### Iliyana Krapova

# Complementizers and particles inside and outside of the left periphery: The case of Bulgarian revisited

**Abstract:** The paper discusses the organization of the left periphery in Bulgarian and argues that it has a rich articulation guided by the general syntactic principles as established on a wide cross-linguistic basis. Bulgarian shows several points of dissociation with respect to the original theoretical template established by Rizzi's 1997 seminal work. The paper discusses these points and brings new empirical evidence about the hierarchical ordering of complementizers in Bulgarian. The evidence shows that the declarative complementizer is merged in a low position within the left periphery and may optionally raise to the position related to the illocutionary force of the embedded clause, while the interrogative complementizers dispose of different and higher dedicated positions, as inferred from their relative order with respect to different types of contrastively focussed phrase. The paper also discusses the controversial modal particle da and argues that it does not occupy a position within the left periphery but given the independently established left peripheral positions, a mechanism is proposed about how its modal and finiteness features are related to selection and to veridicality as the guiding principle behind the organization of the left periphery of Bulgarian.

**Keywords:** Bulgarian, left periphery, complementizer, complement clause, illocutionary force, declarative, interrogative, polarity, indirect questions, unselected questions, topic, Aboutness Topic, Given Topic, Contrastive Topic, focus, Contrastive Focus, question particle, (non-)veridicality, propositional predicate, mood, modal marker, realis-irrealis, factive, finiteness

### 1 Introduction

In this paper, I will discuss the syntax of Bulgarian complementizers from the point of view of Rizzi's (1997) theory that embedded clauses have a left periphery which is richer than usually thought. The term *left periphery* refers to that area of the syntactic representation of the clause where various contextually relevant

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sentential elements are encoded in order for the sentence to connect to preceding discourse. In embedded clauses, this is also the area where complementizers are located whose main function is to serve as syntactic elements connecting the matrix with the embedded clause. Following the Split CP approach originally proposed by Rizzi (1997), I will show that the left periphery of the embedded clause of Bulgarian is a richly articulated area and contains various positions organized in a hierarchical way. To do so, I will look in more detail at the syntax of the complementizer system of Bulgarian in relation to those discourse properties that express the informational articulation of the structure. Most authors that have worked on Bulgarian complementizers so far (Rudin 1993, Rudin et al. 1999; Bošković 2001; Franks and Rudin 2005; Dukova-Zheleva 2010, a.o.) have posited a single C position hosting each particular complementizer and have proposed various adjunction positions to deal with discourse-related phrases. In this paper, I will argue that a Split CP approach offers more precise and more refined theoretical tools that can help us account for issues of both order and interpretation of the elements potentially (co-)occurring within the CP area of the Bulgarian clause. The syntactic analysis I will propose will therefore seek to account for some not quite well understood phenomena regarding the interaction between Topic/Focus phrases on the one hand and the complementizer area on the other.

Like other Balkan languages, Bulgarian is a language with quite a rich complementizer system whereby, as I will argue, each complementizer occupies a distinct syntactic left peripheral position consistent with its functional-semantic specification. In this paper, I will consider the declarative complementizer če 'that' and the interrogative complementizers dali and li 'if/whether'. For lack of space, other conjunctions and relative pronouns used as complementizers will remain outside the scope of the paper: the conditional complementizer ako 'if', the relative complementizer *kogato* 'when' used to introduce adverbial (temporal) clauses and the two factive wh-complementizers deto 'that' and kak 'how'. Concerning the complementizers under study, I will discuss the preliminary hierarchy shown in (1), harmonized with the template discussed in Wiemer (this volume) and will advance arguments as to their relative order with respect to other elements that occupy distinct positions within the left periphery:

(1) CORE 1 (matrix clause) COMP 1 COMP 2 (dependent clause) dali/li če

The paper is organized as follows. In section 1, I briefly introduce the basic conceptual tenets that underlie the view, elaborated originally in Rizzi (1997) and

further elaborated in a series of works (see Rizzi 2001, 2013, 2014; Rizzi and Bocci 2017), namely that all languages avail themselves of a Split CP system in which categories like complementizers, question operators, modal particles and other "function words" that languages use to connect CORE 2 to CORE 1 target different functional projections in the space between them.

In section 2, I discuss general issues of distribution and selection involving the complementizers under study and their relative order with respect to the discourse projections that inhabit the COMP area. In section 3, I discuss the syntactic status of the much debated particle da, sometimes argued to be a complementizer of the irrealis type, and will show that it does not belong to the CP domain but is rather a modal particle within the functional domain of CORE2, in accord with my previous work on this topic (Krapova 2001).

# 2 The left periphery of CORE2 according to Rizzi (1997)

In the Government and Binding framework of Chomsky (1981), only one head position and only one maximal projection position, i.e. only one position where a phrase XP can appear, are available on the left of the subject (NP). This is illustrated in the following structural representation:

In (2), CORE 2 corresponds to what in standard generative grammar terms is known as IP involving the various CORE2-internal functional projections related to verbal tense, mood and agreement and located outside of the lexical projection of the V system (VP). Although C(OMP) too is a syntactic head, it is fundamentally different from the functional array of projections in CORE2 in that it can only host complementizers, connectors or particles serving to introduce the subordinate IP clause and to connect it to CORE1, as in John thinks that Mary left.

It is generally assumed that the category 'complementizer', introduced as early as Bresnan (1972) and further elaborated in Chomsky (1986), conflates two functions: syntactically, it indicates clause type, which, in its traditional understanding, captures basic structural properties of clauses that underlie their interpretation, i.e., whether the clause is a root or a subordinate one, or whether it is a declarative, an interrogative, an imperative or an optative. Complementizers also signal the conversational uses conventionally associated with the various clause types: thus a declarative complementizer introduces a declarative clause corresponding to an assertion, an interrogative complementizer – a clause corresponding to a question, while a modal complementizer of sorts typically introduces a modalized clause expressing a requirement or a wish (Portner 2009: 258).

Rizzi (1997) proposes that these distinctions are structurally represented in a uniform way across languages. Apart from this conceptual claim he also advances the hypothesis that the CP does not correspond to a single maximal projection but should rather be conceived as an "area" or "zone" hosting various functional projections with a fixed semantic/functional specification and rigidly ordered among each other as in (3).

The two projections - ForceP and FinP - delimit the boundaries of the CP area and are located at the interface with CORE1 and CORE2, respectively. The projection of ForceP encodes properties relating to clause type and illocutionary force. ForceP is the highest projection of the CP domain, one that establishes a local relation with CORE1 and is directly accessible to it for the purposes of selection (the main predicate or some other element within CORE 1, e.g. the head of a relative clause). The projection that closes off the CP domain from below is Fin(iteness)P expressing distinctions pertaining to the (non-)finiteness character of CORE 2, i.e., information that "faces the inside, the content of the IP embedded under it" (Rizzi 1997: 283). As the label indicates, the role of Fin is to structurally distinguish finite from non-finite embedded clauses, but it also encodes related properties pertaining to tense,

In what follows, I will assume that as far as sentence structure is concerned, clause type matches illocutionary force at least in typical contexts, leaving aside the pragmatic aspects of the relation between clause type/sentence mood and illocutionary force/speech act mood. See also Cristofaro (2003) and Nordström (2010) for a discussion regarding embedded clauses.

<sup>1</sup> Clause types (also labelled sentence moods) express concepts related to belief, knowledge, truth and the speaker's commitment to the truth of the proposition (Nordström 2010: 41), so they are also closely related to distinctions like realis-irrealis or factual-non-factual (see Wiemer this volume), which also determine the choice of verbal mood (indicative vs. subjunctive) within CORE2. Thus, while an assertion would typically be encoded in the indicative, a request or a wish would typically be encoded in the subjunctive. Even though there is a close correspondence between clause type and illocutionary force, Portner (2009) notes that the two should be kept apart because the correspondence is not absolute. For example, (i) has the clause type of an assertion but its illocutionary force is that of a request:

<sup>(</sup>i) I wonder if you can tell me the time.

agreement and modality. These properties are then "passed down" to CORE2 and in general serve as some sort of "instruction" about the exact morphological make-up of the embedded verb. As an abstract conceptual category, Fin correlates with those language specific morphological properties encoded in the Infl space of CORE2 (see (2) above) that are responsible for anchoring of the embedded tense to the speech context, as well as for the various mood distinctions expressed on the embedded verb or on other elements (such as negation, location markers, etc.). For example, a declarative embedded clause i.e., one whose Force is marked as declarative, 2 would typically have its Fin specified as [+finite] in virtue of having independent temporal reference and indicative modality. On the other hand, the Fin of a modalized clause, given the variety of modal meanings languages express, can be specified for one or more features from the domain of non-indicative modality, often correlating with non-finiteness or with temporally dependent event anchoring. This then will determine the choice of a subjunctive or an infinitive, or of some other type of non-affirmative mood marking on the verb according to the morphological inventory of the language.<sup>3</sup> In more recent accounts, Fin is also exploited as a host for other abstract features relating the embedded clause to the context of speech, like Speech Act distinctions, Speech event anchoring, Assertion Time, logophoricity, etc. (see discussion and references in Eide 2016).

Interspersed between Force and Fin are the discourse-related projections like the ones hosting topicalized and focalized phrases. There is ample evidence that in many languages such phrases occupy left-peripheral positions, so assuming these positions to be fixed within the CP domain they can serve as useful diagnostics for evaluating the positional evidence coming from the distribution of complementizers and their interpretive import with respect to both CORE1 and CORE2. For example, Rizzi argues that, in Italian, the complementizers che 'that' and di 'of' (the infinitival complementizer) have a different distribution with respect to topics or focussed phrases: such phrases follow the declarative complementizer che but precede the prepositional complementizer *di* so that they are ordered as in (4):

<sup>2</sup> Quite obviously, Force has access to the informational content encoded in Fin and vice versa, so that if for example the clause represents an assertion embedded under a declarative complementizer (e.g., after 'bridge' verbs like say, believe, etc.), the indicative would be chosen. If on the other hand the clause expresses a requirement, a wish or an order, embedded under a modal complementizer, the subjunctive will be chosen (if the language possesses such morphology) or a special type of tense marking.

<sup>3</sup> Rizzi's system thus aptly differentiates the broader category of modality that can be said to featurally reside in Fin from the more narrow category of mood, which is by necessity instantiated within the IP domain/CORE2. "[M]ood correlates with a verbal form and composes a paradigm within the verbal system of a certain language, whereas the instantiations of modality are not necessarily associated with the verb" (Sampanis 2012: 72). See also Quer (2006) and a discussion in Palmer (2001).

Left peripheral topics and focus contribute to the informational organization of the embedded clause via two well-known articulations: Topic-Comment and Focus-Presupposition.<sup>4</sup>

The order in (4) is thus a direct reflex of the fact that topic and focus phrases have interpretive (semantic-pragmatic) properties which force them to move to a dedicated position (criterial head) within the left-periphery (Top, Foc) for purposes of discourse-scope (Rizzi 2014). Apart from positional evidence justifying the relative order between the two complementizers (an empirical generalization) there are also conceptual reasons behind this order (an explanatory generalization). Since the syntactic component of natural language is at the interface with the sound system on the one hand (given the specific intonational contours with which topics and focussed phrases are pronounced), and with the semantics and pragmatics system on the other (given the ways they connect to previous discourse in terms of notions such as newness and givenness) it is expected that at the "[a]t the interfaces, the criterial heads and features activate the relevant interpretive routines of semantic-pragmatic interpretation, and determine the appropriate prosodic contour assignment, respectively" (Rizzi and Bocci 2017: 12). Therefore, in Rizzi's understanding pragmatic properties are directly encoded in syntax and interfere with other elements located in the left periphery. See also Grimshaw's (1979: 317) conclusion: "treating complement selection syntactically is possible only if the relevant aspects of semantic interpretation are built into syntactic structure".

Parametric variation may regard cross-linguistic selectional differences (i.e., which elements of CORE1 select which kinds of lexically filled C positions) but also number and order of the available C positions. All of these depend on

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(i) [......] Top [.........]
    'Topic'
                    'Comment'
(ii) [\ldots] Foc<sub>x</sub> [\ldots]
                     'Presupposition'
     Focus<sub>x</sub>
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Foc<sub>x</sub> refers to the particular kind of focus import in the left periphery: contrastive, corrective, exhaustive or mirative (see discussion in Dal Farra 2016; Bianchi et al. 2015, 2016, and below). Presupposition refers to notions like givenness, as in the classical terminology going back to Jackendoff (1972) and Chomsky (1972). Rizzi also notes that as far as (i) is concerned, the interpretive conditions on comments are extremely weak: presumably the only requirement is that the comment should contain focal information, just to make the statement informative.

<sup>4</sup> According to Rizzi (2014), the head Top takes the entire complement as its Comment, while the head Foc takes the entire complement as its Presupposition:

language-specific properties of grammar. Certain languages like the Balkan ones, given their more analytic character, exploit a greater number of lexical items in a finer-grained left periphery, which allows for a greater freedom of combinations among the complementizers themselves as well as with respect to discourse phrases (Roussou 2000, 2010; Hill 2002, 2004, a.o.). On the other hand, Slavic languages seem to use a more limited number of complementizers (basically three – a declarative, an interrogative, and a subjunctive one) and moreover, they appear to have fixed positions within the CP area. This however does not exclude the possibility that complementizers can be multifunctional in some cases and may target more than one position (cf. e.g., Kašpar 2015 on že 'that' in Czech).

Although Rizzi's (1997) argument is based mainly on Italian, it served as a benchmark for pursuing interesting comparative analyses.<sup>5</sup> It was soon extended to Romance and Germanic, where complementizers like *che* (*que* of Romance), as well as English that, German dass, etc. lexically realize the Force position in finite clauses and are to be distinguished from prepositional complementizers like e.g., English for, di/de of Romance, etc. which typically lexicalize the lower (non-finite) Fin position and are also relevant for the purposes of Case assignment to the embedded subject as in e.g., English I want for [John-Acc] to leave (exceptional case marking).

The goal of this section was to make it clear that although Rizzi's elaboration of the CP area (see in particular Rizzi 2013, 2014) incorporates a number of theory-internal premises, e.g., the role of the interface conditions, the necessity of a phrase to undergo movement to the left periphery for discourse-scope/interpretive reasons, etc., his conclusions have a much wider empirical validity than usually expected from a generative-type approach.

## 3 Exploring the Bulgarian left periphery

In this section, I will explore the left periphery of the Bulgarian embedded clause and will discuss some syntactic and semantic facts that have not been observed so far but in my view are highly relevant for understanding the precise distribution of the declarative and the interrogative complementizers.

