

Aspect as an indicator of a clausal size in involuntary state constructions in BCS

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Abstract. Bosnian/Croatian/Serbian (BCS) has a productive INVOLUNTARY STATE CONSTRUCTION (ISC) with a modal interpretation. There is an ongoing debate concerning the syntactic complexity of this construction. According to one account – the “mono-clausal analysis”, ISCs have only one (overt) lexical verb, and the modal interpretation stems from the imperfective operator (Rivero and Milojević-Sheppard 2003, Rivero 2009, Tsedryk 2016). There is also a “bi-clausal account” which argues in favor of a covert matrix verb of involuntary disposition FEEL-LIKE, which takes a clausal ModP complement, giving the modal interpretation (Marušič & Žaucer 2005 [henceforth M&Ž]). In this paper, I provide additional evidence in favor of the bi-clausal approach and in so doing, account for a previously unresolved aspectual restriction on the construction, namely that it is ungrammatical with a perfective lexical verb. The main claim is that the unavailability of perfective in the ISC is due to selectional properties of covert FEEL-LIKE, which results in the violation of requirements on perfective.

Keywords. Slavic languages; involuntary constructions; covert verb; requirements on aspect; bi-clausality

Introduction. The main focus of this chapter is on BCS dative involuntary state constructions that express the disposition but lack a dispositional marker and can be interpreted as ‘*feel like/be in the mood of doing x*’. The logical subject is in the dative case and the verb agrees with the nominative object in gender, person, and number. The morpheme SE in BCS signals a non-active morphology, indicating the absence of an explicit agent (Franks 1995, M&Ž 2005, Rivero 2009, Ilić 2013). Crucially, these constructions are only compatible with **imperfective** and never with **perfective** forms of the verb (1).

- (1) BCS (Ilić 2013: 2)
- | | | | | |
|----------|----|----------------------|---------|--------|
| Mark-u | se | pije/ | *popije | kafa. |
| Mark-DAT | SE | drink.PRES.IPFV/*PFV | | coffee |
- ‘Mark feels like drinking coffee.’

‘Feel-like’ consultations are typical for such Slavic languages as Slovenian, Bulgarian, and BCS. Despite the ongoing discussion concerning the syntactic complexity and the source of modality in ‘feel-like’ constructions across Slavic languages, none of the suggested analyses give a formal account for the imperfective/perfective distribution.

Generally, there are two main approaches towards the analysis of the ‘feel-like’ construction in Slavic languages: a monoclausal approach (Rivero 2003, 2009, Tsedryk 2016) and a bi-clausal approach (M&Ž’s 2005).

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- (2) [AppIP NP_{DAT} [Appl [TP T [AspP IPFV^{OP} [vP v VP]]]]] *monoclausal*
 (3) [TP T [AspP [vP FEEL-LIKE [XP PRO ...]]]] *bi-clausal approach*

According to the monoclausal analysis, the modal interpretation in (2) stems from the imperfective operator (IPFV^{OP}), which is similar to the English progressive operator. The claim is that both the ‘feel-like construction and English Futurates involve the modal meaning of future plans or dispositions (Rivero 2003, 2009, Ilić 2013). The structures are different, however, in terms of presence/absence of a ‘director’ who controls future plans. In English Futurates, the director is introduced by the nominative logical subject. In ‘feel-like’ constructions, on the other hand, the logical subject DP has an inherent dative case, which is ‘associated with the lack of control’ (Rivero 2009: 193). The dative DP is an adjunct that is structurally located in the high Applicative Phrase (AppIP) above TP. This analysis applies to ‘feel-like’ constructions across Slavic languages.

In the bi-clausal analysis (3), the matrix clause has a covert verb of involuntary disposition FEEL-LIKE, which takes another clause as its complement. It’s been argued that the size of the lower clause is smaller than a TP, since ‘there is no morphological evidence for TP’ (M&Ž 2005:14). M&Ž claim that null elements are not structurally licensed but are rather recoverable by semantic and structural ‘flags’ (e.g., the compatibility the argument-suppressing clitic *se* and the ‘active’ verb).

While both analyses offer an account for the syntactic structure of ISCs, they lack an explicit explanation of restrictions on perfective constructions. In what follows, I support the bi-clausal analysis. Contrary to M&Ž, however, I claim that the size of a complement clause is larger than a vP. I then argue that the ungrammaticality of perfective is driven by the conflict between requirements on perfective and the temporal properties of the embedded clause. The proposed analysis is parallel to the existing account for propositional structures, thoroughly discussed in Abusch (2004), Wurmbrand (2014), Todorović (2015), and others. In particular, I show that the covert matrix verb ‘FEEL-LIKE’ shows the same selectional properties as propositional verbs *claim* and *believe*, triggering the violation on perfective.

