

# Same or different? Infinitival and subjunctive complementation vs. verb serialization in Bosnian/Croatian/Montenegrin/Serbian

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## ABSTRACT

The paper deals with a heretofore understudied multi-verb construction in BCMS, which consists of two verbs inflected for imperative. The construction in question is shown to share the bulk of the properties found in serial verb constructions (SVC) across languages, such as mono-clausal syntax or single-event semantic readings. We thus argue that BCMS constructions of this type should be included within the broader SVC typology, which was not recognized in the previous literature. BCMS SVCs are subsequently compared to other similar constructions found in this language, such as control subjunctives or infinitives. The paper ends with a formal analysis that accounts for both the shared properties and the contrasts that these constructions exhibit.

## 1 INTRODUCTION

**KEYWORDS** verb serialization · coordination · anaphoricity · control

The main focus of our paper is the multi-verb construction found in Bosnian/Croatian/Montenegrin/Serbian (BCMS) of the type exemplified below:

- (1) a. Odi kupi kruh i mlijeko!  
go.IMP.2SG buy.IMP.2SG bread and milk  
'Go buy bread and milk!'  
b. Dođi vidi ovo!  
come.IMP.2SG see.IMP.2SG this  
'Come see this!'

The clauses in (1) feature two finite verbs inflected for imperative. They are representative of a construction type that we argue should be analyzed as a Serial Verb Construction (SVC), even though BCMS has not typically been included within a cross-linguistic typology of languages containing SVCs.<sup>1</sup> There is no universally agreed-upon definition of SVCs that would apply on a cross-linguistic basis, but these constructions have been shown to exhibit a certain cluster of properties across languages, which we show to be at play in BCMS as well, thus justifying the use of the SVC label in relation to this language.<sup>2</sup>

In §2, we provide some further introductory remarks on the BCMS constructions given in (1), outlining some of the main features they exhibit in this language. §3 gives a brief literature review on SVCs and their observed cross-linguistic characteristics. In §4, we show that BCMS constructions such as those in (1) share the main properties that have been observed with their cross-linguistic SVC counterparts, which justifies us in our view that BCMS contains SVC-type constructions as well. In §5, we go on to compare SVCs with other complex verbal structures found in this language, with a

<sup>1</sup>Some of the basic outlines of the analysis we develop here in relation to SVCs were sketched out in brief in Joseph & Sočanac (2023). The present paper expands on the analysis that was presented there and takes it in new directions.

<sup>2</sup>Thus, for ease of exposition, we continue to refer to constructions such as those in (1) as SVCs throughout the paper.

particular focus on the anaphoric constructions such as infinitives (2-a) and subjunctives (2-b), exemplified below.<sup>3</sup>

- (2) a. Moraš ići u školu.  
must.PRS.2SG. go.INF in school  
'You must go to school.'
- b. Počeo sam da studiram.  
begin.PST.M.SG AUX.1SG SBJV study.PRS.1SG  
'I began to study.'

We then provide a formal analysis which accounts for both the shared properties of these clauses and for some of the contrasts they exhibit, namely the fact that SVCs involve more anaphoric structures than infinitives and subjunctives in BCMS. §6 concludes the paper and outlines some open questions left for future research.

## 2 MAIN PROPERTIES OF SVCs IN BCMS

As noted in §1, BCMS SVCs can only appear in the imperative mood. The use of any other grammatical category in such contexts, such as present indicative (3-a) or aorist (3-b), results in ungrammaticality:<sup>4</sup>

- (3) a. \*%Idem kupim kruh i mlijeko.  
go.PRS.1SG buy.PRS.1SG bread and milk  
intended: 'I go and I buy bread and milk.'
- b. \*Odoh kupih kruh i mlijeko.  
go.AOR.1SG buy.AOR.1SG bread and milk  
intended: 'I went and I bought bread and milk.'

This is one of the rare areas in which BCMS SVCs differ from their cross-linguistic counterparts, which tend to inflect across different grammatical categories more freely (Aikhenvald 2018). BCMS SVCs are not completely fixed expressions, though, because they can appear both in singular and in plural:

- (4) a. Odi kupi kruh i mlijeko!  
go.IMP.2SG buy.IMP.2SG bread and milk  
'Go buy bread and milk!'
- b. Odite kupite kruh i mlijeko!  
go.IMP.2PL buy.IMP.2PL bread and milk  
'(you-plural) Go buy bread and milk!'

Therefore, even though BCMS SVCs do not inflect as freely as some of their cross-linguistic counterparts, they can at least inflect across the full imperative paradigm in BCMS (BCMS imperatives only allowing for 2nd person singular and plural).<sup>5</sup>

BCMS SVCs exhibit some nuanced differences with respect to simple imperatives when it comes to their interpretation, particularly in relation to tense, because SVCs are more temporally proximate than simple imperatives. Specifically, SVCs imply that the

<sup>3</sup>The term 'subjunctive' is slightly controversial here because BCMS does not feature distinctive subjunctive verbal morphology, but it does contain a mood particle (*da*) which should be seen as the equivalent of subjunctive mood markers in Balkan languages (as argued in more detail in §5). We thus follow the established convention within Balkan linguistics of referring to such complements as subjunctives.

<sup>4</sup>A clause such as the one in (3-a) could actually be acceptable in some varieties of BCMS (e.g. in certain Torlak dialects in Southern Serbia), but not as an SVC of the type discussed here. (3-a) would correspond instead to a subjunctive-type complement introduced without the subjunctive subordinator (i.e. the mood marker *da* mentioned in fn.3). Here we do not discuss Torlak data, but see Sobolev (2003, 2004, cit. in Cinque & Krapova 2019) for more detail.