<sup>5</sup> Rizzi's theory is part of what is known as "the cartographic research project" within generative linguistics whose basic idea is that syntactic representations are complex objects consisting of sequences of hierarchically organized functional elements" (Rizzi and Bocci 2017: 1) and moreover, that there is a systematic matching between morphosyntactic and semantic features and functional projections, providing "as precise and detailed maps as possible of syntactic configurations" (Cinque and Rizzi 2010: 58).

### 3.1 Distribution of declarative and interrogative complementizers

The complementizer system of Bulgarian contains several functional items that can be said to occupy a left peripheral position given that they appear to the left of the embedded subject marking the edge of IP (for an early account see Krapova 2002): the declarative complementizer če 'that' and the interrogative markers dali 'if/whether' and *li* (the clitic variant of *dali*). The complementizer status of these lexical elements (particles in more traditional descriptions) is well-established since early work on Bulgarian generative syntax (Rudin 1986; Penčev 1998). More attention has been given to the particle *li*, which according to some early accounts (Izvorski 1995) does not belong to the complementizer system but is a marker of focalization. See Dukova-Zheleva (2010) for an extensive recent account and § 3.3.2 for more details. Also debatable from point of view of distribution, position and interpretation are the properties of the modal particle da. As is well-known, this particle is typically (though not exclusively) related to the expression of modality in constructions usually labelled 'Balkan-type subjunctives' and evolved as a result of the characteristic loss (or drastic reduction) of the infinitive in the Balkan languages. The concept 'Balkan subjunctive' however has turned out to be rather misfortunate since there is no verbal subjunctive morphology in these languages, though the verb in the indicative may show signs of either finiteness or of nonfiniteness according to the specific syntactic configuration in which the 'subjunctive' occurs (see Krapova and Cinque 2018 for more details). This ambiguity, arguably attributed to the modal particle itself, raises the question of its syntactic position within the Infl area of CORE2 or - alternatively - within the C-domain (see Rivero 1994; Rudin 1993; Krapova 1999, 2001, and especially Pitsch 2018 for a thorough discussion of many different types of da-clauses). (5) provides an initial illustration of the declarative and the interrogative complementizers, and of the modal particle, whose special status and syntactic properties will be discussed in § 4.

- (5) a. Ivan smjata, če Marija e štastliva Ivan thinks that Maria is happy 'Ivan thinks that Maria is happy'
  - b. Ivan pita dali Marija e štastliva Ivan asks if Maria is happy. 'Ivan asks if Maria is happy'

<sup>6</sup> In each Balkan language, the 'subjunctive' is rendered by a combination of a modal marker/ particle and a temporally restricted finite verb form. See Mitkovska and Bužarovska (this volume).

c. Ivan iska Marija da e štastliva. Ivan wants Maria DA is happy 'Ivan wants Maria to be happy'

Recall that within a Split CP approach as the one I adopt here, the highest left peripheral position, Force, indicates the clause type properties of the embedded clause and its illocutionary force. Given that če-complements are declarative subordinate clauses whose illocutionary force is that of an assertion, while dali-complements are interrogatives whose illocutionary force is that of a yes-no question, <sup>7</sup> če and dali can be said to occupy the position of Force. At first sight, this seems reasonable in view of the complementary distribution seen in (6):

- (6) a. Petăr smiata, če/\*dali manastirăt e napusnat Peter thinks that/\*if monastery-DET is deserted 'Peter thinks that/\*if the monastery is deserted'
  - b. Petăr se čudi \*če/dali manastirăt e napusnat Peter REFL wonders \*that/if monastery-DET is deserted 'Peter wonders \*that/if the monastery is deserted'

These selectional properties may be taken to show that Force itself bears the specification [+/-Q] which then gives the distinction between a clause with a declarative and with an interrogative illocutionary force. As both of these clause types are morphologically and syntactically finite, in the sense that they are not restricted temporally or aspectually, we can suppose that when illocutionary force is overtly signaled in Bulgarian, the lower projection in the C-domain, Fin, remains phonologically empty or null. However, Fin can be said to contain mood features since the indicative of če- and dali-complements stands in sharp contrast to the 'subjunctive' da-complements, which are always referentially dependent and temporally/aspectually restricted (admitting typically present tense and perfective aspect on the embedded verb). See (7) and examples in (8):

(7) CORE1 Force Fin CORE2 [+indicative] +/-Q[+subjunctive] Modal

<sup>7</sup> For the time being I will concentrate on dali reserving § 2.5 for a discussion of the syntactic and semantic differences with li.

- (8) a. Petăr smjata, če Ivan šte kupi / šte kupuva/ e kupil kăštata
  Peter thinks that Ivan will buy-PF/will buy-IMPF/is bought house-DET
  'Peter thinks that Ivan will buy/will be buying / has bought the house'
  - b. *Petăr pita dali Ivan šte kupi/ šte kupuva/ e kupil kăštata*Peter asks whether Ivan will buy-PF/will buy-IMPF/is bought house-DET

    'Peter asks whether Ivan will buy/ will be buying / has bought the house'
  - c. Petăr se nadjava Ivan da kupi/ \*kupuva/ \*šte kupi /e kupil kăštata

    Peter hopes Ivan DA buy-PF/\*buy-IMPF/\*will buy/is bought house-DET

    'Peter hopes that Ivan will buy/has bought the house'

# 3.2 Semantic selection of declarative and interrogative complements and the issue of Illocutionary force

- (9) and (10) summarize the classes of predicates that may select for a *če*-complement or for a *dali*-complement:
- (9) *Če*-complements are selected by:
  - a) propositional attitude/epistemic verbs (*mislja* 'think', *smjatam* 'consider', *vjarvam* 'believe', etc.),
  - b) verbs of communication (kazvam 'say', tvărdja 'claim', etc.) and
  - c) verbs of intellection/cognitive predicates (*znam* 'know', *razbiram* 'understand', etc.).
  - d) emotive predicates (săžaljavam 'regret', radvam se 'be glad', măčno mi e 'be sad', etc.)
- (10) *Dali*-complements are selected by interrogative predicates: e.g., *čudja se* 'wonder', *pitam* (se) 'ask (myself)', etc.

Without going into detail for lack of space, it seems plausible to assume that the distribution of the complementizer  $\check{c}e$  is dependent on the veridicality status of the complement with which it combines. Giannakidou (1998, 2009) defines veridicality as a propositional function that entails the truth of its complement: "F is veridical iff Fp entails p – that is, if whenever Fp is true, p is true too. F is non-veridical if Fp does not entail p – that is, if when Fp is true, p may or may not be true" (Giannakidou 2016: 186). All of the verb classes in (9) involve truth entailment in the sense of introducing a proposition with an independent truth value, i.e., one that can evaluated for truth or falsity. An indicative  $\check{c}e$ -complement, embedded in a positive and declarative main clause, denotes a proposition that is either objectively true/factive, (9c,d), or is evaluated as true (subjective veridical-

ity) by the main clause subject or the speaker (9a,b). This implies that at least one epistemic agent is committed to the truth value of this proposition.<sup>8</sup>

Interrogative predicates on the other hand are non-veridical. Questions denote propositions that leave open the truth value of the proposition; yes-no questions in particular are also polar since they comprise a set of two mutually exclusive propositions  $\{p, \neg p\}$  corresponding to the yes- and the no-answer (Hamblin 1973). As indicated by the negative tag in (11), and argued by Dukova-Zheleva (2010), and Callegari (2018), dali is a polar complementizer.

(11) Pitax te dali Ivan si e vkâšti sega (ili ne) I.asked you-cl.acc whether Ivan REFL is at-home now (or not) 'I asked you if Ivan was at home now'

Dali-clauses are also used for what Adger and Ouer (2001) label 'unselected embedded questions' which do not strictly correspond to a question but to a proposition whose truth value is left open (undetermined). Such contexts present another instance of non-veridical clauses alongside selected dali-questions. See examples in (12) below. Interestingly, non-selected 'questions' in Bulgarian are available only with the predicates of class (9c) above, namely with the class of objective veridicals/cognitive factives. Given that factive complements contain a presupposition, i.e., their truth is anchored or taken for granted in the speech context or in shared world knowledge, the function of dali in such contexts is precisely that of suspending the presuppositional meaning usually associated with such complements. This however is possible only if the factive predicates of (9c) are negated, questioned or used in a conditional form; otherwise dali cannot be felicitously used. Note furthermore that dali is incompatible with the emotive predicates of (9d) even if the latter are negated, questioned or used in a conditional form. Such predicates correspond exactly to the class of 'true factives' in the sense of Karttunen (1971), also known as 'strongly veridical' or 'hard'

<sup>8</sup> According to Baunaz (2016), če is non-veridical with verbs of saying. I adopt here the particular concept of veridicality proposed by Giannakidou (1998, 2009). Note that with verbs of saying, Bulgarian morphologically distinguishes between indicative and evidential moods on the embedded verb. In this paper, I leave evidentials aside, but if the embedded verb is marked with the indicative, the unmarked reading is that the subject believes or knows that the proposition corresponding to the embedded clause is true. This is what Giannakidou labels 'subjective veridicality': the epistemic state of the subject, rather than that of the speaker, is homogeneous, epistemically settled. On the contrary, the semantic import of the evidential is that of an epistemic weakener, i.e., the subject (and the speaker) does not have full knowledge or belief that p is true. This is due to the fact that the evidence for the embedded assertion is partial, i.e., second-hand, which in any case constitutes a less reliable source of knowledge (Giannakidou 2018).

presupposition triggers. As such, they stand apart from the rest of the (factive) complement-taking predicates in that the presuppositional reading they give rise to cannot be (easily) suspended (on some pragmatically determined cases of presupposition suspension with true factives, see Karttunen 1971).9

- e vkăšti (12) a. Petar ne znae dali Ivan si sega (ili ne) Peter not knows whether Ivan SELF is at-home now (or not) 'Peter does not know whether Ivan is at home now (or not)'
  - b. Petarznae li. dali Ivan si e vkăšti sega? (ili ne) Peter knows Q whether Ivan SELF is at-home now (or not) 'Does Peter know whether Ivan is at home now (or not)?'
  - c. Ako znaex dali Ivan si e vkăšti sega (ili ne), I.knew whether Ivan SELF is at-home now (or not), štiax da kaža I.would DA you.CL.DAT Ltell 'If I knew whether Ivan was at home now I would have told you'

Suspension of the presupposition does not lead to a change in the functional meaning of the interrogative complementizer: much like in selected questions, dali has polar semantics and as indicated by the negative tag in (12), introduces a set of propositions  $\{p, \neg p\}$  although since the set in this case is not a question set per se, a yes-no answer is not required in substitution of the two opposite values of p. 10 Thus, all dali-clauses have an identical semantics (as well as an identical syntax) and can be argued to differ only in terms of the higher selector: interrogative dali would be selected by interrogative predicates, while non-interrogative dali would be selected by a class of non-veridical expressions like matrix negation, question or conditional (unselected *dali*). As these elements are operators,

<sup>9</sup> Cognitive factives are well-known to be special with respect to presupposition triggering. In particular, such predicates may lose their presuppositional readings in precisely the contexts illustrated in (12), where the predicate is in the scope of some non-veridical operator like negation, question or conditional. Karttunen's (1971) original distinction was between 'true/full factives' and 'semi-factives'. In later work on the topic, the more general distinction between 'hard' and 'soft' presupposition triggers has been adopted (see also Abbott 2006; Simons 2007).

<sup>10</sup> Note that a sentence like (i) is not ungrammatical but *dali* here introduces what Egrè (2008) refers to as the true answer of a question, i.e., the dali-clause has an intentional rather than an extensional meaning:

<sup>(</sup>i) Petăr znae dali Ivan si e vkăšti sega Peter knows whether/\*if Ivan REFL is at-home now 'Peter knows whether Ivan is at home now'

the sensitivity of dali to their semantic properties argues in favor of treating this complementizer as a (non-veridical) operator itself.

A property of if-clauses in English, shared by selected dali-clauses, is that according to context, they may give rise to alternative answers rather than those drawn from the polar set ( $\{p, \neg p\}$ ). For example, a question like (11) can also be answered with e.g., (Ne), Ivan otide na kino 'Ivan went to the movies'; (Ne), Ivan zamina za čužbina 'Ivan went abroad', etc., i.e., with a proposition that can be drawn from a contextually relevant set containing p and alternatives to ¬p. Unselected dali-'questions', on the other hand, seem to pattern more with English whether-clauses, which are strictly polar, at least according to the analysis of Bolinger (1978) cited in Godard (2002) (for a different view, see Adger and Quer 2001). 11

As mentioned, the selection issues seen above for dali do not arise for the declarative complementizer če 'that': če-complements introducing a presupposition remain immune to matrix operators like negation, question or a modal operator. See examples in (13) where the symbol  $\gg$  indicates the respective presupposition. Therefore, če has no operator semantics inherited from its diachronic predecessor – Slavic čbto 'what', related to Russian čto, cf. Hansen, Letuchiy, Błaszczyk 2016):

- (13) a. Petar ne znae. če Ivan si e vkăšti sega >> Ivan is at home now Peter not knows that Ivan REFL is at-home now 'Peter doesn't know that Ivan is at home now'
  - b. Petar znae li, če Ivan si e vkăšti sega? >> Ivan is at home now Peter knows Q that Ivan REFL is at-home now 'Does Peter know that Ivan is at home now?'
  - c. Može bi znaeš. če Ivan si e vkăšti sega >> Ivan is at home now maybe you.know that Ivan REFL is at-home now 'Perhaps you know that Ivan is at home now'

The selection issues discussed above raise a problem for the Split CP approach. Given that  $\check{c}e$  is always selected (cf. the ungrammaticality of (14a)), while dali

<sup>11</sup> Whether-complements present the speaker with a strict choice between alternatives. "[W] hether appears to imply something about laying hold of information. The speaker has already taken the alternative possibilities under consideration and wants to make up his mind about them." (Bolinger 1978: 96). Of course, there is no one-to-one correlation between dali and if/ whether according to context. Some unselected questions in English do not allow whether, cf. I don't know \*whether/if John is at home now. The reason that dali takes over both complementizers in English can plausibly be attributed to the fact that, unlike English if or Greek an 'if' (Roussou 2010, see also discussion in Adger and Quer 2001; Haegeman 2010), the Bulgarian interrogative complementizer cannot be used in conditionals.

