# Chapter 10

# Two types of secondary imperfectives: Evidence from Polish and Bulgarian

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Secondary imperfective (SI) morphology differs in its productivity in Polish (PL) and Bulgarian (BG): in PL, the SI morphology combines with some but not all prefixes. By contrast, almost every BG perfective verb has a SI variant. To our knowledge, there is no research that has attempted to get a closer understanding of the source of this discrepancy. To fill in this niche, we conducted a comparative study of the interaction of SI morphology with different classes of aspectual prefixes in PL and BG and the meaning effects they give rise to. We present novel observations and account for them by proposing that there are two distinct layers at which SI morphemes are generated in BG and only one such layer in PL.

## 1 Introduction

There is an ongoing debate in the literature on Slavic aspect concerning the status of aspectual morphemes. Little agreement has been reached as to the status of secondary imperfective (SI) /(y)v/ in Slavic languages. The views vary as to where /(y)v/ is generated in the structure (see Schoorlemmer 1995, Babko-Malaya 1999, Istratkova 2004, Milićević 2004, Svenonius 2004a,b, Romanova 2004, Filip 2005, Di Sciullo & Slabakova 2005, Arsenijević 2006, Romanova 2007, Ramchand 2008a,b, Łazorczyk 2010, Markova 2011, Tatevosov 2011, 2015, Biskup 2012, 2019, Wiland 2012, Žaucer 2012, Rothstein 2020, Klimek-Jankowska & Błaszczak 2022, 2023, Kwapiszewski 2022). In most of these studies, generalizations about the status of secondary imperfective morphology are made based on the data from a

Dorota Klimek-Jankowska & Vesela Simeonova. 2025. Two types of secondary imperfectives: Evidence from Polish and Bulgarian. In Berit Gehrke, Denisa Lenertová, Roland Meyer, Daria Seres, Luka Szucsich & Joanna Zaleska (eds.), *Advances in formal Slavic linguistics 2022*, 293–309. Berlin: Language Science Press. DOI: 10.5281/zenodo.15394180

single language. However, Slavic languages differ considerably in the productivity of forming SI verbs. For example, the Bulgarian (BG) secondary imperfective is considerably more productive as compared to Polish (PL): almost every BG perfective verb has a SI variant (see Markova 2011, Rivero & Slavkov 2014; Nicolova 2017: 5.3.25), while in PL, SI morphology combines with some but not all prefixed verbs (see Łazorczyk 2010, Łaziński 2011, 2020, Wiemer et al. 2020, Kwapiszewski 2022, Klimek-Jankowska & Błaszczak 2022, 2023). While it is a well-known observation, there are no works that attempt to explain the locus of variation. Our goal in this paper is to fill that gap. We provide two major novel empirical observations:

1. Within Bulgarian: while all previous works on SI in general and in Bulgarian specifically treat it as a single class, we identify two distinct SI classes within Bulgarian with systematically different sets of formal derivational and semantic properties.

2. Between languages: we identify the locus of cross-linguistic variation in the productivity of SI between Polish and Bulgarian: the two languages share one of the two classes of SI and Polish lacks the second class of SI that Bulgarian has.

We conclude that the difference in the productivity of SI in Polish and Bulgarian is not random, but is systematically determined based on the range of derivational possibilities in the two languages, with respective semantic consequences.

To arrive at these conclusions, we tested the interaction of SI morphology in PL and BG with two classes of prefixes – lexical and purely perfectivizing prefixes – and the meaning effects these different combinations of the tested aspectual prefixes with SI morphemes give rise to. In this paper, the empirical scope of the environments tested is limited to past tense contexts. We discuss possible extensions in §5.

We show that in BG there are two types of SI morphemes that bear different meanings; PL has only one of these SI morphemes. We propose that the two types of SI in BG are realized in two different syntactic layers, following Cinque's (1999) model.