1. The size of the complement clause in ISC. It has been argued that in ISCs across Slavic languages, tense is structurally located above the null modal (M&Ž 2005). As for ISCs in BCS, evidence for the structural position of tense, comes from future tense constructions where T is occupied by *će* ‘will’ (4).

- (4) Mark-u *će* *se* *piti* *kafa* *sutra*
 Mark-DAT will SE drink.INF.IPFV coffee tomorrow
 ‘Mark will feel like drinking coffee tomorrow.’

As for the present and past tense markers, although they appear on the overt verb, semantically, the tense ‘modifies the time of the FEEL-LIKE disposition, not the time of the overt verb’s event’ (M&Ž 2005:12). Aspect, on the other hand, refers to the overt verb’s event. Given that involuntary state constructions do have the structural tense component that c-commands the null modal, I suggest FEEL-LIKE is indeed licensed by the c-commanding tense (5).

- (5) [TP T [FEEL-LIKE [XP [AspP IPFV/PFV [vP ...]]]]]

Assuming that tense on the overt verb is structurally in the specifier position of the matrix T, I will now turn the discussion the size of the embedded clause.

It has been observed that involuntary state constructions in BCS do not allow the co-occurrence of two non-agreeing adverbials, as shown below.

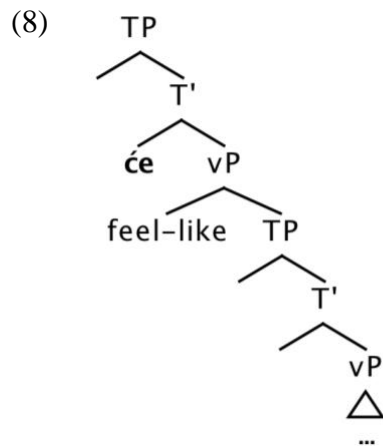
- (6) *Sada se Mark-u jedu torte sutra.
 right now SE Mark-DAT eat.3SG.PRES cake tomorrow
 ‘Right now Mark feels like eating cakes tomorrow.’

According to Rivero (2009), the ungrammaticality of the above construction supports the monoclausal analysis. M&Ž (2005), on the other hand, suggest that similar to Slovenian, the BCS involuntary state constructions are bi-clausal, but the lower clause is deficient since it lacks both the lower TP domain and the lower Aspect projection. Both analyses, however, run into a problem of explaining two particular properties of ISCs: a) the ambiguous interpretation of future constructions; b) the incompatibility of perfective with the future tense and past tenses. I will now take a closer look at each property.

First piece of evidence come from the fact that in future ISCs, the time of the embedded event is not necessarily co-indexed with the time of the matrix event. In (4), for example (repeated below), the interpretation of the embedded event is either simultaneous with the matrix event, or it can get the ‘further-in-the future’ reading.

- (7) Mark-u će se piti kafa sutra.
 Mark-DAT will SE drink.IPFV.INF coffee tomorrow
 ‘Mark feels like drinking coffee tomorrow.’
 a. *‘feeling like’ and drinking coffee are simultaneous, both in the future.*
 b. *Both events are in the future but feeling like precedes drinking coffee.’*

The interpretation of (7b) shows that the matrix and the embedded events can belong to two distinct time intervals, suggesting the existence of two separate tense projections that modify these events, as shown below.



Second, the incompatibility of future and past ISCs with perfective provides additional evidence for the existence of some intervening projection between the matrix predicate and the lower vP.

- (8) *Mark-u će se popiti kafa sutra.
 Mark-DAT will SE drink.PFV.INF coffee tomorrow
 ‘Mark will feel like drinking coffee tomorrow.’
 (9) *Mark-u se popila kafa jučer.
 Mark-DAT SE drink.PFV.PCP coffee yesterday
 ‘Mark felt like drinking coffee yesterday.’

To account for restrictions on aspect, it is necessary to analyze the distinction between imperfective and perfective structures in terms of Speech Time (S), Event Time (E), and Reference Time (R) (Reichenbach 1947). The temporal architecture of an imperfective event is viewed ‘*from within the situation*’, whereas perfective is always concerned with viewing the situation as a single unit (Comrie 1976). Thus, in imperfective, R must be within the event time interval. In perfective, on the other hand, the time of the event must be included in R.