(together with the modal marker da) are free to occur in both main and embedded ones, as shown in (15), we might want to say that the non-interrogative complementizer is in fact not a force marker but an obligatory clausal subordinator selected by verbal (14b) or nominal (14c) heads. <sup>12</sup> Pure subordinators have been argued to differ from true force markers in a number of languages, e.g., Korean (Bhatt and Yoon 1992), and Hungarian (Brody 1990). And Roussou (2000), too, proposes for Modern Greek that oti 'that' can optionally realize the Subordinator position suggested by Rizzi (1997: 328) as a potential site above Force precisely in order to account for such languages (16):<sup>13</sup>

- (14) a. (\*Če) Ivan pristiga dnes. \*that Ivan arrives-IMPF today intended: 'Ivan is arriving today'
  - b. Mislja, \*(če) Ivan pristiga dnes I.think that Ivan arrives-IMPF today 'I think that Ivan is arriving today'
  - c. Novinata/tova, če Ivan pristiga dnes news-DET/this-DET that Ivan arrives-IMPF today 'The news/the fact that Ivan is arriving today'
- (15) a. *Dali* Ivan pristiga dnes? whether Ivan arrives-IMPF today 'Is Ivan arriving today?
  - b. Ivan da idva/dojde tuk vednaga! Ivan DA comes-IMPF/PF here immediately 'Ivan should come here right away!'

<sup>12</sup> Rizzi's system allows for this. In previous work (Krapova and Karastaneva 2002), we suggested that če spells out a feature relevant to clausal subordination relying on a footnote in Rizzi's paper (1997: 328) in which he envisions the possibility that the CP field could be a tripartite system, consisting of a SubordinatorP, a ForceP and a FinitenessP.

<sup>13</sup> From this perspective, languages like English and Romance, which do not formally distinguish embedded illocutionary force and subordination, conflate the expression of these two distinct categories into a single complementizer with a composite semantic specification. Other authors have opted for different solutions regarding the highest C position. For example, according to Ambar (2010) the topmost projection should rather be specified as +/-AssertionP whose purpose is to connect the sentence to a certain type of speech act, while Speas (2004) has argued in favor of a SpeakerP hosting features relevant for epistemic and evidential modality and the speaker's evaluation of truth. In this paper, we will assume that the highest C position is Force. Other alternatives will be explored in future work, in particular Radford's (2018: 270-287) proposal for an additional projection FACTP below ForceP, reserved for factive complementizers like deto 'that-factive', kak 'how', and kak taka 'how come'.

(16) Subordinator > Force > Fin dali/da če

The examples discussed in § 3.1 argue however against treating če as a pure subordinator: as seen in (6) above, it is incompatible with any type of [+Q] specification within the embedded clause, whether the [+Q] feature is carried by dali or by some wh-marked element (17). Also, če never introduces a modalized clause such as the embedded imperative in (17b) which instead must contain the subjunctive marker da.<sup>14</sup> The data in (17) thus show that selectional requirements are strictly observed in Bulgarian declarative complements (formulated as a requirement in (18)), and that če conflates the expression of illocutionary force and subordination without formally distinguishing between these two categories.

- (17) a. Marija me popita \*če/ koj/dali idva utre<sup>15</sup> Maria me-cl. Acc asked that/who/if comes tomorrow 'Maria asked me who is coming tomorrow/if she is coming tomorrow'
  - b. *Kazax*, (\*če) *Marija* da dojde vednaga said-1sG that Maria DA comes immediately 'I said that Mary should come right away'

(i) Skrij v drehite, taka če da ne ja namerjat hide-IMP it-CL.ACC in clothes-DET so that DA not it-CL.ACC they.find 'Hide it in your clothes so that they can't find it'

Complex complementizers can also result from combinations of če and a preposition: văpreki če 'although', makar če 'although, even though' etc. and are used in various types of adverbial clauses. Plausibly, such complementizers are merged as a single element in view of the requirement that the two components that they are made of must be adjacent.

- 15 The wh-word and the interrogative complementizer are in complementary distribution. This shows that both have a +Q feature which suffices for the clause to be interpreted as interrogative. Bulgarian thus differs from languages which instantiate the so-called Doubly Comp filter in allowing both the specifier of Q (the wh-word) and the Q head to co-occur, see (i) from Dutch:
  - (i) Ik vraag me af wie of dat er morgen kommt I ask me AF who if that there tomorrow comes (Koopman 2000: 342)
  - (ii) Doubly Filled Comp Filter: When an overt wh-phrase occupies the Spec of some CP, the head of that CP must not dominate an over complementizer (Haegeman 1994: 423)

Koopman (2000) argues that three CP projections are involved in the analysis of Dutch complementation: wie sits in the specifier of a WH-projection, of in the head of a Q projection, and dat in a lower C position.

<sup>14</sup> The complementizer  $\check{c}e$  can combine with da in unselected purpose-(like) clauses like (i) introduced by taka 'so':

(18) Če 'that' must be selected by a verbal or nominal head.

The fact that  $\check{ce}$  is underspecified for subordination, clause type and factivity, can be taken to imply that this complementizer can occupy more than one position in the left periphery. In the next section, we will see, on the basis of the distribution of topics, that  $\check{ce}$  may in fact occupy a C-position lower than Force. The complementizer dali, which was shown to be indifferent to semantic selection, must be merged in a position compatible with its operator properties. Logically, this difference in complementizer behavior could be due to the fact that, unlike  $\check{ce}$ , dali has a more specific compositional make-up, involving the modal particle da and the interrogative clitic/focus particle li. (See § 3.4. for details and Callegari 2019 for a proposal that dali is syntactically composed of these two elements). If both  $\check{ce}$  and dali are merged in positions different from Force, then we must ensure that some mechanism of feature transmission connects any C position(s) below Force to Force itself, so that the respective selectional requirements be satisfied wherever that is required.

# 3.3 Left dislocated topics, contrastive focus and complementizer ordering

As mentioned above, one of the arguments that is often adduced in favor of a split CP approach to the clausal left periphery comes from the relative position of discourse elements with respect to the particles of the complementizer system. In the most detailed version of Rizzi's (1997) system shown in (19), Topics must follow Force and precede the lowest CP position Fin, while there is a unique position in which focalized phrases can surface.

In this section, we will see more arguments in favor of postulating (distinct) C positions for the complementizers *če* and *dali*. The arguments will come from the distribution and the interpretation of left dislocated topicalized expressions. Focalized phrases and their relative order with respect to the rest of the left periphery will be discussed in § 3.4.

#### 3.3.1 Multiple Topics in the Bulgarian left periphery

One important property of Topics in Bulgarian is that they can either follow or precede complementizers. Consider (20) indicating in parentheses the available positions for the topicalized phrase:

(20) a. Mislja (na Ivan) če (na Ivan<sub>i</sub>) kolegite mu<sub>i</sub> podarixa samo cvetja I.think (to John) that (to John) colleagues-DET his they gave only flowers za roždenija den

for birthday-det

- 'I think that to John his colleagues gave only flowers for his birthday.'
- b. Čudja se (na Ivan) **dali** (na Ivan<sub>i</sub>) kolegite mu<sub>i</sub> podarixa samo cvetja I.wonder (to Ivan) if (to Ivan) colleagues-DET his they gave only flowers za roždenija den

for his birthday-DET

'I wonder if to John his colleagues gave only flowers for his birthday'

The left dislocated constituents in both examples are in the left periphery preceding the embedded subject and are resumed by a clitic. Clitic left dislocation is a common topicalization device in Bulgarian used to refer to a previously introduced discourse antecedent (Arnaudova 2002). There is however a difference in interpretation between the two Topic positions in (20). In the pre-complementizer position, topicalization signals that the speaker wants to introduce the topic constituent (Ivan) as highlighted or salient for the purposes of the conversation or to reintroduce it into discourse as a new topic to be commented on in the future conversation. The post-complementizer occurrence of the clitic left dislocated constituent on the other hand is simply an instance of a familiar or given topic in the sense of Schwarzschild (1999) whereby the dative argument is not highlighted but simply refers to an antecedent known from previous discourse. In other words, the topic in this case resumes background information shared by the discourse participants. Following a proposal by Bianchi and Frascarelli (2010), I will consider these two instantiations of the left dislocated topic constituents as corresponding to two different types of Topic: A(boutness) Topic (used for topic shift) and G(iven) Topic (used for topic continuity). The topic found to the left of če/dali matches the description offered by Bianchi and Frascarelli, from both a pragmatic and a syntactic point of view: it is obligatorily clitic resumed and must be unique. If this is indeed correct, then Bulgarian surprisingly reveals a case of an embedded A-Topic. G-Topics on the other hand can but need not be clitic resumed, in accord with other (independent) principles guiding the probability of clitic resumption. For example, as Cinque and Krapova (2008) have shown, direct objects show a higher propensity for resumption in Bulgarian left dislocation structures, as compared to indirect objects introduced by the dative-like preposition na 'to'. Additionally, (21b) which illustrates that a Topic can indeed be recursive but in order for that to be the case, it must show up after  $\check{c}e$  and dali, i.e., it must be a G-Topic as expected under Bianchi and Frascarelli's approach:

(21) a. Mislia, če [na decata] [knigite] (im) I.think that to children-DET books-DET (to-them-CL.DAT) gi razdadoxa. ošte na părvija učeben them-cl.acc gave already on first-det school-Adj day 'I think that they gave the books to the children already on the first day of school' b. Čudja se dali [na decata] [knigite] wonder-1sg whether to children-DET books-DET sa (im) gi are-3PL razdali ošte na părvija are-3PL (to them.CL.DAT) them.CL.ACC gave-3PL already on first-DET učeben den school-Adj day

Based on the above data, the following preliminary template can be envisaged: given that Force splits the topic area delimiting the space where an A-Topic can occur form that where a G-Topic can occur, then the A-topic can be said to occupy the specifier position of Force, thus appearing to the left of the complementizers, while one or more G-Topics (as indicated by the asterisk in (22), may show up in to the right of Force:

'I wonder if they gave the books to the children already on the first day

of school'

But things are more complicated than (22) would seem to suggest, especially when we consider a third type of Topics, namely C(ontrastive) topics. C-Topics, like G-Topics, mark a constituent as given, but differently from the latter, involve contrast among alternatives: "the function of CT-marking is to signal that the topic denotation belongs to a contextually salient set" (Bianchi and Frascarelli 2010: 72). From a syntactic point of view, one characteristic property of C-Topics in Bulgarian is the obligatory absence of clitic resumption (Arnaudova 2002, 2010). Consider for example (23):

(23) Pomnja, če [C-Topic na Ivan] podarixme  $[parfjum]_E a [C-Topic na Marija]$   $[cvetja]_F$ remember-1sg that to Ivan gave-1pl perfume and to Maria flowers 'I remember that to Ivan we gave as a present a perfume, and to Maria flowers'

In (23), the second conjunct introduces a contrast set with two alternative values (Marija, cvetja) for the phrases (Ivan, parfjum) in the first conjunct. Following Büring's (2003) analysis, <sup>16</sup> the second element in the contrastive set is focus marked, and the contrastive topic is given by the first element. This is because contrastive topics can be represented as answers to wh-questions, with the focus marked element substituting for the wh-word in a question like 'x was given what as a present?', and the contrastive topic substituting x in the same question. Since the value of x must be chosen from a contextually salient set of available alternatives ({Ivan, Marija} in (23)), the contrastive reading of both topic phrases obtains, each unique in its own clause.<sup>17</sup>

Consider now the linear order of a C-Topic with respect to the complementizers če and dali. As shown by (24), a contrastive topic can only follow če and dali, though the position to the left of *dali* is inaccessible to this kind of topics (Rudin 1991: 432):

16 Büring (2003) has argued that this set can be identified as a set of alternative wh-questions (question set) and that the function of the contrastive topic is to replace the value of the respective wh-word from the relevant wh-question. Thus, for example, (i) can be thought as an answer to (ii):

- [FRED]<sub>CT</sub> ate [the BEANS]<sub>F</sub> and [MARY]<sub>CT</sub> ate [the FISH]<sub>F</sub>.
- (ii) Who ate what? (the superquestion)
  - → Who ate the beans?
  - → Who ate the fish?

The first step is to replace the focussed term with a wh-word and front the latter, yielding the question:

(iii) What did Fred eat?

The second step is to form from this a set of alternative questions by replacing the contrastive topic (Fred) with some alternative to it: this is a set of questions of the form:

(iv) What did x eat?

The contrastive topic thus provides a value for x and can be answered by propositions: {Fred ate the beans; Mary ate the fish \}.

17 It remains to be seen whether C-Topics are indeed unique in Bulgarian, as Bianchi and Frascarelli (2010:63) suggest on the basis of Italian. Multiple C-Topics have been argued to exist in a multiple wh-language like English. In a footnote, Bianchi and Frascarelli (2010, fn. 24) cite the following example from Culicover (1996: 35):

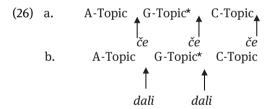
(i) I insisted that that book, to me, maxim gave, and this book, to you, sasha gave.

Bulgarian is a multiple wh-fronting language, so multiple contrastive topicalization should in principle be possible theoretically. I leave that issue for further research.

- (24) a. *Pomnja* (<sub>C-Topic</sub> na Ivan) če (<sub>C-Topic</sub> na Ivan) podarixme  $[parfium]_{\rm F}$ we.gave-as-a-present perfume I.remember (to Ivan) that (to Ivan) togava, a na Marija samo cvetja but to Maria only flowers 'I remember that to Ivan we gave a perfume as a present then, but to Maria [we gave as a present] only flowers'
  - b. *Pitax te* (\*<sub>C-Topic</sub> na Ivan) dali (C-Topic na Ivan) podarixme I.asked you-cl.acc (to Ivan) if to Ivan we.gave-as-a-present parfium togava, a na Marija samo cvetja. but to Maria only flowers perfume then, 'I asked you if to Ivan we gave as a present a perfume then, and only flowers to Maria'

If C- Topics are ordered with respect to both an A-topic and an G-Topic, as argued by Bianchi and Frascarelli (2010)<sup>18</sup> and indicated in (25), we end up with the templates in (26), where all available positions of the complementizers are summarized with respect to the three types of peripheral Topics:

(25) Aboutness Topic > Given Topic\* > Contrastive Topic



The fact that če though not dali can appear following a C-Topic makes it plausible to assume that this complementizer disposes of an additional lower position which is banned for dali. I suggest that the lowest position in (26a) can plausibly be identified as Fin – the projection that closes off the CP field and also signals the morpho-syntactic information relevant for distinguishing between indicative and non-indicative clauses. In Fin, če can be preceded by all types of Topics, while in any of the higher positions indicated in (26a) the declarative complementizer can be preceded by a G-Topic (G-Topic > če) or followed by a G-Topic

<sup>18</sup> The order assumed in Bianchi and Frascarelli (2010) is different: A-Topic > C-Topic > G-Topic. The data from Bulgarian thus show that this order is subject to parametric variation.

( $\check{c}e > G$ -Topic). Apparently, the two higher positions in (26) coincide for the two complementizers. Plausibly, then, we can identify the highest position targeted by če and dali as being that of Force, given that it distinguishes between the unique A-Topic and the rest of the Topic field. In § 3.4, however, I will give evidence that Force is not always accessible to the interrogative complementizer. As for the intermediate position, the comparison between (26a) and (26b) might be taken to imply that the two complementizers can surface in the (head of the yet unidentified XP) position preceding the C-Topic.

