Impulsatives in Bulgarian:
A Covert Version of a New Grammatical Category*

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1 Introduction

The goal of this paper is to introduce a new linguistic category, which I call impulsatives. In particular, I will discuss a construction in Bulgarian which I view as a covert instantiation of this category. Similar constructions also exist in other South Slavic languages. Bulgarian impulsatives and their South Slavic counterparts present interesting questions about the mapping between syntax and semantics because the source of the impulsative meaning in these constructions is not obvious from the morphology and syntax.

In Bulgarian, impulsatives are composed of a dative argument, the non-active clitic *se* and the imperfective aspect.

(1) *Na Ivan mu   se   pišeše   kniga.*
     P   Ivan DAT.M.SG NACT write.3SG.IMPF book
     'Ivan felt like writing a book.'
     'A book was being written for/on Ivan.'[1]

In example (1), the argument *Ivan* is marked with the dative preposition *na* and the verb is preceded by the non-active clitic *se*. In addition, (1) is ambiguous. One interpretation of this sentence is where a book was being written and Ivan is somehow affected. I will refer to this type of reading as the affected argument reading (Bosse, Bruening, Yamada, Peng, and Cathcart, 2008).[2] The second reading is that Ivan had the desire or impulse to write a book. This is the impulsative reading. Impulsatives introduce modal semantics or intensionality because in the modal world of the impulsative, the experiencer is the external argument of the verb. All potential impulsatives are ambiguous between the affected argument and the impulsative

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[1]P=Preposition, DAT=Dative, ACC=Accusative, NOM=Nominative, IMPF=Imperfect, EV=Evidential N=Neuter, M=Masculine, F=Feminine, AOR=Aorist, NACT=Non-active, COMP= Complementizer, PART=Participle, PR=Present, DEF=Definite, INDEF=Indefinite, IMPU=Impulsative, OM=Object Marker

[2]English translations for affected readings are not exact, for simplicity I will use 'on/for Ivan'.

readings. This paper focuses on the impulsative readings. I will only address the affected argument readings when relevant.
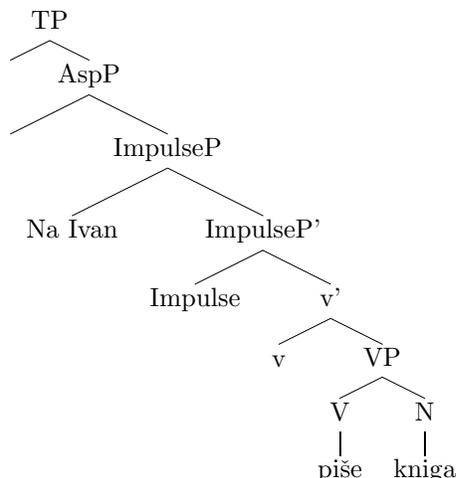
Impulsatives in Bulgarian raise many questions. The central question is the source of the intensionality and the impulsative reading. Since there is an absence of dedicated morphology, it is unclear where the intensionality is coming from. A corollary question is: what is the structure of these constructions? How many events, arguments, functional heads like tense and aspect are in this construction? Furthermore, what licenses the experiencer argument? Finally, what role does the non-active morphology play in this construction?

While South Slavic impulsatives have long been recognized (Benedicto, 1995; Franks, 1995; Dimitrova-Vulchanova, 1999; Rivero and Sheppard, 2003; Rivero, 2004), they have recently garnered attention from two opposing accounts. The two accounts differ in two aspects in particular: the source of the intensionality and the size of the structure. The first is a biclausal account with a null psych-predicate, put forth by Marušič and Žaucer (2006), who call this construction the "feel like construction." The second is Rivero's (2009) monoclausal account involving an imperfective operator as the source of the intensionality. Rivero (2009) calls this construction the 'involuntary state construction." However, neither account fully captures the nature of impulsatives in Bulgarian. I propose a monoclausal analysis with a null impulsative element with the following semantic denotation.

(2) $[\![\mathbf{Impulsative}]\!]^{w,g} = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w'$ is compatible with what x feels like in e in w$] \rightarrow [\exists e'$ in w'.P(x)(e')]

Semantically, the null impulsative head will do several things. First, it will provide intensionality by quantifying over possible worlds. Secondly, it has an event argument. Finally, it introduces an experiencer argument and links it with the agent of the internal predicate in the modal world. Syntactically, the impulsative head will license and case-mark an experiencer argument and select for an unsaturated voice projection. The structure for example (1) is shown in the tree below.

(3)

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                              TP
                             /\
                            /  \
                          AspP
                          /\
                         /  \
                     ImpulseP
                      /      \
                     /        \
                  Na Ivan    ImpulseP'
                             /       \
                            /         \
                        Impulse        v'
                                      /  \
                                     /    \
                                    v     VP
                                         /  \
                                        V    N
                                        |    |
                                      piše  kniga
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The rest of this paper is organized as follows. The second section is dedicated to finding the source of the intensionality. I present both Marušič and Žaucer (2006)'s account with a null source and Rivero's (2009) analysis with an imperfective operator as the source of the intensionality. I conclude in favor of Marušič and Žaucer (2006) that the source of the intensionality comes from a null element. In the third section, I depart from Marušič and Žaucer (2006)'s use of a psych predicate and argue that this null element is neither a modal nor a desiderative/volitional verb but rather a new category, "impulsative", akin to an overt morpheme found in the Quechua languages. In the fourth section, I further depart from Marušič and Žaucer (2006)'s analysis and argue that the impulsative construction is not biclausal but monoclausal. Then I present a monoclausal structure that derives the non-active morphology by using Distributive Morphology (Halle and Marantz, 1993). Finally, section five provides a full derivation of the analysis and concludes the paper.

2   The Source of the Intensionality

This section explains the paradox that impulsatives present. I discuss the morphological makeup of Bulgarian impulsatives and demonstrate why none of the overt components of the sentence directly or singularly contribute to the intensional meaning. There are two ways to solve this issue. Marušič and Žaucer (2006) motivate a null verb with a clausal complement. On the other hand, Rivero (2009) argues that there is no need to posit a new null element. She argues that impulsatives are analogous to English Futurates (Copley, 2002a) and Spanish Imperfects (Cipria and Roberts, 2000) in that an imperfective operator provides intensionality. Nevertheless, I argue that Marušič and Žaucer (2006)'s position must be upheld in that the intensionality of impulsatives in Bulgarian cannot be derived from the components of the construction and that there must be a null element contributing the intensionality and impulsative meaning.

2.1 Morphological Makeup of Impulsatives

The mapping of the syntax to the semantics is problematic in impulsatives because the morphological and syntactic components do not singularly introduce modal semantics, while the impulsative construction as a whole does. The morphological makeup of impulsatives appears to have three obligatory elements: non-active morphology, a dative argument, and imperfective aspect. All elements can be used in constructions distinct from that of the impulsative. Moreover, all of these constructions are non-intensional. However, if a sentence is missing any of the three components the impulsative reading cannot be achieved.

Non-active morphology in Bulgarian has several different functions. Non-active morphology can be added to a transitive verb to create a passive. It also appears on unaccusative and reflexive verbs.

(4)   *Knigata   se   pisa.*
       book.the NACT write.AOR.3SG
       'The book was written.'

(5)   *Ivan se   poyavi.*
       Ivan NACT appear.AOR.3SG
       'Ivan appeared.'

(6)   *Ivan se   mie.*
       Ivan NACT wash.3SG.PR
       'Ivan washes himself.'

In example (4), the non-active clitic *se* makes the sentence a passive. Example (5) is an example of an unaccusative verb in Bulgarian. Example (6) is a verb that can be made reflexive by the addition of the non-active clitic. None of these examples (4)-(6) are intensional.

Dative arguments in Bulgarian can also occur in multiple constructions. In addition to occurring in ditransitive constructions, dative arguments can also appear as subjects of psych predicates and as affected arguments in applicative constructions (Pylkkänen, 2002).

(7)   *Petar dade   knigata   na Ivan.*
       Petar give.3SG.AOR book.the P   Ivan
       'Peter gave the book to Ivan.'

