

# ASPECTUAL AFFIXES IN RUSSIAN AND CZECH

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## 0 Introduction

This paper is guided by the assumption that several factors, active at different levels, simultaneously contribute to the aspectual and temporal interpretation of eventuality descriptions. These factors include the verb (possibly) with its affixes, the whole predicate with its argument structure and thematic relations, Tense, numerous kinds of adverbials, connectives, and world knowledge (e.g. of causation), to name just the most important ones. The main question is how to account for the interaction and composition of aspectual and temporal information at different levels.

In the literature on aspect, different theories can be found. Either they concentrate on the predicational level, i.e. telicity, argument structure, and/or thematic relations (e.g. Krifka (1992), Ramchand (forthcoming), Verkuyl (forthcoming)) or there are discourse theories operating with already “derived” events and states without saying anything about how these event and state interpretations are arrived at (e.g. Kamp/Reyle (1993)). Verkuyl (forthcoming) suggests that a terminative (or telic) VP retains the property [+T<sub>VP</sub>], which can be “neutralized” at the S-level by, for instance, the properties of the external argument or other factors, leading to [-T<sub>S</sub>]. In this resulting phrase, the telicity value of the predicate ([+T<sub>VP</sub>]) is “given a subordinated place in a larger durative structure but it remains visible as such” so that it should be possible to distinguish between [-T<sub>VP</sub>] and [-T<sub>S</sub>]. He believes this to be a salient research question as “the transition from inner aspectual information to higher levels” has not yet been analysed or accounted for. Thus, there is no attempt in the literature so far of trying to connect the two main approaches to aspect that concentrate on entirely different language levels (VP vs. discourse level). This is necessary, though, to get an exact and clear picture of what really creates something like events and states at the discourse level, otherwise any discourse theory runs the risk of arbitrariness.

This paper represents a first step towards a compositional analysis of temporal and/or aspectual information obtained at different levels by thoroughly looking at the verbal level, analysing data from two particular Slavic languages. In accordance with Verkuyl, I will assume that aspectual-temporal information obtained at lower levels is not obscured by other such information obtained at higher levels. Rather, the meaning gets more complex as there are different layers of meaning with different possible meaning effects that in a way get “piled on top of each other”. By comparing the possibilities and meaning effects of particular affixation processes in Russian and Czech, main differences between these two languages can be observed. I will show, that these play a major role in the different strategies both languages pursue in narrative discourse.

Section 1 will deal with approaches to Slavic aspect found in the Slavistic as well as other linguistic literature. Their shortcomings in capturing certain data from Russian and Czech will be exemplified. In section 2, I will clearly separate telicity from grammatical aspect in claiming that Slavic prefixes can be divided into internal and external ones, where the internal prefixes are telicity markers, whereas external prefixes mark perfectivity and supply external boundaries only. These two distinct phenomena interact and together with other factors like argument structure, Tense, or adverbials, contribute to the aspectual and temporal interpretation of situations in context as events or states, i.e. their interpretation as temporally bounded or unbounded. Systematic differences between Czech and Russian in the compatibility and use of certain affixes lead to the main contrasts in the overall use of grammatical aspect in both languages, which will be addressed in section 3. The investigation of further factors active at other levels will require a more detailed treatment, which goes beyond the margins of this paper.

## 1 Slavic grammatical aspect

All Slavic languages have an obligatory grammatical verbal category of aspect, in the sense that each Slavic verb form (including non-finite verb forms) is either perfective or imperfective. Russian and Czech perfective verbs can be set apart from imperfective verbs by (at least) two criteria. First, only imperfective but not perfective verbs can combine with certain

phase verbs (aspectual verbs) such as ‘to start’. In addition to that, only imperfective but not perfective verbs have periphrastic future forms. Aspectual information on the verb is provided by perfectivizing prefixes, (mostly) imperfectivizing suffixes<sup>1</sup>, and (less often) imperfectivizing vowel alternation. There is no uniform marking of the perfective or the imperfective aspect, i.e. not every imperfective verb form contains a suffix and not every perfective verb form contains a prefix, but there are a variety of combinations that one can find among Slavic verbs as the following list shows:<sup>2</sup>