### (27) A-Topic G-Topic **xp** C-Topic

Rizzi (2001 seq) argues that the position hosting interrogative complementizers within the left periphery is Int(errogative)P (see (28)), a dedicated functional position different from and lower than Force. Int also hosts a dedicated operator (Op) in its specifier responsible for the interpretation of yes-no questions (see also Grimshaw 1994, Roberts 1993, Haegeman 2012):19

(28) 
$$[_{ForceP}$$
 Force . . .  $[_{IntP}$  Op Int  $]$  . . . Fin dali

It seems reasonable to suppose that given the operator properties of dali, this complementizer is also merged in Int (like its Italian counterpart se), and assuming that there is an empty Op in the specifier of IntP, dali could share with the latter a Q feature, in accord with standard principles of Spec, head agreement. A question arises at this point: if Int is the functional projection where dali is merged, is this position also accessible to the declarative complementizer, given

<sup>19</sup> Rizzi treats Int as an operator position in both main and embedded clauses in Italian hosting the abstract yes-no operator, as well as certain *wh*-adverbials like the reason adverbial *why*, which occupies the specifier of Int. (i) illustrates that this might be a reasonable suggestion also for Bulgarian 'why'-phrases: such phrases, differently from the wh-argument kakvo 'what' in (ii), can either follow or precede a topicalized phrase and can thus be argued to surface in a higher position than the one reached by *wh*-arguments, at least in embedded questions:

zašto (na Ivan) (i) Pitam se na Ivan mи podarixa samo cvetja Lask REFL to Ivan-Topic why (to Ivan-Topic) him-cl.dat they gave only flowers za roždenija den. for birthday-DET

<sup>&#</sup>x27;I am wondering why to Ivan they gave only flowers for his birthday'

na Ivan kakvo (\*na Ivan) mu podarixa za roždenija den. I.ask REFL to Ivan what (\*to Ivan) him-CL.DAT they gave for birthday-DET 'I am wondering what they gave as a present to Ivan for his birthday?'

the complementary distribution between the two complementizers? As a consequence, what would be the correct featural specification of Force, given the template in (7) above?

To answer these questions, let us suppose that the intermediate position XP in (27) that če has access to does not coincide with the position of Int in (28). This is motivated by the fact that the declarative complementizer has no operator properties and has a non-interrogative specification. I will label this position Verid(icality)P, a label which seems suitable in view of the selectional properties of the verb classes in (9). Let us furthermore assume that VeridP is lower than IntP but contiguous to it so that each complementizer occupies the respective head position according to its featural specification (+Q or -Q). This is illustrated in (29) which also captures the relative order of the two complementizers with respect to both G-Topics and the C-Topic:

Given that a C-Topic necessarily follows če (and by transitivity also dali), VeridP can be said to mark the distinction between *givenness/topicality* on the one hand, and contrast on the other. From a discourse point of view, VeridP identifies the Topic field to its left and marks the start of the Comment in the Topic-Comment articulation of the clause, with C-Topics belonging to the Comment and requiring a focused phrase as part of the contrast set, as we saw above. In view of the syntactic and semantic affinities between contrastive topics and contrastively focalized phrases, VeridP can be said to mark off the area of focalization, characterized by the feature [+contrast].

I suggest that the position VeridP is also related to other interpretational differences between če-clauses and dali-clauses. Recall that apart from predicates selecting for a +Q complement, dali can also introduce unselected embedded questions. See (12a) repeated here as (30a). Recall also that če-complements appearing under factive predicates are not sensitive to the presence of a matrix non-veridical operator and preserve the factive presupposition, see e.g., (13a) above repeated here as (30b):

- (30) a. Petar ne znae dali *vkăšti sega* (ili ne) Ivan si Peter not knows whether Ivan REFL is at-home now (or not) 'Peter doesn't know whether Ivan is at home now (or not)'
  - b. Petar ne znae, če Ivan si *e vkăšti sega.* >> Ivan is at home now Peter not knows that Ivan REFL is at-home now 'Peter doesn't know that Ivan is at home now'

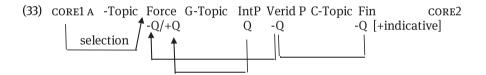
Standing with our previous suggestion that the dali can be licensed through selection either by a matrix Q predicate or by a non-veridical operator, while če has no operator properties and must be selected by a higher verbal selector, Int and Verid should be two distinct positions each with a different effect on the truth of the embedded proposition. Factive verbs, in particular, contain a variable feature as part of their lexical representation (Roussou 2010). When this variable is licensed by a matrix propositional operator (e.g., negation in (30)), a dependency relation is created between the matrix factive verb and the embedded operator C position Int hosting dali. This mechanism ensures that the embedded clause has no truth value (see discussion in Roussou 2010 and Oehl 2007). When Int is not present, Verid hosting če discharges the variable thus creating an independent truth domain for the embedded clause.

One last point regards the multiplicity of C positions and the issue of complementizer spell-out. A plausible analysis of the multiple positions seen above is to assume that complementizers can move around the available Topic positions provided they target a compatible higher hierarchic position in the Split CP domain. Different works propose a relation between Fin and Force, and various authors view this relation in terms of movement from one position to the other (Ledgeway 2000, 2006; Roussou 2000; Rizzi 2013; Radford 2018, a.o.). For example, Ledgeway argues that in Southern Italian dialects (see also Roussou 2000 for a similar proposal regarding Modern Greek) the respective complementizer ca 'that' originates in Fin (in virtue of marking declarativity/finiteness) and from there moves to Force passing across the various discourse-related positions (Topics, Focus) in a successive cyclic fashion (as also indicated by the different morphological shapes ca can assume). A clear indication that complementizer movement is indeed available cross-linguistically comes from the possibility of simultaneously spelling out two complementizer copies in the two positions. Radford (2018) shows this to be the case in colloquial English where that can lexicalize five C positions within the Split CP field: Force, Rep(ort), Rel(ative), Sub(ordinator), Fin. Radford cites different contexts where more than one position hosting that can be spelled out as a (secondary) copy of that (recomplementation), see (31a,b). Additionally, various examples are adduced from different oral registers pointing that two (copies of) different complementizers can co-occur in complex clauses such as (32):

- (31) a. I put it to him [Force **that**] with such a huge event and with so many vessels on the water [Fin that] safety should be the number one priority (Radford 2018: 122, ex. (33d))
  - b. I wanted to know whether in such a situation, whether it could adversely affect my LLM application (Radford 2018: 175, ex. (134b)

(32) *I just don't know* [Int Op **whether**] [Fin **that**] *they will have the same attitude.* (Radford 2018: 154, ex. (95a)

Since multiple spell-out of complementizer copies is not available in Bulgarian, as far as I can tell, and neither are "double" complementizer clauses like (31), we have to assume that whenever *če* and *dali* occupy positions different from Force, <sup>20</sup> Force itself remains empty although it is accessible for complementizer movement, in case an A-Topic is projected, as sketched in (26) above. Accessibility is ensured by the matching featural specification of the split C positions (or by some agreement mechanism in the sense of Rizzi 2013), as indicated in (33). One consequence of (33) is that it ensures that the relevant functional information can be passed over from Fin, Verid and Int to Force making Force ultimately available for the purposes of selection from the predicate of CORE1; cf. Rizzi's (2013) Search relation, and Radford (2018) for an alternative mechanism of top-down feature percolation.



To summarize so far, the effect of multiple topicalization on the distribution of complementizers has brought us to revise the preliminary conclusion that the declarative and the interrogative complementizers necessarily occupy Force. Based on the premise that languages need not lexicalize illocutionary force in the highest C position Force, we argued that the interrogative complementizer in Bulgarian can be spelled out in its merge position, Int, but may subsequently raise/move to Force and be spelled-out in this position producing the alternative order in which G-Topics follow *dali*. The declarative complementizer on the other hand starts out from the position of Fin and can subsequently move to Verid (in case a C-Topic is present) or to a [-Q] Force in case of one or more G-Topics. Note that either complementizer can be spelled out in just one of the available positions, leaving the others phonologically empty or null. If on the other hand, no Topic is projected, these positions amalgamate and a single C is projected (Rizzi 1997: 314). To account for the complementary distribution between the declarative and the interrogative complementizer, we can thus assume that Fin and Verid project only if Int does not project, and vice versa, so the complementary distribution between the declarative

**<sup>20</sup>** According to Rizzi (1997: 314), null or empty Comps are available only when Topic and Focus are projected.

and the interrogative complementizer seen in (6) above and repeated below as (34) can be derived from the structure of the split CP itself rather than from the conceptual necessity of occupying the same unique C position.

- (34) a. Petăr smjata, če/\*dali manastirăt e napusnat Peter thinks that/\*if monastery-DET is deserted 'Peter thinks that/\*if the monastery is deserted'
  - b. Petăr se čudi \*če/ dali manastirăt e napusnat Peter wonders \*that/if monastery-DET is deserted 'Peter wonders \*that/if the monastery is deserted'

One last note concerns the specification of clause type within the left periphery of CORE2. Two possibilities can be considered here, which I leave without further discussion. According to Rizzi and Shlonsky (2007: 35), apart from Force, Fin should also be involved in the specification of clause type:<sup>21</sup> in case Force is not filled by a complementizer, the embedded sentence can still get interpreted as declarative by default. In other words, Fin inherits the clause types specification of Force when the latter is phonologically empty. Under the alternative assumption that CP does not contain empty positions, then Fin should somehow be involved in the specification of clause type/declarative force, so that a (+finite) or (+indicative) Fin should always produce a declarative clause even in the absence of Force. Roberts (2004) argues that the very selection of Fin as [+finite] preempts declarativity (Stowell 1981), i.e., a clause with just a finite Fin is interpretatively equal to a clause with [+declarative] Force.

To summarize so far, the fine-grained order we arrived at so far is thus the one given in (35):

(35) CORE1 [A-Topic [ForceP [ G-Topic [ IntP [VeridP [C-Topic [ FinP ]]]] CORE2

#### 3.3.2 Focus in the left periphery

Focus phrases, in particular those related to the expression of contrast, are wellknown to occupy left-peripheral positions and to exhibit operator properties cross-linguistically (Kiss 1998, Horvath 2010, Bianchi 2019). Focus is relevant for

<sup>21</sup> In later work, Rizzi seems to posit instead complementizer movement claiming that the normal derivation of a that-clause proceeds by first merging that in Fin where finiteness is expressed, and on a second step, by moving it to Force for checking of the Force feature (see Rizzi and Shlonsky 2007; Rizzi 2014).

the informational articulation of the embedded structure so it must correspond to a special "dedicated" position, where the focalized constituent gets interpreted in terms of discourse-scope much like the positions dedicated to the expression of topics (Rizzi 2014: 37).

Typically, contrastively focalized elements represent new information provided by the speaker for the purposes of contrast with what he/she considers to be knowledge on part of the interlocutor (as well as part of the shared common ground between the discourse participants).<sup>22</sup> To quote from Zubizarreta (1998): "Contrastive Focus makes a statement about the truth or correctness of (certain aspects of) the presupposition provided by its context statement." (p. 10). Thus, Contrastive Focus (hence forward CF) affects the truth conditions of the clause<sup>23</sup> and articulates the clause into a Focus -Presupposition information structure.

As in many other languages, the special function of contrastive focus in Bulgarian is signalled prosodically by the high pitch contour on the contrastively focussed phrase, conventionally indicated with capital letters in the examples.<sup>24</sup>

24 Bulgarian can also express contrastive focus in situ. See (i) as compared to (ii) where the same constituent appears preverbally, and is plausibly moved to the left periphery:

- (i) Ivana iska KOLA (ne kăšta ili nova rabota). Ivana wants CAR (not house or new job) 'It is a car that Ivan wants' (not a house or a new job)
- (ii) KOLA iska Ivana (ne kăšta ili nova rabota) wants Ivana (not house or new job) 'It is a car that Ivana want' (not a house or a new job).

<sup>22</sup> Unlike Contrastive Focus, Information focus is the domain of new (non-presupposed) information and has been described as the new part, or what is being said about the topic or as the information of the sentence that makes contribution to the hearer's knowledge store (Vallduví 1992, and in particular Arnaudova 2001). The two types of focus are frequently associated with different representations. New information focus is typically realized in-situ, and its realization is guided by principles like the Nuclear Stress Rule, while contrastive focus often involves movement to a left peripheral position,

<sup>23</sup> Left peripheral focus is not constrained to contrastive interpretation; in Italian, for example, it seems to have a corrective or a mirative import rather than a contrastive one (Bocci, Rizzi, Saito, 2018: 12; Bianchi, Bocci and Cruschina 2015, 2016; see also Dal Farra 2018 for a discussion). Corrective focus is introduced for the purpose of correcting part of a previously made statement (assertion) or a commonly shared assumption not shared by the speaker, while mirative focus has a confirmative value: it requires confirmation of a piece of information which is considered unlikely compared to alternatives. All these types of focus share a prosodic contour such that the focalized phrase is pronounced with a high pitch contour and/or is more heavily accentuated. As far as Bulgarian is concerned, in the absence of more detailed studies, I will assume that left peripheral focus is of the contrastive type, although it can in some cases be used for corrective purposes, i.e., for denying or correcting a previous assertion or presupposition that the speaker does not share.

Contrastive interpretation arises from the contrast between the focussed phrase, e.g. vino in (36), and at least one other parallel element from a closed set of alternatives as indicated by the explicit or implicit tag. (36) shows that contrastive interpretation depends on the type of the embedded clause: in a declarative clause, (36a), focus negates the potential alternatives indicated by the negative tag, while in interrogative clauses containing a polarity complementizer dali, (36b), focus introduces one out a set of potential alternatives which bear the same value for the variable corresponding to the focussed constituent. As Bianchi and Cruschina (2016) argue, the set must contain more than one alternative so that the speaker chooses the single alternative which according to him/her satisfies the context description:

```
(36) a. Kaza, [če
                     [F_{OCUS} VINO]_{IP} šte nosjat za partito t ]]] (ne rakija, limonada...)
        said that WINE will they bring to party-DET (not rakia, lemonade)
        'He/she said they would bring wine to the party (not rakia, lemondade, etc.)
     b. Pitax te
                           [ dali [Focus VINO [IP šte
                                                       nosite
                                                                za partito t]]
        I.asked you-cl.acc if
                                      WINE
                                                will you.bring-PL for party-DET
        (ili rakija, limonada...)
        (or rakia, lemonade. . .)
        'I asked you if it is wine that you will bring to the party (or rakia,
        lemonade, etc.)
```

Furthermore, contrastive focus appears to follow two of the three types of topicalized phrases we discussed in § 3.3.1. above: it follows both A-Topics and G-Topics, so with (35) in mind, and comparing (36) with (37), we can establish that the position of CF is below the position of Int, where dali is merged, and as a consequence, also below the highest position where dali reaches, i.e., Force, taking thus Focus (and the G-Topic) in its scope. In a moment, I will review evidence that Bulgarian disposes of a second left peripheral focus position and that consequently, this language does not conform to one basic tenet of Rizzi's CP approach: the left periphery may host a unique focalized constituent. (37c) further shows that CF can also occur above the complementizer če.