(8)   *Na Ivan mu   se   privizhdat   tezi momicheta.*
       P   Ivan DAT.M.SG NACT imagine.3PL these girls.the
       'Ivan has a vision of these girls.'

(9)   *Joana mu   pišeše   mnogo statii   na Ivan.*
       Joana DAT.M.SG write.3SG.IMPF many   articles P   Ivan
       'Joana was writing many articles on/for Ivan.'

In example (7), the dative argument functions as the second argument in a ditransitive, while it serves

as the subject of a psych predicate in example (8). Finally, in example (9) the dative argument can take a number of affected roles in applicative constructions. Affected roles include benefactive: 'Joana dedicated many articles to Ivan'; malefactive: 'Joana was stealing Ivan's ideas'; or by proxy: 'Joana was writing the articles so that Ivan didn't have to.' While (9) can be interpreted many ways, none of these interpretations are intensional. Furthermore, neither (7) and (8) are intensional.

The imperfective morphology in Bulgarian is fused with past tense morphology. This is often referred to as the imperfect form. The imperfect form in Bulgarian can be habitual, progressive or iterative.

(10)   *Joana pišeše*   *(vseki den).*
       Joana write.3SG.IMPF every day
       'Joana was writing (every day).'

In (10), the imperfective morphology allows the sentence to have various imperfective readings. It can be used as the past progressive in the context where Joana was writing when the phone rang. It can also have habitual or iterative readings that are more salient when adverbial phrases such as 'every day' is added or understood.

Thus, dative arguments, non-active and imperfective morphology in non-impulsative contexts perform specific functions in Bulgarian. In their primary roles, they do not introduce any intensionality. Examples (4)-(10) do not have any intensionality. Since these morphological components do not inherently supply intensionality, the source of the intensionality in impulsatives is a mystery. While none of the morphological components alone can create an impulsative, the impulsative reading cannot be attained without these crucial ingredients. It appears that if any one of these components is absent, the impulsative reading will not be achieved. Later, I will argue that while non-active morphology and dative arguments are indeed obligatory, imperfective morphology is not.

Non-active morphology is obligatory in impulsatives. If a sentence is active, the impulsative reading is not available.

(11)   *Na Ivan   mu   pišeše   mnogo statii.*
       P   Ivan pro DAT.M.SG write.3SG.IMPF many   articles
       'He/She was writing many articles on/for Ivan.'

Example (11) is an active sentence with a dative argument and imperfective aspect. It does not have the impulsative meaning, but rather a distinct affected argument reading.

Additionally, dative arguments are required in impulsatives. Without the dative argument, the sentence is interpreted as a passive.

(12) *Knigata   se   pišeše.*
      book.the NACT write.AOR.3SG
      'The book was being written.'

Example (12) is a non-active sentence with imperfective aspect, but lacking a dative argument. This sentence also does not receive an impulsative reading, but rather is interpreted like a passive.

Lastly, there appears to be an aspectual restriction. In the past tense, impulsatives must be imperfect. In the aorist tense, the impulsative reading disappears:

(13) *Na Ivan mu   se   pisa   pismoto.*
      P   Ivan DAT.M.SG NACT write.AOR.3SG letter.the
      'They/ people wrote the letter for Ivan.'
      ∗'Ivan felt like writing the letter.'

Example (13) is in the simple aorist tense, the other morphological past tense in Bulgarian. Though there is both non-active morphology and a dative argument, there is no impulsative meaning. Examples (11)-(13) indicate that all three ingredients are necessary to create the impulsative construction.

While the impulsative meaning cannot be attributed to any of its parts, the impulsative construction is contingent on their presence. The apparent lack of compositionality drives at the central questions concerning impulsative constructions. As initially discussed, the source of the intensionality remains to be explained. Additionally, the requirement of each morphological component in impulsatives, must also be explained.

2.2   An account with a null verb

Marušič and Žaucer (2006) propose a biclausal analysis of impulsatives in the South Slavic Languages that involves positing a phonologically null psychological predicate. They compare impulsatives in Slovenian to psych predicates that are nearly synonymous and argue that the structures are the same.

    Slovenian

(14) *Gabru   se pleše.*
      Gaber.DAT SE dance3P.SG
      'Gaber feels like dancing.'
      (Marušič and Žaucer, 2006, Ex 2)

(15) *Gabru   se lušta   plesati.*
      Gaber.DAT SE desire3P.SG dance.INF
      'Gaber feels like dancing.'
      (Marušič and Žaucer, 2006, Ex 3)

Murašič and Žaucer argue that Slovenian impulsatives are biclausal because they are not subject to restrictions that monoclausal constructions are. One, in particular, is temporal adverbial modification.

Biclausal sentences can have two conflicting time adverbs without bringing about a temporal clash.

(16)   *Včeraj   se mi   ni   šlo jutri   domov.*
        yesterday SE DAT AUX.NEG.PST go tomorrow home
        'Yesterday, I didn't feel like going home tomorrow.'
        (Marušič and Žaucer, 2006, Example 13)

In example (16), *včerai* 'yesterday' modifies the 'feel like' event while *domov* 'tomorrow' modifies the 'going home' event. On the other hand, non-agreeing adverbs are impossible in ordinary monoclausal constructions (McCawley, 1979).
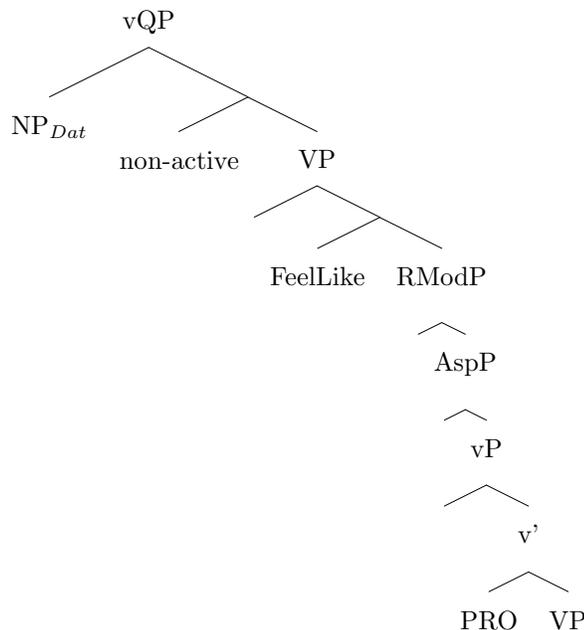
(17)   ∗Tomorrow, Jim will play basketball in two weeks.
        (Marušič and Žaucer, 2006, Example 8)

However, many (Ross, 1976; Partee, 1974; McCawley, 1979; Dowty, 1979; den Dikken, 1996; Larson and Ludlow, 1997) have noted that some apparently monoclausal constructions can support two conflicting time adverbs.

(18)   Tomorrow, Jim will want a new bike in two weeks.
        (Marušič and Žaucer, 2006, Example 7)

While it appears that example (18) only has one predicate, this cannot be true. If it did only have one predicate, it would behave like the monoclausal example (17), and not be able to support two conflicting adverbs. Larson and Ludlow (1997) argue that this is one indication that intensional verbs like *want* always take complement clauses rather than a direct object. This makes the structure biclausal. Because of this and other facts, such as selectional restrictions, binding effects, and ellipsis, Larson and Ludlow (1997) propose that intensional verbs actually take a null *have* when it appears that they are taking only a direct object. It is therefore the case that only biclausal constructions allow conflicting time adverbs. On the basis of this and related arguments such as conflicting manner adverbials and depictive secondary predicates, which are also limited to biclausal structures, Marušič and Žaucer conclude that Slovenian impulsatives have a biclausal structure and that they also involve a phonologically null verb. The following is the structure they propose for Slovenian impulsatives.