- |  |                                    |   |
|--|------------------------------------|---|
| 1. imperfective simple <sup>3</sup> :  | <i>byt'</i>                        | – ‘to be’   |
|  | <i>znat'</i>                       | – ‘to know’   |
|  | <i>pisat'</i>                      | – ‘to write (s.th.)’  |
| 2. perfective prefixed:  | <i>uznat'</i>                      | – ‘to get to know, to find out’                             |
|  | <i>On popisal.</i>                 | – ‘He wrote (for a while).’                                 |
|  | <i>napisat'</i>                    | – ‘to write s.th.’  |
|  | <i>podpisat'</i>                   | – ‘to sign’   |
| 3. imperfective prefixed-suffixed <sup>4</sup> :   | <i>uznavat'</i>                    | – ‘to get to know, to find out’                             |
|  | <i>podpisyvat'</i>                 | – ‘to sign’   |
|  | <i>?napisyvat', ?On popisyval.</i> |   |
| 4. perfective suffixed:  | <i>kriknut'</i>                    | – ‘to shout (once)’   |
| 5. perfective simple:  | <i>dat'</i>                        | – ‘to give’   |
|  | <i>kupit'</i>                      | – ‘to buy’  |
|  | <i>sest'</i>                       | – ‘to sit down’   |
| 6. imperfective suffixed:  | a) <i>davat'</i>                   | – ‘to give’   |
|  | <i>sadit'sja</i>                   | – ‘to sit down’   |
|  | b) <i>byvat'</i>                   | – ‘to (usually) be’   |
|  | Czech: <i>mívat</i>                | – ‘to (usually) have’                                       |
| 7. imperfective suffixed-suffixed (Czech only):  | <i>mívávat</i>                     | – ‘to (usually) have’                                       |
| 8. perfective prefixed-prefixed (Czech only):  | <i>Poodstoupila.</i>               | – ‘She stepped aside a little.’                             |
| 9. perfective prefixed-suffixed (Czech only):  | <i>Poklekl.</i>                    | – ‘He kneeled down a little.’ <sup>5</sup>                  |
| 10. perfective prefixed-prefixed-suffixed (Russian only?, only in context, no infinitive): | <i>On povydaval knigi.</i>         | – ‘He gave out (the) books (for a while)’ (distributively). |

In the Slavistic literature, the notion of ASPECTUAL PAIRS is taken to be crucial. A perfective and an imperfective verb constitute an aspectual pair if they do not differ in lexical meaning but only in their aspectual value. It is a highly debated question as to what exactly should or should not count as an aspectual pair, which can sometimes lead to neglecting the really important questions. The main issue is whether only suffixation leads to aspectual pairs or whether there is such a thing as “empty prefixes” (i.e. contributing no additional lexical meaning) creating aspectual pairs by prefixation. The problem is that, in addition to its aspectual value, a prefix usually has a lexical meaning of its own, whereas a suffix does not.<sup>6</sup>

The Slavistic tradition is highly influenced by the structuralist markedness theory of the Prague Linguistic Circle, relying in particular on Roman Jakobson (1932/71) and (1956/71), and

<sup>1</sup> There is only one perfectivizing suffix, namely Russian *-nu-*, Czech *-nou-*.

<sup>2</sup> I will use Russian examples from now on and will refer to Czech examples if there are differences from Russian. Russian and Czech basically have the same inventory of verbal categories and similar morphological marking of these. The only productive imperfectivizing means are the suffix *-(y)va-* in Russian, and the suffixes *-ova-* and *-va-* in Czech. Vowel alternation, which is not productive, is found more frequently in Czech than in Russian as Czech morphology, in general, is more archaic than Russian morphology. On top of the perfective-imperfective distinction, Czech has a productive way of marking iterativity on the verb, which is not productive anymore in Russian. I will come back to this in more detail in section 3.

<sup>3</sup> The term ‘simple verbs’ used here refers to verbs without any affixes but also to verbs that were derived from non-verbal categories (nouns, adjectives etc.) by derivational affixes (e.g. in Russian the suffix *-ova-*).

<sup>4</sup> These verbs are called SECONDARY IMPERFECTIVES.

<sup>5</sup> The verb *kleknout* is derived from the simple imperfective verb *klekat* – ‘to kneel’ by the (only) perfectivizing suffix *-nou-*, regularly falling out in the formation of the past tense form with an l-participle (cf. section 7.1) *klek-l* (the l-participle of *klekat* is *klekal*). The additionally prefixed form in 9. is a variation of 8.

<sup>6</sup> See section 7.2 for more details.

treats grammatical aspect in Slavic languages as a BINARY subordinative (less often privative) OPPOSITION. In a binary subordinative or privative opposition, one member, in this case the perfective aspect, is considered to be MARKED for a certain feature whereas the other member, the imperfective aspect, is UNMARKED. The most widespread view is that the imperfective aspect is somewhat neutral with respect to the perfective feature, which can but does not have to be negated (SUBORDINATIVE OPPOSITION: +A vs. +/-A). In a PRIVATIVE OPPOSITION the unmarked member negates the property of the marked one (+A vs. -A). Another possibility would be to take grammatical distinctions as EQUIPOLLENT OPPOSITIONS (A vs. B), but this option is rarely found in the literature on Slavic aspect.<sup>7</sup>

Treating grammatical aspect in Slavic languages as a binary subordinative or privative opposition is generally problematic. What is regularly overlooked (for example by Klimonow (1996) and (2000) or Borik (2002)) is the fact that even Jakobson (1966/71) distinguishes between the opposition ‘unmarked’ imperfective simple verbs (e.g. the verbs under 1. above) vs. ‘marked’ prefixed perfective verbs (e.g. the verbs under 2.) on the one hand and the opposition ‘unmarked’ prefixed perfective verbs (e.g. the verbs under 2.) and ‘marked’ prefixed-suffixed imperfective verbs (e.g. the verbs under 3., i.e. secondary imperfectives) on the other. Thus, there can be different levels of ‘markedness’ that are usually overlooked when referring to Jakobson. As the list above shows, there are at least four different stages of morphological markedness, if one accounts for the different affixes a Slavic simple verb can combine with (simple verbs and verbs with 1 to 3 affixes). In the following sections, I will show that these different layers of morphological markedness also have an effect on the semantic markedness and the interpretation of these verb forms, in general.