# 2 Background on the secondary imperfective in Polish and Bulgarian

## 2.1 Similarities between Polish and Bulgarian

In both PL and BG, aspectual distinctions are encoded on almost all verbs.[1] The least morphologically complex aspectual forms are primary imperfectives (bare, i.e. "unprefixed'' verbs) and they can be perfectivized by means of a prefix, cf. (1). Some prefixes do not change the verb in any way other than its aspectual value; they are called PURELY PERFECTIVIZING or EMPTY prefixes (Bogusławski 1963, Svenonius 2004a,b, Młynarczyk 2004, Willim 2006, Ramchand 2008a).[2]

(1) a. pisać – napisać PL
write.IPFV write.PFV

b. piša – napiša BG
write.IPFV write.PFV

Another class of prefixes are the so-called LEXICAL PREFIXES (Babko-Malaya 1999, Svenonius 2004a,b, Romanova 2004, 2007, Ramchand 2008a,b, Biskup 2012, 2019, a.m.o.): they have an idiosyncratic meaning where the prefix changes the lexical interpretation of the verb, but not in a predictable way, for example the prefix *prze-* in (2) and the prefix *pod-* in (3) have very different meaning in various verbs they participate in. Lexical prefixes cause idiosyncratic changes in the meaning of a verbal predicate that is not derivable from either the verb or the prefix, cf. (2) and (3).[3]

[1] The encoding of aspectual distinctions can be blocked, e.g. for phonological reasons, or in certain loanwords, e.g. *printiram* 'print' only has one form in BG.

[2] Janda & Nesset (2010) emphasize that Russian has at least 16 prefixes forming natural perfectives (those perfectives which are not semantically distinct from the unprefixed base verb), which may suggest that they encode hidden distinctions. They propose that in the case of natural perfectives there is a semantic overlap between the meaning of the prefix and the meaning of the base verb and the diversity of prefixes used in natural perfectives follows from the fact that the base verbs from which they are derived fall into semantically diverse classes. Building on that, Janda & Lyashevskaya (2013) propose that the verbal prefixes act as classifiers in that they select verbs according to broad semantic traits, categorizing them the way numeral classifiers in some languages categorize nouns. We think that irrespective of the terminology used, there is a general consensus that the prefixes in natural perfectives do not modify the meaning of the base verbs but they may only impose selectional restrictions on the base verbs they combine with. Therefore, we will maintain the terminology 'purely perfectivizing'.

[3] Because of these properties, Romanova (2004), Svenonius (2004a,b), Ramchand (2004, 2008a,b), Łazorczyk (2010) argue that lexical prefixes are merged vP-internally.

(2) a. kupić – *prze*-kupić PL
buy.PFV bribe.PFV
'to buy' – 'to bribe'

b. grać – *prze*-grać PL
play.IPFV lose.PFV
'play' – 'lose'

c. łączyć – *prze*-łączyć PL
connect.IPFV switch.PFV
'connect' – 'switch'

(3) a. seštam *(se) – *pod*-seštam BG
recall REFL remind.PFV
'recall' – 'remind'

b. budja – *pod*-budja BG
wake.up.IPFV incite.PFV
'wake up' – 'incite, instigate'

c. igraja – *pod*-igraja BG
play.IPFV mock.PFV
'play' – 'mock'

Furthermore, lexical prefixes (can) alter the argument structure/selectional restrictions of a verb, cf. (4)–(5).

(4) a. znać {kogoś / *uszkodzenia} PL
know.IPFV someone damage
'to know someone'

b. do-znać {*kogoś / uszkodzenia}
suffer.PFV someone damage
'to suffer damage'

(5) mislja (*se) – za-mislja *(se) BG
think REFL consider REFL
'think' – 'consider'

Lexically prefixed perfective verbs are imperfectivized by means of an *-yw-* or *-a-* suffix in Polish and by a *-va-* suffix or vowel alternations in Bulgarian, cf. (6). These imperfective forms derived from perfective verbs are called SECONDARY IMPERFECTIVE (SI). Table 1 shows more verbs from this morphological pattern.

