

## **Volitional mood in South Slavic with a focus on Bulgarian: a paradigmatic view**

In this paper we survey some of the inflected and periphrastic volitional mood paradigms in South Slavic with a focus on Bulgarian data. Our review confirms typological observations in the literature that volitional mood paradigms tend to ‘fracture’, in that the cross-categorisation with different person/number features leads to systematic associations with different meanings and, typologically, frequent associations with different forms. This makes it difficult to argue that non-existent inflected forms are gaps in the inflected paradigm. Because of this periphrastic volitional mood forms that exist alongside inflected forms have to be seen as independent (syntactic) paradigms, rather than forms that fill missing cells in inflected paradigms, i.e. the product of feature intersection. Like more canonical periphrases, however, syntactic volitional mood forms are non-compositional and exhibit an organisation akin to the content-form paradigm organisation of inflected paradigms developed in certain inferential-realizational approaches to morphology. Following some recent formalisations, we suggest a tentative analysis of the most productive periphrastic volitional mood forms in Bulgarian based on the assumption that their properties are constrained partially by the morphology and partially in the syntax.

Keywords: Bulgarian, Slavic, volitional mood, periphrasis

### **1. Introduction**

Most of the South Slavic languages have inflected imperative forms, as well as forms that seem to have the same directive force, but are analytic, rather than synthetic. In addition, there is a range of inflected and analytic forms which can be said to have related meanings, e.g. optative and hortative. We will follow the lead of Ammann and van der Auwera (2004) and use the term ‘volitional mood’ as a cover term for this set of related meanings and forms. Following

their suggestion, the term ‘optative’ will be reserved for the expression of wishes, ‘imperative’ will be reserved for second person forms with directive force, and the term ‘hortative’ for appeals to act directed to first or third persons (with a further distinction between co-hortative for first person and ex-hortative for third persons possible). We return to the motivation for these distinctions below.

In this paper we investigate the relationship between inflected and analytic volitional mood forms, focusing in particular on analytic forms. We will argue that despite their syntactic nature, these forms exhibit some properties typical of paradigmatic organisation, e.g. complex interactions between different morphosyntactic features. In taking a paradigmatic approach, our paper builds on the review of syntactic volitional mood forms in Ammann and van der Auwera (2004), where they are seen as a features typical of Balkan languages. Here we suggest that analytic and inflected forms occupy the same information space and can be organised into a complex set of form and content paradigms (along the lines of Stump (2016)). We test these forms against the concept of periphrasis discussed in recent work in theoretical linguistics (Sadler and Spencer (2001), Ackerman and Stump (2004), Brown et al. (2012), Spencer and Popova (2015), Bonami (2015), Bonami et al. (2016) amongst others) and conclude that they exhibit some, but not all properties associated with canonical periphrases. In the next section we introduce inflected volitional mood and some analytical constructions in South Slavic, and argue that volitional mood paradigms tend to ‘fracture’, justifying the distinction between different sub-categories. Next we turn our attention to a particular analytic construction, the *da*-form construction, drawing primarily on data from Bulgarian where it is well-developed, and argue that this polyfunctional form doesn’t fill cells in an otherwise inflected paradigm, the way canonical periphrastic constructions do, but shares information space with inflected forms, exhibits non-compositionality and can be understood as a set of forms which are structured in paradigmatic oppositions with each other. We argue that this construction, whose

volitional mood interpretation relies on it appearing in a main clause, should be constrained partially by syntax and partially by morphology. Finally, we sketch what an account along these lines might look like.

## 2. Volitional mood in South Slavic

South Slavic languages have a set of synthetic inflectional forms with primarily imperative meaning, alongside, in most cases, a more or less developed paradigm of analytic forms with imperative, hortative and optative meanings. We provide a brief description of synthetic imperatives below, before turning to the analytic forms.

### 2.1 Synthetic imperative/hortative forms

Like many other languages (for a very useful overview of imperatives see van der Wurff (2007)), South Slavic synthetic imperatives have second person forms (singular and plural, also dual where dual verbal forms exist), which are used mostly in main imperative clauses. Inflectionally these forms are fairly paired back: 2SG forms are equivalent to one of the stems of the verb, 2PL/DU forms add to the stem an ending indicating the respective person/number.<sup>1</sup> In addition, in some of the South Slavic languages, e.g. Slovene and BCS, there is also a synthetic 1PL (and 1DU where appropriate) form, which similarly adds the requisite person/number endings to the verbal stem. In (1) below we give some examples of synthetic inflected imperatives and first person hortatives across the South Slavic languages.

(1)	Slovene	BCS	Bulgarian	Macedonian
	2SG	čitaj	čitaj	četi
	1DU	čitajva		čitaj

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<sup>1</sup> We use the following abbreviations 1/2/3 first/second/third person, ACC accusative, AOR aorist, CL clitic, DAT dative, DEF definite, DU dual, F feminine, FUT future, IMPERF imperfect, LPTCP I-participle, M masculine, NOM nominative, OPT optative, PERF perfect, PFV perfective, PL plural, PROG progressive, PRS present, PST past, PTCP participle, REFL reflexive, SBJV subjunctive, SG singular.