(19)

```
                              vQP
                    ┌──────────┴──────────┐
                  NP_Dat         ┌────────┴────────┐
                            non-active            VP
                                           ┌───────┴───────┐
                                        FeelLike        RModP
                                                          │
                                                        AspP
                                                          │
                                                         vP
                                                          │
                                                          v'
                                                      ┌───┴───┐
                                                    PRO     VP
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In the structure in (19), the non-active vP, labelled "vQP", selects for the 'feel like' predicate, the source of intensionality and the impulsative reading. It, in turn, selects a clausal complement with both mood and aspect and an internal subject filled by PRO. Note that it is almost a full clause, except for the lack of tense.

This tree is intended to account for impulsatives in Slovenian. Murašič and Žaucer note that certain facts make Bulgarian different from Slovenian, notably with regards to an aspectual restriction. Murašič and Žaucer provide a typology of differences among impulsatives in the South Slavic languages. They claim that the differences stem from the category that the 'feel like' predicate selects. In Bulgarian, the 'feel like' predicate selects for AspP rather than ModP. Hence, the 'feel like' predicate controls the aspectual nature of its complement by only selecting imperfective aspect in Bulgarian. Aside from this difference, Bulgarian and Slovenian impulsatives are identical, according to Murašič and Žaucer.

2.3   Impulsatives without a syntactic head

In contrast, Rivero (2009) argues for a monoclausal analysis with no covert verb. Rivero derives the intensionality in impulsatives from an imperfective operator. She argues that impulsatives in Bulgarian and Slovenian are analogous to English futurates and Spanish Imperfects. English futurates and Spanish imperfects have a particular intensional reading brought about by the use of imperfective or progressive morphology. These readings exist in addition to the conventional reading that the morphology provides. While it is understood that in most contexts, present progressives in English mean that something is happening now, they can also have a futurate meaning. Contrast the following sentences:

(20) a. The movie is playing.
      b. The movie is playing at 7.

In example (20-a), the progressive is used to indicate that the movie has already started and is currently playing. The time of the utterance is located within the progression of the movie playing event. This contrasts with example (20-b), where the playing event cannot happen at the time of the utterance, because there is a later time adverbial *at 7*. Instead, the progressive morphology indicates a planned future event, in which it is understood that the movie is going to start at 7. This is the futurate reading of the English progressive.

Under Copley's (2002) analysis, English futurates are understood as plans. These plans have directors. The directors are usually the subjects of the clause and are often understood as both the 'planners' of the planning event and external argument of the internal predicate. The planner could also be a third party such as the manager of the movie theatre in (20-b). Despite being monoclausal, English futurates (Copley, 2002b) and Spanish imperfects (Cipria and Roberts, 2000) can support two conflicting time adverbs without leading to a contradiction.

(21) For two weeks, the Red Sox were playing the Yankees tomorrow.
      (Copley, 2002b, Example 1a)

(22) *Durante dos semanas, el   equipo jugaba   mañana.*
      for   two weeks   the team   play.IMPF.3SG tomorrow
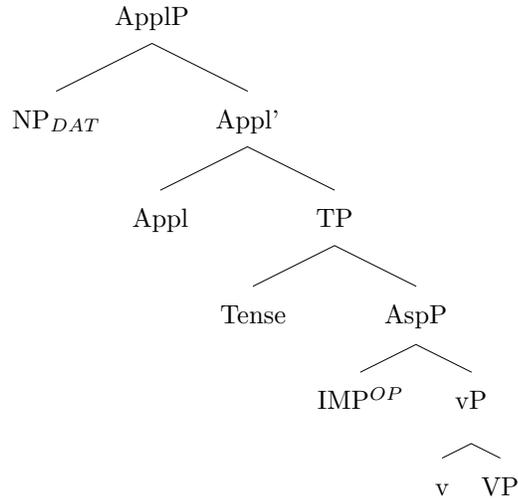   'For two weeks, the team was playing tomorrow.'
      (Rivero, 2009, Example 5)

In example (21), 'for two weeks' modifies the plan to play and the day of the actual playing is to occur 'tomorrow'. Rivero argues that it is not necessary that impulsatives be biclausal, since English futurates are apparently monoclausal and can support conflicting adverbs.

Moreover, Rivero claims that an imperfective operator is the source of the intensionality in impulsatives in South Slavic, analogous to English futurates. However, in impulsatives the "subject" is a dative argument rather than a nominative argument as in English futurates. Rivero argues that oblique or quirky subjects with dative case cannot function as directors, unlike nominatives in English futurates. Under Rivero's analysis, the dative argument is introduced by a high applicative head (Pylkkänen, 2002). The high applicative phrase is above the TP, which makes it a topic position. Rivero further argues that an argument in the topic position is in the contextual background and therefore cannot be a director. Hence, the dative argument would not be understood as a 'planner' the way the nominative argument is in English futurates.[3] Instead,

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[3]This seems to conflict with Copley's analysis, since directors can be a third party as in (20-b). The manager of the movie theatre can only be understood from the contextual background.

the dative argument would identify the person with the relevant desire for the main predicate. Her structure is provided below.

(23)

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                        ApplP
                       /     \
                 NP_DAT       Appl'
                             /     \
                          Appl      TP
                                   /   \
                               Tense   AspP
                                      /    \
                                  IMP^OP    vP
                                           /  \
                                          v   VP
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By deriving the intensionality from the Imperfective Operator (IMP^{OP}) in the head of Aspect, Rivero is able to provide a monoclausal structure for South Slavic impulsatives. By placing the dative argument in the head of a high applicative she is able to differentiate between the futurate and impulsative constructions and explain why they receive different interpretations. In addition, the high applicative head licenses the dative argument. By these means, Rivero is able to achieve an impulsative construction without having to posit a null source for the intensionality.

2.4 There must be a Null Element

Despite Rivero's claim to that effect, her analysis fails to provide a source for the intensionality in impulsatives. In this section, I demonstrate that Rivero's central components, the imperfective operator and the applicative head, are not relevant in impulsatives . I argue that an imperfective operator is neither necessary nor sufficient in impulsatives. In other words, there is no aspectual restriction on Bulgarian impulsatives. I also argue that the applicatives and impulsatives cannot be conflated. Finally, Rivero's account does not explain the obligatory appearance of non-active morphology. This section concludes with Marušič and Žaucer that impulsatives are best analyzed as involving a null element that exclusively provides intensionality to impulsatives. Later, in section 4, I will argue that Bulgarian impulsatives are not biclausal, upholding Rivero's original objection to Marušič and Žaucer (2006)'s account.

2.4.1 IMP^{OP} is Not the Source of Intensionality

An imperfective operator is not the source of intensionality in impulsatives. Evidence stems from the fact that impulsatives appear in places where there is no evidence that an imperfective operator is present. Moreover, there are instances where an imperfective operator is present and an impulsative reading is not. Finally, impulsatives in Albanian are not dependent on an imperfective operator.

Futurate readings are not uniformly available wherever impulsative readings are. Under Rivero's analysis, the imperfective operator can yield either the futurate reading or the impulsative reading depending on the case of the noun. If the subject is nominative, then the sentence can have a futurate reading.

(24) *Dnes (po plan) izbuxvaše   stačkata.*
      today (per plan) start.Imp.3Sg strike.the
      'According to plans, the strike was breaking out today.'

Rivero argues that the availability of the impulsative reading indicates that the imperfective operator is present. In addition to the imperfect past, Bulgarian also has a number of prefixes and suffixes that can change the aspect or telicity of an event. In particular, Rivero claims that a verb with the imperfective suffix *-va* is an instantiation of the imperfective operator, because the impulsative reading is available even if the verb is in the aorist tense. If this is the case, a futurate meaning should be available when the subject receives nominative case. However, this prediction is not borne out.

(25) *Na Ivan mu   se   na-pis-va-xa   mnogo statii.*
      P   Ivan 3SG.DAT REFL PF-write-VA-AOR.3Pl many articles
      'Ivan felt like writing up many articles.'
      (Rivero, 2009, Ex 44)

(26) **Dnes po plan Ivan napisva   mnogo statii.*
      Today per plan, Ivan PF-write.VA.AOR.3SG many   articles
      'According to plan, Ivan is writing many articles.'

While in example (25) the impulsative reading is available with the imperfective affix *-va*, example (26) does not have the intended futurate reading with the same suffix. This suggests that the imperfective suffix *-va* isn't an instantiation of the imperfective operator. Without the imperfective operator in this construction, the availability of the impulsative reading is unexplained.

There is further evidence that the imperfective operator is not obligatory in Bulgarian impulsatives. While an imperfective operator should make an event atelic, the impulsative can be telic. Impulsatives can occur with the terminative pre-verb *ot*:

(27) *Na Ivan mu   se   ot-jade   jabalka za deset minuti.*
      P   Ivan 3SG.DAT REFL FINISH-eat.AOR.3SG apple   for ten   minutes
      'Ivan does not feel like eating an apple in ten minutes anymore.'[4]

In example (27), the terminative prefix *ot* applies to the impulsative event, giving the meaning that Ivan
had felt like eating an apple but lost his appetite. The feeling event has therefore ended and is telic. The
internal event is also a telic event as indicated by the presence of a telic adverbial phrase *za deset minuti*
'in ten minutes' (Vitkova, 2004). Since both events are telic, neither event can be atelic. Therefore, the
imperfective operator is incompatible with this sentence.

    Another indication that the imperfective operator is not involved in Bulgarian impulsatives comes from
the periphrastic perfect. The periphrastic perfect entails a telic event (Anagnostopoulou, Iatridou, and Izvorski,
1998), as illustrated in (28).

(28) *Na Maria i   se   e   pisalo.*
      P   Maria DAT.F.SG NACT has write.3SG.AOR.EV.N
      'Maria had felt like writing.'

In example (28), we see that the impulsative reading exists, not only without imperfective morphology
but with both the aorist tense and perfect morphology. Hence, an imperfective operator in not present in
the sentence. This demonstrates that it is not necessary to have an imperfective operator to achieve an
intensional impulsative reading, contrary to Rivero's account.

    Furthermore, when the perfect is combined with the imperfective, the impulsative reading disappears.

(29) *Na Maria i   se   e   pišelo.*
      P   Maria DAT.F.SG NACT has write.3SG.EV.N
      'Something has been being written for Maria.
      ∗'Maria had been feeling like writing.'

Example (29) has imperfective morphology and a dative argument. Therefore, Rivero's analysis would
predict this sentence to have an impulsative interpretation. However, that meaning is unavailable, and it
can only be interpreted as a passive with an affected argument. Thus, the imperfective operator does not
always induce the impulsative meaning when it is present. If the imperfective operator were providing the
intensionality in impulsatives, example (29) should have an impulsative meaning. Nevertheless, it does not.
Therefore, an imperfective operator is not sufficient to capture all the impulsatives in Bulgarian.

    To summarize, the facts about the aspectual restriction on impulsatives in Bulgarian are not clear. On
the one hand, an impulsative reading cannot be attained when a verb is in the simple aorist past with no

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[4]Preposition *za* does not translate as 'in' but can mean 'for' in other contexts. I translate it as 'for' to be consistent with
the literature and my informants translation.

other aspectual prefixes, making it appear that imperfective aspect is necessary. On the other hand, in the periphrastic perfect form, impulsative readings can only be achieved with aorist tense and disappear with the imperfect form. Therefore, an imperfective operator cannot be used to supply the intensionality in impulsatives. The restriction cannot be solely attributed to the Aspect head. Unfortunately, I do not have an explanation for this contradictory pattern, but it is clear that an imperfective operator cannot characterize it.

Finally, cross-linguistically, the imperfective is not a crucial component in impulsatives. Albanian impulsatives are very similar to Bulgarian impulsatives. They both have dative arguments and non-active morphology. However, Albanian impulsatives do not require impulsatives to be imperfective. [5]

(30)   *Një mollë   m'u   hëng.*
        A   apple.INDEF.NOM DAT.1SG eat.NACT.AOR.3SG
        'I felt like eating an apple.'

(31)   *Një mollë   më   hahej*
        A   apple.INDEF.NOM DAT.1SG eat.NACT.3SG.IMPF.
        'I was feeling like eating an apple.'

Examples (30) and (31) show that in Albanian, impulsatives can appear with both the imperfective and perfective past tenses. This indicates that, for Albanian, the imperfective is not obligatory in impulsatives. Even if Bulgarian impulsative relied on an imperfective operator for their intensionality, the intensionality in Albanian would still be unexplained.

I conclude that the imperfective operator is not the source of intensionality in Bulgarian impulsatives. I have shown various instances where the impulsative reading can be obtained with no evidence that the sentence has an imperfective operator. Hence, an imperfective operator is not necessary in Bulgarian impulsatives. Furthermore, I showed an example where there is an imperfective operator, however no impulsative reading exists. Therefore, an imperfective operator is not sufficient. Finally, data from Albanian impulsatives indicates that the imperfective is not an obligatory component of impulsatives, and therefore could not be the source of the intensionality.