(6) a. podpisać – podpisywać PL
sign.PFV sign.SI
'sign' – 'sign'

b. podpiša – podpisvam BG
sign.PFV sign.SI
'sign' – 'sign'

Table 1: Lexical prefixes and SI in Polish and Bulgarian

| Polish | | Bulgarian | | English |
|---|---|---|---|---|
| PFV | SI | PFV | SI | |
| podpisać | podpisywać | podpiša | podpisvam | 'sign' |
| odpowiedzieć | odpowiadać | otgovorja | otgovarjam | 'reply' |
| naprawić | naprawiać | popravja | popravjam | 'repair' |
| wyjaśnić | wyjaśniać | objasnja | objasnjavam | 'explain' |
| sprzedać | sprzedawać | prodam | prodavam | 'sell' |
| opisać | opisywać | opiša | opisvam | 'describe' |

## 2.2 A major difference: SI productivity

In the previous section, we showed that SI is possible with lexically prefixed verbs both in PL and in BG. However, there is a major difference between PL and BG in that almost every BG verb can form SI (Dickey 2000: 11; Nicolova 2017: 5.3.25). Most verbs with empty prefixes also have SI forms, as illustrated in (7b). In PL, empty prefixed forms cannot form SI, see the ungrammatical form in (7a). The pattern described in example (7) is systematic in the two languages, as demonstrated in Tables 2 and 3.[4]

(7) a. pisać – napisać – *napisywać PL
write.IPFV write.PFV write.SI

[4]The fact that one may find some rare instances of these verbs on the internet suggests that someone either used them creatively or mistakenly. Such rare uses may suggest that the two projections that we will argue for in §4 high SI and low SI are universally there in the hierarchy of projections but in some languages such as Polish, for example, the high SI morpheme generally does not merge in this position (it is blocked), but it may exceptionally be unblocked when used creatively or in speech production errors.

b. piša – napiša – napisvam BG
write.IPFV write.PFV write.SI

Table 2: Purely perfectivizing prefixes and SI in Bulgarian

| Bulgarian | | | English |
|---|---|---|---|
| IPFV | PFV | SI | |
| stroja | postroja | postrojavam | 'build' |
| piša | napiša | napisvam | 'write' |
| pŭrža | izpărža | izpăržvam | 'fry' |
| gladja | izgladja | izglaždam | 'iron' |
| broja | prebroja | prebrojavam | 'count' |
| molja | pomolja | pomolvam | 'ask' |
| četa | pročeta | pročitam | 'read' |
| gubja | izgubja | izgubvam | 'lose' |
| merja | izmerja | izmervam | 'measure' |
| zvănja | pozvănja | pozvănjavam | 'call' |
| čupja | sčupja | sčupvam | 'break' |

Table 3: Purely perfectivizing prefixes and SI in Polish

| Polish | | | English |
|---|---|---|---|
| IPFV | PFV | SI | |
| budować | zbudować | *zbudowywać | 'build' |
| pisać | napisać | *napisywać | 'write' |
| smażyć | usmażyć | *usmażywać | 'fry' |
| prasować | wyprasować | *wyprasowywać | 'iron' |
| liczyć | policzyć | *policzać | 'count' |
| prosić | poprosić | *popraszać | 'ask' |
| czytać | przeczytać | *przeczytywać | 'read' |
| gubić | zgubić | *zgubiać | 'lose' |
| mierzyć | zmierzyć | *zmierzać | 'measure' |
| dzwonić | zadzwonić | *zadzwaniać | 'call' |
| łamać | złamać | *złamywać | 'break' |