2DU	čitajta			
1PL	čitajmo	čitajmo		
2PL	čitajte	čitajte	četete	čitajte

Although part of the same paradigm, the first person forms have a somewhat different semantics, in that they express an appeal to do something to a group of addressees that includes the speaker and express an exhortation, rather than a command. As is clear from (1) not all the South Slavic languages have this form, for which Ammann and van der Auwera (2004) reserve the term (co-)hortative. This separation between the second person and first/third person forms is rooted partially in the inherent semantic distinctions between appeals to action made directly to an addressee, indirectly to a third person, or to self, possibly as a member of a group. This could, of course, be considered a polysemy, but another motivation for the distinction stems from intra- or inter-linguistic comparisons: different languages have forms that specialise for some, but not all of these meanings and we can find forms specialising for some of these meanings within the same language, as we shall see when we examine the analytic volitional mood forms. We might assume on these grounds that the forms in (1) really express two features: hortative and imperative.

The paradigms in (1) appear somewhat circumscribed, since both imperative and hortative cross-categorise with a limited number of the available feature-values in the language: they have limited person forms (there are no third person or 1SG forms in the paradigms shown above) and there are no tense distinctions, even though South Slavic languages have inflected tenses and, in some cases, for instance Bulgarian and Macedonian, a number of periphrastic tenses.

This is, however, not untypical of imperatives cross-linguistically (see van der Wurff (2007), Goussev (2013) amongst others). For this reason even in paradigmatic approaches to morphology the paradigms above are considered complete and the imperative paradigm is assumed a priori to be limited, for instance to second persons (see the treatment of the

imperative in Bulgarian in Stump (2001), for instance). Inflected imperatives don't make tense distinctions and combine with limited person values. In this respect, however, they are fairly typical of this grammatical category (some tense marked imperative forms are noted in van der Wurff (2007), for instance, see also discussion of imperative paradigms in Goussev (2013)).

There are some paradigm cells that could be considered gaps even in such circumscribed paradigms. Slavic verbs distinguish perfective and imperfective aspect and affirmative imperative forms are possible with both perfective and imperfective verbs. Negated imperative forms with perfective verbs, however, are either rarer (e.g. in BCS, see Szucsich (2010)), or deemed impossible (for instance in Bulgarian). Descriptive grammars often motivate this gap in semantic terms. We return to this gap later.

## **2.2 Analytic volitional mood constructions**

Alongside the synthetic imperatives South Slavic languages also have a range of syntactic constructions with similar semantics, which in some cases complement and in others appear to be synonymous with the synthetic forms. What follows is not a comprehensive description of these constructions across all South Slavic languages. Instead, we will focus on one of the most widespread and productive ones – what we will call the *da*-verb forms – and will limit our discussion mostly to Bulgarian. Before we turn to our main data, however, we will show that some of the volitional mood constructions appear to support the distinction between different ‘sub-features’ under the label of ‘volitional mood’ put forward in Ammann and van der Auwera (2004). Heterogeneous constructions some of which specialise for particular person-number combinations are not, it would appear, typologically surprising (see van der Auwera et al. (2004) for instance). Volitional mood constructions appear to be numerous, heterogeneous, and grammaticalised to a different degree (on the grammaticalisations of some volitional mood constructions in some Slavic languages see Hansen (2004) and Čakárova (2009), for example).

There is a tendency, however, for some constructions to be restricted to certain person-number combinations, in other words, some constructions appear to reflect the distinctions between imperative (with second persons) and hortative (with first and/or third persons). For example, according to Herrity (2016) Slovene, which as we saw above has synthetic forms for the imperative and the co-hortative, has analytic constructions which we will refer to as ‘hortative’.<sup>2</sup>

According to Herrity (2016), these Slovene constructions are used to express a wish, desire, necessity, mild command, exhortation or regret on the part of the speaker. They are formed with the particle *naj* and either (a) 1st or 3rd persons of the present tense (b) the future of the verb *bíti* ‘be’ or (c) the third persons of the conditional (we illustrate in 3 with examples from Herrity (2016), glosses added).

- (3) a. Vsè naj ostáne, kàkor je  
 All let remain.3SG as be.3SG  
 ‘Let everything remain as it is’
- b. Naj strokovnjáki réčejo, kàr hóčejo  
 let experts say.3PL what want.3PL  
 ‘Let the experts say what they want.’

These forms are similar to the Bulgarian forms with the particle *neka* ‘let’, illustrated below (*neka* can optionally be followed by *da*):

- (4) a. Neka (da) idem na kino!  
 Let’s DA go.1PL to cinema  
 ‘Let’s go to the cinema.’
- b. Neka (da) se ugovorjat koga šte idem na kino.  
 Let DA REFL agree.3PL when FUT go.1PL to cinema  
 ‘Let them agree a time for us to go to the cinema’.

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<sup>2</sup> Herrity (2016) refers to them as ‘optative mood’, a label we reserve here for forms that are used to express wishes, and notes that contemporary grammars of the language generally don’t recognise these forms as a distinct mood.

Although some scholars consider there to be a full paradigm of *neka* (*da*) forms, Ivanova and Gradinarova, (2015: 56) note that in the contemporary language the second person forms are used very rarely.

In Bosnian/Croatian/Serbian (BCS) the cognate constructions with *neka* seem to have specialised even further: Szucsich (2010) reports that in main clauses *neka* occurs primarily with third person forms. Other person forms seldom occur in main clauses. We give some of his examples (glosses adapted) for the *neka* construction in BCS in (5).