2.4.2 Affected Argument Readings are Distinct

The other component of Rivero's analysis is an applicative head. According to Rivero, the experiencer argument in impulsatives is introduced by the applicative head in analogous to applicatives that induce affected argument readings like those in Pylkkänen (2002). This in effect conflates the impulsatives with

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[5]Kallulli (2006b) has some examples where the imperfective is necessary to achieve the impulsative meaning, however my informants did not agree with these judgments.

affected argument constructions. Nevertheless, these two constructions behave differently, specifically with regards to non-active morphology. First, applicatives, unlike impulsatives, are not limited to non-active constructions.

(32) *Na Joana   mu pišeše   mnogo statii.*
      P   Joana DAT pro write.3SG.IMPF many   articles
      'On Joana, he/she was writing many articles.'
      *'Joana feels like writing many articles.'

Example (32) has imperfective morphology and an applicative argument; therefore, Rivero's account would predict there to be an intensional interpretation. However, the sentence does not have the impulsative reading.

Moreover, non-active morphology applies differently to applicatives than impulsatives. Applicatives with non-active morphology still have a passive meaning, as in (33), where the agent of the overt predicate is existentially bound. In contrast, impulsatives do not involve existential binding of the agent of the overt predicate because the dative argument necessarily receives the agent theta role. The dative argument in impulsatives doubles as the experiencer of the 'feeling' event and the agent of the internal predicate. In contrast applied arguments do not carry any other theta role.

(33) *Na Ivan mu   se   pišeše   kniga.*
      P   Ivan DAT.M.SG NACT write.3SG.IMPF book
      'Ivan felt like writing a book.'
      'A book was written on Ivan'

In the impulsative example in (33), 'Ivan' is both the feeler and the writer. It cannot be the case that Ivan desires for anyone else to do any writing. In the affected argument reading however, Ivan cannot have written a book. The agent of writing must be someone else. Rivero's analysis does not have a way to capture both the obligatory control in impulsatives and the obligatory obviation in applicatives. The applicative head would have to control the agent of the overt predicate only in impulsatives and then obviate the agent only in applicatives. Rivero's analysis does not explain how the applicative head would function differently for each reading. More generally, Rivero's account does not explain why non-active morphology is necessary in impulsatives.

Additionally, data from Albanian suggests that the external argument is introduced lower in the structure. In Albanian impulsatives, the nominative argument can bind the dative argument.[6]

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[6]Data could not be replicated in Bulgarian, likely because of word order restrictions.

(34) *Peshkaqenët$_1$ i   hahen   njëritjetrit$_1$.*
      Shark.pl.nom CL.pl eat.nonact.3pl each.other.dat
      'The sharks feel like eating each other.'

In (34), the dative argument *njëitjetrit* 'each other' is c-commanded by the nominative argument *peshkaqenët* 'the sharks'. In Rivero's analysis the applicative head that introduces the dative argument is above TP. Consequently, in Rivero's structure the nominative argument cannot c-command the dative argument because the nominative argument is in Spec of TP below the dative argument in Spec of the applicative head. Thus Rivero's analysis cannot be extended to Albanian impulsatives. The Albanian data suggests that the dative argument is introduced lower than TP.

Rivero's analysis lacks an explanation of the role of non-active morphology in impulsatives. As a result, her analysis incorrectly conflates affected argument readings with impulsative readings. However, affected arguments are not the same as impulsatives because they can receive both active and passive interpretations, whereas impulsatives are restricted to non-active sentences and do not receive passive interpretations. Moreover, data from Albanian suggests that the introduction of the external argument is lower than the TP, in contrast to Rivero's introduction of the dative argument in a high applicative head. These issues indicate that the external argument is not introduced by an Applicative head and that non-active morphology plays a crucial role in the construction of impulsatives.

2.4.3   Summary

While Rivero uses both the imperfective operator and the applicative head to derive impulsatives, both are questionable. While it may be true that the imperfective operator can introduce intensionality in futurates, it does not introduce the intensionality in impulsatives. Impulsatives do not rely on the imperfective operator to obtain their meaning. Impulsatives can appear without the imperfective operator, with the *va* suffix, with the terminative prefix *ot* and with the periphrastic perfect. Moreover, the impulsative interpretation cannot be attained in the perfect imperfective despite having the imperfective morphology. While it is an attractive option to have an applicative head introduce the experiencer argument and assign dative case to it, this is also problematic. Applicatives in Bulgarian are not limited to non-active sentences. Moreover, applicatives with non-active morphology have a passive meaning, where the agent is existentially bound. Impulsatives differ in that they do not have a passive interpretation and their experiencer argument doubles as the agent of the internal event. Thus, without the intensionality coming from the imperfective operator and an account of the role of non-active morphology,= the interpretation of impulsatives remains unexplained.

2.5   Conclusion

Bulgarian impulsatives must contain a null element. I have shown that no overt component can be responsible for the intensionality of impulsatives. I have also shown that Rivero's analysis, which attempted to derive intensionality from the imperfective operator, fell short of predicting when an impulsative reading is available. Hence, it appears that there is nothing that can explain the intensionality or the experiencer argument in impulsatives.

Marušič and Žaucer were the first to propose the existence of a null element in impulsatives on the basis of, among other things, conflicting adverbs. Adverbs are event properties of type $<s,t>$ and combine with event properties via Predicate Modification. That is, they adjoin to nodes of type $<s,t>$ (Parsons, 1990; Landman, 2000; Zimmermann, 2002). Consequently, in order for an adverb to modify the 'feeling' event, there must be a node that introduces the 'feeling' event. I agree with Marušič and Žaucer that there is such a node in impulsatives, and that nothing overt in the sentence could possibly be the node that introduces such an event. Therefore, the node must be null. This null element must be intensional, introduce an event and an experiencer argument and assign the latter case. In addition, the dependence on on non-active morphology must be explained.

3   What is this null element?

In this section, I discuss the nature of the null element. First, I argue that it is not a modal and it is also different from a desiderative/volitional verb. Rather, I argue that it is a new element, an impulsative functional head. Impulsatives can be found in many languages, such as Albanian (Kallulli, 2006a), Finnish (Pylkkänen, 1999) and other South Slavic languages (Marušič and Žaucer, 2006, among others). Crucially, impulsatives are found overtly in the Quechua languages (Hermon, 1985). The overt instantiation of impulsatives in the Quechua languages contributes additional motivation for positing a null element in languages with covert impulsatives. I argue that Bulgarian is one such covert instantiation.

3.1   This element is not a modal

The null impulsative head is not a modal. Modals in Bulgarian do not produce presuppositional ambiguities with the adverb 'again'.[7]

(35)   *As   bix   rabotil   otnovo.*
        I.NOM may.1SG work.EV.M again
        'I might work again.'

---

[7]This also seems to be true of modals in English.

The example in (35) only has one possible presupposition: that I have worked before. It does not presuppose that there was a possibility of working before (and I didn't work). This is because the modal *bix* 'might' does not introduce an eventuality. Only the verb *raboti*, 'work', does. This contrasts with the impulsative, which does create ambiguities with the adverb 'again', as in example (36).

(36) *Na Ivan mu   se   pišeše   kniga otnovo.*
      P   Ivan DAT.M.SG NACT write.3SG.IMPF book again
      'Ivan felt like writing a book again.'

The example in (36) can have two possible presuppositions. The first scopes over the impulsative predicate, giving the presupposition that Ivan had the urge to write before, but may not have ever written. The second presupposition scopes over the internal predicate 'writing a book.' Ivan may have just completed his first book begrudgingly. However, now that it is done, he feels the urge 'write a book again.' This indicates that the impulsative head is not a modal, because unlike modals, impulsatives can have more than one presupposition with the adverb 'again'.

Furthermore, the impulsative head is not a modal because it introduces an argument and assigns that argument dative case while modals do not (Bhatt, 1998; Wurmbrand, 1999). The dative argument in impulsatives is the experiencer of the feeling event introduced by the impulsative head. The impulsative head introduces this argument so that it can assign it the experiencer theta role of the feeling event. In addition it assigns it dative case. Dative case is the case for experiencers in Bulgarian.

(37) *Na Ivan mu   (se)   xaresvat tezi   momicheta.*
      P   Ivan DAT.M.SG (NACT) like.3PL these girls.the
      'Ivan likes these girls.'

(38) *Na Ivan mu   se   privizhdat   tezi   momicheta.*
      P   Ivan DAT.M.SG NACT imagine.3PL these girls.the
      'Ivan has a vision of these girls.'

In example (37) and (38) the verbs *xaresvat*, 'like' and *privizhdat*, 'have a vision', take a dative subject because that argument receives an experiencer theta role. On the other hand, modals in Bulgarian do not affect case assignment, as shown in example (35) above, where the subject receives nominative case, as it would as the subject of an ordinary verb like *raboti* 'work'. If the impulsative were a modal, both the experiencer role and the dative case marking would be left unexplained. By proposing that the impulsative is a functional head that introduces an external argument and assigns it dative case, we resolve the issue of case and theta role assignment. Thus, I conclude that the null impulsative element is not a modal because it creates ambiguities with the adverb 'again' as well as introducing and assigning case to an external argument.

3.2 The element is not a 'want' type verb, but an impulsative

Marušič and Žaucer consider the null verb a desire/volitional predicate, class 3 under Belletti and Rizzi's (1988) classification of psych predicates. However, this classification is problematic. The linguistic category "desiderative" is a well-recognized and well-documented one; the World Atlas of Linguistic Structures (Haspelmath, 2008), for instance, lists 283 languages across the world as having a desiderative construction, including languages with full verbal predicates and languages with desiderative affixes. However, the impulsative construction differs markedly from what is commonly meant by a desiderative construction. I repeat an impulsative example below.

(39) *Na Ivan mu   se   pišeše   kniga.*
      P   Ivan DAT.M.SG NACT write.3SG.IMPF book
      'Ivan felt like writing a book.'

First, its subject is non-volitional. Impulsatives are always translated with non-volitional meanings such as 'feel like' or 'have an urge to'. The feeling is often described as a yearning, an urge or an impulse. In addition, speakers say the most salient context for impulsatives are verbs that describe bodily functions, such as 'pee', 'vomit', 'cough,' 'yawn', and 'sleep'.

(40) *Na Ivan mu   se   spi.*
      P   Ivan DAT.M.SG NACT sleep.PR.3SG
      'Ivan feels like sleeping.'
      'Ivan is sleepy.'

Example (40) is salient in a context where Ivan is tired even though he may not want to sleep. For instance, it may be New Year's Eve and Ivan wants to be awake at midnight but is very tired. However, this sentence cannot be used when what Ivan wants is not what he is feeling. The sentence cannot be used in a context where Ivan has a busy day the next day and wants to get a good night's rest but cannot fall asleep.

Subjects of desideratives, on the other hand, are volitional. Desideratives are often translated with the volitional verb 'want'. Moreover, in many languages, desideratives can also mean 'will' and have a future interpretation. This is true of desideratives in Japanese, for instance.

Japanese

(41) *watashi-ga   ne-**ta**-i*
      speaker.NOM sleep-DES-NONPAST
      'I want to sleep.'

Example (41) cannot be used in the same contexts as (40). It infelicitous to say (41) when one is tired on New Year's eve. On the other hand, it is natural to say this sentence when one cannot fall asleep but wants to be rested for the next day. Whereas example (40) referred to the uncontrollable urge to sleep despite ones's desires, (41) refers to one's desire to sleep despite one's ability to sleep. Consequently there is a semantic difference between impulsatives and desideratives, namely impulsatives are not volitional while desideratives necessarily are.

A second difference between impulsatives and desideratives is that the subject is marked with an oblique case, not the nominative that characterizes subjects generally. In the impulsative in example (39), the subject has dative case. In contrast, in the desiderative example in (41) the subject has nominative case.[8]

Furthermore, the subject in impulsatives also fails to agree with the verb (this pattern of case and agreement probably reflects the lack of volition). The verb instead agrees with the logical object as in example (42).

(42)   *Na Ivan mu   se   pišexa   mnogo statii.*
       P   Ivan DAT.M.SG NACT write.3PL many   articles.
       'Ivan feels like writing many articles.'

In example (42), the verb *pišexa* 'write' carries third person plural agreement, despite the fact that the dative subject has is singular. The plural argument in the sentence is the object *mnogo stattii* 'many articles'.

In contrast, desideratives do not affect agreement. The verb agrees with the subject of the desiderative, as shown in the following examples from Passamaquoddy.

Passamaquoddy

(43)   *Msi=te   keq   '***t**-*olluk*-**hoti**-*ni*-**ya** *ewapoli-ko-k*
       all=Emph what 3-do-Plural-N-3P   IC.wrong-be-IIConj
       'They do everything that is wrong.'
       (Mitchell, 1921/1976b, Line 5)

(44)   *Aqami=te=hc   '***t**-*oli=koti=olluk*-**hot***i-ni*-**ya**.
       more=Emph=Fut 3-thus=DES=do-Plural-N-3P