- (10) Requirements for both aspects (Kratzer 1998)
- a. $[[\text{IMPERFECTIVE}]] = \lambda P. \lambda t. \exists e [t \subset \tau(e) \ \& \ P(e)]$
Reference Time (R) is within Event Time (E): $R \subseteq E$
 - b. $[[\text{PERFECTIVE}]] = \lambda P. \lambda t. \exists e [\tau(e) \subseteq t \ \& \ P(e)]$
Event Time (E) is within Reference Time (R): $E \subseteq R$

As per the definition in (10b), it’s been argued that the ungrammaticality of perfective stems from the conflict between perfective and the temporal domain. Consider the following examples from English:

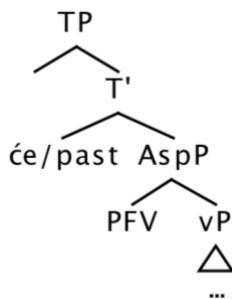
- (11) English (Todorović 2015: 84)
- a. John translates a poem (*right now).
 - b. John translated a poem yesterday.
 - c. John will translate a poem tomorrow.

Perfective is not compatible with the present tense since R, introduced by the present tense, is near-identical to Speech Time and, thus, is too shot to include Event Time, violating the requirement on perfective. Future and past structures, on the other hand, are compatible with perfective (11a, 11b). The past tense locates R before S, making it potentially long. Similarly, the future tense signals posteriority of R with respect to S, identifying R as a potentially long time interval (Pancheva & Von Stechow 2004, Von Stechow 2009, Todorović 2015, Todorović & Wurmbrand 2016, and many others).

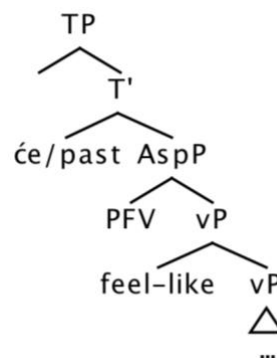
- (12) **Present:** $R = S$ *The reference time must be equal to the time of speech.*
Future: $R > S$ *The reference time must follow the time of speech*
Past: $R < S$ *The reference time must be prior to the time of speech*

As per the definition in (10a), we would expect future and past ISCs to be grammatical. Given that future and past specify the reference time interval as indefinitely long, neither Rivero’s monoclausal, nor M&Ž’s bi-clausal analysis with the reduced lower clause (e.g., vP) are able to rule out the perfective configuration in (8) and (9), structurally represented below.

(13) *Monoclausal ISC*

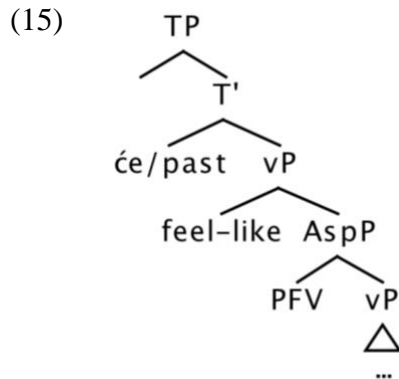


(14) *Bi-clausal ISC*



In (13), the reference time interval is extended by future and past, within which the time of *the drinking event* should be included. In this case, we would expect (8) and (9) to be grammatical since there would be no violation of the perfective requirement ($E \subseteq R$).

In (14), the lower clause lacks the AspP projection, suggesting that the bi-clausal structure has only the matrix AspP (M&Ž 2005). However, if AspP modifies the matrix event of ‘*feeling like doing x*’, it is not clear how to explain the ungrammaticality of future and past constructions with perfective since the reference time interval introduced by future and past is indefinitely long, and, thus, is able to include the time interval of the **matrix event**. Moreover, if the structure is indeed bi-clausal, the AspP projection should be structurally located lower than the matrix predicate since the aspect on the overt verb does not modify the event of ‘*feeling like doing x*’, but rather refers to the embedded event (15)¹.



Although the structural position of AspP seems to be correct, this configuration cannot rule out the ungrammatical future-oriented and past constructions (8) and (9) either². There are no intervening temporal components between T and the lower perfective predicate. The indefinitely long time interval introduced by future and past becomes R for both the matrix (*feel-like doing x*) and the embedded events, imposing no violations on the perfective requirement ($E \subseteq R$). Thus, perfective ‘*feel-like*’ constructions are predicted to be grammatical, at least in the future and past contexts.

In sum, the incompatibility of perfective with the past and future components signals the presence of some intervening temporal component between the matrix T and the lower vP. Crucially, this component restricts the reference time of the embedded event, making the inclusion of E into R impossible.

Having established that the size of the embedded clause is larger than a vP (e.g., TP), I will further argue that the ungrammaticality of perfective structures is due to the conflict between the perfective embedded event and R of the lower clause.