- (5) a. Neka pob(ij)edi naobolja ekipa.  
 OPT win.PRS.3.SG best.F.SG.NOM team.F.SG.NOM  
 ‘May the best team win.’
- b. Neka umrem <...>  
 OPT die.PRS.1.SG <...>
- otišla je drugom.  
 away.went.1PST.F.SG be.3.SG other.M.SG.DAT  
 ‘Let me die ... she went to another one.’ (from a song text)

There are also constructions specialising for second persons, or imperatives. For example, in addition to the usual negation of imperatives with *ne*, there are specialised negated imperatives. In Bulgarian these are constructions with the special negative *nedej/nedejte*, historically (negated) imperative forms of the verb *dejati* ‘do’ and a *da*-form of the verb (or, less frequently, a remnant of the infinitive, which has practically disappeared from the language). The constructions with *da*-forms are illustrated below:

- (6) a. Nedej da xodiš na kino!  
 not.do.2SG DA go.2SG to cinema  
 ‘Don’t go (sg) to the cinema!’
- b. Nedejte da xodite na kino!  
 not.do.2PL DA go.2PL to cinema  
 ‘Don’t go (pl) to the cinema!’

There are cognate negative imperative forms in other Slavic languages, see e.g. *nemoj/nemojte* constructions in BCS (Hansen (2004)).

In contrast to these analytic constructions, which seem to have specialised or be specialising for particular persons-numbers, the constructions we will discuss in more detail, the *da*-form constructions, have forms for all person-number combinations. Though formally similar, in terms of meaning they can be organised around some of the different sub-features of the volitional mood. We turn to *da*-forms next.

### **3. *Da*-form volitional mood constructions**

*Da*-form constructions comprise the particle *da* and a verb inflected for tense and agreement features. The verb can be in some, though not all, of the tenses available in the language. The particle/marker *da* is present throughout South Slavic. In Bulgarian, as in the other languages where it is found, it is polyfunctional and as a consequence its status is disputed and it has variably been considered a mood particle, or a complementiser; *da*-form constructions are also seen as a replacement of the infinitive, which some Slavic languages have (nearly) lost (a very useful overview can be found in Pitsch (2018)). Pitsch (2018) summarises the arguments in favour of considering *da* a modal particle: unlike typical complementisers, *da* is strictly adjacent to the verb and can be separated from it only by clitics (like the negative particle *ne*, *da* behaves as a clitic which can head the clitic cluster); in addition, *da* can co-occur with undisputed complementisers like *če* ‘that’, but not with other modal particles like *bix* (conditional mood particle) and *šte* (the future tense particle). In the remainder of this paper we will adopt this position and will treat *da* as a verbal/modal particle. The modality associated with *da* in most of its uses comes from its tendency to appear in irrealis contexts.

Certain *da*-forms are traditionally included in grammatical descriptions of Bulgarian (e.g. Nicolova (2008) and references therein) as alternative or complementary to the inflected



imperative forms see (7), in other words, these forms have volitional mood meanings. We illustrate the basic constructions with the perfective verb *kupja* ‘buy’, but *da*- constructions can be used with both perfective and imperfective verbs.

(7)	<i>da</i> +present tense	<i>da</i> +present perfect	<i>da</i> +past perfect	<i>da</i> +imperfect
1SG	da kupja	da sām kupil/a/o	da bjax kupil/a/o	da kupex
2SG	da kupiš	da si kupil/a/o	da beše kupil/a/o	da kupeše
3SG	da kupi	da e kupil/a/o	da beše kupil/a/o	da kupeše
1PL	da kupim	da sme kupil/a/o	da bjaxme kupili	da kupexme
2PL	da kupite	da ste kupil/a/o	da bjaxte kupili	da kupexte
3PL	da kupjat	da sa kupil/a/o	da bjaxa kupili	da kupexa

Volitional mood meanings for the *da*-forms illustrated above are available when they are used in main clauses, compare (8) with (9). The phenomenon is described and discussed as a possible Balkanism in Ammann and van der Auwera (2004). Some examples of the uses of such main clause *da*-constructions are given in (8).

- (8) a. Da kupiš                      xľjab!  
 DA buy.2SG.PRS              bread  
 ‘Buy bread!’
- b. Da imaš                      mnogo kšmet!  
 DA have.2SG.PRS              much luck  
 ‘May you have a lot of luck!’
- c. Do utre              da sme kupili              xľjab!  
 by tomorrow DA be.3PL buy.LPTCP.PL bread  
 ‘We must have bought bread by tomorrow/Let’s buy bread by tomorrow’.
- d. Ex, da bjax                      kupila                      xľjab!  
 ah DA be.IMPERF.1SG buy.LPTCP.3SG.F bread  
 ‘I wish I had bought bread’.
- e. Ex, da imax                      sega mnogo pari!  
 ah DA have.IMPERF.1SG now much money  
 ‘If only I had a lot of money!’

The same *da*-forms are found in subordinate clauses, indeed the typical uses of *da*-forms, usually considered analogues of subjunctives and/or infinitives, are in subordinate clauses. The *da*-forms with present tense verb are the most extensively discussed in the literature and seem

to have the widest range of uses. We illustrate some of this range in (9), where subordinate *da*-clauses are used as complements of control verbs (9a, b, c), purpose clauses (9d), as well as subject clauses (9e) and nominal complements (9f).

- (9) a. Naredix da kupiš xľjab.  
 order.1SG.PST DA buy.PRS.2SG bread.  
 ‘I ordered (you) to buy bread’.
- b. Naredix Ivan da kupi xľjab.  
 order.1SG.PST Ivan DA buy.PRS.3SG bread.  
 ‘I ordered Ivan to buy bread’.
- c. Togava ťte započneť da peeť.  
 then FUT start.2SG DA sing.PRS.2SG  
 ‘Then (you) will start singing.’
- d. Zaminax da uĉa v ĉuťbina.  
 depart.AOR.1SG DA study.PRS.1SG in abroad  
 ‘I left to study abroad’.
- e. Da kupiš xľjab e neobxodimo.  
 DA buy.PRS.3SG bread is.3SG necessary  
 (For you) to buy bread is necessary. (It is necessary for you to buy bread.)
- f. Tja ima namerenie da uĉi v ĉuťbina.  
 she has intention DA study.PRS.3SG in abroad  
 ‘She has the intention to study abroad.’