<sup>5</sup>The only requirement in this context is that the two verbs agree in person and number, as shown in more detail in §4 and §5 when discussing subject control.

demanded action is to take place right away, which is not necessarily the case of simple imperatives. Note the acceptability contrast below:

- (5) a. Odmah kupi karte za Pariz!  
immediately buy.IMP.2SG tickets for Paris  
'Buy the tickets for Paris immediately!'  
b. Kupi karte za Pariz sljedeći tjedan!  
buy.IMP.2SG tickets for Paris next week  
'Buy tickets for Paris next week!'
- (6) a. Odmah odi kupi karte za Pariz!  
immediately go.IMP.2SG buy.IMP.2SG tickets for Paris  
'Go buy tickets for Paris immediately!'  
b. \*Odi kupi karte za Pariz sljedeći tjedan!  
go.IMP.2SG buy.IMP.2SG tickets for Paris next week  
intended: 'Next week, go buy tickets for Paris!'

As shown in (5), simple imperatives are compatible both with proximate time markers (such as *odmah* 'immediately') and with more distal time markers like *sljedeći tjedan* 'next week'. SVCs, on the other hand, only accept the most proximate time markers, which convey a need for the immediate initiation of the action. We give a formal account of this property of SVCs later, in §5.

Another salient property of BCMS SVCs is that the two verbs contained in these constructions are not of equal status, in the sense that the first verb is drawn from a bounded set while the second verb is drawn from an unbounded set. Note the grammaticality contrasts between (7) and (8) below:

- (7) Odi { kupi kruh / piši zadaću / pomogni mami  
go.IMP.2SG buy.IMP.2SG bread write.IMP.2SG homework help.IMP.2SG mom  
/ vidi što se dogodilo }!  
see.IMP.2SG what REFL.AUX happen.PST.N.SG  
'Go buy some bread / write your homework / help your mom / see what happened!'
- (8) a. { Odi / \*požuri / \*potrči } kupi kruh!  
go.IMP.2SG hurry-up.IMP.2SG run.IMP.2SG buy.IMP.2SG bread  
'{Go / hurry up / run} buy some bread!'  
b. { Dođi / \*uđi / \*siđi } vidi  
come.IMP.2SG come-in.IMP.2SG come-down.IMP.2SG see.IMP.2SG  
ovu sliku!  
this picture  
'{Come / come in / come down} see this picture!'

As shown in (7), the second verb within a BCMS SVC is chosen somewhat freely, being only subject to semantic and pragmatic constraints (i.e. the sentence as a whole needs to make sense contextually). The first verb, on the other hand, is drawn from a very limited set of motion verbs, i.e. only *ići* 'go' and *doći* 'come'. Even though all the variants in (8) would make sense semantically and contextually, only those featuring the specific verbs 'go' and 'come' as the first verb in the construction are admitted, while all others are ungrammatical. The second verb within a BCMS SVC is thus the lexical head of the construction, as it determines the core meaning of the expression as a whole. Such asymmetry between the verbs contained within an SVC is typical of these constructions cross-linguistically, as we show in the next section.

Our final introductory note on BCMS SVCs touches on the aspectual information contained in such expressions. Given that the second verb functions as the lexical head of the construction, it also determines the aspect of the SVC as a whole. It can be marked both for perfective and for imperfective, as shown below:



- (12) Erí ogidi akí-ní indi pei-mí (Ijo)  
 he machete take-TENSE/ASPECT fish cut-TENSE/ASPECT  
 'He cut a fish with a machete.'  
 (McWhorter 1997:p.48, cit.in Aikhenvald 2018: p.2)
- (13) tuda bola mai (Tetun Dili)  
 throw ball come  
 'Throw the ball over here.' (Hajek 2006:p.243, cit.in Aikhenvald 2018: p.2)

As explained by Aikhenvald (2018), the example in (11) from Taba (an Austronesian language spoken in Indonesia), has a causal reading, with the first verb in the construction ('bite') expressing the cause and the second verb ('die') the effect. The instrumental reading in Ijo (12), a West-African Ijoid language spoken in Nigeria, obtains because both verbs in the construction take the object (*ogidi* 'machete') as the instrument argument. Finally, the Tetun Dili (another Austronesian language, spoken in East Timor) example in (13) has a directional reading due to the contribution of the second verb in the construction (*mai* 'come'), which indicates the direction of the object (*bola* 'ball') towards the speaker. The latter is the closest to the type of meaning we observe in BCMS SVCs as well, which also imply a sense of motion due to the use of motion verbs.

Another property we observed with BCMS SVCs which is also typically found in SVCs across languages is the asymmetric status of the verbs contained in these constructions, with one verb drawn from an unbounded set and functioning as the head of the construction, and the other verb drawn from a bounded set specified for a certain semantic value (one of these values being a sense of motion or direction, as observed in the Tetun Dili example in (13) as well as in BCMS SVCs more broadly) (Aikhenvald 2018). Even though symmetrical SVCs are not uncommon cross-linguistically, asymmetrical ones are far more common. As Aikhenvald puts it: "[e]very language with serial verb constructions has asymmetrical serial verbs [but no] languages with symmetrical serial verbs and without asymmetrical ones have been identified thus far" (2018:p.6). Nevertheless, despite the 'minor' status of one of the verbs contained in typical SVCs, all serial verbs can in principle function as independent predicates of their own clauses when used in some other context (ibid. p.3). This excludes functional elements such as auxiliaries or verbal particles, which must co-occur with another verb, from the SVC analysis.

