes-no-questions. Declarative clauses differ from question clauses in that in declarative clauses, there exists a strict complementarity between V-fronting and NP topicalization, i.e., NP-topicalization excludes V-fronting and vice versa, whereas in yes-no-questions, when V is fronted, there can still be a NP in Spec-CLargP (cf. 20a). The possibilities mentioned can be informally summarized as follows; the arrow indicates the interdependence between the High FRONT area and the pronominal clitics: '\*, means 'with no upward bound on number of occurrences':



Thus, one can have the High chamber filled without anything occurring in the Low chamber, and vice versa, and one can have material in both, regardless of which type of Low chamber is chosen; moreover, when a V is fronted in a declarative, then this is the only possible occupant of FRONT. CLarg consistently supports, and agrees with, elements in the High chamber. Finally, given structural assumptions like those presented here, any clause in Bulgarian can be construed as having at least one constituent occupying the FRONT area.

Apart from certain intervention problems that the Low chamber raises for the Spec-head-account alluded to above, further issues residing in these constructions include the fronting of V, an apparent head, to an area where otherwise phrases occur, and, involving more 'levels' of analysis than just the syntactic, the selection of specific positions according to information structural status (topic, contrastive, etc.). The latter factors, taken together with the circumstance that CLarg activates a 'specific' interpretation of the arguments represented, shows that this syntactic system cannot be given a formal treatment except in interaction with an articulate semantics.<sup>13</sup>

# 5. The clause structure of the other South Slavic languages

The other languages in the South Slavic group display, in varying degree, the properties of Bulgarian clause structure introduced above. Most saliently, all the other languages tend to share the same overall design in terms of a FRONT field, a functional field and the VP area.

With regard to the FRONT area, the differences from Bulgarian reside in constraints on the structure of FRONT, as well as types of XPs that may occur in the clause initial position. For instance, standard Macedonian allows for multiple occurrence of XPs in FRONT, however unlike Bulgarian, this is restricted to nominal expressions and adverbial phrases, whereby disallowing verb fronting. In addition, Macedonian allows for an empty FRONT field, a phenomenon traditionally described as a clitic-first option, or as the absence of Tobler-Mussafia effects. Le Serbian/Croatian/Bosnian display a constraint with respect to the simultaneous occurrence of XPs in FRONT, in that one XP at most is allowed to occur in this position.

The latter constraint in Serbian/ Croatian/ Bosnian may be seen as related to the tendency for strict observance of the 2nd position for clitics, also referred to as the Wackernagel position.<sup>15</sup> With respect to the options for clitic placement, Serbian/

<sup>&</sup>lt;sup>13</sup> For a formal semantic analysis of the constituency and aspectual values of the verb phrase, to which an analysis of the phenomena now mentioned will have to be related, see Verkuyl (this volume).
<sup>14</sup> For a discussion of topicalization and fronting in Balkan Slavic see Tomić (1996), and Rivero

<sup>(1991, 1994,</sup> and this volume) for verb fronting.

<sup>&</sup>lt;sup>15</sup> We refrain here from a discussion of the appropriateness of the term, and how Wackernagel's classical definition is to be interpreted with respect to the Slavic data. For a detailed discussion the reader is referred to Anderson (1993), and Riemsdijk (forthcoming).

Croatian/ Bosnian resemble rather Czech, which belongs to the West Slavic group (cf. the paper by Toman, this volume). In addition, Serbian/ Croatian/ Bosnian and Czech are similar in that they exhibit a variation in what counts for first constituent preceding the clitics, e.g. whether first word or first phrase (cf. Anderson 1993, Progovac 1996). A further similarity is that, under certain circumstances, clitics may appear in the third position in the clause, a phenomenon described as clitic third (cf. Ćavar & Wilder, forthcoming, and Boścovič 1995), also embedded thirdness (cf. Toman, this volume). Another difference between Bulgarian and Macedonian, on the one hand, and Serbian/ Croatian/ Bosnian and Czech (the West Slavic language represented in this volume), on the other, is the absence of clitic doubling in the latter type. This property may be attributed to the fact that both Bulgarian and Macedonian are core members of the Balkan Sprachbund, whereas Serbian/Croatian/Bosnian are not.<sup>16</sup>

Further properties of Serbian/ Croatian/ Bosnian also deserve attention. One is 'left-branch extraction' in nominal phrases, whereby a fragment of the noun phrase, such as e.g. a modifier AP/ a demonstrative may be fronted to clause initial position, leaving the rest of the phrase *in situ* (cf. Ćavar and Wilder 1994, forthcoming, Progovac 1996, and Dimitrova-Vulchanova, forthcoming). Another interesting property is the availability of two options for clitic placement in infinitival contexts, i.e. the clausal 2nd position and the 2nd position in the infinitival phrase.<sup>17</sup> Following the Romance clitic tradition, this property is sometimes labelled 'clitic climbing' also in connection with these languages (e.g. Spencer 1991; for a discussion cf. Progovac 1991, and Dimitrova-Vulchanova, forthcoming).

For an introduction to South Slavic clitic phenomena the reader is referred to seminal work by Browne (1974) and Rå Hauge (1976), and for analyses of clitic placement options to work by Progovac (1991, 1996), Ćavar and Wilder (1994, forthcoming), Bošcović (1995, current work), and Halpern (1995). Basic properties of South-Slavic clause structure are described in Penčev (1993), Rivero (1991, 1993, 1994a, b, and this volume), Rudin (1986, 1988, 1991), Tomić (1996), Dimitrova-Vulchanova (1995, forthcoming) and Dimitrova-Vulchanova and Hellan (1991, forthcoming).

<sup>&</sup>lt;sup>16</sup> Some Balkan features are present in Serbian/ Croatian/ Bosnian (cf. the discussion in Assenova 1989, Laskova 1993).

<sup>17</sup> The following pair illustrates the alternation:

<sup>(</sup>i) a. Zelim mu ga dati want(1sg) him(cl-Arg) it(cl-Arg) give(inf) 'I want to give it to him'

b. Ja mu ga zelim dati I him(cl-Arg) it(cl-Arg) want(1sg) give(inf)

#### 6. This volume

This volume displays a variety of approaches to some of the phenomena introduced so far. The paper by Rivero gives a minimalist view of verb fronting and related phenomena. The papers by Progovac and Schick look at the central properties of conjunctions in South-Slavic, whereas Krapova and Caink provide distinct, however compatible accounts of the structure of the functional field, and the nature of functional categories. The paper by Verkuyl provides a formal semantic account of Slavic aspectual phenomena. Two papers are devoted to the structure of nominal expressions, the one by Dimitrova-Vulchanova and Giusti, and the one by Leko. The former exploits the parallel between clause structure and the structure of noun phrases in a discussion of possessive expressions in Bulgarian, whereas the latter describes basic features of noun phrase structure in Bosnian. The paper by Browne presents some of the puzzles and still controversial issues in the formal description of South-Slavic, and Toman gives an account of cilitic placement phenomena in Czech.

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