*Da*-forms with other tenses are also possible in subordinate clauses. *Da*-forms with the perfect tense are used in irrealis future-perfect contexts (10), whereas *da*-forms with the imperfect and past perfect are found in the protasis of conditional sentences with past semantics (11), and in other subordinate clauses with counterfactual meaning (12).

- (10) Nadjavam se do doveĉera  
 hope.PRS.1SG REFL by tonight  
 da ste kupili xľjab.  
 DA be.PRS.3SG buy.LPTCP.PL bread

‘I hope that by tonight you would have bought bread’.

- (11) a. Da bjaxte stojali na opaťki pred  
 DA be.IMPERF stand.LPTCP on queues in-front-of

izbiratelnite urni, sega štjajte da bādete evropejci.  
 ballot.DEF boxes now want.IMPERF DA be.3PL Europeans

‘Had you queued in front of the ballot boxes, you would have been Europeans now.’

b. Dori da imaxme obxvat, ne bixme  
 even DA have.IMPERF.1PL coverage not be.COND.1PL

mogli da pomognem koj znae kolko.  
 be.able DA help.PRS.1PL who knows how.much

‘Even if we had coverage, we wouldn’t be able to help much.’

(12) Knigata, kojato iskate  
 book.DEF which want.2PL

roditelite vi da bjaxa pročeli, veče e na pazara.  
 parents.DEF your.CL DA be.IMPERF read.LPTCP.PL already is.PRS.3SG on market.DEF

‘The book you wish your parents had read is already on the market.’

*Da*-forms in main clauses are not exclusive to Bulgarian, they occur in South Slavic more generally. We list some examples below, though given the rather complex nature of the phenomenon, we don’t undertake a detailed comparison.

For BCS (Alexander, 2006: 249-250) points out that a *da*-clause that stands alone can communicate a wish, desire or request. We provide some of her examples in (13), with added glosses. Independent *da*-clauses seem to be possible with both present and past tense, with past tenses they are said to express a veiled threat.

(13) a. Da vas upoznam.  
 DA you.PL introduce.PRS.1SG  
 ‘Let me introduce you.’

b. Da se nagodimo.  
 DA REFL agree.PRS.1PL  
 ‘Let’s make a deal’.

c. Samo da daska ne pukne!  
 only DA board not break.PRS.3SG

‘If only the board doesn’t break! (I hope that the board won’t break!)’

- d. Da to više nikad nisi učinio!  
DA that more never not.BE.2SG do.PTCP  
‘Don’t you ever do that again!’

Uses of *da*-clauses with volitional meanings in BCS are described also in Szucsich (2010). A comparison between *da* and *neka* highlights the propensity of *da* to appear in irrealis contexts.

Uses of *da* with the subjunctive are also recorded. We give some of Szucsich’s (2010: 400ff.) examples (with adapted glosses) in (14).

- (14) a. Samo da bi došao!  
only that SBJV.3SG come.LPTCP.M.SG  
‘If only he came!’
- b. Da si samo brže vozio!  
that be.2SG only faster drive.LPTCP.M.SG  
‘If only you had gone faster!’
- c. Da ste odmah išli u prodav(ao)nicu!  
that be.2.PL immediately go.LPTCP.M.PL in store.F.SG.ACC  
‘Immediately, go to the store!’

In Macedonian, Tomič (2012, 374-375) notes the use of a *da*-form with a perfective imperfect verb to express a missed opportunity, her example is reproduced in (15) (glosses adapted).

- (15) a. Da dojde!  
DA come.3PL.PFV.IMPERF  
‘They (were invited and) should have come!’ (‘They shouldn’t blame anybody for not coming.’)
- b. Da go zemeše!  
DA 3SG.M.ACC.CL take.2/3SG.PFV.IMPERF  
‘You/(s)he should have taken it!’ (‘Now you/(s)he cannot blame anyone for not taking it.’)

The phenomenon of volitional mood main clause constructions appears to be an example of what Evans (2007) calls ‘insubordination’, the use of typical subordinate clauses as main clauses, sometimes with conventionalised semantics. In the case of the South Slavic constructions this conventionalisation of insubordination is expressed in the association of *da*-

form main clause uses with volitional mood semantics. As a result, these *da*-form uses are semantically non-compositional, in other words, the imperative meaning associated with *da kupiš (x)ljab* ‘to buy bread’ comes precisely from the use of the construction in a main clause, rather than from the meaning of any of its components, which can appear in different syntactic contexts with different interpretations.

### **3.1 The content paradigm of analytic volitional mood constructions**

In a number of ways volitional mood *da*-forms are similar to other analytic forms that have been considered periphrastic, i.e. syntactic forms that bear similarities to inflected word-forms, discussed recently in a score of studies (e.g. Sadler and Spencer (2001), Ackerman and Stump (2004), Brown et al. (2012), Bonami and Webelhuth (2013), Bonami (2015), Spencer and Popova (2015), Bonami et al. (2016), a.o.). The most clear-cut definitional property for periphrasis is paradigm intersection: the case where a syntactic construction occupies a cell in an otherwise inflected paradigm. We will discuss a putative case of paradigm intersection between the inflected imperative and the analytic *da*-volitional forms below, but will conclude that although there are complex interactions between the inflected and the syntactic paradigm, it is difficult to claim a straightforward case of paradigm intersection. However, there is another property – (morphosyntactic) non-compositionality – that has been put forward as definitional for periphrasis in Ackerman and Stump (2004), for instance, see also discussion in Brown et al. (2012). As we saw before, *da*-form volitional constructions are non-compositional. We will therefore treat them as periphrastic, i.e. as forms that are, on some sense, equivalent to inflected forms of lexemes, which can be seen as part of the paradigm of these lexemes and which can, at least in part, be regulated by the morphology. We will sketch below what form this interaction could take.