Prosodic marking of course is not enough to claim that there is a separate Foc projection in Bulgarian with quantificational properties in the left periphery. I will however show that in order for a preverbal constituent to receive a contrastive focus, certain syntactic conditions have to be met indicating that left peripheral focus obeys more stringent contextual conditions, yet to be determined precisely.

- (37) a. Pitax (na Ivan) dali (na Ivan) vino te I.asked-vou-cl.acc (to Ivan) if (to Ivan) wine šte (mu) nosite (ili rakija, limonada...) will (him-cl.dat) you.bring (or rakia, lemonade, etc.) lit. 'I was asking you if to Ivan it is wine that you will bring (him)'
  - b. Kaza. (na Ivan) če (na Ivan) vino šteli da (mu) He/she.said (to Ivan) that (to Ivan) WINE would. EVID DA (him-CL.DAT) they.bring lit. He/she said that to Ivan it is wine that they would bring (him)'
  - c. Kaza VINO če na Ivan šteli da (mu) nosiat he/she.said wine that to Ivan would.evid da (him-cl.dat) they.bring 'He/she said that it is wine that they would bring to Ivan'

Note that a sequence of a contrastive topic and a contrastive focussed phrase is unavailable in Bulgarian. I take this to indicate that these two types of contrastive phrases are in complementary distribution and as a consequence that they occupy the same position. If this is correct, we can suppose that the left periphery of Bulgarian embedded clauses contains a position, labelled ContrastP in (38), which is accessible to both C-Topics and C-Focus phrases:

(38) Force > G-Topic\* > Int > VeridP > ContrastP > Fin

Contrast always involves quantification of alternatives, so whichever element surfaces in this position must have operator properties (operator topic and operator focus). In its left peripheral position, the XP expressing the contrast binds a gap (a variable, or a full unpronounced copy of XP, 25 Rizzi 2014: 37) in the original position from which the XP moves. This explains why CF phrases cannot be clitic resumed much like contrastive topics. The chain formed in this way ( $[XP_i \dots t_i]$ ) allows for the preservation of the original semantic interpretation of XP (e.g., as an argument of bring in (36)) and delimits the rest of the clause as presupposed (and therefore part of the Focus-Presupposition articulation of the embedded clause).

### 3.4 Dali interrogatives and contrastive focus

As mentioned above, *dali* shares the semantics of polar questions and has been labelled a polar operator (Dukova-Zheleva 2010; Callegari 2019) akin to the disjunction operator ili 'or', which is also a polarity item. Dukova-Zheleva (2010)

<sup>25</sup> This type of focus is not semantically restricted since any type of phrase can undergo focus movement.

has shown that when the embedded sentence does not contain a contrastively focussed constituent, dali takes the entire embedded proposition in its scope. The proposition is then interpreted with respect to the polar set which according to the classical Hamblin-type semantics of embedded interrogatives (Hamblin 1973), involves only two mutually exclusive alternatives: {p, ¬p}. In this set, p corresponds to the proposition denoting the positive answer, as in (39b), and ¬p to the one denoting the negative answer, as in (39c):

- (39) a. Pitax te dali šte xodiš na kino tazi večer. I.asked you-cl.acc if will you.go to cinema this evening 'I asked you if you will go to the cinema tonight'
  - b. Da, šte xodja na kino tazi večer Yes, will I.go to cinema this evening Yes, I will go to the cinema tonight'
  - c. Ne, njama da xodja na kino tazi večer No, won't DA I.go to cinema this evening 'No, I won't go to the cinema tonight'
- (39a) can also receive (40) as an answer:
- (40) Ne, šte ritam futbol s prijatelite No, will I.play football with friends-DET 'No, I will play football with my friends'

In (40), the interpretation is computed not with respect to the negative alternative  $\neg p$  (39c) but with respect to a set containing p and other alternatives to p (Rooth 1992), so that a positive answer will involve p while a negative one will involve at least one other alternative which the speaker finds more likely. The availability of (40) shows that *dali* can generate a set of alternatives rather than just a polar set (Bianchi and Cruschina 2016). When asking the question, the speaker presupposes that one proposition in a set of salient propositions of the form "you will do x tonight" is true, and asks whether the proposition expressed by p "you will go to the cinema tonight" is in fact the one that is true (Bianchi 2019).

Note that such a wide scope interpretation of *dali* requires the entire embedded proposition to constitute new information. New information focus is wellknown to allow for focus spreading so that every sentential constituent can be within the scope of dali (unless there is a Topic, in which case the scope of dali is not computed with the respect to the Topic, which in any case is taken for granted or given, but over the entire Comment (41b) or over a focus constituent, vino 'wine' in (41c), contained in the Comment).

(41) a. Pitax (na Ivan) dali (na Ivan) [šte mu te nosite Lasked vou-cl.acc (to Ivan) if (to Ivan will him-CL.DAT vou.bring vino] wine 'I was asking you if you were going to bring wine to Ivan' b. Ne. šte mu kupim samo cvetia No, will him-cl.dat we.buy only flowers No, we will buy him flowers only' c. Ne. šte mu nosim edna rakija

. *Ne, šte mu nosim edna rakija*No, will him-CL.DAT we.bring one rakia

No, we will buy him a bottle of rakia'

Given these scope possibilities and the fact that as a polar operator *dali* always interferes with the focus structure of its complement, it is plausible to assume that *dali* itself bears a focus feature. As Callegari (2019) hypothesized, the focus feature on *dali* can plausibly be related to the morphological make-up of this complementizer, which incorporates the focus particle *li*, i.e., the clitic variant of *dali* (see next subsection for details). Moreover, *li* itself is akin to the disjunctive/polar operator *ili* 'or' pointing that focus and polarity are closely related and can have effects on the morphological level. In the next section, however, we will see that *li* and *dali* do not occupy the same position in the left periphery of the embedded clause.

Let's see now what the effect of CF is on the interpretation of embedded *dali*-questions. As observed by Dukova-Zheleva (2010), in such cases a *dali*-question is interpreted not with respect to the propositional alternatives that make part of the focus set but with respect to the focussed constituent itself, leaving the rest of the clause as part of the background information (presupposed). (42) illustrates this narrow focus:

(42) Pitax te  $dali[_{+foc}]$  [ $_{CF}$  za SOFIA] Ivan šte pătuva (ili za Varna, Plovdiv...) I.asked you if to SOFIA Ivan will he.travels (or to Varna, Plovdiv..) 'I asked you if Ivan was going to travel to Sofia (or to Varna, Plovdiv, etc.)'

In discussing the interaction between the polarity operator and Focus in Bulgarian, Dukova-Zheleva (2010) argues that in cases like (42), the focussed phrase generates a set of focus alternatives (here, too, the focus set is by necessity a superset of the denotation of the focussed constituent), which provide possible answers to the question (Varna, Plovdiv, etc.). As this is reflected in the focus structure of the answer, (42) can be answered as (43a), or as (43b), while the rest of the sentence is presupposed, i.e., part of the shared knowledge:

(42) a. Da, za Sofia Ivan šte pătuva Yes, to Sofia Ivan will he.travels b. *Ne, za Plovdiv* <del>Ivan šte pătuva</del> (Varna, . . .) No, to Plovdiv Ivan will he.travels (Varna, . . .)

Dukova-Zheleva's account thus requires that the focus alternatives are introduced below the operator dali. This is crucial for the Rooth-type account to focus that Dukova-Zheleva adopts: dali must occupy a position immediately above the position of CF in order to allow for scope to be computed only with respect to this constituent rather than to the entire proposition, as in (39) above.

Somewhat surprisingly, however, in (43) we observe that a focussed constituent can also precede dali. We thus establish that dali can be surrounded by two Focus positions, though they can be realized only one at a time:

(43) Čudja se/Pitam te (za sofia) dali (za sofia) Ivan šte pătuva I.wonder/I.ask you-cl. Acc (to sofia) if (to SOFIA) Ivan will he.travels

As shown by the empirical evidence discussed below, there are important interpretational differences between these two focus positions. First, the higher focus position is incompatible with focalizing adverbs like *daže* 'even' but can only be accompanied by the focalizing adverb samo 'only':

- (44) a. Čudja se samo/\*daže/\*săšto i za SOFIA dali Ivan šte pătuva I.wonder only/\*even/\*also and to SOFIA if Ivan will he.travels (ili i za Varna, Plovidv . . .) (or and to Varna Ploydiv. . . .) 'I am wonderting if it is only to Sofia that Ivan will travel' (or also to Varna, Plovdiv, etc.)'
  - b. Čudja se dali samo/daže/săšto i za sofia Ivan šte pătuva I.wonder if only/even/also and to SOFIA Ivan will he.travels 'I am wondering if Ivan will travel only/even/also to Sofia'
- (44) shows that the higher Focus position may host a constituent with an exhaustive interpretation, while the lower Focus position may host a constituent with a pure contrastive focus interpretation. The behaviour of the higher focussed phrase is reminiscent of the English cleft constructions and of the Hungarian focus moved to the preverbal focus position (Exhaustive Focus) (Horvath 2010). In the account put forward by Kiss (1998) for Hungarian, exhaustive contrast is achieved via exclusion of alternatives. For example, in (44), the Focus phrase/ cleft asserts the value for which the predicate (travel) holds by excluding all other

alternative values (Varna, Plovdiv...) for which the predicate could potentially hold and which are part of the natural expectations of the interlocutor. It is in this sense that clefting and Hungarian-style contrastive focus specify uniqueness provided by *only* as opposed to *even* and *also* which presuppose non-uniqueness (are non-exhaustive) and thus cannot be clefted/focussed. (45) shows that clefting must obey similar restrictions (Horn 1969, Sornicola 1988, Nelson 1997, Kim 2012):

(45) It is only/\*even John that Peter introduced to Mary.

(45) contains the presupposition that Peter introduced x to Mary, and that out of a set of individuals present in the domain of discourse, John (the clefted constituent) was the only one that satisfies the description, i.e., x = John.

Similarly, (44)a from Bulgarian contains the presupposition that Ivan will travel to x, and that Sofia is the only relevant alternative, i.e., x = Sofia.

While in Hungarian contrast is always exhaustive (Horvath 2010) requiring movement to the left periphery as opposed to other type of focussed constituents, which do not, Bulgarian seems to feature a more fine grained focus articulation. This language has no special cleft construction but to render the difference between clefting and contrast resorts to a distinct focus position, which can be targeted by focus movement.

Another distinction between the two positions regards the possibility of focussing an existential quantifier. Compare:

- (46) a. Čudja se (\*njakoj) dali (njakoj) vse pak njama da prieme I.wonder (\*someone) if (someone) after all won't DA he.accepts našata pokana our-det invitation
  - 'I wonder if someone will accept our invitation after all'
  - b. Čudja se (\*vsičko) dali vsičko si kazax. Lwonder (\*everything) if (everything) REFL I.said 'I am wondering if I said everything I had to say'

The existential quantifier is excluded also in English cleft constructions, confirming that the higher focus position in Bulgarian is indeed cleft-like:

(47) \*It is someone/everything that he saw.

We therefore need to recognize that there are two positions available for contrastive phrases at least as far as Bulgarian is concerned and that the position of dali distinguishes the two Focus positions due to its operator properties. Note

however, that in (44b) the focalizing adverb only is compatible with the lower contrastively focussed phrase as well. Plausibly then, both focussed constituents share a [contrastive focus] feature but their compositional make-up in addition contains finer-grained focus features (Dal Farra 2018), like e.g. [+contrastive, ± exhaustive] or [+contrastive, +exhaustive]. 26 Given that exhaustivity implies contrast, the lower C-Foc position can simply be labelled [contrastive], while the higher one must be specified as [+exhaustive], (48). As a consequence, other contrastive phrases, whether topicalized or focalized, are excluded.

(48) Force C-Foc[+exhaustive] Int C-Foc/Top[contrastive]<sup>27</sup>

Putting together (48) with (38) above, repeated here as (49), we arrive at the template in (50) which is now enriched with the two CF positions: one above Int, reserved for exhaustivity, and one below Int, shared by topics and focussed phrase bearing the feature [contrastive]. Recall, that in order to make sense of the distribution of G-topics either following or preceding dali, we postulated in § 3.3.1 that the complementizer can optionally raise to the higher Force position, which however is not an operator position. When dali spelled-out in Force, the order dali > G-Topic(s) falls out but it becomes impossible to distinguish the two focus positions. This suggests that movement of the interrogative complementizer to Force is not optional and may take place only under certain circumstances, i.e., topicalization does not interfere with such a movement, while focalization does:

- (49) Force > G-TopicP\* > Int > Verid > ContrastP > Fin
- (50) Force > G-TopicP\* > CFoc[+exhaustive] Int Verid ContrastP > Fin

<sup>26</sup> In fact, exhaustive focus has been shown to constitute one kind of contrastive focus, so what Kiss (1998) labelled 'contrastive focus' in order to explain Hungarian left peripheral focus was later revisited in terms of 'exhaustivity', which was found to correspond more closely to the syntactic and the semantic properties of Hungarian left peripheral focussed phrases (Horvath 2010). 27 Positing more than one focus position in the left periphery goes against Rizzi's observation (see also Frascarelli 2000 and Brunetti 2004) that there is a single dedicated position in the left periphery associated with focus. Other studies propose two fixed positions (Belletti 2001, 2004; Benincà and Poletto 2004). Given the distinct types of focus constructions mentioned in fn, 23, languages may plausibly dispose of different left peripheral positions where contrastively focussed phrases can move to for interpretative purposes. Whether these positions are activated or not depends on language-specific considerations.

### 3.5 The syntax of the particle *li*

Much work of the '90s has been dedicated to establish whether this particle is a complementizer or not. According to the more widespread view (Rudin 1997; Rudin et al 1999; Bošković 2001, and Franks 2005), li is a complementizer located outside IP, in C, and is endowed with a special focus feature triggering movement of XP (or a V) to its left. V-li movement produces a neutral yes-no question (51b), while XP-li movement (51a) produces a focus structure with XP pronounced in a marked way. Either one or the other option can be realized, though not both simultaneously, possibly as a consequence of the Doubly Filled Comp Filter stated in fn. 15. The complementizer analysis sketched in (52) is motivated by the complementary distribution of *li* with other complementizers, and also by its clause-typing properties as an interrogative marker like non-clitic dali.