Another cross-linguistic property observed with SVCs is that the verbs contained within these constructions must agree and share the same values in relation to grammatical categories such as tense, aspect, mood or modality, among others (Aikhenvald 2018). Thus, for instance, even though SVCs can typically inflect across different tenses, it is impossible for one serial verb to have one tense value (e.g. past) and the other a different one (e.g. present). This excludes various types of embedded subordinate structures, compatible with such conflicting tense markings, from the SVC analysis. The latter types of structures are further excluded because SVCs do not exhibit any syntactic links or markers of syntactic dependency, such as complementizers or coordinators, between the verbs that make up such constructions (Aikhenvald 2018). BCMS SVC also exhibit these properties, the only difference being that they do not inflect across different tenses and other grammatical categories, since they are restricted to the imperative paradigm.

Verbs contained within SVCs also typically share at least one core argument (subject or object) between them. For instance, in many West-African languages, subject sharing is a distinctive property of SVCs, distinguishing these constructions from similar structures, such as coordinate clauses (Collins 1993, Ameka 2006, Aikhenvald 2018). Note the contrast between the examples from the West-African language of Fongbe in (14) (Aikhenvald 2018: p.40):

- (14) a. Kòkú sọ kòklò yì àxì mɛ' (Fongbe)  
           Koku take chicken go market in  
           ‘Koku brought the chicken to the market.’  
       b. Kòkú sọ àsón ọ bọ Àsibá yì àxì mɛ'  
           Koku take crab DEF and Asiba go market in  
           ‘Koku took the crab and Asiba went to the market.’

The clause in (14-a) features an SVC whereas the one in (14-b) features a coordinate clause. On the surface, they may appear very similar (the main difference being the presence vs. absence of the coordinator *bọ* ‘and’) but the underlying structures of these two expressions are quite different, as evidenced by the fact that the verbs in the SVC must share the same subject (*Koku* in this case), whereas those in the coordinate clause are compatible with two different subjects (*Koku* and *Asiba*). The same type of contrast is observed in BCMS as well, as we show in §4 when we compare SVCs to coordinate clauses in this language (which, on the surface, also appear very similar).

Finally, and most importantly, serial verbs function as a single predicate and thus involve single-event readings from a semantic standpoint and mono-clausal structures from a syntactic standpoint. Aikhenvald (2018) uses a range of different diagnostics to demonstrate this across languages, among which we mention just a few. One manifestation of the single-predicate status of serial verbs can be gauged when they appear within subordinate clauses, in which case both verbs must be under the scope of the same subordination marker. This is demonstrated in an example from Tariana, an Arawak language spoken in Brazil (Aikhenvald 2018: p.21).

- (15) [nhuta nu-thaketa]-ka di-ka-pidana (Tariana)  
           1SG.take 1SG-CROSS.CAUS-COMP 3SG-see-PST  
           ‘He saw that I took (it) across.’

In this case, both the verbs for ‘take’ and ‘cross’ must appear under the same subordinator (-*ka*) in order to be interpreted as an SVC and acquire the causal reading of ‘take across’, which proves that they form a single syntactic unit. The single-event semantic status of SVCs can be demonstrated in various different contexts. One diagnostic which seems to work on a cross-linguistic basis (including in BCMS, as we show in the next section) has to do with adverbial modification. Note the grammaticality contrast in the examples from Yoruba (another West-African language) in (16) (Aikhenvald 2018:p.26):

- (16) a. Olú tètè jókòó kawé (Yoruba)  
           Olu quickly sat read  
           ‘Olu quickly sat down and read.’  
       b. \*Olú jókòó tètè kawé  
           Olu sat quickly read  
           intended: ‘Olu sat down and quickly read.’

The reason the variant in (16-b) is ungrammatical is that the adverb *tètè* ‘quickly’ cannot narrowly modify just the second verb in the construction (*kawé* ‘read’). Instead, both verbs have to be modified as a single whole, which demonstrates that they function as one predicate and denote a single event. In the following section, we use a number of diagnostics to demonstrate that BCMS SVCs pattern with their cross-linguistic counterparts when it comes to these properties as well.

#### 4 SVCS VS COORDINATE IMPERATIVES IN BCMS

In this section we provide a summary of the argument given in Joseph & Sočanac (2023), where the main goal was to demonstrate the existence of SVCs in BCMS.<sup>6</sup> We begin with an outline of cross-linguistic properties of SVCs discussed in the previous section.

- (i) SVCs consist of two (or more) verbs without any syntactic link or marker of dependency between them;
- (ii) each verb contained within an SVC can also function as the sole predicate in a clause;
- (iii) serial verbs constitute a single predicate and thus denote a single event;
- (iv) SVCs project a mono-clausal structure;
- (v) serial verbs share at least one core argument (object or subject);
- (vi) verbs in an SVC must share the same values in relation to grammatical categories such as tense, aspect, mood etc.

The properties listed in (i-vi) are used here as diagnostics for SVC-hood in BCMS. In (17) we can see, first of all, that BCMS SVCs also feature verbs that can in principle function as predicates of their own clauses (thus complying with the SVC criterion outlined in [ii]).

- (17) a. Odi       kupi       kruh!  
           go.IMP.2SG buy.IMP.2SG bread  
           ‘Go buy bread!’  
       b. Odi       van!  
           go.IMP.2SG out  
           ‘Go outside!’  
       c. Kupi       kruh!  
           buy.IMP.2SG bread  
           ‘Buy bread!’

BCMS SVCs also seem to satisfy the first criterion mentioned on the list above, in that they do not feature any apparent syntactic link between the two verbs contained in the construction. A potential problem in this context, however, is the similarity between BCMS SVCs and coordinated imperative clauses, such as the one below, which seem to differ only in the presence vs. absence of the conjunction *i* ‘and’.

- (18) Odi       i       kupi       kruh!  
           go.IMP.2SG and buy.IMP.2SG bread  
           ‘Go and buy bread!’

It could thus be argued that the constructions under study here are actually syntactic equivalents of coordinated imperatives, i.e. coordinate structures which only differ from the clause in (18) in that the conjunction *i* has no overt phonetic realization. This would invalidate our claim that these constructions are in fact SVCs. To show that this is not the case, we now compare BCMS SVCs with coordinated imperatives (CI) such as the one in (18).