### 1.1 The semantics of grammatical aspect

There are different suggestions for the semantics of grammatical imperfective and perfective aspect. For Slavic languages, there is a tendency only to define the perfective aspect and to derive the meaning of the imperfective from this definition, since the Slavistic tradition treats it as a privative or subordinative opposition. The most popular notions to define the Russian perfective are BOUNDEDNESS, prominent in the Moscow tradition (e.g. Vinogradov (1947/72)), and TOTALITY, prominent in the Leningrad (Petersburg) tradition (e.g. Bondarko/Bulanin (1967)). The latter is usually used to define the Czech perfective aspect, as well (e.g. Kopečný (1962)). In the Russian Academy Grammar (Švedova (1980)), both notions are included in a more complex definition of the perfective aspect as referring to a “total action, delimited by a bound”, whereas imperfective verbs “lack this feature”. In addition to that, most works list several PARTICULAR MEANINGS that imperfective and perfective verb forms give rise to in context (at the ‘syntagmatic level’), which can be derived from this one INVARIANT MEANING (at the ‘paradigmatic level’). Other works dealing with grammatical aspect from a more universal perspective, often treat it as VIEWPOINT ASPECT (e.g. Glasbey (1998) referring to Smith (1991)), where the imperfective aspect describes a situation from an internal point of view or perspective and the perfective aspect a situation from an external point of view, i.e. a situation in its totality. Thus, grammatical aspect is taken to work as a “window” on the described situation (Verkuyl (2003)).

I do not want to go into detail on particular Slavistic accounts but will address just two approaches trying to capture the semantics of grammatical aspect in some Slavic languages. The first is Borik (2002), who defines Russian aspect as viewpoint aspect in terms of the relation of Speech time and Reference time. The second is Filip (1993/99) for Czech (and presumably Slavic in general), who defines it as a mereological part-whole relation.

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<sup>7</sup> In the more recent Slavistic literature, many scholars depart from the structural markedness concept and define the imperfective aspect in positive terms as well, cf. Glovinskaja (1989), Padučeva (1996), Dickey (2000).

### 1.1.1 Borik (2002)

Borik defines Russian grammatical aspect as VIEWPOINT ASPECT and strictly separates it from telicity, which she calls PREDICATIONAL ASPECT. She supports this claim by the data and the application of certain telicity tests. At the same time both are taken to be completely independent of one another. To define telicity, she relies on the concept of the SUBINTERVAL PROPERTY (Bennett/Partee (1972/78)) for all atelic predicates. She adjusts - as she calls it - Reinhart's "unified theory of R-time" (1986, 2000), which takes Reichenbach's notions of S, E, and R as intervals, to Russian. E is included in R by default, but in case of English, the progressive operator reverses this relation ( $E \subseteq R \rightarrow R \subseteq E$ ). The S-E relation is responsible for both the temporal interpretation and morphological tense. The S-R relation determines perspective, which is grammatical aspect in Borik's account. Borik takes "viewpoint aspect" in Russian to be a privative opposition since "the imperfective aspect, in principle, allows for more diversity in interpretation". Therefore it is defined as a non-perfective:

- (1) PF:  $S \cap R = \emptyset \ \& \ E \subseteq R$   
 IPF:  $\neg (S \cap R = \emptyset \ \& \ E \subseteq R)$ , namely,  $S \cap R \neq \emptyset \vee E \not\subseteq R$

As the relation between E and R is set, Borik incorporates it as a second condition for the perfective aspect. She views this to be necessary to exclude a currently ongoing interpretation for perfectives (the "progressive reading" in her terminology), which is supported by the fact that perfective non-past forms, supposedly, never have an actual present interpretation. For this kind of interpretation, E and S would have to overlap, which clashes with Borik's definition of perfectivity.

I agree with Borik that grammatical aspect and telicity are two distinct phenomena. At this point, I will only use one telicity test, namely the compatibility with durative and frame adverbials, to serve the purpose and refer to her thesis for other tests:<sup>8</sup>

- (2) On *popisal dva časa / \*za dva časa.* (Russian)  
 he-NOM PF-write-PAST two hours in two hours  
 'He wrote (was writing) for two hours / in two hours.'
- (3) On *perepisyval celuju stat'ju \*dva časa / za dva časa.* (Russian)  
 he-NOM SI-re-write-PAST whole-article-ACC two hours in two hours  
 'He re-wrote the whole article (i.e. by changing it) for two hours / in two hours.'

As these examples show, there are perfective verbs that are only compatible with durative but not with frame adverbials (signalling atelicity) whereas there are imperfective verbs which (in certain contexts) are only compatible with frame and not with durative adverbials (signalling telicity). Hence, (a)telicity cannot be the same as (im)perfectivity. I will come back to this in section 2.2.