       'They will want to do it even more.'
       (Mitchell, 1921/1976a, Line 99)

In example (43), the verb *ollok* is inflected for the third person plural agreement which is distributed across three morphemes a prefix *'t*, a suffix *hoti* and another suffix *ya*. When the verb *'ollok* has the desiderative preverb a *koti* , as in example (44), it still agrees with the third person plural subject.

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[8]Desiderative in Japanese often occur without the subject or with a topic marker, however the structural case they receive is nominative.

To summarize, the construction in Bulgarian differs from canonical desideratives both semantically and syntactically. Semantically, Bulgarian impulsatives are not volitional, as opposed to desideratives, which are volitional. Syntactically, subjects in Bulgarian impulsatives have oblique case, while desideratives assign nominative case. Lastly, verbs in impulsatives do not agree with their subjects, while verbs in desideratives do.

Because of these differences, I view the Bulgarian construction not as a desiderative, but as a previously unrecognized linguistic category. I will call this category an *impulsative*, from the noun *impulse* (Oxford English Dictionary: "Sudden or involuntary inclination or tendency to act," definition 3c). I will analyze impulsatives as involving a dedicated functional head: Impulse.

3.3 An Overt Impulsative

Evidence for proposing that impulsatives are indeed a functional head is that an overt impulsative affix exists in the Quechua languages. Constructions with an impulsative affix in Quechua behave much like impulsatives in Bulgarian. First, they diverge from the traditional desiderative both semantically and syntactically. Furthermore, these constructions introduce events like their Bulgarian counterparts. The following examples are from Cusco Quechua.

Cusco Quechua

(45)   *Noqa-ta tusu-ni.*
        I.NOM   sing.1SG
        'I sing.'

(46)   *Noqa-ta tusu-naya-wan.*
        I.ACC   dance.IMPU.1OM.3SG
        'I feel like dancing.'

In example (46), the morpheme *-naya-* contributes the impulsative meaning to the sentence, whereas sentence (45) lacks the impulsative reading. Like Bulgarian impulsatives, sentences with *naya* are translated as 'feel like' rather than 'want'. Moreover, the most salient verbs to use with impulsatives are those of bodily functions, as in (48).

(47)   *Noqa-ta puñu-naya-wan*
        I.ACC   sleep.IMPU.1OM.3SG
        'I feel like sleeping/ I'm sleepy.'

(48)   *Noqa-ta hanllari-naya-wan.*
        I.ACC   yawn.IMPU.1OM.3SG
        'I feel like yawning.'

Like the Bulgarian example (40), (47) can only be used in a context where the person has an urge to sleep whether he/she wants to sleep or not. It would be felicitous in the New Year's Eve context. However, this sentence is infelicitous if the person suffering from insomnia.

In addition, the subject is marked with an oblique case, as opposed to the normal nominative case in (45). Furthermore, accusative is the case for experiencers in Cusco Quechua, as shown in (49):

(49)　*Noqa-ta rayqa-wan.*
　　　　I.ACC　hungry.1OM
　　　　'I am hungry.

Moreover, while the verb in (45) is conjugated for a first person subject, the verb in (46) is conjugated in third person singular, despite the fact that its subject is first person. Instead, the first person is indexed with the first person object agreement *wan*. However, in a sentence without the impulsative morpheme *-naya-*, the same agreement would ordinarily indicate a third person agent or causer and a first person object, as in the following example.

(50)　*Pay　　noqa-ta qapari-wan.*
　　　　S/he.NOM I.ACC　yell.1OM..3SG
　　　　'S/he yells at me.'

Another fact to note from these examples is that the tense and agreement morphology must appear outside the *-naya* suffix. It is ungrammatical to place the *naya* morpheme outside these morphemes.

(51)　**Noqa-ta tusu-wa-naya*
　　　　I.ACC　dance.1OM.3SG.IMPU
　　　　'I feel like dancing.'

Furthermore, the nature of the impulsative event in Cusco Quechua is similar to that of Bulgarian. That is, impulsatives in Quechua can support conflicting time adverbs and create more than one presupposition with the adverb 'again'.

(52)　*Qaynap'unchaw noqa-ta lloqsi-naya-wa-ra-n　　　khunan p'unchaw-paq*
　　　　Yesterday　　　I.ACC　go.out.IMPU.1OM.PST.3SG now　　day.for
　　　　'Yesterday, I felt like going out for today.'

(53)　*Noqa-ta yapamanta llank'a-naya-wan.*
　　　　I.ACC　again　　　work.IMPU.1OM
　　　　'I feel like working again.'

In example (52), there are two conflicting adverbs. However, there is no contradiction, because the adverb *Qaynap'unchaw* modifies the feeling event and the adverb *khunan p'unchawpaq* modifies the going out event. In example (53) there are two possible presuppositions: one in which I had the feeling before, and the

second where I worked (maybe begrudgingly) before. This indicates that *naya* is more than a modal, but a functional head that introduces its own event.

In this section, I contrasted impulsatives with traditional volitional/desiderative predicates and have concluded that impulsatives are their own unique category. Furthermore, I have attested to their existence by demonstrating that an overt version of this class exists in the Quechua languages. The overt impulsative in the Quechua languages behaves much like its counterpart in Bulgarian. This suggests further that Bulgarian impulsatives have null affix.

3.4 Summary

In this section, I have motivated the existence of a new grammatical category, the impulsative. This category is necessary to characterize the null predicate in Bulgarian impulsatives. Bulgarian impulsatives are neither modals nor prototypical volitional/desiderative predicates. Instead, I compared Bulgarian impulsatives to a construction in the Quechua languages, which appear to have an overt instance of an impulsative.

4   Are impulsatives biclausal or monoclausal?

Thus far, the analysis I have put forth for impulsatives in Bulgarian contains a null impulsative functional head that introduces both an event and an argument based on overt suffix found in Quechua. What remains to be determined is the nature of the structure of impulsatives. Namely, I must weigh in on the debate whether impulsatives are monoclausal or biclausal. While I have followed Marušič and Žaucer (2006) in having a null predicate, I depart from their analysis with regards to biclausality. In particular, I demonstrate that Bulgarian impulsatives are not parallel to their periphrastic biclausal counterparts. This indicates that the structure of impulsatives in Bulgarian is monoclausal. I derive the monoclausal structure by proposing that the impulsative predicate selects for an unsaturated Voice projection. Additionally, this accounts for the non-active morphology that is a characteristic of Bulgarian impulsatives.

4.1   Impulsatives are not biclausal

In this section, I show that impulsatives in Bulgarian are not biclausal. Specifically, I show that Murašič and Žaucer's biclausal structure does not represent Bulgarian Impulsatives.[9] Bulgarian, like Slovenian has both covert impulsatives and overt periphrastic counterparts. Examples (54) and (55) are Bulgarian counterparts

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[9]However, Slovenian impulsatives may be best analyzed as biclausal. Murašič and Žaucer give an example of modal ambiguity that indicates that the structure has at least two modal projections. This suggests that the structure for Slovenian impulsatives is biclausal. My informants were unable to give me clear judgements on comparable examples in Bulgarian.

to the Slovenian examples (14) and (15) introduced in the prior section.

(54) *Na Ivan mu   se   pišeše   kniga.*
      P   Ivan DAT.M.SG NACT write.3SG.IMPF book
      'Ivan felt like writing a book.'

(55) *Na Ivan mu   se   šteše   da   piše   kniga.*
      P   Ivan DAT.M.SG NACT want.IMPF.3SG COMP write.3SG. book
      'Ivan felt like writing a book.'

Under Murašič and Žaucer's analysis, Bulgarian impulsatives and their overt periphrastic counterparts should have the same structure. However, I demonstrate that Bulgarian impulsatives do not behave exactly like their periphrastic counterparts and therefore cannot have the same structure. While periphrastic impulsatives in Bulgarian are fully biclausal, covert impulsatives in Bulgarian are not. Periphrastic impulsatives have accusative objects, can have reflexive objects, overt subjects, and passivized lower clauses, whereas covert impulsatives cannot. All of these facts indicate that rather than having the same structure, covert impulsatives instead have a different, smaller structure than periphrastic impulsatives.

The first difference between periphrastic impulsatives and covert impulsatives is that covert impulsatives cannot have an overt subject. Bulgarian does not have control sentences where an overt subject is disallowed: biclausal constructions always allow overt embedded subjects.

(56) *Na Ivan mu   se   šteše* **toy** *da   gi   pregurne.*
      P   Ivan DAT.M.SG NACT want he   COMP them hug.3SG
      'Ivan feels like hugging them.'

(57) **Na Ivan mu   se   toy** *pregusta.*
      P   Ivan DAT.M.SG NACT he   hug.IMPF.3SG
      'Ivan feels like hugging them.'

In example (56), the pronoun *toy* can be the subject of the embedded clause. However, in example (57), the addition of the pronoun makes the sentence ungrammatical. If covert impulsatives were biclausal, the embedded predicate should be able to have its own subject, like its periphrastic counterpart.

In addition, unlike periphrastic impulsatives, covert impulsatives assign nominative case to their logical object.

(58) *Na Ivan mu   se   šteše   *(gi)   piše   (*te).*
      P   Ivan DAT.M.SG NACT ACC.3PL write.3SG (them.NOM)
      'Ivan felt like writing them.'

(59) *Na Ivan mu   se   (*gi)   pišexa   te.*
      P   Ivan DAT.M.SG NACT (ACC.3PL) write.3PL them.NOM
      'Ivan felt like writing them.'

In example (59), the periphrastic impulsative is ungrammatical with a nominative object, but it's covert counterpart is grammatical only with a nominative object and is ungrammatical with an accusative object.

Moreover, covert impulsatives cannot have reflexive logical objects, while the periphrastic ones can. This is unexpected under any analysis where the covert version is analogous to the periphrastic version.

(60)   *Na Ivan mu   se   štešte pregurne sebesi.*
         P   Ivan DAT.M.SG NACT want   hug.3SG self
         'Ivan wants to hug himself.'

(61)   **Na Ivan mu*   se   pregusta   sebesi.*
         P   Ivan DAT.M.SG NACT hug.3SG.IMPF self
         'Ivan felt like hugging himself.'

In example, (60), the embedded verb *pregurne* 'hug' takes the reflexive argument *sebesi*. However, in (61) the selection of *sebesi* results in ungrammaticality. If covert impulsatives were fully biclausal there should not be any restrictions on the type of object the embedded predicate can take. In section 4.2, I will discuss how my analysis would rule example (61) out.

And finally, covert Bulgarian impulsatives cannot have a passive embedded clause, while periphrastic impulsatives can. If covert impulsatives were bi-clausal, they would have two voice projections and the embedded clause should be able to have the passive voice.

(62)   *Na Ivan mu   se   šteše da   bude   pregurnat*
         P   Ivan DAT.M.SG NACT want COMP be.3SG hug.PART
         'Ivan wanted to be hugged.'

(63)   **Na Ivan mu*   se   da   bude   pregurnat*
         P   Ivan DAT.M.SG NACT COMP be.3SG hug.PART
         'Ivan felt like being hugged.'

In example, (62), the periphrastic impulsative allows the lower clause to be passivized, however the covert counterpart in (63) is ungrammatical. This suggests that there is only one voice projection. If there is only one voice projection, then the structure must be smaller than the biclausal structure Murašič and Žaucer propose. This indicates that the structure is actually monoclausal.

Further evidence that Bulgarian impulsatives are monoclausal is that they only have one tense and aspect. The tense and aspect marked on Bulgarian impulsatives necessarily modify the 'feeling' event as opposed to the main predicate.

(64)   *Na Ivan mu   se   piše kniga.*
         P   Ivan DAT.M.SG NACT write.3SG. book
         'Ivan feels like writing a book.'

In example (64), the verb is conjugated in the present tense, and thus the feeling is present. If the verb is in the past tense as it is in (54), it is the feeling that is in the past, not the writing. It cannot be understood as Ivan has an urge to have already written. This indicates that the structure is monoclausal.

In addition, covert impulsatives in Bulgarian cannot have overt complementizers. Conversely, periphrastic ones as in (62) must have an overt complementizer.

(65)　*Na Ivan da　　mu　se　　　pišeše kniga.
　　　　P　Ivan DAT.M.SG NACT write.3SG.IMPF book
　　　　'Ivan felt like writing a book.'

To conclude, periphrastic and covert impulsatives behave very differently. While periphrastic impulsatives can have passivized embedded clauses, reflexive objects, overt subjects, and complementizers covert impulsatives cannot. Furthermore, periphrastic and covert impulsatives assign different cases to their logical objects: while periphrastic impulsatives assign accusative case, covert impulsatives must assign nominative case to their logical objects. This demonstrates that Bulgarian covert impulsatives are not analogous in structure to their periphrastic counterparts. Moreover, the fact that a covert impulsative cannot embed a passive or have separate tense and aspect for the embedded verb indicates that covert impulsatives in Bulgarian are monoclausal with only one set of functional projections like Voice, Tense and Aspect.

4.2　A monoclausal analysis

In this section, I provide a monoclausal structure for Bulgarian impulsatives. I extend Embick's (2004) analysis of non-active morphology to impulsative constructions. This extension has many advantages. First, it accounts for the differences between covert impulsatives and periphrastic impulsatives in Bulgarian. Secondly, it explains the non-active morphology that obligatorily occurs in impulsative constructions. And lastly, this unifies the analysis with that of impulsatives in Albanian which also hosts non-active morphology.

Embick proposes an account of the morphological syncretism of the non-active voice in Greek and Albanian in the Distributed Morphology framework (Halle and Marantz, 1993). Non-Active voice morphology appears on passives, reflexives and unaccusatives. Embick suggests that non-active morphology is a reflection of unaccusative syntax. This assumes that external arguments are not introduced by the verb itself but by a higher functional head, Voice. (Kratzer, 1996) Unaccusative syntax is any syntactic structure where the external argument is not projected. At spell-out, whenever there is a syntactic structure without the projection of the external argument, the non-active morphology is inserted. In the tree below, v' is projected but not the full vP or spec vP where the external argument would be placed.

(66)