The first context where these two types of clauses exhibit a clear contrast has to do with the (a)symmetric status of the verbs contained within them. As already noted in

<sup>6</sup>In that paper, we used the language label ‘Croatian’ instead of BCMS, but that has no effect on the argument presented here. BCMS is a more appropriate label here because some of the constructions that we look at (in particular control subjunctives) are more typical of Eastern Štokavian (i.e. the Serbian variety of the old Serbo-Croatian) than they are of Croatian. See §5 for more detail.

§2 (the relevant example is repeated below), SVCs contain one verb drawn from an unbounded set that is the head of the construction (the second verb) and one which has to be a verb of motion (the first one).

- (19) { Odi / \* požuri / \* potrči } { kupi kruh /  
 go.IMP.2SG hurry-up.IMP.2SG run.IMP.2SG buy.IMP.2SG bread  
 piši zadaću / pomogni mami }!  
 write.IMP.2SG homework help.IMP.2SG mom  
 ‘{Go / hurry up / run } {buy bread / write homework / help your mom}!’

CIIs, on the other hand, are under no such restriction: both verbs can be drawn from unlimited sets in these types of clauses, as long as they are contextually appropriate.

- (20) { Odi / požuri / obuci se } i { kupi kruh  
 go.IMP.2SG hurry-up.IMP.2SG dress.IMP.2SG REFL and buy.IMP.2SG bread  
 / pomogni mami / pošalji pismo }!  
 help.IMP.2SG mom send.IMP.2SG letter  
 ‘{Go / hurry up / get dressed} and {buy bread / help your mom / send the letter}!’

The fact that CIIs such as those in (20) feature two verbs of equal status suggests that each of these verbs functions as a predicate of its own clause. We thus have a classical coordinate structure with two separate clauses conjoined by the coordinator. On the other hand, the asymmetry between the verbs within an SVC would seem to indicate that only the head of the clause is a full predicate, whereas the other verb merely contributes to and modifies the event denoted by the main verb. If this were so, then BCMS SVCs would pattern with their cross-linguistic counterparts in exhibiting single-event readings. In what follows we provide further evidence in favor of this conclusion.

The first indication of the contrast between BCMS SVCs and CIIs in terms of mono- vs. bi-eventivity, respectively, is related to modification. As shown below, SVCs do not allow for separate modification of the verbs contained within the construction, whereas this is fully acceptable in CIIs.

- (21) a. \*Odi van brzo kupi kruh!  
 go.IMP.2SG outside quickly buy.IMP.2SG bread  
 intended: ‘Go outside (and) quickly buy bread!’  
 b. Odi van i brzo kupi kruh!  
 go.IMP.2SG outside and quickly buy.IMP.2SG bread  
 ‘Go outside and quickly buy bread!’

The ungrammaticality in (21-a) is to be expected if we assume that the two verbs in the SVC compose a single complex predicate that denotes a single event from a semantic standpoint, and therefore they cannot be separately modified by two different adverbs. (21-a) may become more acceptable if there is a clear prosodic break between the two parts of the construction (in the place where the conjunction is in (21-b)), but then we are no longer dealing with an SVC but rather with a likely syntactic equivalent of (21-b), i.e. a CI containing a silent conjunction. This brings us to another property whereby BCMS SVCs pattern with their cross-linguistic counterparts (which we merely signal here but do not discuss in detail), namely the fact that these constructions function as a prosodic unit as well, with a single coherent prosodic contour.

Another property that points towards the mono-eventivity (as well as mono-clausality) of BCMS SVCs is subject control: unlike CIIs, which are compatible with two separate subjects (silent pro addressee subjects typically, since we are dealing with imperatives), SVCs can only feature a single subject. This is demonstrated by the fact that the verbs within an SVC must always agree in person and number, whereas CIIs do not observe this restriction.



- (22) a. Odi { kupi / \*kupite } kruh!  
 go.IMP.2SG buy.IMP.2SG buy.IMP.2PL bread  
 'Go and buy bread!'  
 b. Odi i { kupi / kupite } kruh!  
 go.IMP.2SG and buy.IMP.2SG buy.IMP.2PL bread  
 'Go and buy bread!'

The grammaticality contrast in (22) thus further points to the difference in terms of mono- vs. bi-eventive/clausal status of BCMS SVC vs. CIs, respectively. It also points to the fact that BCMS SVCs share another cross-linguistic property of SVC-hood, listed in (v) at the beginning of the section, i.e. the fact that the verbs within an SVC should share at least one core argument (in this case the subject).

The final two phenomena that we briefly treat here in order to further demonstrate that BCMS SVCs function as a single semantic and syntactic unit are negation scope and clitic climbing. First, regarding negation, CIs allow the negative marker to take narrow scope over the second verb (23-a), whereas this produces ungrammaticality in the case of SVCs (23-b).

- (23) a. Odi i ne zadržavaj se!  
 go.IMP.2SG and NEG tarry.IMP.2SG REFL  
 'Go and don't tarry about!'  
 b. \*Odi ne zadržavaj se!  
 go.IMP.2SG NEG tarry.IMP.2SG REFL  
 intended 'Go don't tarry about!'

The ungrammaticality in (23-b) speaks to another cross-linguistic property of SVCs that was noted by Aikhenvald (2018:p.1), namely the fact that a subcomponent of an SVC cannot be negated separately from the construction as a whole, which makes sense given the single-event and mono-clausal status of serial verbs.