Borik claims that her definition of the perfective aspect captures the data due to the "clear prediction for Russian that R-time movement is always 'done' by PF". When referring to single unique events this prediction seems to turn out right as the following example shows:<sup>9</sup>

<sup>8</sup> The following abbreviations will be used:

<b>IPF</b> for imperfective simple verbs,			
<b>PF</b> for simple perfective verbs and perfective verbs with internal prefixes,			
<b>SI</b> for imperfectives derived from PF by means of a suffix or vowel alternation,			
<b>PO, PRO, or ZA</b> for perfective temporal Aktionsart verbs with external prefixes.			
<b>AA</b>	Aktionsart	<b>NDIR</b>	non-directed motion verb
<b>GER</b>	gerund	<b>PART</b>	participle
<b>DIR</b>	directed motion verb	<b>PAST</b>	past tense
<b>IT</b>	iterative verb	<b>PRES</b>	present tense

Section 2 will further clarify this distinction. In the glosses, I will spell out the verbal information but leave aside nominal information (like case and number) unless it is of importance for the temporal-aspectual information. Abbreviations for the sources can be found after the references.

- (4) *Ja zakry<sup>P</sup> okno, zadernu<sup>P</sup> štory i podoše<sup>P</sup> k umyval'niku s dvumja kranami – krasnym i sinym; otvernu<sup>P</sup> ich na probu – iz oboich tekla<sup>P</sup> cholodnaja voda. Ogljade<sup>P</sup> stol [...]* (Kun)

‘I closed the window, drew the blinds and went to the sink with two taps – a red and a blue one. I turned them to try them out - cold water ran out of both of them. I looked at the table ...’

All the verb forms describing sequenced events are perfective, whereas the only imperfective verb form (*tekla* – ‘flew, ran’) describes a situation temporally overlapping (elaborating) the situation of trying out and thus it does not create R-time movement.

But in episodes consisting of sequences that regularly take place and where, nevertheless, something like R-time movement is involved, it is ‘done’ by the imperfective aspect:

- (5) *Inogda ona šalila<sup>i</sup> i, zadržavšis<sup>9</sup> u vtorogo okonca, postukivala<sup>i</sup> noskom v steklo. Ja v tu že sekundu okazyvalsja<sup>i</sup> u éтого okna, no isčezala<sup>i</sup> tuflja, černyj šelk, zaslonavšij svet, isčezal<sup>i</sup>, - ja šel<sup>i</sup> ej otkryvat<sup>9</sup>. (MM)*

‘Sometimes, she teased me and, hiding close to the neighbour’s window, knocked on the glass with a stick. I showed up at the window at the same time, but the shoe, the black silk, disappeared and I went to open the door for her.’

This would not be such a big problem for Borik’s theory, since she defines the imperfective aspect as a non-perfective. So it could also create R-time movement if it only denied the second condition of the perfective aspect (since Borik’s definition consists of two components). But she claims that “R-time movement is **always** ‘done’ by PF”. What is even more problematic than the fact that in this example all imperfective verb forms move the story line forward, is that the only verb form that does not is even a perfective one. The second verb form *zadržavšis*’ is perfective but the event denoted by it (‘to hide’) is in a temporal overlap relation with the event described by the third verb form *postukivala* (‘to knock’). The interpretation that the second event (described by the perfective verb form) is in a temporal overlap relation to the third (described by an imperfective verb form) is inferred by the fact that the second is encoded by a non-finite verb form (a gerund), attached to a finite verb form, describing the third event. Nevertheless, it is a grammatically perfective verb form and hence we would have to expect something like R-time movement according to Borik’s definition. In the next example, it is even more obvious, that non-finite perfective verb forms never create R-time movement:

- (6) – *I vot, - rasskazav<sup>9GER</sup> pro proisšestvie v Griboedove, zagrustiv<sup>9GER</sup> i zatumanivšis<sup>9GER</sup>, Ivan zakončil<sup>P</sup>: - ja i okazalsja<sup>P</sup> zdes’.*

“‘Thus’, having told what happened in Griboedov, Ivan finished, sad and depressed, ‘I ended up here.’”

All three non-finite verb forms are gerunds derived from perfective verbs. Obviously, non-finite verb forms, in general – whether they are imperfective or perfective –, refer to some sort of background information that temporally overlaps with the events described by finite verb forms. In this case they cannot create R-time movement even if they are perfective.

At the end of her thesis, Borik presents some discourse data and claims that the imperfective aspect typically appears in temporal subordinate clause and with a “progressive interpretation”<sup>10</sup>. But in fact, as my empirical research on Russian and Czech aspect usage in past tense narrative discourse (Gehrke (2002)) shows, the imperfective aspect is rather used either with non-finite verb forms (with a temporal overlap reading) or as secondary imperfectives in habitual contexts creating R-time movement, as well. Her claim that if “you change PF to the imperfective the sequence interpretation disappears” is therefore not correct, since the change rather creates a sequence interpretation within a habitual episode, instead. If

<sup>9</sup> At this point, I will not provide any glosses but indicate grammatical aspect as superscripts (p for perfective and i for imperfective) on the highlighted verb forms.