In other words, in BG, there is a morphological triplet for verbs with purely perfectivizing prefixes and a pair for lexically prefixed forms, as in Tables 2 and 4. And in PL, verbs form morphological pairs: either the bare imperfective and a verb with a purely perfectivizing prefix or the lexically prefixed imperfective and the derived SI, as in Tables 3 and 5. The crucial difference between the two languages in the two tables is marked with shading.[5]

Table 4: Purely perfectivizing vs. lexical prefixes and SI in Bulgarian

| primary imperfective | perfective | secondary imperfective |
|---|---|---|
| N/A | podpiša 'sign' | podpisvam |
| N/A | poleja 'water' | polivam |
| stroja 'build' | postroja | postrojavam |
| piša 'write' | napiša | napisvam |

Table 5: Purely perfectivizing vs. lexical prefixes and SI in Polish

| primary imperfective | perfective | secondary imperfective |
|---|---|---|
| N/A | podpisać 'sign' | podpisywać |
| N/A | podlać 'water' | podlewać |
| budować 'build' | zbudować | *zbudowywać |
| pisać 'write' | napisać | *napisywać |

While the morphological determinant of the restrictive SI in PL is well-known – the availability of SI counterparts of perfective verbs depends on the prefix type, as we described above – and it is also well-known that BG SI is fully productive, these observations raise many questions that remain unanswered to date. The questions we address in this paper are whether there are semantic differences between the SI forms in BG that do not have equivalents in PL and the ones that do have equivalents in PL and why the BG SI forms are not possible in PL.

[5]We acknowledge that the type of classification of triplets and pairs that we are using to make this claim is not the only one that exists in the literature. In a very recent study on aspectual triplets in Russian, Czech, Polish, Wiemer et al. (2020) identify triplets based on a different set of criteria. They assume that lexically prefixed verbs also form triplets. We explain how we understand triplets and pairs Section, §2.1 that we use in this paper are based on the works cited in §2.

## 3 Novel findings: Two types of SI

Our first finding is that the pair SI in PL is equivalent to the pair SI in BG and it is ambiguous between the single ongoing and habitual reading. The second finding is that within BG, the triplet SI is qualitatively different from the pair SI. The triplet SI is habitual only, while the pair SI is ambiguous between single ongoing and habitual reading. This means that the properties of SI are not uniform across languages and even within the same language they are not homogeneous.

### 3.1 Pair SI in Bulgarian and Polish

Both in Bulgarian and in Polish, SI forms derived from lexically prefixed verbs are ambiguous between an ongoing reading, as in (8), and a habitual reading, as in (9). This is not idiosyncratic of a specific verb, but holds across the morphological paradigm represented in Table 1.

(8) Ongoing context

a. Kogato vljazoh v ofisa na Ivan, toj (točno)
when enter.PFV.AOR.1SG in office of Ivan he just
{podpis-va-še dokumenti / poprav-ja-še koleleta /
sign-SI-IMPF.3SG documents repair-SI-IMPF.3SG bikes
otgovar-ja-še na imejli}. BG
reply-SI-IMPF.3SG to emails

b. Kiedy weszłam do gabinetu Jana, (właśnie)
when entered.PFV.PST.1SG to office John just
{podpis-yw-ał dokumenty / naprawi-a-ł rower /
sign-SI-PST.3SG documents repair-SI-PST.3SG bike
odpowiad-a-ł na maila}. PL
reply-SI-PST.3SG to email
'When I entered John's office, he was (in the middle of) {signing documents / repairing bikes / replying to e-mails}.'

(9) Habitual context

a. Predi obiknoveno {podpis-va-še dokumentite /
before usually sign-SI-IMPF.3SG documents
poprav-ja-še koleletata / otgovar-ja-še na imejli} po-bărzo
repair-SI-IMPF.3SG bikes.DEF reply-SI-IMPF.3SG to emails faster
ot men, no veče ne. BG
than me, but already not

b. Kiedyś zwykle {podpis-yw-ał dokumenty / na-prawi-a-ł
before usually sign-SI-PST.3SG documents repair-SI-PST.3SG
rowery / odpowiad-a-ł na maile} szybciej niż ja, ale teraz
bikes respond-SI-PST.3SG to emails faster than I but now
już nie. PL
already not
'In the past, usually he (used to) {sign (the) documents / repair bikes / respond to e-mails} faster than me but not anymore.'