- (51) a. Čudja se  $[_{XP+li}$  na KINO lište xodiš tazi večer I.wonder to CINEMA O will you.go this evening 'I am wondering if you will go to the cinema tonight' b. Čudja se  $[v_{+li}$  šte xodiš li] na kino tazi večer
  - I.wonder will you.go Q to cinema this evening 'I am wondering if you will go to the cinema tonight'

Another view holds that *li* is a focus particle and as such occupies a lower Foc position (Izvorski 1995; Dukova-Zheleva 2010). As both types of analysis work with a single C position, the choice is between this position and a lower Foc position, intermediate between C and IP.

(53) 
$$\left[_{CP} \operatorname{Int/Q} \left[_{FocP} \operatorname{Foc} \left[_{IP} \right] \right] \right]$$

Both analyses assume that li has a Q feature as well as a focus feature but differ with respect to how these two features are represented syntactically – under the regular position Q/Int supplied with a focus feature or under a different Focus position supplied with +Q feature. The question is thus about the syntactic nature of *li*: an interrogative particle or a focus marker?

Following the alternative semantics approach to focus proposed by Rooth (1992), Dukova-Zheleva (2010) argues that in (53), whereby li is in Foc (i.e., in the head of our ContrastP), it can either take the entire proposition in its scope (wide focus, all-focus, (54a)) or scopes over the only constituent which occupies its specifier (narrow focus, contrastive focus (54b)).

(54) a. OP Int/Q 
$$\begin{bmatrix} FocP/ContrastP & Foc V+li_{+Q} \end{bmatrix} \begin{bmatrix} IP \end{bmatrix} \end{bmatrix}$$
  
b. OP Int/Q  $\begin{bmatrix} FocP/ContrastP & XP & Foc li_{+O} \end{bmatrix} \begin{bmatrix} IP \end{bmatrix} \end{bmatrix}$ 

Since *li* itself is within the scope of the polar operator, it is to be expected that the effects on interpretation of *li* in Foc should be comparable to those of *dali*-questions. In other words, whether it is the focus projection that is filled or the immediately higher Q/Int projection should be immaterial to interpretation given that they realize the same combination of Q and Foc features. This is confirmed, as (55) and (56) show: a *dali*-question can be paraphrased as a *li*-question regardless of scope:

- (55) a. *Bašta ti* pita dali šte xodiš dovečera na Father your he.asks if will you.go tonight to kino (ili šte praviš nešto drugo). cinema (or will you.do something else) 'Your father is asking if you will be going to the cinema tonight (or you will be doing something else)'
  - b. Bašta ti pita šte xodiš li dovečera na Father your he.asks will you.go Q tonight to kino (ili šte praviš nešto drugo). cinema (or will you.do something else) 'Your father is asking if you will be going to the cinema tonight (or you will be doing something else)'
- (56) a. *Bašta ti* pita dali na KINO šte xodiš dovečera Father your he.asks if to CINEMA will you.go tonight (ili šte praviš nešto drugo) (or will you.do something else)
  - b. *Bašta ti* pita na KINO li šte xodiš ovečera (dili šte praviš nešto drugo). Father your asks to CINEMA Q will you.go tonight (or will you.do something else)

'Your father is asking if you will be going to the cinema tonight (or you will be doing something else)'

From the surface order of (56b) we cannot infer which position the contrastively focussed phrase *na kino* 'to the cinema' occupies. Recall that we postulated two focus positions around Int(dali) with slightly different semantic features (see

- (50) above). Given that the lower focus position may contain various sorts of contrastively focussed phrases, while the higher one may contain exhaustive focus only, we can use this as a test to verify which exact position li occupies in narrow focus XP li-questions:
- (57) Bašta ti pita [G-Top decata] samo/\*daže/\*săšto i na KINO li father your asks children-det only/\*even/\*also and to cinema Q šte (gi) vodiš dovečera?

  will (them-cl.acc) you.take tonight lit. 'Your father is asking you if only to the cinema you will be taking the children tonight?'
- (57) shows that focalizing adverbs like *even* and *also* are banned from combining with the focus particle li. Another piece of evidence comes from the ban on existential quantifiers to precede li (58).
- (58) \*Pitam te NJAKOGO/VSEKI li šte vodiš s teb na kino
  I.ask you-cl.acc SOMEONE/EVERYONE Q will you.take with you to cinema
  lit. 'I am asking you if you will be taking someone/everyone to with you the
  cinema'

Assuming that these distributional restrictions are syntactic and relate to the fact that the position of exhaustive focus is unavailable for non-unique adverbs, as well as for quantifiers with referentially dependent/non-specific readings (someone, everyone), it seems plausible to affirm that although li is merged as a focus particle in the position of Foc/Contrast in (54), this complementizer reaches the superordinate position of Int where it can take in its scope the contrastively focused XP. It also emerges from the data that XP cannot reach the higher Foc position given that it cannot receive an exhaustive interpretation as shown by (58) above. We can this assume that XP moves to the specifier of Int, (52a), so that a Spec,head relation can be established between Int hosting li and the specifier of the same projection. Head-movement of li to Int, though not further than Int, will also explain the fact that (G-)topics can linearly precede the XP-li complex, as we saw in (57) above.

If *li* surfaces in Int, the position where the complementizer *dali* is merged, as we argued in the preceding section, then one can imagine that the focus particle does indeed make part of the compositional make-up of the interrogative

complementizer which would then be rightly considered as the non-clitic version of li. It is quite plausible that the use of li as an interrogative complementizer is contingent on its focus properties and that this focalizing Slavic particle dating back to earlier stages of the language has been reanalyzed as an interrogative complementizer precisely because of the superordinate Int projection which licenses C-Foc/Contrast in the left periphery (as we saw above, polarity properties and focus are closely related from a semantic point of view). Claiming however that all occurrences of *dali* are synchronically formed in syntax by combining the modal particle da and the focus particle li (Callegari 2019), as sketched in (60) below, <sup>28</sup> is more ambitious and more difficult to evaluate. It is not uncommon for languages to compose two elements with operator semantics in order to form more complex complementizers with operator properties, e.g., English whether composes a wh-feature and the existential either.

In some recent proposals, embedded ves-no if-questions in English pattern with if-conditional clauses in terms of complementizer choice and semantic make up. Both contain a World operator (Bhatt and Pancheva 2006; Haegeman 2010) or a projection WorldP that specifies the truth value of the clause via a feature world with a value [actual] or [possible] (Arsenjević 2009). WorldP could be taken to correspond to my VeridP with the modal particle da occupying this position in (59), in alternative to declarative če. And, as mentioned above, non-veridicality is relevant for the semantic interpretation of *dali*-clauses.

Even though such a line of thought appears quite attractive, there are at least two counterarguments that can be pointed out specifically for Bulgarian.<sup>29</sup> First, if da and li occupy different projections, it is not clear how they come to form a derived

**<sup>28</sup>** Callegari does not make use of the Split CP framework: for her *li* occupies the Focus position. I adapt her proposal to my theoretical instruments,

<sup>29</sup> Recall from § 3.4 above that dali is related (like li) to the disjunctive operator ili 'either/or' itself decomposable into 'and' + li. If da and ako 'if-conditional' share the World operator meaning, then dali differs from ako in that it has an additional component not present in ako 'if', namely a focus feature. In other words, both (da)li and ako 'if' would signal that the event is possible, not actual, i.e., not true in the actual world of the discourse (irrealis) but the additional focus meaning of *da+li* coming from the disjunction part of its morphological make-up '(either) or' partitions the possible worlds in which the event might take place into p worlds and non-p or alternative worlds. From this point of view English (and Italian, Greek), as well as all languages which employ a single complementizer for both interrogative and conditional clauses, capitalize

complementizer. One could imagine that *da* moves to the left of *li* if the latter has reached Int but this type of movement appears problematic under the present proposal: in such case, *li* would skip the intermediate Verid position occupied by *da* in (60), in violation of the Head movement constraint, which requires movement to be local (Travis 1984). Alternatively, it can be assumed that complex syntactic heads are derived by m(orphological)-merger (Matushansky 2006), but in order for m-merger to apply, da should be claimed to occupy the head of li's specifier in Foc giving rise to an atomic though derived head. This however would predict that no further syntactic movement is available, given the post-syntactic nature of m-merger. In other words, it becomes less clear how to derive the interrogative syntax of dali, in case no movement to Int is posited. While this issue needs further investigation, the predominant view on the syntax of the subjunctive particle (first proposed by Rudin 1992) goes against treating it as a complementizer situated in a C-related position; in fact, it is dubious that da ever reaches the left periphery. See also §4.

A second counterargument against the claim that dali is formed in the syntax comes from the fact that this complementizer always selects an indicative IP, while da selects a Balkan-type subjunctive. If dali were the syntactic spell out of da + li, it would be expected to trigger a subjunctive, contrary to fact. However, the two das can co-occur in those contexts in which dali and da can combine independently, it is the modal marker da that determines the 'subjunctive' morphology on the embedded verb, as well as its interpretation. See (61) as an example:

(61) Ne znaeše dali da govori li da mălči. not he/she.knew if DA he/she.talk or DA he/she.be-silent 'He/she didn't know whether he/she should talk or be silent'

Even if one posits two copies of da – one merged in the head of VeridP, and another one merged in a lower position within the CP hierarchy, say Fin, we still need to know why the subjunctive effects get obviated only in case da combines with li though not in case da appears as an independent lexical item. I thus take (61) to show that *dali* is stored in the lexicon as an independent complementizer lexically composed of the modal marker and the focus/Q particle.

To summarize, in this section, we argued that *li* is akin to the disjunctive operator ili 'or' whose main function is to select among alternatives. These alternatives can be realized on the level of the proposition or on the level of the constituent which occupies the specifier of *li*. We also argued that even though *li* is merged

on the common meaning component, while Bulgarian capitalizes on their meaning difference. This point needs further elaboration which I leave for future research.

in the contrastive focus position (C-Foc/Contrast), and may take in its specifier a contrastively focalized phrase, it does not stay in this position but must move to the superordinate Int head in order to be interpreted as a question operator, sharing with the non-clitic *dali* the features focus and polarity.

## 3.6 Putting the orders together

Combining the various bits and pieces of the analysis discussed so far, we arrive at the following partial map of the Bulgarian left periphery. In (62), only positions at merge are indicated:

Several important conclusions have been reached so far. First, (62) gives the structure where če and dali are merged in the left periphery: Fin and Int, respectively. Second, we discussed the availability of complementizer movement across the positions of topics and focus, proposing that such movements can indeed be postulated for Bulgarian as well: a) movement of the declarative complementizer to Verid thereby coming to linearly precede ContrastP hosting a contrastive topic or focus; b) movement of both the declarative and the interrogative complementizer dali to Force thereby coming to linearly precede one (or more) G-Topic; c) movement of the clitic complementizer li to Int, thereby forcing a focussed constituent to occupy its specifier.

The available positions of the three complementizers are summarized in (63):

- (63) a. CORE1 V [A-Topic [ForceP če [G-Topic\* [VeridP (če) [C-Topic/C-Focus [FinP (če) [CORE2]]]]]]]
  - b. core1 V [A-Topic [ForceP dali [G-Topic\* [C-Focus +exhaustive [IntP (dali) [C- Focus +contrastive [CORE2 ]]]]]
  - c. core1 V [A-Topic [ForceP [G-Topic\* [C-Focus +exhaustive [IntP li [C-Focus +contrastive ]]]]]

Furthermore, there are restrictions on the availability of projected material. Thus, movement of dali from Int to Force cannot take place due the need of differentiating between the two types of C-Focus (exhaustive and contrastive) only one of which can project in the Bulgarian left periphery. Positing movement of the complementizer dali from Int to Force would predict the order dali > C-Focus when the latter is marked as [+exhaustive], which we saw is unavailable in Bulgarian. The clitic variant of dali, li, is merged in the lower C-Focus/Contrast position, but the similar restrictions regarding the distribution and the interpretation of the two types of Focus force li to move to the position of dali, i.e., Int. In this position, (see (57) above), one or more G-Topics can precede the XP/V-li complex, as confirmed by the data.

As for A-Topics, they obviously do not count for selection, given that an A-Topic can precede če and dali in the highest available complementizer position Force. Given that a higher selector can "see through" a Topic, and thus select a +Q or -Q complement, then we have to assume that at least as far as Bulgarian is concerned, the configuration of the left periphery need not be local: the higher verb does not need to linearly precede the complementizer in order to able to select it (see the agreement mechanism in (33) above). This is an important difference of Bulgarian with respect to the rest of Slavic.

If locality is indeed a requirement, an alternative solution could be exploited, namely that the highest projection in the left periphery is not Force but some additional projection akin to SubordinatorP, as in Rizzi (2001). In §3, we concluded that če does not have the properties of a pure subordinator. A question arises at this point whether A-topics sit outside the left periphery. Krifka (2001: 25) argues that A-Topics constitute "a speech act by itself, an initiating speech act that requires a subsequent speech act like an assertion, a question, command or curse about the entity that was selected". In a similar vein, Bianchi (2014) regards topic shifting as indicating a separate speech act which is then conjoined to the speech act expressed by the following clause, as illustrated in (64):

(64) [8P [Top Those petunias,] & [ForceP Force[decl] they are very nice]] (Bianchi 2014)

For comparable data from Modern Greek, where too topics can precede the declarative complementizer, Roussou (2000) has adopted the solution that oti 'that', which itself is marked as (+declarative), (subordinator), can optionally raise to the position of Subordinator, as opposed to the factive complementizer pu, which is merged directly in the higher Sub position. In Krapova (2010), I discussed the correlation between factivity and complementation, and I argued that indeed, topics, in particular an A-Topic, cannot surface in front of the complementizer če when selected by a factive verb like regret.

(65) \*Săžaljavam, [knigite] **če** [na Peter] Ivan ošte ne mu gi books-det that to Peter Ivan yet not him-CL.DAT them-CL.ACC I.regret is vărnal is given-back lit. 'I regret that as for the books, Ivan hasn't returned them to Peter yet'

If these data are confirmed, and if the highest position of the Bulgarian left periphery turns out to be related to factivity, labelled C<sub>Fact</sub> in (66), then the declarative complementizer če can be found, according to the type of clause, in each of the complementizer positions theoretically available in the CP field (Fin, Verid, Force and C<sub>Fact</sub>):

The implication of (66) would be that če is maximally underspecified with respect to the features of these projections and can thus transit across the entire CP field. I leave for future work a more precise analysis of A-topics and their relative order with respect to the various types of complementizers in virtue of factivity.

# 4 Da: a modal particle or a complementizer in the left periphery?

In this section I briefly consider the Bulgarian modal particle da which introduces subjunctive clauses. In our discussion of the compositional make-up of the interrogative complementizer dali in §3.5, we hinted that da has no access to the Cdomain even though it may seem that certain properties of da are shared with those of the declarative complementizer.