Finally, the syntactic phenomenon of clitic climbing (CC) demonstrates more specifically the structural contrast between BCMS SVCs and CIs in terms of mono- vs. bi-clausality, respectively. CC has been widely recognized as a clause-bounded operation and often used as a diagnostic to distinguish between mono-clausal and bi-clausal structures.<sup>7</sup> As expected, therefore, a clitic such as the dative pronoun *mi* 'to me' can climb from the lower to the higher verb in SVCs, since both verbs are contained within the same clausal structure, whereas CC produces ungrammaticality in the case of CIs since the clitic would need to climb over a clausal boundary.<sup>8</sup>

- (24) a. Odi mi kupi (mi) novine!  
 go.IMP.2SG me.CL.DAT buy.IMP.2SG me.CL.DAT newspapers  
 'Go buy me newspapers!'  
 b. Odi (\*mi) i kupi (mi) novine!  
 go.IMP.2SG me.CL.DAT and buy.IMP.2SG me.CL.DAT newspapers  
 'Go and buy me newspapers!'

We take the data provided in this section as sufficient evidence for the claim that BCMS SVC imperatives should be included within the broader cross-linguistic typology of SVCs, since they were shown to exhibit most of the properties observed with their cross-

<sup>7</sup>See Kayne (1989) or Cinque & Krapova (2019) for cross-linguistic data and the relevant references related to CC.

<sup>8</sup>An interesting observation with regard to the SVC example in (24-a) is that CC appears to be optional there, i.e. both the variant with the lower *mi* and the one with the higher *mi* seem equally grammatical, which is not usually the case in BCMS due to the clitic-second constraint that is operational in this language. This apparent problem may be resolved if we turn our attention to prosody once again: the variant with the lower *mi* seems to involve a slight prosodic break between the two verbs which is not present in the CC variant. So the variant without CC might, once again, actually correspond to a covert bi-clausal CI. We leave a more elaborate discussion of this point for future work.

linguistic counterparts.<sup>9</sup> In the following section, we compare the observed properties of BCMS SVCs with some other anaphoric mono-clausal structures found in this language.

## 5 SVCS IN RELATION TO OTHER MONO-CLAUSAL MULTI-VERB CONSTRUCTIONS IN BCMS

If we turn our attention to clausal subordination, we note some interesting parallels between SVCs, on the one hand, and some other control structures, on the other, in particular infinitives (25-a) and subjunctives (25-b), such as those we observed earlier in §1 (reintroduced below).

- (25) a. Moraš            ići        u školu.  
              must.PRS.2SG. go.INF in school  
              ‘You must go to school.’  
       b. Počeo            sam        da        studiram.  
              begin.PST.M.SG AUX.1SG SBJV study.PRS.1SG  
              ‘I began to study.’

Complements such as those in (25) are selected by a range of control predicates, such as volitionals (e.g. *htjeti*, *željeti* ‘want, wish’), modals (*moći* ‘can’, *morati* ‘must’), implicatives (*uspjeti* ‘manage, succeed’) or phasal/aspectual verbs (e.g. *početi* ‘begin’, *prestati* ‘stop’). While the use of infinitives in such contexts is widely observed on a cross-linguistic basis, subjunctives such as the one in (25-b) are more specific to the languages of the Balkan region.<sup>10</sup>

Due to diachronic reasons too complex to discuss here, most Balkan languages have lost their infinitives (to a greater or lesser degree) and replaced them with finite complements. Here we refer to such complements as ‘control subjunctives’ (a term used in Landau (2004) and much subsequent literature). Given that BCMS is not a fully ‘Balkanized’ language (with the exception of the Torlak dialect, which we do not discuss here), it has not completely replaced its infinitives with subjunctives but still allows for a degree of optionality in control environments such as the one given in (25), although this is subject to some regional variation within the BCMS language area (once again too complex to discuss here in detail). Suffice it to say (in somewhat simplified terms) that the more Eastern (and especially southeastern) varieties of BCMS are more likely to use the finite subjunctive in control contexts as in (25), while the more Western varieties favor the infinitive there.<sup>11</sup> Here we abstract away from such regional variations and treat infinitives and subjunctives on an equal basis.

Another brief side note is needed specifically in relation to BCMS subjunctives. Balkan languages introduce subjunctive complements through mood markers (e.g. Modern Greek *na*, Albanian *të*, Romanian *să*, etc.) which are morphologically distinct from the complementizers used to introduce indicative complements (Modern Greek *oti*, Albanian *që*, Romanian *că* etc.). BCMS, on the other hand, introduces both subjunctive and indicative complements through the item *da* (compare the subjunctive in (25-b) and the indicative in (27), for instance). Nevertheless, the subjunctive *da* in BCMS should be seen as a separate syntactic item distinct from the indicative complementizer. Note, for

<sup>9</sup>The only point in which BCMS SVCs differ from most of their cross-linguistic counterparts is, once again, their inability to inflect across different grammatical categories, since they are restricted to the imperative paradigm. We do not consider this as a good reason to exclude these constructions from the cross-linguistic typology of SVCs. As noted by Aikhenvald (2018), there is no exhaustive list of diagnostics that would clearly distinguish serial from non-serial verbs, and even in those languages where the existence of SVCs has been clearly established, it is not uncommon for a given SVC type to behave differently from others in relation to certain cross-linguistic properties of SVC-hood.

<sup>10</sup>See Joseph (1983) and Friedman & Joseph (2025:§7.7.2.1), and the references therein, for a much more detailed discussion of the Balkan situation in this context, which is only very briefly presented here.

<sup>11</sup>This makes sense given that the areal features of Balkan sprachbund (infinitive-loss being just one of many) are most pronounced in the South-East of the Balkan region (Friedman & Joseph 2025).

instance, the example in (26) below:

- (26) Znam        da        će        da    dođe.  
 know.PRS.1SG COMP.IND FUT.3SG SBJV come.PRS.3SG  
 'I know that s/he will come.'