All the verbs in Table 1 behave in a way analogous to the pattern shown in examples (8) and (9), allowing both habitual and ongoing readings. We were unable to find any counterexamples.

### 3.2 Triplet SI in Bulgarian

The triplet SI in Bulgarian cannot be used with ongoing actions, cf. (10) and only has habitual readings, cf. (11). The examples also show that the bare imperfective is grammatical in both environments.[6]

(10) ONGOING CONTEXT

a. Kogato telefonăt zvănna, točno {păržeh /
when phone.DEF rang.AOR.3SG just fry.IMPF.1SG.IPFV
*izpăržvah} kjufteta. BG
fry.IMPF.1SG.SI meatballs
'When the phone rang, I was (right in the middle of) frying meatballs.'

b. Kogato telefonăt zvănna, točno {gladeh /
when phone rang.AOR.3SG just iron.IMPF.1SG.IPFV
*izglaždah} drehi. BG
iron.IMPF.1SG.SI clothes
'When the phone rang, I was (right in the middle of) ironing clothes.'

c. Kogato telefonăt zvănna, točno si {pišeh /
when phone rang.AOR.3SG just REFL.GEN write.IMPF.1SG.IPFV
*napisvah} domašnoto. BG
write.IMPF.1SG.SI homework.DEF
'When the phone rang, I was (right in the middle of) writing my homework.'

[6]While we assume that it is always available in ongoing contexts, we do not claim that it is always possible in every habitual context.

(11) Habitual context

a. Kogato praveh zakuska, obiknoveno {păržeh / izpăržvah} po 3 kjufteta na čovek. BG
when make.IMPF.IPFV.1SG breakfast usually fry.IMPF.IPFV.1SG fry.IMPF.SI.1SG DISTR 3 meatballs per person
'When I made breakfast, I used to fry 3 meatballs per person.'

b. Predi vinagi {gladeh / izglaždah} drehite vednaga sled prane. BG
before always iron.IMPF.IPFV.1SG iron.IMPF.SI.1SG clothes.DEF immediately after washing
'Before I always ironed the clothes immediately after washing.'

c. Predi obiknoveno {pišeh / napisvah} po njakolko knigi na godina, no sega samo po edna. BG
before usually wrote.IMPF.IPFV.1SG wrote.IMPF.SI.1SG DISTR several books per year, but now only DISTR one
'In the past, I used to write several books per year, but now only one.'

This semantic pattern observed with triplet SI above is valid across the paradigm of triplet SI, a sample of which was presented in Tables 2 and 3. Since there is no triplet SI in Polish, this part of the data is not directly comparable between the two languages. In both single ongoing and habitual scenarios presented for Bulgarian in (10) and (11), Polish uses primary imperfective verbs only.

To summarize, while PL uses primary IPFV verbs to render both habitual and ongoing readings in purely perfectivized verbs and the SI forms of such verbs are blocked, BG productively uses the SI forms of those verbs to exclusively "mark" the special kind of habitual reading (consisting of a series of temporally non-overlapping bounded events happening on separate occasions).

Our novel observation is that the properties of SI morphology are not semantically uniform across the two languages. In the next section, we propose that the two types of SI morphemes merge at different syntactic positions in BG but not in Polish.

## 4 The syntax of SI

In order to formally capture the observations presented in the previous section, we propose that in BG, the two types of SI morphemes merge at two syntactic layers – one higher and one lower – while in PL, the low SI morpheme merges only in the lower one.