The *da*-clauses are polyfunctional in much the same way that inflected word forms can be polyfunctional, a situation described in morphology as syncretism. For instance, the *-ing* form of an English verb is ambiguous between four or five separate uses, as the progressive aspect converb (*Mary is singing*), an adjectival, participial form (*the girl singing the song last night*), a gerund or adverbial usage (*Singing loudly, Mary walked on stage*) and perhaps two distinct types of nominalization (*We didn't expect you singing so loudly; Your singing is loud*). In the inferential-realizational morphological model advocated in Stump (2016), for instance, such syncretisms are handled by setting up two types of paradigm for an inflecting lexeme, content paradigms and form paradigms. The content paradigm is defined over the set of morphosyntactic properties accessible to syntax and semantics. In the case of English verbs this would include the features defining the four or five uses just illustrated (say, [ASPECT: prog], [PTCP: prs] and so on). The feature value pairs would thus define four or five distinct cells in the content paradigm of the lexeme SING. The form paradigm, on the other hand would be much simpler and would include just one cell corresponding to the four or five cells of the content paradigm: [Vform: ing]. In Stump's model the content and form paradigms are related through Paradigm Linkage, mediated by a function which in the present case would map each of the content paradigm cells realizing [ASPECT: prog], [PTCP: prs] etc to the single form paradigm cell [Vform: ing].

We propose that, similar to the synthetic imperatives, Bulgarian *da*-forms in (7) can be interpreted as a form paradigm. It maps from content paradigms in complex ways. Using available descriptions of these forms, below we sketch a possible content-paradigmatic organisation of these constructions, based on the distinctions we introduced earlier.

Some *da*-forms can be used as synonyms of the synthetic imperative – closest in meaning are the second person forms with the present tense. We illustrated with (8a) for the second singular, repeated here.

- (8) a. [repeated]  
 Da kupiš xljab!  
 DA buy.2SG.PRS.PFV bread  
 ‘Buy bread!’

In paradigmatic terms, forms like (8a) and the analogous 2PL constructions create an overabundance in the system. However, the *da*-construction forms, unlike the synthetic imperatives, cross-categorise with all person-numbers and also interact with tense, as the labels we have been using and the examples in (7) suggest. These are, however, what might be called non-cumulative paradigms, in other words, the present tense *da*-forms are not simply forms in which the semantics of the present tense is added to some other semantics marked elsewhere in the construction. On the contrary, the tense semantics is neutralised (similar to the synthetic imperatives, the present tense forms have futurate interpretation) Since these forms are very close in meaning to the synthetic imperative, we will call them ‘un-marked’. It should be noted, however, that the present tense 2SG and 2PL *da*-forms are less formal and have stronger pragmatic force than their synthetic counterparts (see Nicolova (2008) for details). The present tense *da*-forms can also be used as hortative 1PL<sup>3</sup> (see 16) and third person forms (see 17).

- (16) Da kupim xljab!  
 DA buy.1PL bread  
 ‘Let’s buy bread’

- (17) a. Deteto da večerja!  
 child.DEF DA eat.dinner.3SG  
 ‘The child should have dinner’  
 b. Decata da večerjat!  
 children.DEF DA eat.dinner.3PL  
 ‘The children should have dinner’

The perfect tense *da*-forms can be used as commands/exhortations which reference an action that should be completed by some future point in time (compare 18a with 18b).

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<sup>3</sup> 1SG forms are rare, as one would expect of appeals to act addressed to self.

- (18) a. Do   dovečera   da   si   kupil   xľjab!  
 by   tonight   DA   be.2SG buy.LPTCP.M   bread  
 ‘(You) should have bought bread by tonight’
- b. Do   dovečera   šte   si   kupil   xľjab.  
 by   tonight   FUT   be.2SG buy.LPTCP.M   bread  
 ‘(You) will have bought bread by tonight’

The use of the 1PL and third person perfect tense *da*-forms is similar. Thus, the imperative-hortative paradigm of *da*-forms has two cells: an ‘unmarked’ one (the present tense *da*-forms) and a ‘future perfect’ one (perfect tense *da*-forms).

The present tense *da*-forms can be used also for wishes and curses, i.e. to express the optative mood in the terminology of Ammann and van der Auwera (2004). One set of optative mood forms is syncretic to the unmarked imperative/hortative, i.e. these are the present tense *da*-forms. In (19) we illustrate with the wish ‘may (I/you/she/he/it/etc.) be healthy’:

- |      |                    |                  |
|------|--------------------|------------------|
| (19) | SG                 | PL               |
| 1    | da bāda zdrav/a/o  | da bādem zdravi  |
| 2    | da bādeš zdrav/a/o | da bādete zdravi |
| 3    | da bāde zdrav/a/o  | da bādat zdravi  |

This use is available to synthetic volitional mood forms as well, but only with the second person (20).