The sentence above features two different *da*-items appearing within the same embedded structure. The first *da* is the indicative complementizer, selected by the factive verb *znati* 'know'. The second *da*, on the other hand, is the same subjunctive marker as the one observed in (25-b). The use of the mood particle in the context of the analytical future tense, as in (26), is not untypical of Balkan languages more broadly, at least in certain diachronic stages of their development (see Joseph 1983, or Friedman & Joseph 2025:§6.2.4). Therefore, given (26), the subjunctive and the indicative *da* cannot be seen as the same syntactic item in BCMS, because they clearly occupy different positions in the structure. While the indicative *da* is a classical complementizer, the subjunctive *da* is a functional equivalent of its more overtly marked Balkan counterparts.<sup>12</sup>

Let us now turn once again to our main focus. If we compare BCMS infinitives and control subjunctives such as those in (25) with indicative complements (typically selected by predicates such as assertives (e.g. *reći* 'say', *tvrditi* 'claim'), epistemic or propositional attitude verbs (e.g. *misliti* 'think', *vjerovati* 'believe'), or factives (e.g. *znati* 'know', *otkriti* 'discover'), among others), we observe contrasts similar to those that were noted between SVCs and CIs in the previous section. Infinitives (Inf) and control subjunctives (C-Subj) thus also exhibit properties typical of mono-clausal structures that denote a single event.

The first indication of their mono-clausal and mono-eventive status is the fact that, unlike indicative complements (27), Inf and C-Subj are incompatible with conflicting time markers such as *jučer* 'yesterday' and *sutra* 'tomorrow' (28). Unsurprisingly, the same restriction applies to SVCs as well, as shown in the examples below (taken from Joseph & Sočanac 2023):

- (27) Ivan je        jučer        rekao        / mislio        da        Marija  
 Ivan AUX.3SG yesterday say.PST.M.SG think.PST.M.SG COMP.IND Marija  
 dolazi        sutra.  
 come.PRS.3SG tomorrow  
 'Yesterday, Ivan said/thought that Marija is coming tomorrow.'
- (28) a. \*Ivan je        jučer        morao        / počeo        raditi  
 Ivan AUX.3SG yesterday must.PST.M.SG begin.PST.M.SG work.INF  
 sutra. [Inf]  
 tomorrow  
 intended: 'Yesterday Ivan had to/begun to work tomorrow.'
- b. \*Ivan je        jučer        morao        / počeo        da  
 Ivan AUX.3SG yesterday must.PST.M.SG begin.PST.M.SG SBJV  
 radi        sutra. [C-Subj]  
 work-PRS.3SG tomorrow  
 intended: 'Yesterday Ivan had to/begun to work tomorrow.'
- c. \*Odi        jučer        kupi        kartu sutra! [SVC]  
 go.IMP.2SG yesterday buy.IMP.2SG ticket tomorrow  
 intended: 'Yesterday go buy the ticket tomorrow.'

The grammaticality contrast in (27)–(28) is expected if we assume that indicative complements denote two separate events, which can be modified by two different and conflicting time markers, whereas Inf and C-Subj, just like SVCs, denote a single event and therefore disallow such conflicting modification.

This contrast is further confirmed if we look at subject-control data: while indicative

<sup>12</sup>There are much more detailed arguments in the literature in favor of this view, but they would take us too far afield here. See Sočanac (2011, 2017) or Todorović (2012, 2015), among others, for more detail.

complements allow for separate subjects in the matrix and the embedded clause (as we could already observe in (27) above), Inf and C-Subj pattern with SVCs in that they are only compatible with a single subject (Joseph & Sočanac 2023).

- (29) a. Ivan<sub>i</sub> { mora<sub>i</sub> / počinje<sub>i</sub> raditi<sub>i/\*j</sub> }.  
 Ivan must.PRS.3SG begin.PRS.3SG work.INF  
 ‘Ivan must/is beginning to work.’  
 b. Ivan<sub>i</sub> { mora<sub>i</sub> / počinje<sub>i</sub> da radi<sub>i</sub> /  
 Ivan must.PRS.3SG begin.PRS.3SG SBJV work.PRS.3SG  
 \*rade<sub>j</sub> }.  
 work.PRS.3PL  
 ‘Ivan must/is beginning to work.’  
 c. Odi<sub>i</sub> { kupi<sub>i</sub> / \*kupite<sub>j</sub> } novine!  
 go.IMP.2SG buy.IMP.2SG buy.IMP.2PL newspapers  
 ‘Go buy newspapers.’

As shown by the use of indices in the examples, all the verbs in (29) must refer to the same subject.

Finally, Inf and C-Subj also differ from indicatives and pattern with SVCs when it comes to clitic climbing (although here the data is slightly complicated by an apparent additional constraint in the case of subjunctives, as we see below). In indicative complements, CC results in outright ungrammaticality.

- (30) Marija (\*mu) tvrdi da (mu) je vratila  
 Marija he.CL.DAT claim.PRS.3SG COMP.IND he.DAT.CL AUX.3SG return.PST.F.SG  
 novce.  
 money  
 ‘Marija claims that she returned the money to him.’

In the case of Inf, on the other hand, CC is allowed (in fact obligatory), as in (31-a), whereas in the case of C-Subj (31-b), CC is somewhat degraded in relation to the variant without CC, but not as bad as in the indicative complement in (30).

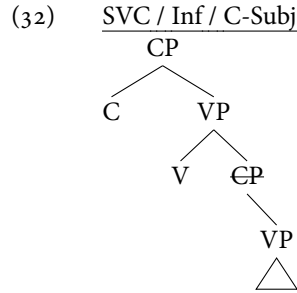
- (31) a. Moraš (mu) vratiti (\*mu) novce.  
 must.PRS.2SG he.CL.DAT return.INF he.CL.DAT money  
 ‘You have to return the money to him.’  
 b. Moraš (??mu) da (mu) vratiš novce.  
 must.PRS.2SG he.CL.DAT SBJV he.CL.DAT return.PRS.2SG money  
 ‘You have to return the money to him.’