(12) BG: $SI_{high}$ >> $SI_{low}$
PL: $SI_{low}$

This proposal allows us to syntactically distinguish between the properties of lexical prefixes and purely perfectivizing ones (see §2). We argue that SI is not a uniform category within Bulgarian because it merges in two different syntactic positions with different properties each. Moreover, pair SI is equivalent across Bulgarian and Polish because it is merged in the same projection $SI_{low}$ with the same properties. PL does not have aspectual triplets because the high SI morpheme is blocked and it cannot merge in the $SI_{high}$ layer while Bulgarian developed a specialized habitual meaning of the $SI_{high}$ morpheme. Because verbs with $SI_{high}$ have obligatory habitual readings in BG, which are missing in PL, we propose that the $SI_{high}$ morpheme merges in a projection corresponding to Cinque's (1999) $Asp_{HAB}$.

We assume Baker's (1985) Mirror Principle, according to which syntax reflects morphology and vice versa and the linearization of functional morphemes is syntactically motivated. Additionally, we follow Cinque (1999), who argues that there is a fixed hierarchy of functional projections which regulates the way adverbs and functional morphemes are merged in syntax. Based on a large survey of languages, Cinque shows that among temporal/aspectual affixes, e.g. repetitive, frequentative, terminative, continuative, retrospective, durative, progressive, completive, those that are specifically dedicated to expressing habituality scope the highest (Cinque 1999: p. 56; 70). Crucially, this means that the dedicated habitual functional head is syntactically higher than the progressive aspectual head. The complete functional hierarchy is provided below in (13), in which the two functional heads are highlighted with boxes.

(13) $Mood_{speech\ act} > Mood_{evaluative} > Mood_{evidential} > Mood_{epistemic} > T_{(past)} > T_{(Future)} > Mood_{irrealis} > \boxed{Asp_{habitual}} > T_{(Anterior)} > Asp_{perfect} > Asp_{retrospective} > Asp_{durative} > \boxed{Asp_{progressive}} > Asp_{prospective}/Mod_{root} > Voice > Asp_{celerative} > Asp_{completive} > Asp_{(semel)repetitive} > Asp_{iterative}$
Cinque (1999: 76)

Our examples in the preceding sections showed that this is the case also in BG and PL. In addition, we showed that the adverbs are optional in the case of $SI_{high}$, that is, it encodes the habitual reading itself rather than being merely compatible with it. $SI_{low}$, on the other hand, is compatible with both frequentative and ongoing adverbs just like a null IPFV operator, for example the one proposed

in Ferreira (2016) selecting for VPs referring to singular or plural events respectively: IPFV [VPsg / VPpl].[7]

In this way the proposal offers a formalization in syntactic terms which captures the differences in the morphological productivity of SI in the two languages, the within-language split (in BG), as well as the fact that the lower SI is equivalent in the two languages.

## 5 Discussion and conclusion

This study presented a formal description of a systematic difference in the productivity of SI in PL and BG: the Polish perfectives that do not allow subsequent secondary imperfectivization are precisely those cases where Bulgarian SI forms only have a habitual reading and the single ongoing reading is unavailable. These are the perfective forms which in Polish contain purely perfectivizing prefixes. By contrast, Polish perfectives that allow subsequent secondary imperfectivization are those cases where Bulgarian SI forms are ambiguous between a single ongoing and a habitual reading. These are the perfective forms which both in Polish and Bulgarian contain lexical prefixes.

Based on these novel observations we proposed that there are two distinct types of SI in BG: $SI_{high}$ » $SI_{low}$ and only one in Polish, $SI_{low}$. Crucially, we showed that $SI_{low}$ is uniform in the two languages – it is ambiguous between a single ongoing and habitual reading. $SI_{high}$ is merged in a projection corresponding to Cinque's (1999) $Asp_{HAB}$ and Bulgarian syntax generates this position, while Polish does not.