- |      |                |                  |
|------|----------------|------------------|
| (20) | SG             | PL               |
| 2    | bādi zdrav/a/o | bādete zdrav/a/o |

The optative can be expressed also by *da*-forms with imperfect or past perfect in main clauses. These forms are interpreted as counterfactual wishes, see (21). In other words, this part of the paradigm also has two cells: unmarked optative and counterfactual optatives.

- (21) a. Ex,   da   bjaxme   kato   Estonia!  
 Ah,   DA   be.IMPERF.1PL   like   Estonia  
 ‘If only we were like Estonia!’
- b. Ex,   da   imax   pari!  
 Ah,   DA   have.IMPERF.1SG   money  
 ‘If only I had money!’ or ‘I wish I had money!’



- c.   Pone   lipite                da   bjaxa                požalili!  
      at.least linden.trees   DA   be.IMPERF        take.pity.PTCP.PL  
      ‘(I wish) they had at least spared the linden trees!’
- d.   Da   bjaxa                    kupili                xľjab!  
      DA   be.IMPERF.3PL        buy.PTCP.PL        bread  
      ‘I wish they had bought bread!’
- e.   Da   bjaxa                imali                kășmet da idat na more!  
      DA   be.IMPERF.3PL        have.LPTCP.PL        luck    DA   go    to sea  
      ‘I wish they had the luck to go to seaside

To sum up, what we find in Bulgarian is a set of *da*-forms with verbs in the present, perfect, past perfect and imperfect tenses, which map onto functions in a complex way. They partially overlap with synthetic imperative forms, but their own paradigm is fuller. In some cases the *da*-forms have meanings very similar to the meaning of the inflected imperative, but as there are stylistic differences between them, we will consider them almost synonymous forms that nonetheless belong to two separate, if semantically related paradigms.

There is one set of forms that could be seen to fill in a gap in the inflected paradigm, and these are the negated perfective *da*-forms. Inflected imperative forms, just like *da*-forms, are negated with the default negator *ne*. In some South Slavic languages (Slovene, for instance) negated inflected imperatives are possible with both imperfective and with perfective verbs. Negated imperatives with perfective verbs have a slightly different semantics, sometimes denoted with the term preventative – for warnings, or when the speaker wishes to draw attention to the unwanted consequences of a particular action. We illustrate with a Slovene example from Herrity (2016) in (22), glosses added.

- (22) Ne   odpri                    vrát   za   nobêno        céno  
      not   open.IMP.2SG.PFV        door   for   no            price  
      ‘Do not open the door on any account’

In Bulgarian synthetic imperatives are disallowed with perfective verbs when negated. With volitional *da*-forms, on the other hand, there is no such restriction. When perfective *da*-forms with imperative function are negated, they also function as a preventative imperative, i.e. they

are appropriate in those cases where a speaker considers an event to be undesirable and urges the listener to take action to prevent that event from happening ((Academy Grammar, vol. 3, 68), see examples in 23).

- (23) a.    Da     ne     padneš!  
          da     not    fall.2SG  
          ‘(be careful) Don’t fall!’
- b.    Da     ne     nastinete!  
          da     not    catch.cold.2PL  
          ‘(be careful) Don’t catch a cold!’

Although in Bulgarian the *da*-forms have taken on a function which is performed by the inflected imperative in other languages, it is difficult to consider this a gap in the paradigm because of the ‘fractured’ nature of the volitional mood paradigms, that is, the propensity of different person-number combinations in this paradigm to assume a different meaning, i.e. the propensity of the form paradigms to ‘fracture’ into a number of separate paradigms. Although we will consider the inflectional and the syntactic paradigm independent of each other, we will suggest below that we can still make use of the fact that they occupy a similar information space to block inflected negated imperatives with perfective verbs in Bulgarian.<sup>4</sup>

#### **4. Accounting for analytic volitional mood constructions: a sketch of a proposal**

In the previous sections we argued that *da*-form constructions, when used in main clauses, play a role in the language which is very similar to that of inflected imperative forms. Volitional mood *da*-form constructions can also be seen as a paradigm, which depends on the cross-categorisation of mood and tense features. At the same time *da*-form constructions are similar syntactically to *da*-forms used in subordinate clauses. Here we propose that this complex

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<sup>4</sup> For a fuller overview of this in Slavic and for an account of the Bulgarian data which attributes the unavailability of inflected imperative with perfective verbs in Bulgarian to the morphosemantics of tense and aspect categories in the language, see Kuehnast (2008). Our account is closer to the traditional view that the loss of these forms became more likely due to the existence of synonymous syntactic constructions.

behaviour calls for an account in which the properties of these constructions are constrained partially by the syntax and partially by the morphology. Our account is thus similar to the account we have proposed for periphrastic constructions in other work. What *da*-forms show even more clearly than more canonical periphrases is that grammatical analytic constructions share properties with other syntactic constructions in the language, while at the same time expressing information which elsewhere can be expressed by indisputably inflected forms (a point made as early as the seminal Ackerman and Webelhuth (1998)).

The analysis sketched below is based on the assumptions of a paradigm-based approach to morphology along the lines of Paradigm Function Morphology (PFM) (Stump (2001), and later updates of the framework as in Stump (2016), see also Bonami and Stump (2016)), on the one hand, and lexicalist syntactic frameworks like Head-driven Phrase Structure Grammar (HPSG) (Pollard and Sag (1994)), especially HPSG approaches that integrate constructions Ginzburg and Sag (2000)). PFM is an inferential-realizational framework in which the phonological form of an inflected word-form is inferred from the information associated with the cell in the paradigm of that form. HPSG approaches like those in Sag (1997) and Ginzburg and Sag (2000), on the other hand, assume that the grammar contains descriptions of phrasal signs arranged in a default inheritance hierarchy, much like descriptions of words can be. This allows phrasal signs to share properties or be more or less specific than each other. Some constraints over phrases are default constraints and can be overridden when stated over more specific constructions.