Even though CC produces a degraded result in both (30) and (31-b), the latter is not as degraded as the former, which we take to mean that two different syntactic constraints are at play. In the case of the indicative in (30), CC crosses over a CP boundary, producing a clearly ungrammatical result. In the case of C-Subj, on the other hand, CC takes place within a mono-clausal structure (same as in Inf), but it produces a degraded result because the subjunctive particle *da* introduces what Cinque & Krapova (2019) define as a criterial position (right after the particle) where the clitic needs to attach.<sup>13</sup> Hence the CC variant in (31-b) violates this criterial condition on clitic placement, since the clitic skips over the criterial position introduced by *da*, but this syntactic constraint is not as strong as the ban on CC over a CP boundary, hence the nuance contrast in acceptability between (30) and (31-b).<sup>14</sup>

<sup>13</sup>We cannot further expound upon Cinque and Krapova’s argument but refer the reader to their article for details.

<sup>14</sup>Inf and C-Subj also exhibit a number of other anaphoric properties typical of mono-clausal structures (which we do not discuss here), related to NPI and long-distance anaphor binding, for instance. See Progovac (1993) or Sočanac (2017), among others.

Crucially, therefore, both Inf and C-Subj pattern with SVCs in that they involve a mono-clausal structure, as shown in the (simplified) illustration below:



All of these clauses thus constitute a single CP domain (i.e. matrix CP), which explains the common anaphoric properties they exhibit. Nevertheless, they also display some nuanced contrasts in the context of the mono-clausal structure in (32).

The first contrast has to do with the possibilities of modification of these different clauses. Even though they were all shown to be incompatible with conflicting temporal modifiers, Inf and C-Subj are not as restrictive when it comes to modification in general as SVCs were shown to be. In fact, Inf and C-Subj allow for separate modification of the two verbs in certain contexts (as long as the result is semantically acceptable, of course).

- (33) Moraš obavezno kupiti / da kupiš kartu na kiosku.  
 must.PRS.2SG obligatorily buy.INF SBJV buy.PRS.2SG ticket on kiosk  
 'You absolutely must buy the ticket at the newspaper stand.'

The interpretation where the modal adverb *obavezno* 'obligatorily' modifies the modal verb *morati* 'must' while the locative modifier *na kiosku* 'at the newspaper stand' separately modifies the verb *kupiti* 'buy' is possible in (33).

Such separate modification is never grammatical with BCMS SVCs, however. Multiple adverbs are in principle possible in these constructions when they jointly modify the entire event denoted by the serial verbs, but whenever we have two adverbs that unambiguously separately modify the two verbs, this produces an ungrammatical result, as in (34).

- (34) \*Odi van kupi kartu na kiosku!  
 go.IMP.2SG out buy.IMP.2SG ticket at kiosk  
 intended: 'Go (out) buy the ticket at the newspaper stand.'

As already noted when we discussed modification data in the previous section, the sentence in (34) significantly improves if there is a prosodic break between the two parts of the SVC (before the second verb specifically). Once again, this is likely because the variant with the prosodic break corresponds to a coordinate structure with a silent coordinator, where the separate modification in (34) becomes just as acceptable as it is in CIs with an overt coordinator.

- (35) Odi van i kupi kartu na kiosku.  
 go.IMP.2SG out and buy.IMP.2SG ticket at kiosk  
 'Go out and buy the ticket at the newspaper stand.'

The fact that (35) is perfectly fine indicates that the ungrammaticality in (34) is not related to the lexical semantics of the individual verbs, but to the SVC configuration they find themselves in, and the impossibility of separately modifying verbs that compose a single predicate and denote a single event.

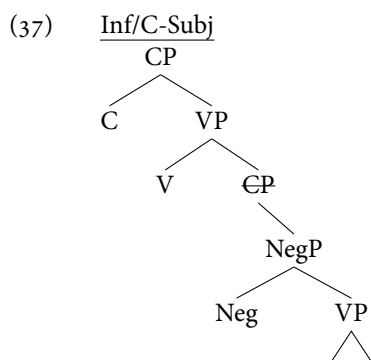
Another contrast between SVCs, on the one hand, and Inf and C-Subj, on the other,

has to do with the syntax of negation. In particular, narrow negation scope, whereby only one verb in the construction is negated, is banned in SVCs (36-b) but allowed in certain contexts with Inf and C-Subj (36-a), as long as the resulting sentence is semantically legitimate.<sup>15</sup>

- (36) a. Probaj ne zakasniti / da ne zakasniš  
 try.IMP.2SG NEG be-late.INF SBJV NEG be-late.PRS.2SG  
 ‘Try not to be late.’  
 b. \*Odi ne zadržavaj se!  
 go.IMP.2SG NEG tarry.IMP.2SG REFL  
 intended: ‘Go don’t tarry about.’

The CI variant of (36-b) is perfectly acceptable, as we already saw in the previous section (cf. (23-a)), so the unacceptability in (36) is, once again, not a question of lexical semantics.