2. The interaction of R and Aspect requirements. We observed that R for the embedded event is not linked to R of the matrix clause since the future and past tenses in the matrix clause do not trigger the grammaticality of perfective ISCs. To account for restrictions on perfective structures in (1), repeated below, I argue for the existence of a temporal domain that sets up the restrictions

¹ Most likely, there is an additional AspP projection, which is located in the matrix clause and modifies the higher predicate, however it is not crucial for the current analysis.

² The future element *će* comprises two parts [+PRES] and [WOLL] (Abusch 2004). However, this is not crucial for the current discussion.

on the embedded R, such that R is too short to include the time interval of the embedded event, violating the perfective requirement ($E \subseteq R$).

- (16) Mark-u se pije/ *popije kafa.
 Mark-DAT SE drink-PRES.IPFV/*PFV coffee
 ‘Mark feels like drinking coffee.’

Concretely, I propose that in ISCs, R of the embedded clause is introduced by an involuntary attitude holder’s NOW.

My approach follows the analysis for propositional structures, thoroughly discussed in Abusch (2004), Wurmbrand (2014), Todorović (2015), and others. In particular, propositional verbs of the type *believe/claim* combine with a complement clause that involves the attitude holder’s NOW. The ungrammaticality of perfective structures with propositional complements is attributed to the fact that the reference time interval of the embedded clause, introduced by the attitude holder’s NOW, is too short to include the time of the embedded event, violating the requirements on perfective (Todorović and Wurmbrand 2016).

- (17) *Verujem da Jovan prevede pesmu.
 believe.1SG.PRES DA Jovan translates.PRES.PFV poem
 ‘I believe that John has translated a poem (just now).’
 (18) *Milan će verovati da Jovan prevede pesmu.
 Milan will believe.INF that Jovan translate.PRES.PFV poem
 ‘Milan will believe that Jovan will have translated a poem (right now).’

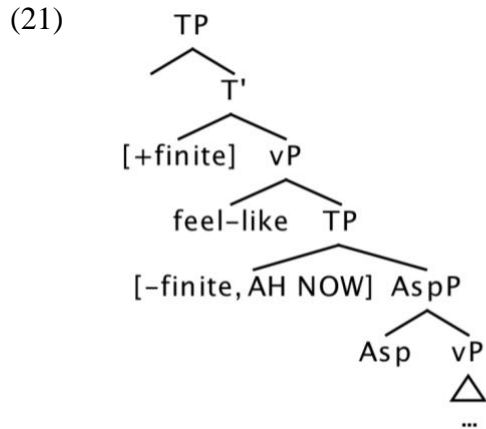
In the present and future examples (17) and (18), the contemporary NOW can be compared to the speech time interval in the sense that it is associated with a particular short time interval. S refers to the time interval when the sentence is spoken, e.g., the actual time of the utterance, which is the real time ‘now’. The contemporary NOW, on the other hand, is associated with the time interval, which is an actual time according to the speaker’s beliefs, regardless of the matrix tense. For instance, in (19) John believes that the current time is 11 a.m. The attitude holders’ contemporary NOW is not the time of the utterance (10 a.m.), but rather 11 a.m.

- (19) English (Todorović 2015: 101)
 At 10 a.m. John believed it to be 11 a.m.

I suggest that by the analogy to propositional complements, in ISCs, the matrix covert verb FEEL-LIKE combines with a complement that has an (involuntary) attitude holder’s ‘now’ (AH NOW). Similar to Speech Time, AH NOW is a very short time interval. The difference is that S determines when the utterance is spoken (e.g., the real time ‘now’), whereas in ISCs, AH NOW is associated with the time interval which is an actual time according to the speaker’s involuntary desire (FEEL-LIKE). For example, in (7), repeated below, the simultaneous interpretation of the matrix and the embedded clauses (20a) show that regardless of the matrix future tense, R for the lower clause is the actual time of the involuntary desire (e.g., ‘now’ with respect to the person’s ‘feeling like doing x’).

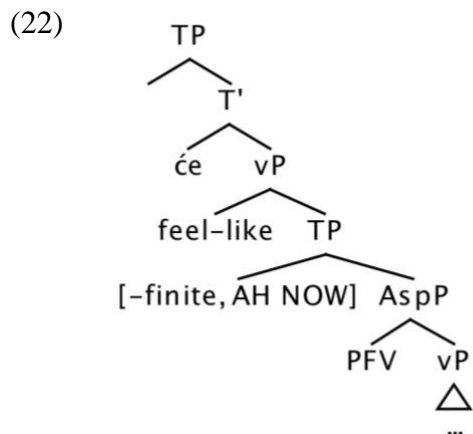
- (20) *Mark-u će se piti kafa sutra.
 Mark-DAT will SE drink.INF.IPFV coffee tomorrow
 ‘Mark will feel like drinking coffee tomorrow.’
 a. *‘feeling like’ and drinking coffee are simultaneous, both in the future.*
 b. *Both events are in the future but feeling like precedes drinking coffee.’*

The structural position of AH NOW is given below.