We will assume that *da*-forms are constructions in this sense, i.e. they are phrasal signs, partially constrained by their descriptions in the grammar. In some constructional approaches within HPSG certain constraints are specified to be default constraints, i.e. they can be overridden in specific constructions. This is the case with the Head-Feature Principle, which says that the HEAD features of a phrasal sign with a head-daughter and a complement daughter

would be inherited from the head-daughter. In what follows we assume that HEAD features are not necessarily passed on to the phrase level by the head-daughter, where a phrasal description or some other constraints says otherwise.

As we said earlier, we assume that *da* is a modal particle and we account for it as a raising verb, much like the account of English infinitival *to* in Sag et al. (2003), for instance. We show the properties of a subordinate *da*-construction in Figure 1. For simplicity, we focus on constructions with present tense verbs.

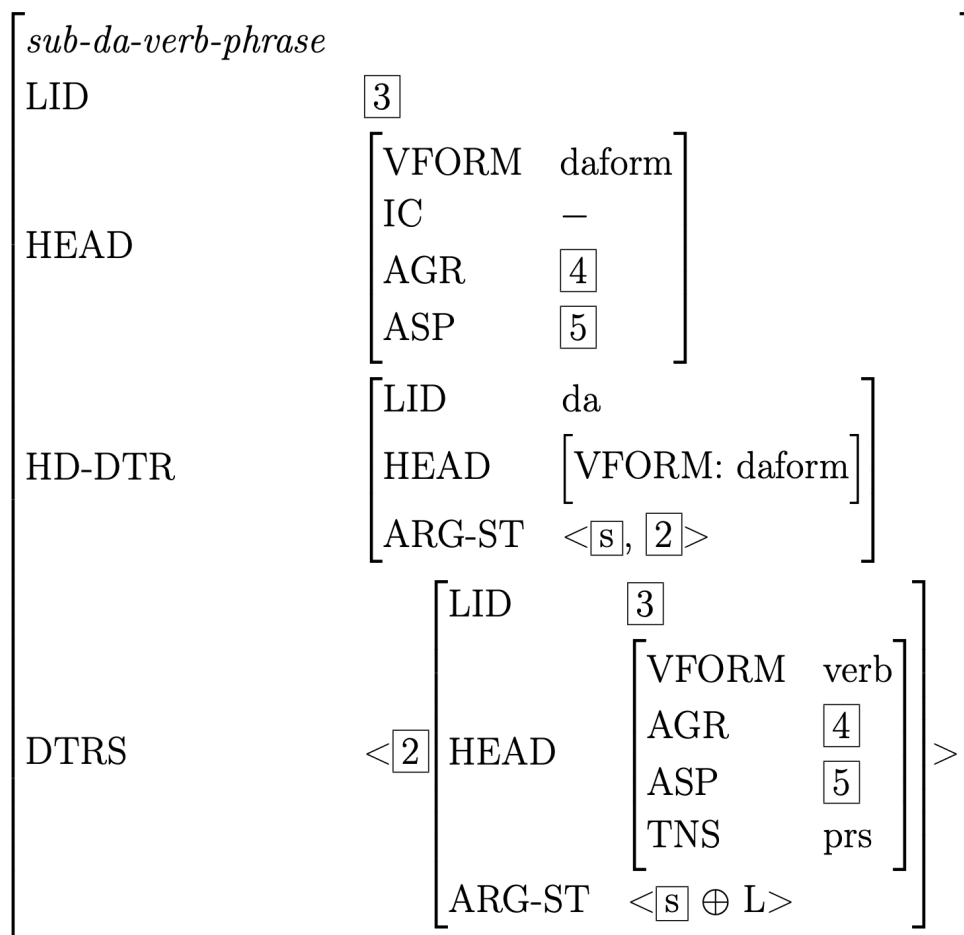


Figure 1: The *da*-construction

This construction has a head daughter (HD-DTR) -- *da* itself -- and one other daughter on its daughters list (DTRS) -- the lexical verb. The description of this construction specifies that the

lexical verb should be in the present tense, and that its agreement and aspectual values are shared with the construction as a whole (this sharing is indicated by numbered tags like 4). The construction itself is specified to have VFORM *daform*, to allow it to be subcategorized for by verbs that require *da*-forms as their complements.

In this construction the present tense is not passed on to the level of the construction. This reflects the observation that in at least some *da*-form constructions the present tense is pleonastic (see discussion in Pitsch (2018)). The subject  $\boxed{s}$  on the list of arguments of the lexical verb daughter is also the subject of the HD-DTR. The construction as a whole inherits its lexemic identity (LID) from the lexical verb. An important specification on the level of the construction is the negative value for the feature I(independent) C(ause) (a similar feature is used in Ginzburg and Sag (2000)). This ensures that this construction cannot be used as a main clause.