```
                                XP
                                 |
                                v'
                               /  \
                              v    VP
                                    |
                                  √ROOT
```

Similar to Albanian and Greek, non-Active voice morphology in Bulgarian also appears on passives (67), unaccusatives (68) and reflexives (69), as shown in section 2.1. Relevant examples are repeated below.
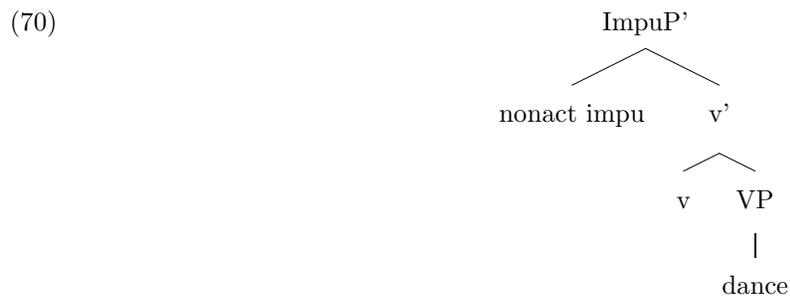
(67) *Knigata se pisa.*
      book.the NACT write.AOR.3SG
      'The book was written.

(68) *Ivan se poyavi.*
      Ivan NACT appear.AOR.3SG
      'Ivan appeared.

(69) *Ivan se mie.*
      Ivan NACT wash.3SG.PR
      'Ivan washes himself.'

These are all cases in which the external argument is not projected in Bulgarian. Passives are a clear case for unaccusative syntax because the external argument that occurs in active versions of the sentence is missing. Unaccusative verbs are verbs where the subject has been shown to be an underlying object or internal object of the verb. And lastly, Embick argues that reflexives also have unaccusative syntax in that the underlying object raises to the specifier of v, after the cliticization of an anaphoric external element.

I propose that the null impulsative head selects for v'. Since the external argument of the overt verb does not project, the non-active morphology is inserted. However, since v' is a projection of v, agenthood is introduced into the semantics.

(70)