The representation in (21) is applicable for present, past, and future ‘feel-like’ constructions. Since tense is structurally located in the matrix clause (M&Ž 2005), and since the interpretation of the lower predicate is simultaneous with the involuntary ‘*feeling like doing x*’ event, not the matrix tense, but rather contemporary AH NOW becomes R for the embedded event. Regardless of the matrix tense, the perfective requirement ($E \subseteq R$) cannot be met. R, introduced by AH NOW, is near-instantaneous, and it is too short to include E of the lower clause.

As for the shifted ‘further-in-the future’ interpretation of lower clause in (20b), I will follow Todorović (2015) and suggest that the extension of the embedded R requires a structural component. Although the embedded clause in (20a) can get the ‘further-in the future’ orientation, it is achieved by the adverbial ‘tomorrow’ rather than by the structural future component, and, thus, the extension of R is not possible. Regardless of the shifted ‘further-in-the future’ reading of the embedded clause, contemporary AH NOW remains Reference Time for the lower event (22).



Since both events ‘*feeling like doing x*’ and the *drinking* event are in the future, *će* needs to be structurally located above the matrix predicate. It is not able to serve as R for the embedded clause due to the intervening material (AH NOW).

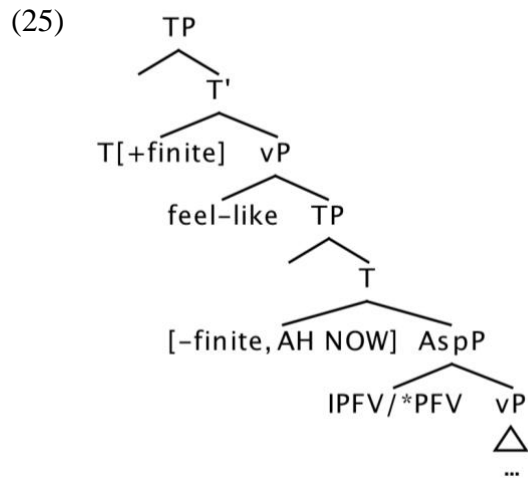
In the matter of ISCs with imperfective, they do not have any restrictions, unlike their perfective counterparts: in contrast to perfective constructions (24), imperfective is possible (23).

- (23) Mark-u se pije kafa.
 Mark-DAT SE drink.PRES.IPFV coffee
 ‘Mark feels like drinking coffee.’

- (24) *Mark-u se popije kafa.
 Mark-DAT SE drink.PRES.PFV coffee
 ‘Mark feels like drinking coffee.’

To account for the grammaticality of (23), I propose that the requirements on imperfective are not violated, and, thus imperfective ISC are possible.

In sum, the following structure can account for both imperfective and perfective ISCs in BCS:



In both imperfective and perfective ISCs, the reference time interval for the embedded clause is near-instantaneous AH NOW. What distinguishes the two structures is their aspectual requirements. Perfective requires the reference time interval to include the time of the event ($E \subseteq R$), whereas in imperfective, R must be included in the event time interval ($R \subseteq E$). The fact that R introduced by NOW is a very short time interval is not a problem for imperfective ISCs, since the time of the embedded event (e.g., *drinking coffee*) is able to include short reference time interval introduced by NOW, satisfying the imperfective requirement ($R \subseteq E$).

3. Conclusion. In this paper, I first provided additional evidence for the bi-clausal analysis of ISCs in BCS. Contrary to M&Ž (2005), however, I argued that the size of the complement clause in such constructions is larger than a vP. Evidence for the TP size of the lower clause comes from the ambiguous interpretation of future ISCs and from the incompatibility of perfective with future and past structures.

I then argued that the ungrammaticality of perfective ISCs stems from the conflict between perfective aspect and the temporal domain of the embedded clause. In particular, due to its selectional property, the covert matrix FEEL-LIKE must combine with the complement clause that has a very short R , imposing restrictions on perfective. In general, my proposal is in line with the existing account for structures with propositional verbs, such as *claim* and *believe* (Todorović and Wurmbrand 2016). In particular, it supports and broadens the claim that the perfective/imperfective distribution can be attributed to (in)compatibilities of aspect with the temporal domain.

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