Previous works on SI cannot capture the novel observations we present here. For example, Rivero & Slavkov (2014) assume that all SIs in BG have both habitual and ongoing readings. This is reflected in their formal account, attributing this duality to context. As we have shown, this is accurate for SI with lexical prefixes in BG and in Polish, but it overgenerates for SI with purely perfectivizing prefixes.

Conversely, Markova (2011) assumes (but provides no evidence) that the SI morphology in BG is in Cinque's (1999) Asp habitual projection. This has the opposite problem: it undergenerates the available ongoing interpretations of SI with lexical prefixes.

One limitation of this study is that the syntactic proposal put forth here still does not explain why it may be that one language is able to generate the higher

[7]We assume Tatevosov's (2011, 2015) proposal that aspectual morphology can be lower than the actual aspectual interpretation.

SI layer, while the other language is not. We leave such a comprehensive explanatory account for future work.

Additionally, one may reasonably ask why $SI_{high}$ is not blocked by primary imperfective forms which can also express a habitual reading. In order to address this issue, we show below that in temporal *after*-clauses imposing sequential ordering between two events only $SI_{high}$ is possible and simple imperfective is not, as shown in (14). By contrast in temporal *while*-clauses with two events temporally overlapping only simple imperfective is possible and $SI_{high}$ is not, as shown in (15).

(14) Vseki păt sled kato {*?stroeše / postrojavaše} kăšta, tja se
every time after when built.IPFV.3SG built.SI.3SG house it.F REFL
srutvaše. BG
collapsed.SI.3SG
'Every time 'after' he built (=finished building) a house, it collapsed.'

(15) Vseki păt dokato { stroeše / *postrojavaše} kăšta, imaše
every time while built.IPFV built.SI.3SG house have.IPFV.3SG
incidenti. BG
incidents
'Every time while he was building a house, there were incidents.'

One possible answer could be that there are two homophonous SI morphemes in Bulgarian, the one applying higher in syntax being specialized in expressing habituality consisting of a series of temporally non-overlapping bounded events (instead of serving the more general task of "undoing the perfectivizing contribution of the prefix"). Panini's Principle (also referred to as Elsewhere Principle), according to which the application of a specific rule or operation overrides the application of a more general rule, would then link the function of expressing habituality to the specialized $SI_{high}$ form.

What remains to be studied in more detail is the interaction of SI morphology with different classes of superlexical prefixes. It is also necessary to extend the empirical scope to other Slavic languages in order to identify which languages pattern with Bulgarian and which ones pattern parametrically with Polish, and whether there are other possibilities. It also remains to be tested whether the observations we report in this study for past tense contexts can be extended to non-past tense as well.[8]

[8]We note that both present tense and imperfective aspect can have a multitude of meanings, e.g. non-actual readings, see Rivero & Slavkov (2014), Nicolova (2017): 364; due to this, a study of the interaction of SI and present tense deserves a longer paper that we leave to future work.

Finally, Bulgarian and Macedonian have two properties that other Slavic languages lack: they have definite articles and they have preserved the Imperfectum and Aorist tenses. To that end, it would be relevant to test whether the SI morphology interacts with Imperfectum and Aorist and behaves differently in the present and in the past, as well as whether number and referentiality of nominal complements impact the interpretation of either types of SI.

## Abbreviations

| | | | |
|---|---|---|---|
| 1 | first person | IPFV | imperfective |
| 3 | third person | PFV | perfective |
| AOR | aorist | PP | past participle |
| DEF | definite | PRS | present tense |
| DISTR | distributive | PST | past |
| IPFV | imperfective | REFL | reflexive |
| GEN | genitive | SG | singular |
| F | feminine gender | SI | secondary imperfective |

## Acknowledgments

This research was supported by the Polish National Science Center (NCN) grant SONATA BIS-11 HS2 (2021/42/E/HS2/00143). We are very grateful to the audiences of FDSL in Berlin, to the anonymous reviewers, and to the editors and especially Berit Gehrke for their insightful comments.

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