Volitional mood *da*-form constructions are very similar to subordinate constructions. The information they express, however, is partially specified by the morphology. In some formalisations of PFM-style approaches word-forms are constrained by implicational statements whose antecedent mentions relevant morphosyntactic properties of signs and whose consequent states properties of words that can express these morphosyntactic properties (see Crysmann and Bonami (2016)). Such implicational statements are in Paninian competition – those with a more specific set of morphosyntactic properties in the antecedent ‘win out’, i.e. pre-empt the application of implicational statements with more general antecedents. The paradigm cells of the analytic volitional mood constructions include the specification VFORM *da*-form alongside features associated with the mood they express, for example [MOOD: imp]. This feature would appear in the relevant antecedents and ensure that the syntactic paradigms don’t directly compete with the inflected imperative paradigm. The imperative main clause syntactic constructions, for instance, can be subject to the constraints in (25).

$$(25) \left[ \text{HEAD} \begin{bmatrix} \text{MOOD} & \text{imp} \\ \text{VFORM} & \text{daform} \end{bmatrix} \right] \rightarrow \left[ \begin{array}{l} \textit{in-sub-da-verb-phrase} \\ \text{HEAD} \begin{bmatrix} \text{MOOD} & \text{imp} \\ \text{VFORM} & \text{daform} \\ \text{IC} & + \end{bmatrix} \end{array} \right]$$

This constraint specifies that the cell in the paradigm that includes the features [MOOD *imp*] and [VFORM *deform*] is realised by a sub-type of *da*-constructions which has as part of its head-features the specification [MOOD *imp*], [VFORM *daform*] and a positive value for the feature IC, in other words, this construction has to appear in a main clause.

A fuller description of the construction is given in Figure 2.

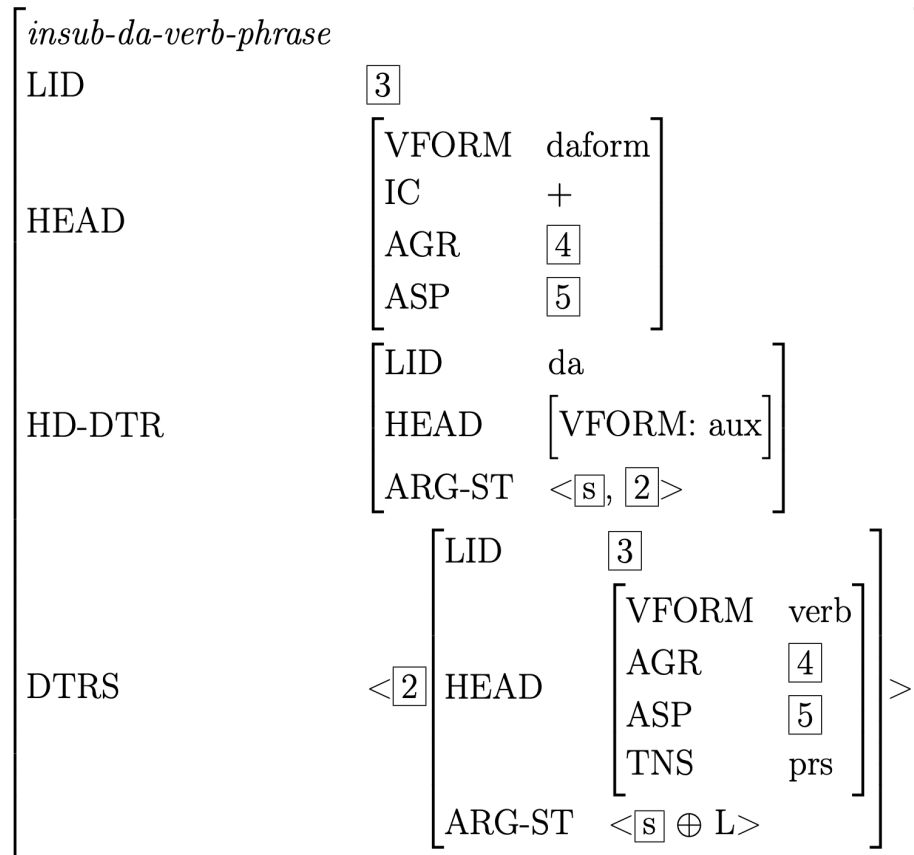


Figure 2: The main-clause imperative *da*-construction

And finally, we can capitalise on the fact that there are no negated inflected imperatives with perfective verbs, we could assume the constraint in (26), which gives as the realisation of the respective paradigm cell the *da*-form construction, rather than an inflected verb.

$$(26) \left[ \begin{array}{c} \text{HEAD} \\ \left[ \begin{array}{cc} \text{MOOD} & \text{imp} \\ \text{ASP} & \text{pfv} \\ \text{NEG} & + \end{array} \right] \end{array} \right] \rightarrow \left[ \begin{array}{c} \text{in-sub-da-verb-phrase} \\ \left[ \begin{array}{cc} \text{MOOD} & \text{imp} \\ \text{ASP} & \text{pfv} \\ \text{NEG} & + \\ \text{VFORM} & \text{daform} \\ \text{IC} & + \end{array} \right] \end{array} \right]$$

## 5 Conclusion

As the preceding discussion suggests, the volitional mood paradigm is ‘fractured’: we find somewhat different, but related, meanings for specific cells in the paradigm. This makes it difficult to claim that a volitional mood paradigm is ‘deficient’, since such deficiency is not exceptional: the imperative hierarchy formulated in van der Auwera et al. (2004), for instance, predicts that cross-linguistically different person-number combinations may be associated with different forms, or indeed, with no forms at all. Thus, in South Slavic we find a somewhat sparse but typical inflected paradigm. However, in some languages, for example Bulgarian, the volitional mood is also associated with a rather rich range of analytic forms. We focused on one set of such forms, the constructions with the modal particle *da*. We claimed that these form a syntactic paradigm, part of the volitional mood category. Given the non-compositionality of this construction, the fact that it shares properties with other constructions in the language and that it shares information space with the inflected imperatives we suggested that it should be constrained jointly by the morphology and by the syntax and outlined a tentative analysis.

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