# 4.1 Veridicality issues

As in many other languages, the Bulgarian subjunctive does not seem to be associated with a specific kind of modality or mood. Da-clauses can be main, selected or unselected.

Since da occurs in a variety of clauses, it is difficult to associate this particle with a single description: in root contexts a da-clause can be an imperative, an optative, or a counterfactual (among others).

- (67) a. (Kazax) da dojdeš vednaga! (I.said) DA vou.come immediately 'I told you to come here immediately'
  - b. Nadjavam se/dano da imaš kăsmet! I.hope /let's hope DA you.have luck 'I hope/let's hope you will be lucky'

c. Da beše učil, šteše da spolučiš. DA vou.were studied vou.would DA you.succeed 'If you had studied, you would have succeeded'

In embedded contexts a da-clause, depending on the class of verbs that selects it, can correspond to monoclausal 'restructuring' configuration or a bi-clausal control structure or a bi-clausal subjunctive configuration of the Romance type (see Krapova and Cinque 2018 and §4.5 below for further discussion).

In a series of papers, Giannakidou (1998; 2009:1887) proposes that the subjunctive is non-veridical, i.e., it creates a semantic space in which the sets of worlds compatible with what the individual knows are partitioned into p and non-p worlds. Additionally, Giannakidou argues that non-veridicality is what all subjunctives share cross-linguistically. A slightly different idea of the distinction between veridical and non-veridical contexts in the prism of the distinction between indicative and subjunctive modality is presented in Smirnova (2012: 24) for Bulgarian:

#### (68) Function of mood in Bulgarian

- a. The subjunctive presupposes that the domain with respect to which the embedded proposition p is evaluated, i.e.  $\cap f(\alpha)(w)$  is non-homogeneous: some worlds in  $\cap f(\alpha)(w)$  are p worlds and some worlds are not-p worlds.
- b. The indicative presupposes that  $\cap f(\alpha)(w)$  is homogeneous: all worlds are p worlds or all worlds are not-p worlds.

Based on these definitions, Smirnova establishes that the criterion underlying mood choice is "epistemic commitment" to the truth of a proposition. Giannakidou (2016) further establishes a link between (non)veridicality and epistemic commitment: "a fully committed speaker is in a veridical epistemic state, which is a state with only worlds where the proposition is true" (p. 187). This by necessity requires the choice of an indicative če-complement. However, not all indicative-selecting verbs come with such a presupposition. For example, a sentence like (69a)

(69) a. Ivan vjarva/smjata, če opasnostta e silno preuveličena Ivan believes/thinks that danger-DET is strongly overestimated 'John believes/thinks that the danger is highly overestimated'

is obviously true for John (the believer) though not necessarily for the speaker who need not commit himself/herself in any possible way to the truth of the proposition, and can thus produce the following continuation:

(69) b. . . . . , no az znam, če opasnostta e seriozna. but I I.know that danger-det is serious 'but I know that there is a real danger'

To deal with the difference in commitment, Giannakidou proposes that veridicality (and epistemic commitment) is always relativized to an epistemic anchor. Anchors are the individuals asserting the sentence, 30 and both the speaker and the main clause subject can function as such, producing differences on the commitment scale in accord with the semantics of type of matrix verb. Since mood choice is a direct outcome of whether a truth inference of the complement clause is available to at least one epistemic agent, predicates can also be divided into veridical or not: veridical predicates allow for such relativized commitment to truth, while non-veridical predicates allow no such commitment.31 I cannot go into a discussion of the various types of predicates in Bulgarian in relation to the concept of veridicality, but the important thing to note is that all verbs that may select for a subjunctive in Bulgarian, e.g., propositional attitude verbs like 'want', 'hope' and 'suggest' are non-veridical, i.e., they never introduce a proposition that is evaluated as true in all possible worlds. According to Giannakidou (2009, 2016), the main function of the subjunctive is to signal that a certain proposition p is left open (p is not entailed or presupposed): $^{32}$  in Smirnova's terms, the domain with respect to which p is evaluated are partitioned into p and non-p worlds, cf. (68a) above. Consequently, the subjunctive indicates that speaker (or the main clause subject) is in a weak(er) epistemic state.<sup>33</sup> Weaker epistemic states correlate with reduced confidence or with a low(er) degree of belief in the actual truth of the proposition. See also Siegel (2009: 1878): "in Balkan, indicative is correlated with a higher degree of certainty on the part of the subject than is subjunctive".

<sup>30</sup> That the sentence is asserted can be shown by the fact that an evidential cannot be used after believe-verbs in Bulgarian. Such predicates accept only an indicative or a subjunctive in certain cases. This shows that the evidential always involves the speaker and can be used as a test for distinguishing between the veridicality status of the proposition with respect to either the speaker or the subject.

<sup>31</sup> Giannakidou (2016) also proposes that veridicality is coded via a matching mechanism between the selecting verb and the mood of its complement.

<sup>32</sup> Other non-veridical contexts include questions, modal verbs and adverbs, imperatives, conditionals, the future, disjunctions, before clauses.

<sup>33</sup> Epistemic states are sets of worlds compatible with what the individual anchor knows or believes.

## 4.2 Non-veridicality properties of da

In view of the above discussion, and in confirmation to our previous analysis, veridical complement clauses in Bulgarian are expected to be indicative, and to also contain the declarative complementizer če (in opposition to dali-clauses which are indicative but create a non-veridical domain). Recall that we argued that this complementizer may occur in more C-positions among which particularly relevant for veridicality are Fin and Verid.

Now what about da? Are these positions also relevant for da? This might appear plausible if it can be shown that VeridP can be specified as [± veridical] with če alternating with the modal marker da in the head of VeridP. The specification of Fin will thus be free from modality features and will contain instead only features relevant to the realization of the clause as finite or non-finite. Below, we will see that in certain selected contexts da also expresses syntactic nonfiniteness and would thus alternate with če along two dimensions – veridicality and finiteness. (7) above would thus be revised as (70):

#### 4.3 Da in C?

Pitsch (2018) summarizes the two analyses that have been proposed: dacomplements are full CPs and da is a complementizer in a C position; dacomplements are regular IP clauses and da is a modal particle internal to CORE 2/IP and located in the head of a special projection dedicated to mood features and labelled MoodP, as originally suggested by Rivero (1994) on the basis of its complementary distribution with the future marker šte which, too, requires strict adjacency with the (present tense) finite verb. The ambivalence of da as a complementizer vs. mood marker is replicated in debates about the status of the virtually identical particles na, să, të in Modern Greek, Romanian, Albanian, respectively, so the controversy goes outside the limits of a language-specific analysis and assumes a wider significance (Rivero 1994; Roussou 2000, 2009; Dobrovie-Sorin 1994; Turano 1994, a.o.; see also discussion in Wiemer this volume).

There are arguments and counter-arguments for each position, as my own earlier work has also shown (Krapova 1999, 2001). On the one hand, both če and da are free functional morphemes and as such are excellent candidates for a left peripheral position. The various type of left dislocated phrases, as well as of focus

phrases are all ordered above *da*, similarly to če when the latter can be shown to occupy the lowest C position Fin. For example, as (71) illustrates, a G-Topic, (71a), a C-Topic, (71c), and a contrastive Topic (71b) must precede the modal particle.

- (71) a. Predlagam [G-Topic na Ivan] [C-Foc TI] kažeš da mu I.suggest YOU-NOM DA him-CL.DAT vou.tell to Ivan kakvo e našeto rešenie. what is our-DET decision
  - 'I suggest that it should be YOU who will let Ivan know what our decision is'
  - b. ?Nadjavam se [C-Topic edna kniga] [Ivan]<sub>F</sub> da mi I.hope one book DA me-CL.DAT gives, Ivan da mi  $a \left[_{\text{C-Topic}} druga\right] [ti]_{\text{F}}$ kupiš. and another YOU-NOM DA me-CL.DAT you.buy 'I hope that Ivan will give me for free one book, and that you will buy me a second one'
  - [G-Topic tazi kniga] [IP Ivan da mi c. Iskam ja podari] **Lwant** this book Ivan DA me-CL.DAT it-CL.ACC gives Lit. 'I want that this book, Ivan gives it to me as a present'

In each of these sentences, the particle da appears next to a subject. Note that while (71a) gives no indication as to whether the subject occupies the C-Foc/ Contrast position of the left periphery or has been focussed in situ, (71b) makes it clear that the subject must be occupying the canonical position of Spec,IP/ CORE2. Recall also our previous conclusion that there is only one C-Top/Foc position in the left periphery (see §3.3.1-§3.3.2 and the structural representation in (65) above), as well as the examples in (23)–(24) above attesting that second conjunct of a contrast set is focus marked in situ. I take these data to show that da is sensitive to subject properties and must be adjacent to an overt (or null) subject, marking the left boundary of the IP/CORE2 (71c). With the subject appearing on the opposite side of  $\check{c}e$  and da (compare for example (71) with (63a) above), we have a clear indication that the lowest structural position of če 'that' is higher than (the highest position of) da. If the former is Fin (66), then the latter is not part of the left periphery.

# 4.4 Veridicality and double mood choice

As mentioned above, the complementary distribution between the indicative complementizer and the subjunctive particle arises not as a result of the syntactic position they occupy but as a result of the selectional properties of the main

predicates in lieu of veridicality. A potential counterexample comes from a small group of selecting predicates which feature a double mood choice. Note, however, that the meaning of the verb changes according to whether the complement is introduced by če or by da. For example, in (72a) below the complement of hope introduces a homogeneous domain in the sense of (68b) above (all worlds are either p worlds, or  $\neg p$  worlds, where p = Peter has left, and  $\neg p$  = Peter hasn't left). This returns a meaning that we can label 'weakly assertive' which goes together with a high(er) certainty about the existence of a point in time in which the leaving event has taken place. In (72b), on the other hand, hope expresses a preference reading and denotes an attitude (Farkas 1992; Giannakidou 2016). In this case, the da-complement introduces a non-homogeneous domain in the sense of (68a) above, and the interpretation of *hope* is similar to that of a preferential predicate like want (the worlds in which Peter has left are preferred over worlds in which Peter has not left).<sup>34</sup> Note that a *when*-clause is available as an adverbial clause only under the scope of da (and the main verb hope) where it does not anchor the proposition to any particular time. This also explains why the *when*-clause is ruled out in (72a): it is simply incompatible with the resultative meaning of the present perfect which bans temporal anchoring:

- **če** Petăr e zaminal (\*kogato ti (72) a. Ivan se nadjava, dojdeš). Ivan REFL hopes that Peter is left (\*when you-nom REFL you.come 'Ivan hopes that Peter will have left (\*when/by the time you come back home'
  - b. Ivan se nadjava Petăr **da** e zaminal, kogato ti si dojdeš Ivan REFL hopes Peter DA is left when you-nom refl you.come 'Ivan hopes that Peter will have left when/by the time you come back home'

The relation between mood choice and veridicality and/or epistemic commitment is further strengthened by examples like those in (73a)-(74a), featuring respectively the so-called polarity subjunctives (Quer 2001, 2009) and subjunctives in questions producing an epistemic meaning (Giannakidou 2009, 2016: 183). These

<sup>34</sup> Anand and Hacquard (2013) have argued for a multicomponent analysis of predicates such as hope, claiming that they contain a doxastic component, which triggers indicative selection, and a preference/bouletic component, which triggers subjunctive selection. The indicative example in (72a) is thus interpreted in a doxastic sense (i.e., in the epistemic model of the anchor i (= Ivan), there is a world compatible with Ivan's beliefs where he wins), whereas the subjunctive example in (72b) is interpreted in a more bouletic sense, referring to Ivan's preference (i.e., in the epistemic model of *i* = Ivan there is one world, call it the ideal world, where Ivan wins and which is more desirable to him than the worlds in which he does not win).

subjunctive types are available with propositional attitude predicates like e.g., viarvam 'believe', mislia 'thinks' which exhibit a double mood choice: while they typically take an indicative če-complement, a switch to a da-clause gets licensed by several (non-veridical) operators (in the sense of Giannakidou 1995, 1998). In fact, these operators coincide with the ones that allow for an unselected daliclause, as discussed in §3.2, namely matrix negation, the question operator, as well as modal expressions of possibility like maybe, perhaps (not illustrated here). The indicative on the other hand scopes over any of these matrix operators, cf. (73b)-(74b):<sup>35</sup>

- (73) a. \*(*Ne*) *vjarvam* Marija da ima PhD. not I.believe Maria DA has PhD 'I don't believe Maria has a PhD'
  - če Marija ima PhD. b. (Ne) viarvam. (not) I.believe that Maria has PhD 'I don't believe Maria to have a PhD'
- (74) a. Vjarvaš li Marija da ima PhD? vou.believe Q Maria DA has PhD 'Do you believe Maria has a PhD?'
  - b. Viarvaš li, če Mariia ima PhD? you.believe Q that Marija has PhD 'Do you believe that Maria has a PhD?'