<sup>10</sup> Borik never makes it clear what she means by “progressive” meaning but intuitively it corresponds to a process meaning.

temporal overlap is to be expressed, non-finite verb forms are preferred, in general. Thus, the least there is to criticise about her theory is that it only works for single, unique events, but fails when it comes to repetition (where secondary imperfectives are used) or backgrounded information (the use of perfective gerunds).

A general problem with Borik's theory is that she defines grammatical aspect in Russian as a "closed privative opposition", which, simply, is not compatible with the idea of compositionality. As I have shown above, there are different levels of markedness. In habitual contexts, a sequencing interpretation is created by imperfective verb forms. For this purpose, Russian primarily uses secondary imperfectives that are morphologically marked by additional suffixes on mostly prefixed perfective verbs:

- (7) *Mnogie iz 30 tysjač mexaničeskich ekipažej, **begavšie**<sup>iPART</sup> v 28-m godu po Moskve, **proskakivali**<sup>i</sup> po ulice Gercena, **šurša**<sup>iGER</sup> po gladkim torcam, i čerez každyju minutu s gulom i skrežetom **skatyvalsja**<sup>i</sup> s Gercena k Moxovoj tramvaj 16, 22, 48 ili 53-go maršruta.* (RJ) (Russian)

‘Many of the 30 thousand mechanical carriages, driving around Moscow in 1928, ran along Herzen Street, rushing over the smooth pavement, and every minute tram line 16, 22, 48, or 53 chased from Herzen Street to Moss Street with a din and a squeak.’

The only verb forms creating something like R-time movement in this habitual episode are finite forms of secondary imperfectives (*proskakivali* and *skatyvalsja*) as the trams first pass Herzen Street and then go on to Moss Street. Other situations temporally overlapping with these two are described by non-finite verb forms (a participle and a gerund). Thus, the secondary imperfectives are also double-marked semantically, as the prefix can be associated with the meaning of sequencing, whereas the suffix marks the repetition of the whole episode. Finite verb forms of simple imperfective verbs are, in general, avoided in such contexts and rather appear in stative episodes (such as scenery descriptions) or other contexts like wh-questions (cf. section 7.3). So, there is a clear need to distinguish between simple imperfectives and secondary imperfectives.

This is not what Borik does, though. Instead she views all imperfectives as one homogeneous group or, in other words, does not “isolate” the semantics of perfective and imperfective aspect from telicity, tense and other factors that are hard to be kept apart since they all at once contribute to the semantics of one particular verb form. The fact that “the imperfective aspect, in principle, allows for more diversity in interpretation” has to be related to the difference between atelic and telic predicates **that are combined** with the imperfective aspect. In fact, with atelic predicates, the perfective aspect is morphologically and semantically marked (by prefixes), whereas with telic predicates, it is the imperfective aspect that gets an extra marking (by suffixes). If atelicity is taken to be unmarked with respect to telicity, the natural conclusion will have to be that simple imperfectives are the least marked forms as they are atelic and within atelic predicates the imperfective is not marked. That is why they “allow for more diversity in interpretation”. Secondary imperfectives, on the other hand, are more complex since they express telicity and imperfectivity at the same time. So with respect to their perfective counterparts without the suffix, they are more marked and semantically more complex.

Closely related to this is the fact, that Borik makes problematic choices of verbs in the application of certain tests to prove some of her points. She picks simple imperfectives in cases where she wants to show that the imperfective aspect is unmarked, but she chooses secondary imperfectives in other cases, where she needs to show that imperfectivity and telicity can go together. She rejects the finish/stop-test altogether, although this could, indeed, show differences among the imperfectives, and set atelic simple imperfective verbs apart from telic secondary imperfectives. Hence, if one really isolates the meaning of imperfective and perfective aspect from any other phenomena such as telicity and tense, one has to draw the conclusion that it is not a privative but an equipollent opposition. Therefore, the imperfective

aspect deserves a positive definition and cannot be defined as a non-perfective in the way Borik does it.

To define the Russian perfective aspect in terms of the relation between S and R and as viewpoint, in general, is problematic, since not all perfective verb forms express an external perspective on a situation. Padučeva (1996) notes that with every perfective verb form R is always retrospective with respect to the event itself but at the same time R is always synchronous to the resultant state of this event. Thus, some uses of the perfective aspect focus on this point of change, others only on the resultant state<sup>11</sup>. Some verbs even exclusively have the resultant state reading, for example the verb *ustat'* in *Ja ustala.* - 'I am tired (now!)' (literally: 'I have grown tired.'). as this sentence cannot be an answer to the question *Čto slučilos'?* (PF) – 'What happened?' (cf. Padučeva (1996)). When referring to the opening of a window, being closed again at the moment of utterance (or reference), Russian cannot use the perfective aspect anymore, which always refers to the point of change (the opening) and its resultant state at once, but rather has to use the imperfective verb:<sup>12</sup>

(8) *Ja otkryval okno.* – 'I (had) opened the window (once and it is closed now).'

(9) *Ja otkryl okno.* – 'I have opened the window (and it is still open).'