```
                        ImpuP'
                       /      \
                 nonact impu    v'
                               /  \
                              v    VP
                                    |
                                  dance
```

In addition, the null impulsative head passes on to its experiencer argument the agenthood of the internal

predicate. This is shown in the semantic denotation I have propose below.

(71) $\llbracket$**Impulsative**$\rrbracket^{w,g} = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w'$ is compatible with what x feels like in e in w] $\rightarrow[\exists e'$ in w'.P(x)(e')]

This structure captures the monoclausal nature of Bulgarian impulsatives in addition to providing a template for which non-active morphology in Bulgarian is inserted uniformly. Moreover, this unifies the analysis of both Bulgarian non-active morphology and Bulgarian impulsatives with that of their counterparts in Albanian. Albanian impulsatives like their Bulgarian counterparts, are composed of a verb with non-active morphology and an argument with dative case:

Albanian

(72) *Agimit   kërcehet   në zyrë.*
      Agim.DAT dance.3SG.NACT.PR in office.SG.DEF
      'Agim feels like dancing in the office.' [10]

In example (72), the impulsative in Albanian is formed by using the non-active form of the verb *kërcehet* 'dance' and by marking the experiencer argument *Agim* with dative case. These similarities indicate that a good analysis of Bulgarian impulsatives should also extend to impulsatives in Albanian. The analysis I have provided thus far extends smoothly to Albanian impulsatives.

Moreover, it also explains why impulsatives cannot have a reflexive object. Under Embick's analysis, reflexives consist of an underlying object in subject position that binds an anaphoric clitic that was base-generated in specifier of v but cliticizes to the v head. In an impulsative, the anaphoric clitic would not be able to be base-generated in specifier of v, since that level is never projected. Furthermore, the internal argument of the embedded predicate cannot be input as the experiencer argument. In the denotation in (71), only the argument introduced by v, can be the experiencer argument. Thus, my analysis can rule out (61).

Thus, the selection of v' grants us four benefits. Firstly, it unifies the analysis of Bulgarian impulsatives with that of Albanian impulsatives. Secondly, it accounts for the non-active morphology, thirdly it derives a monoclausal structure and finally it explains the ban on reflexive objects.

One objection to this type of analysis is that X-Bar theory, as it is usually understood, stipulates that selection of a bar level category is not allowed. However, there is no principled reason for this stipulation. Moreover, the semantic selection of a predicate with an unsaturated argument has been used in analyses for reciprocals Bruening (2004) and reflexives Labelle (2008) respectively. It is independently necessary to allow the selection of an open predicate for analysis of reflexives and reciprocals. This semantic selection of

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[10]Can also be interpreted as 'There was dancing in the office and it affected Agim (e.g. it was Agim's office.)'

an open predicate translates syntactically to a bar level category. Therefore, I argue that traditional X-Bar theory should allow for this type selection.

4.3 Conclusion

In this section, I analyzed the null impulsative predicate as selecting for an unsaturated voice projection. This was motivated by the fact that Bulgarian impulsatives have non-active morphology. In addition, this analysis parallels impulsatives in Albanian. The monoclausal properties were uncovered when I compared Bulgarian impulsatives with their periphrastic analogue. This argues against the biclausal analysis proposed by (Marušič and Žaucer, 2006), despite having borrowed their suggestion of a null predicate. I have taken their suggestion and modified it to an analysis with a null impulsative predicate that selects for the unsaturated voice projection.

5 Full Derivation

I posit a null impulsative modal with the following denotation

(73) $[\![\mathbf{Impulsative}]\!]^{w,g} = \lambda P_{<e,vt>}\lambda x.\lambda e.\lambda w.\forall w'[w'$ is compatible with what x feels like in e in w$] \rightarrow [\exists e'$ in w'.P(x)(e')$]$

The null impulsative modal does the following things. It provides modality, it Introduces another event; namely the 'feeling like' event and an experiencer argument. In addition, it adds this to the assertion of the sentence. The following is a sample derivation

(74)