The observed similarities between SVCs, on the one hand, and Inf and C-Subj, on the other, are more salient than the contrasts that they were shown to exhibit, which is why we maintain that all of these constructions involve a mono-clausal, single CP structure. Nevertheless, we claim that the mono-clausality is obtained in a different manner in the two instances. In the case of Inf and C-Subj, their mono-clausal status is syntactically derived, in the sense that they start from a bi-clausal structure, which is then truncated during the derivation, resulting in embedded C-deletion that subsumes both verbs within a single, matrix CP domain.<sup>16</sup> The resulting structure, however, still leaves the verbal domains associated with the matrix and the embedded verb somewhat independent of one another, which allows, among other things, for the separate modification of verbs we observed in (33). Moreover, the embedded CP truncation with Inf and C-Subj does not affect all parts of the embedded left periphery. In particular, it does not (necessarily) affect the functional projection NegP, which can thus still be used as the host for embedded negation in sentences such as those in (36).<sup>17</sup>



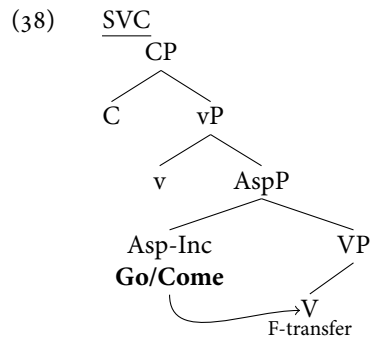
SVCs, on the other hand, project a mono-clausal structure from the outset, i.e. they never project an embedded CP but derive their structure within a single, matrix CP. As a result, they are even more syntactically anaphoric than Inf and C-Subj. Thus, for instance, they cannot feature items such as embedded negation because the node that could host

<sup>15</sup>Once again, (36-b) could obtain under a CI interpretation (i.e. with a marked prosodic break), but not as an SVC.

<sup>16</sup>This truncation can affect varying chunks of the embedded left-periphery structure depending on the syntactic context and on the selecting predicate. Due to space constraints, we are unable to further develop this analysis in the present paper, but see Sočanac (2017) for more detail.

<sup>17</sup>Since some earlier syntactic works, such as Kayne (1989), Laka (1989), and Pollock (1989), negation has typically been analyzed as inserted under a high functional NegP, situated somewhere above VP and below CP. We take no stance as to the exact position of this projection; all that matters is that it is situated below CP, and can survive embedded CP truncation in certain contexts.

such an item is not projected in the first place. Below we provide a more articulated illustration of the syntactic structure underlying SVCs, focusing on the vP layer, where the main properties of these constructions are determined.



The main verb is inserted under the thematic V node, hence it functions as the lexical head of the construction. As for the motion verb, we claim that it is inserted under an aspectual head labeled Asp-Inc[ceptive]. The main information pertaining to aspect (i.e. perfective vs. imperfective) is passed on from the Asp to the V head through the Agree-mechanism of feature transfer.<sup>18</sup> This is why the aspect of the SVC as a whole is encoded on the second verb. The main function of the first verb within a BCMS SVC (besides its lexical meaning denoting movement) is to convey the need for the immediate initiation of the action. This information is encoded on the Asp-Inc head (hence the ‘Inceptive’ label), explaining the greater temporal proximity that SVCs were shown to exhibit compared to simple imperatives (the relevant examples are reintroduced below).

- (39) a. Kupi karte za Pariz sljedeći tjedan!  
 buy.IMP.2SG tickets for Paris next week  
 ‘Buy tickets for Paris next week!’  
 b. \*Odi kupi karte za Pariz sljedeći tjedan!  
 go.IMP.2SG buy.IMP.2SG tickets for Paris next week  
 intended: ‘Go buy tickets for Paris next week!’

The formal analysis in (37)–(38) still needs to be further elaborated to more finely account for the syntactic and semantic properties of clauses we have dealt with here (and perhaps some others as well), but it holds promise since it allows us to explain the main features that these clauses were shown to exhibit.

## 6 CONCLUSION

Our analysis has focused on several multi-verb constructions found in BCMS, specifically SVCs, Inf and C-Subj. They were all found to exhibit anaphoric properties typical of mono-clausal structures (e.g. temporal anaphoricity, subject control etc.) which is why they were analyzed as single, matrix CP domains. The nuanced contrasts that SVCs were shown to exhibit with respect to Inf and C-Subj can be accounted for by positing that the former are mono-clausal from the outset of their syntactic derivation, whereas the latter derive their mono-clausality via the truncation of the embedded CP.

The analysis presented here also opens up some avenues for future research. First of all, the formalisms that were sketched out in §5 need to be further elaborated to account for some finer properties associated with the clauses under study that could not be discussed here in greater detail. Secondly, while our discussion has mostly focused on syntax and semantics, there was also an occasional side note that touched upon prosody, which seems to further reinforce the analysis presented here. Thus, a deeper look into

<sup>18</sup>See Legate (2005) or Bobaljik (2008) for more on the mechanism of feature transfer (or feature sharing).

the prosodic properties of clauses such as SVCs is also warranted in future work. Finally, we also plan to broaden our focus on a wider cross-linguistic basis and assess the analysis developed thus far in light of data from other languages. The first good candidate for study in this context is Greek, which seems to exhibit similar SVC constructions as BCMS, not just synchronically but also in earlier diachronic stages (cf. Joseph 1990; Logozzo & Tronci 2022). The study can also be extended to other Slavic languages, which seem to exhibit similar multi-verb constructions as well (e.g. the so-called take-imperatives found in languages like Bulgarian, Russian or Polish). Therefore, the subject under study is far from being exhausted.

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## ABBREVIATIONS

1	first person	IND	indicative
2	second person	INF	infinitive
3	third person	IPFV	imperfective
ACC	accusative	LOC	locative
AUX	auxiliary	M	masculine
BCMS	Bosnian/Croatian/- Montenegrin/Serbian	N	neuter
C-Subj	Control subjunctive	NEG	negation
CI	coordinated imperatives	NOM	nominative
CL	clitic	PFV	perfective
COMP	complementizer	PL	plural
DAT	dative	PRS	present
DEF	definite	PST	past
F	feminine	REFL	reflexive
FUT	future	SBJV	subjunctive
IMP	imperative	SG	singular
		SVC	serial verb construction

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