The use of the perfective verb implies that the window is still open (at least at the point of reference), an effect, which is comparable to that of the present perfect (or past perfective in past tense narrations) in English. In general, almost every perfective verb form conveys the meaning of a resultant state as well and it is not necessarily an external viewpoint but rather a point of change, which every perfective verb form refers to. Hence, S and R can overlap even with the perfective aspect, which is the case when perfective verb forms are used to refer to a resultant state.<sup>13</sup>

There is another, though marginal case, where S and R can overlap, namely with the perfective present. Borik claims that the definition of the perfective aspect has to exclude a "progressive reading", e.g. the actual present interpretation for perfective non-past forms. But the fact that these forms hardly ever refer to a currently ongoing situation is due to the telicity property of the predicate and not due to their being perfective. Evidence for this comes from other languages that do not explicitly mark grammatical aspect on the verb. In German, for instance, the present tense of a telic verb does not get an actual present interpretation: *Ich finde das Buch.* (lit. 'I find the book.'). but rather refers to an event of finding the book taking place some time in the future. With performative verbs and in the reporter present one gets an actual reading even with the Russian perfective present, which is the case with telic predicates in other languages as well (e.g. the use of the simple present instead of the progressive in English). Russian atelic perfective verbs, on the other hand, e.g. those with the prefix *po-* in example (2), are not used in the present tense, they occur almost exclusively in past tense contexts. Borik simply does not take into account the primary discourse functions of these prefixes.

In sum, grammatical perfective aspect does not in all cases express an external viewpoint in terms of the relation between speech time and reference time, since both temporal intervals can overlap as, for instance, in the case of the perfect meaning of the perfective aspect. In addition to that, defining the imperfective aspect as a non-perfective leads to a neglect of the meaning effects any imperfective verb form gives rise to and disregards the fact that there are two distinct groups of imperfectives due to the interaction with (a)telicity. Finally, Borik's definition of the perfective aspect makes the empirically wrong prediction that R-time

<sup>11</sup> This is labelled the PERFECT MEANING of the perfective aspect, which I will come back to in section 3.1.

<sup>12</sup> This is usually considered to be an instance of the general-factual meaning of the imperfective aspect, cf. section 7.3.

<sup>13</sup> Previous accounts of the notion of viewpoint in terms of the relation of E and R (e.g. Schoorlemmer (1994) through Borik) seem to be more fruitful, since an event leading up to a point of change has to precede a resultant state, so the E would neither overlap neither with S nor with R, whereas S and R could still overlap if the perfective verb form refers to a resultant state.



movement is always 'done' by the PF. Rather, in habitual contexts it is 'done' by secondary imperfectives, whereas perfective non-finite verb form cannot create R-time movement at all. Thus, R-time movement in Russian is in most cases 'done' by the combination of Tense (since it has to be a finite verb form) and telicity. Grammatical perfectivity only plays a role in creating R-time movement with atelic perfectives (cf. sections 2 and 3).

### 1.1.2 Filip (1993/99)

Filip adopts Krifka's (e.g. 1992) definitions for cumulative and quantized predicates:

- (10) CUMULATIVE PREDICATES: Whenever P applies to x and y, it also applies to the sum of x and y, provided that it applies to at least two distinct entities.

QUANTIZED PREDICATES: Whenever P applies to x and y, y cannot be a proper part of x.

She does not distinguish between the notion of telicity and Krifka's notion of quantization but uses them as synonyms: "In the domain of eventualities, the denotational domain of verbal predicates, we distinguish between telic (or quantized) predicates, such as *write a symphony*, and atelic (or cumulative) ones, such as *run*, according to how their parts are related to their wholes."

Predicates are taken to denote eventualities that are divided into states, processes and events. States and processes are cumulative, whereas events are quantized. In addition to Bach's (1981 and 1986) subdivision of states into static and dynamic states, on the one hand, and events into culminations and happenings, on the other, Filip introduces a third kind of event, namely an INCREMENTAL EVENTUALITY, which "can be associated with a single verb but also with a grammatical construction". Incremental eventualities involve an INCREMENTAL THEME in the sense of Dowty (1991). This is a nominal argument that is entailed to undergo a definite change of state "in distinguishable separate stages, i.e. subevents". Filip claims that verbs denoting incremental eventualities are not specified "with respect to telicity or quantization". Hence, there are the following kinds of eventualities:

- (11) quantized – : states, processes  
 quantized +: events  
 quantized  $\alpha$ : incremental eventualities

Filip further claims that the semantic core of any aspectual system can be captured by the mereological terms PART and WHOLE, whereas "the realization of other contributing properties will depend on the markedness relation between the members of a given aspectual opposition and the relative verb-prominence or heavy loading of information in the verb in a given language". To provide a uniform characterization of the semantics of the progressive has been problematic so far "because its semantic properties vary according to the eventuality type" it operates on. She adopts Krifka's definition of the English progressive operator as a proper part relation. In connection with this, she addresses the well-known structural analogies between the domain of objects and the domain of events and constitutes a systematic gap for English, since *whole* and *cumulative* can never go together (\**whole+cumulative*). Imperfectivity (part-relation) and telicity (quantizedness), on the other hand, can:

	PART	WHOLE
CUMULATIVE	<i>some gold</i> <i>He was running.</i>	* *
QUANTIZED	<i>part of a symphony</i> <i>He was writing a symphony.</i>	<i>a whole symphony</i> <i>He wrote a symphony.</i>

**Table 1: Interaction of telicity and the part-whole distinction (taken from Filip (1993/99))**

She points out that there is a "need to draw a clear line between the quantized-cumulative distinction and the part-whole distinction in the domain of individuals and eventualities". At the same time, the interaction of both phenomena is accounted for as table 1 shows.