The function of matrix negation in (73) and of the Q operator in (74) is to remove the veridical reading inherent in the če-clause so that the embedded proposition is no longer evaluated as true in any individual's epistemic model. Giannakidou's approach would predict that such contexts would require a subjunctive complement, so the fact that a če-complement is still available in such non-veridical environments can perhaps be handled better under Smirnova's proposal, which, as mentioned above, relies on the notion of epistemic commitment. Whatever the correct explanation for the relation of mood choice to veridicality or epistemic commitment, the above examples seem to show that just like če, da must also be related to the C-position Verid, although the particle itself, for reasons we saw in the examples (71), cannot surface phonologically in this position. The rele-

<sup>35</sup> This is well documented in the literature (Farkas 1992, Manzini 1994, among others). Negation and the question operator license the subjunctive in complements of epistemic predicates also in Romance (Quer 2009). See also Siegel (2009) for Balkan languages.

vance of a special position within the left periphery related to veridicality or to the speaker's epistemic commitment as a function of his/her evaluation of the truth of the complement clause merits further research. Here, I propose that there is some feature transmission mechanism ensuring that the particle gets related somehow to the left periphery. One can imagine that da is merged in some Mood projection inside IP, as in the classical analysis of Rivero (1994), but that depending on context the feature(s) carried by da are copied onto the Verid head for reasons of interpretation under selection or under non-veridical operators of sorts. The modal force is then passed over to Force. I leave for future research the exact implementation of this proposal:

(75) Force Topic field Verid Contrast Fin [IP Mood Modal -veridical +finite da

#### 4.5 Da as marker of ±finiteness

Apart from its veridicality-related property, the functional specification of da must also involve a finiteness-related feature. Note that all da-clauses involve a morphologically finite verb form but as I show in Krapova (2001), the syntactic expression of (non)finiteness in Bulgarian correlates with Tense and subject identity. Pitsch (2018) examines carefully various types of da-clauses and confirms the conclusion that wherever a complement has a [-T] specification, i.e., wherever embedded tense is interpreted as strictly simultaneous (realized morphologically as present tense) with the tense specification of the matrix clause, da can be argued to be syntactically non-finite and thus to correspond to an infinitive in a language with infinitives. On the other hand, wherever a complement is specified for Tense, i.e., has a [+T] specification, referentially independent in terms of tense, and denoting a proposition with a distinct time frame, then it can be said to correspond to a true subjunctive. As a consequence, the embedded subject can be identical or not with the main subject. Thus, subject (non-)identity follows from the competition of the two moods (subjunctive vs. infinitive) (Farkas 1992; Krapova 2001; Pitsch 2018; Wiemer this volume). A 'subjunctive'-like verb like očakvam 'expect' in (76a) allows for an overt embedded subject with disjoint reference, while an 'infinitive'-like verb like znam 'know (how)/be able' in (76b) does not in spite of the agreement inflection on both the main and the embedded verb:

(76) a. Šefăt očakva (ti)podadeš ostavkata da si boss-det expects DA REFL you.give resignation-DET you-NOM 'The boss expects you to resign'

b. Ivan znae (\*toi) da pluva' Ivan knows he-nom DA swims 'Iohn can swim'

Krapova and Cinque (2018) give the following list of predicates that select an infinitive-like da-complement, (75), arguing in favour of a monoclausal approach to their syntactic union on the basis of various transparency effects:

- (77) a. modals: *moga* 'can', *trjabva* 'must', *može* 'it is possible'
  - b. aspectuals and implicatives: započvam 'start', spiram 'stop', svăršvam 'finish', opitvam se 'try', uspjavam 'manage, succeed'
  - c. motion verbs: otivam da 'go and do (something)'
  - d. verbs of knowing<sup>36</sup>/ability: *znaja da* 'know how'/'can', *uča se da* 'learn how'

Modals, aspectuals and motion verbs combine with clausal projections smaller than a clause in many languages. They are thus comparable to the "restructuring" predicates well-known from Romance (Rizzi 1982, Cinque 2006). Several notes are in order regarding the classification in (77). First, the two predicates in (77d) znaja da 'know how' and uča se da 'learn', which is the inchoative version of know how, meaning 'come to know how', can be made to converge with the class of modals in virtue of their interpretation as predicates of mental (or internal) ability, synonymous with one of the meanings of English can, as in e.g., Znam da pluvam (lit. I.know DA I.swim 'I can swim'). Second, the class of aspectuals in (77b) has been extended to also comprise certain implicative verbs like zabravjam 'forget to', uspjavam 'succeed/manage to', which can be viewed as aspect-related in that they express notions akin to conative aspect (try to, attempt to), frustrative/success aspect (fail to, forget to, (not) succeed/manage to). As demonstrated by Cinque (1999, 4.2.8.), non-Indo-European languages often express these aspects via grammatical suffixes, incorporated into the verb stem, much like what happens with prototypical aspectual notions such as inceptive (begin to), terminative (stop V-ing), completive (finish V-ing). Third, motion verbs in Bulgarian also require the subjunctive when expressing the distance covered to reach an endpoint at which the event takes place, as in e.g., Otivam da kupja mljako 'I.go DA I.buy milk 'I go and buy milk'. All the syntactic classes in (77) share the defining properties of Romance restructuring predicates: strict co-reference between the matrix subject and the understood subject of the embedded verb resulting

**<sup>36</sup>** I use the less formal term 'knowing' here in order to distinguish the ability sense of *znaja da* 'know how' from the epistemic sense of znaja 'know' which requires a če 'that'-clause.

in their obligatory semantic identity (as manifested by the obligatory agreementfeature matching between the two verbs); absence of deictic Tense properties of the embedded verb; impossibility of Nominative case assignment in the 'embedded' domain, cf. (76b).<sup>37</sup>

Cinque (1999) has shown that what are standardly considered IP-internal and unique categories of Mood, Tense and Aspect should be seen as a rich and finegrained domain comprising various functional projections associated with different types of interpretations and observing a strict relative order. These functional projections can host verbs, adverbs and other elements dedicated to expressing modal/temporal/aspectual meanings. See (78) taken from Cinque (2006: 91, 93) and illustrating the relevant projections corresponding to the classes of (77):

(78)	$[Mod_{epistemic}]$	[Mod possibility	$[Mod_{obligation}]$	[Asp <sub>terminative</sub>
	trjabva 'must'	može 'it's possible	' trjabva 'have to'	spiram 'stop'
	[Asp <sub>inceptive</sub>	$[Mod_{ability}]$	[Asp <sub>frustrative/success</sub>	[Mod <sub>permission</sub>
	započvam 'begin'	moga'can¹'	uspjavam 'mana	age' <i>moga</i> 'can²'
	$[Asp_{completive}]$	$[V_{\mathrm{infin}}]]]]]]]]]]]$		
	svăršvam 'finish'	da+V		

Since all of the functional verbs in (78) must combine with da, the hierarchy suggests that in similar 'restructuring' environments da is a sort of infinitive marker functionally equivalent, as indicated informally in (78), to the infinitive suffix in languages with infinitival morphology.

The hierarchical ordering of functional projections in (78) can also accounts for multiple sequences of da-complements. Such constructions, exemplified in (79) below, follow rigid ordering principles which would be hard to account if da were to occupy a single Mood projection. For example, the fact that the only interpretation available in (79) is the one in which the possibility modal takes the deontic ones (ability or permission) in its scope cannot be made to follow from any independent syntactic requirement on the order of clauses. On the contrary, in an approach that postulates a sequence of dedicated functional verbs associated with a specific interpretation, the correct interpretations simply follows

<sup>37</sup> Krapova and Cinque (2018) structurally distinguish between subjunctive-selecting predicates (e.g., otkazvam 'refuse') from infinitive-selecting ones (i.e., those in (77)) by arguing that in the former case strict coreference results from exhaustive control in a bi-clausal configuration, while in the latter case, the embedded verb's lexical subject raises to the subject position of the restructuring verb in a strictly monoclausal configuration (much like what happens with auxiliaries). The reader is referred to that work for details about other types of da-clauses in bi-clausal structures exhibiting obviation effects (as in (76a) above similar to Romance subjunctives.

from the order of the projections themselves without any further stipulation, thus predicting the two available interpretations in (i) (whereby the first appearance of možem 'we can' is interpreted in its 'possibility' reading, while the second occurrence of the same verb has the reading of 'ability' or 'permission'). The opposite combinations in (ii) are correctly excluded by the predictions of the hierarchy:

- (79)  $\left[ _{CP} \right]_{IP}$  pro možem  $\left[ da \right]_{FP}$  možem  $\left[ da \right]_{VP}$  vlezem  $\left[ \left[ da \right]_{VP} \right]_{VP}$ we.can DA we.can DA we.enter (Krapova 1998:118)
  - (i) 'It is possible for us to be able to enter'; 'It is possible for us to be permitted to enter'
  - (ii) '\*We are able for it to be possible for us to enter'; \*We are permitted for it to be possible for us to enter'.

Given that da can introduce different types of infinitival verbal complements to restructuring verbs, as well as different types of regular modalized clauses (e.g. after classes of verbs as those in (80), which unlike the verb classes in (77) take a regular CP complement rather than a reduced one, the possibility exists that the modal marker does not occupy a single position within the clause. In (78) we hinted at a possible interpretation of da as part of the embedded VP area of restructuring verbs, while with the predicates in (80) da seems related to modality rather than to the expression of functional non-finiteness:

- (80) a. Preference predicates (volitionals and predicates of desire): iskam 'want', *želaja* 'desire'<sup>38</sup>
  - b. Commissive predicates: obeštavam 'promise'

(i) a. *Iskam* [vp da živeja] (monoclausal)

DA I.live I.want-

'I want to live'

da živeeš] (biclausal) b. Iskam [CP ti

I.want you-NOM DA you.live

'I want you to live'

(ii) a. Voglio vivere

'I want to live (infinitive)'

b. Voglio che tu viva.

'I want that you live (subjunctive)'

<sup>38</sup> Krapova and Cinque (2018) argue that desideratives are ambiguous between an infinitive or a subjunctive-taking predicate so they may enter in either a monoclausal or in a biclausal structure, see (i). This structural ambiguity is shared by Romance, see (ii):

- c. Directives: *kazvam da* 'tell to', *săvetvam* 'advise', *porăčvam* 'order', zapoviadvam 'order'
- d. Permissives: pozvoljavam 'allow', zabranjavam 'forbid'
- e. Epistemics: *vjarvam* 'believe', *mislja* 'think' (see (73)a, (74a) above)

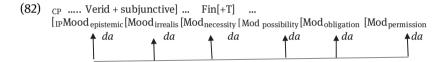
If these classes of verbs categorially select for a CP complement, then it appears plausible that da gets inserted in particular functional positions within the IP area (see the map in (78)), activating upon merge the functional content of these positions. An embedded imperative, for example, would activate in its derivation the projection Mod<sub>obligation</sub> (81a) where da spells out the content of a deontic modal (cf. English should). And this might be said to be the case with the other directive verbs in (80c). Permissives, on the other hand, can be said to involve the activation of Mod<sub>nermission</sub>, while epistemic predicates may involve the activation of different modal projections, for example Mod<sub>possibility</sub> in (81b) where da's functional content is comparable to that of a possibility modal or of an adverb like može bi 'maybe'. This is confirmed by the paraphrase with a če-clause which unlike the da-clause can combine with modal adverbs like e.g., *može bi* 'maybe' producing the exact same interpretation:

- (81) a. Lekarjat mi kaza da počivam poveče (Mod<sub>obligation</sub>) doctor-DET him-CL.DAT he.told DA Lrest more 'The doctor told me that I should rest more'
  - b. (ne) Vjarvam (\*može bi) da ima (\*može bi) lek za tazi bolest (Mod<sub>possibility</sub>) (not) I.believe (\*maybe) DA there-is (\*maybe) cure for this disease 'I (don't) believe in the possibility of curing this disease'
  - Cf. (ne) Vjarvam, če može bi ima (može bi) lek za tazi bolest (not) I.believe that maybe there-is (maybe) cure for this disease 'I (don't) believe that there can exist a cure for this disease'

This of course is a very tentative proposal. As is well-known, the list of verbs that select for a da-complement is quite long, and the range of constructions involving da is difficult to capture in a unified way (see also Wiemer this volume). A finer grained compositional analysis of the lexical features of selecting verbs is needed before we can gain a clue to what motivates selectional preferences and restrictions, i.e., why certain verbs combine with certain types of da-complements – a notoriously difficult question that remains unresolved until present day.

To summarize, in this section we have looked at structural and semantic properties of the Bulgarian modal marker da. But the important thing to note here is that da-complements can be of various sizes, as also argued for by Todorović (2012) on the basis of data from Serbo-Croatian but with a different theoretical apparatus. It is in any case not accidental that basically the same classes of verbs

that select da in Bulgarian also select the respective modal particles present in the rest of the Balkan languages. I therefore converge with Siegel (2009) and Pitsch (2018) that da is a vacuous element although I do not agree with these authors that da-complements do not add anything to sentence semantics. In my view, da spells out functional features like tense/finiteness and mood in accord with the hierarchy in (78) according to whether the da-complement constitutes an independent syntactic domain or not. In the former case, i.e., when the da-complement is part of a full-fledged CP, I suggest that da's features are copied onto the C positions of Fin and Verid, the former obligatory finite, i.e., endowed with the feature [+T], and the latter endowed with the feature [+subjunctive]. This accords well with Rizzi's proposal that Fin expresses distinctions pertaining to the (non-) finiteness character of CORE2, i.e., information that "faces the inside, the content of the IP embedded under it" (Rizzi 1997: 283). As for the role of Verid, we can suppose that its semantic function is to serve as an epistemic anchor for the embedded proposition (possibly via a World operator, as mentioned in 3.5 above).



If on the other hand, the da-complement is selected by a modal, an aspectual, a motion verb or a verb of knowing how, the entire complex constitutes a monoclausal domain, in which case, da's function equals that of an infinitive(-like) marker introducing a VP denoting an event rather than a proposition. This then is responsible for the host of effects that are related to monoclausal non-finite expressions, like the lack of an independent temporal specification, the obligatory lack of an overt nominative subject preceding da (which has raised to the subject position of the entire IP, as indicated by the trace in (83)), as well as other transparency effects (discussed in detail in Krapova and Cinque (2018):

(83)  $\left[ _{CP} \right]_{IP}$  Subject NP [Modal/Aspectual/Motion V<sup>1</sup> [t da + V<sup>2</sup>]

# 5 Conclusion

In this paper, I proposed some modification of the original analysis of Rizzi (1997) and I hope to have shown, using data drawn from Bulgarian, that the CP area connecting CORE1 to CORE2 constitutes a rich functional domain comprising

different types of complementizers as well as discourse phrases. Rizzi's work opened an important theoretical perspective on the syntactic and semantic dependencies between CORE1 and CORE2 and the ways they are encoded in the left periphery of CORE2 and determine some of the structural and semantic properties of CORE2 itself.

I argued that the projection labelled by Rizzi Fin(iteness), where presumably the declarative complementizer če in Bulgarian is merged, cannot handle the distribution of Topics emerging from the Bulgarian data, so I proposed an additional projection VeridP on top of FinP, hosting not only the raised complementizer če 'that' but also features copied from the various IP-internal modal projections hosting the modal marker da. I also reviewed the other C positions where the declarative complementizer če and the interrogative one dali/li 'if/whether' can surface arguing that the left periphery of the Bulgarian embedded clause is structured in a hierarchical way. In order to establish the precise dimensions of the CP hierarchy, I had to discuss some old-standing issues relevant to the positions and the variety of discourse phrases like topics and focus. I also argued that Force may not be necessarily filled by an overt complementizer but that it must be connected to the lower CP area via some feature transmission mechanism.

At the same time the above observations have shown that traditionally used concepts like realis-irrealis are insufficient to explain the wide variety of structural instantiations of the complementizers and the particles found in the Bulgarian functional domain, whether in the left periphery or within CORE2. To take one example, propositional attitude predicates are expected to select an *irrealis* complement but in Bulgarian and in Slavic more generally they take an indicative as in regular assertions. The modal particle da, too, cannot be viewed as a simple irrealis marker. Instead, as I tried to show, it functions as a default marker of non-veridicality, which is why it is compatible with a wide variety of modal meanings within the independently established functional hierarchy of Cinque (1999). I also showed that the complexity of this particle goes beyond the expression of modality in that with a particular class of predicates it is exploited as a marker of non-finiteness comparable to a morphological infinitive.

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