```
                    ImpulseP
                   /        \
               Ivan      Impulse'
                        /        \
                   Impulse        v'
                                 /  \
                                v    VP
```

(75)   a. $[\![\mathbf{write}]\!] = \lambda e.$ write(e)
        $[\![\mathbf{v}]\!] = \lambda x\lambda e.$ Agt(e,x)
        Event Identification

        b. $[\![\mathbf{v'}]\!] = \lambda x.\lambda e.$write(e) & Agt(e,x)
        $[\![\mathbf{Impulse}]\!]^{w,g} = \lambda P_{<e,vt>}\lambda x\lambda e.\lambda w.\forall w'$ [w' is compatible with what x feels like in e in w] $\rightarrow [\exists e'$ in w'.P(x)(e')$]$
        Function Application

c. $[\![\textbf{ImpulseP'}]\!]^{w,g} = \lambda x \lambda e. \lambda w. \forall w'$ [w' is compatible with what x feels like in e in w] $\rightarrow$ [$\exists$e' in w'.write(e') & Agent(e',x))]
$[\![\textbf{Ivan}]\!]$ = Ivan
Function Application

d. $[\![\textbf{ImpulseP}]\!]^{w,g} = \lambda e. \lambda w. \forall w'$ [w' is compatible with what Ivan feels like in e in w] $\rightarrow$ [$\exists$e' in w' .write(e') & Agent(e',Ivan))]

6   Conclusion

In conclusion, Bulgarian impulsatives are best analyzed by positing a null impulsative functional head. This null head is a new null category, impulsatives, which behaves like the impulsative suffixes found in the Quechua languages. Furthermore, the differences between fully biclausal psych predicates in Bulgarian gives us evidence that Bulgarian impulsatives are monoclausal. In fact, the pattern of non-active morphology suggests that the lower clause does not have a full vP projection and instead that the impulsative head selects for an unsaturated voice projection. Lastly, the impulsative head introduces the experiencer argument. This analysis explains the non-active voice, the source of the intensionality and the bi-eventivity of Bulgarian Impulsatives. It also unifies the analysis with the analyses of other impulsatives in other languages, such as Albanian, Finnish and Quechua.

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