SLAVIC DERIVATIONAL AFFIXES are taken to create a new verb by changing the category and/or the meaning of the base to which they are applied. Filip claims that the application of a PREFIX to a given verb yields a new PERFECTIVE verb that is “TELIC (event-denoting)”. Prefixes are defined as functions that take state, process or event predicates as their arguments and yield event predicates as their value, thereby lexicalizing the transitions into and out of processes, states or events. She further notes that “all perfective verbs share the entailment that the denoted event has run its whole ‘natural course’, and constitutes from this point of view an ‘integrated whole’”. “If a given state of affairs is represented by a verbal predicate in its entirety, there must be some limits imposed on its (temporal or spatial) extent, and consequently, it must be quantized.” Hence, all prefixes are taken to be perfectivity markers as well as telicity markers.

The IMPERFECTIVE aspect is considered to be unmarked, because there are “no special markers” for imperfectivity, a “wide range of contextually determined interpretations”, and cases where imperfective verb forms refer to whole events (in the so-called general-factual meaning, cf. section 7.3). Therefore, it is defined as expressing a part-relation rather than a proper-part relation as it was done for the (marked) progressive in English.

Both Borik (2002) and Filip (1993/99) want to draw a clear distinction between grammatical aspect and telicity. Whereas Borik (2002) tries to keep both “predicational” and “viewpoint” aspect strictly apart, Filip tries to account for the interaction of these two different phenomena. Unfortunately, the distinction gets blurred in her whole account when she talks about “telicity of predicates and sentences” and does not stick to her definition of telicity for predicates, only. Thus, verbs, predicates, sentences, and eventualities turn out to be telic or atelic at one point or another. The systematic gap in English (\*whole+cumulative’) simply is not there as semantic perfectivity in English is never marked grammatically by any special linguistic form (not even the simple past) but always contextually induced. An atelic (cumulative) predicate like *run* can, indeed, have a semantically perfective reading (whole) as, for instance, in combination with a durative adverbial: *He ran for a while*.

In Slavic languages, on the other hand, perfectivity is marked and grammatical aspect and atelicity can go together as in Russian *On pospal.* or Czech *Pospal.* - ‘He slept / was sleeping for a while.’ Along this line is her treatment of “prefixes with measure function” (in this case the delimitative prefix *po-* with the meaning ‘a bit’), which are “standing to cumulative verb stems or roots as measure, quantity and numeral functions stand to cumulative nominal predicates (mass and plural)”. The problem is, though, that these prefixes are not just added to “cumulative verb stems or roots” but to whole VPs and thus do not change the telicity value of the VP itself. This can be shown by the fact that they can be combined with a *for-* but not an *in-* adverbial, as was already pointed out in the previous section:

- (12) *On            **popisal**            dva časa / \*za dva časa.* (Russian)  
 he-NOM PF-write-PAST two hours    in two hours  
 ‘He wrote / was writing for two hours / in two hours.’

Other Slavic prefixes, indeed, derive new lexical items and create new verbs that are always telic. Thus, a simple imperfective verb like *pisat’* – ‘to write’ is neither atelic nor telic by itself but gets a telic interpretation when combined with a quantized internal argument and an atelic interpretation with a cumulative one or without any internal argument (Filip’s incremental eventuality):

- (13) *On            **pisal**            dva časa / \*za dva časa.* (Russian)  
 he-NOM IPF-write-PAST two hours    in two hours  
 ‘He wrote / was writing for two hours / in two hours.’
- (14) *On            **pisal**            celoe pis’mo    \*dva časa / za dva časa.* (Russian)  
 he-NOM IPF-write-PAST whole-letter-ACC two hours    in two hours  
 ‘He wrote the whole letter for two hours / in two hours.’

If this verb is combined with the prefix *na-*, it becomes telic:

- (15) *On napisał pis'mo \*dva časa / za dva časa.* (Russian)  
 he-NOM PF-write-PAST letter two hours in two hours

‘He wrote a / the (whole) letter for two hours / in two hours.’

This telic verb cannot be used intransitively anymore as opposed to its unprefixated counterpart. Filip does not distinguish between these two different kinds of prefixes but takes all as telicity markers. In this way, telicity becomes identical to perfectivity, which she tries to keep separate.

In sum, not all Slavic prefixes can be treated as telicity markers if one sticks to the definition of telicity for predicates. Rather, there has to be a clear distinction between prefixes that have verbs as their inputs and work as telicity markers on the one hand, and prefixes that operate on already complete atelic VPs and simply create some interpretation of boundedness beyond the VP level, on the other. At the same time, all prefixes cannot be markers for grammatical perfectivity since there is such a thing as secondary imperfectives containing a prefix and a suffix at the same time without being grammatically perfective. Finally, the imperfective grammatical aspect is not per se the unmarked member of the binary opposition perfective-imperfective, as I have already pointed out in the discussion of Borik (2002).

## 1.2 Russian vs. Czech

So far, I have only addressed Slavic aspect in general and primarily provided Russian examples. One often finds theories on Slavic aspect drawing conclusions on the data of just one Slavic language and treating it as a representative for this one, supposedly, monolithic phenomenon like “the Slavic aspect”. In Gehrke (2002), I evaluated data from Russian and Czech 20<sup>th</sup> century novels in comparison to their translations into Czech and Russian, respectively, and arrived at the conclusion that there are major differences in the way aspect functions in narrative discourse in both languages. This can be shown by providing the Czech translations of some of the Russian examples above (repeated here as (17) and (19))<sup>14</sup>:

- (16) *Mnohé z třiceti tisíc drožek, které v osmadvacátém **jezdily**<sup>i</sup> po Moskvě, **proklouzly**<sup>p</sup> Gercenovou ulicí a **zasvištěly**<sup>p</sup> na hladkém dřevěném dláždění; každou minutu se s řinkotem a skřípěním **přehnala**<sup>p</sup> od Gercenovy ulice k Mechové tramvaj číslo 16, 22, 48 nebo 53.* (Czech)

‘Many of the 30 thousand carriages that drove around Moscow in 1928, ran along Herzen Street and rushed over the smooth pavement; every minute tram line 16, 22, 48, or 53 chased from Herzen Street to Moss Street with a din and a squeak.’

- (17) *Mnogie iz 30 tysjač mexaničeskich ekipažej, **begavšie**<sup>iPART</sup> v 28-m godu po Moskve, **proskakivali**<sup>i</sup> po ulice Gercena, **šurša**<sup>iGER</sup> po gladkim torcam, i čerez každyju minutu s gulom i skrežetom **skatyvajsja**<sup>i</sup> s Gercena k Moxovoj tramvaj 16, 22, 48 ili 53-go maršruta.* (RJ) (Russian)

- (18) *Někdy se uličnický **zastavila**<sup>p</sup> u sousedního okna a **poklepávala**<sup>i</sup> špičkou na sklo. **Rozběhl**<sup>p</sup> jsem se tam, ale mezitím **zmizel**<sup>p</sup> střevíček i černý hedvábný stín a já **šel**<sup>i</sup> **otevřít**<sup>p</sup>.* (Czech)

‘Sometimes, she hid in a playful way by the neighbour’s window and knocked on the glass with a stick. I ran there, but in the meantime, the shoe and the black shadow of silk disappeared and I went to open up.’

- (19) *Inogda ona **šalila**<sup>i</sup> i, **zaderžavšis**<sup>p</sup> u vtorogo okonca, **postukivala**<sup>i</sup> noskom v steklo. Ja v tu že sekundu **okazyvalsja**<sup>i</sup> u éтого okna, no **isčezala**<sup>i</sup> tuflja, černyj šelk, zaslonavšij svet, **isčezal**<sup>i</sup>, - ja **šel**<sup>i</sup> ej **otkryvat**<sup>i</sup>.* (Russian) (MM)

Obviously, Czech does not mark repetition on every finite verb form in the way Russian does, since most verb forms used here are perfective. At the same time, backgrounded information is

<sup>14</sup> I put each verb form in bold letters and underlined differences in aspect or forms that were used.

not encoded by non-finite verb forms, rather only finite verb forms are used, in general. Finally, in (18) the last finite verb form *šel* – ‘went’ is imperfective but still creates something like R-time movement, i.e. denoting an event in a sequence that does not temporally overlap with the preceding or any other event.

(20) is another even more illuminating example. This time I will also provide glosses and a more detailed analysis:<sup>15</sup>

- (20) *A vztyčil jsem se, a běžel jsem po vrchní*  
 and PF-get-up-PAST AUX-1sg REFL and DIR-run-PAST AUX-1sg along upper  
*fošně železniního mostu, tam na druhé straně řeky nakládali*  
 wooden-path railway-bridge-GEN, there on other side river-GEN SI-pile-up-PAST  
*jetel růžák, a když jsem přeběhl most a*  
 clover-pink-ACC, and when AUX-1sg PF-across-run-PAST bridge-ACC and  
*díval jsem se dolů, viděl jsem, že ten muž*  
 IPF-look-PAST AUX-1sg REFL down, IPF-see-PAST AUX-1sg, that that man  
*v bílé košili není nikdo jiný než pan děkan. (JR) (Czech)*  
 in white shirt not-is no-one other than Mr. dean

‘Then I got up and ran along the upper wooden path of the railway bridge. There, on the other side of the river, they collected pink clover, and when I crossed the bridge and looked down, I saw that the man in the white shirt was no-one else than our dean.’

- Potom ja vstal i pobežal po verxnemu nastilu železnodorožnogo*  
 then I PF-get-up-PAST and PF-run-PAST along upper wooden-path railway-  
*mosta; na toj storone reki ukladyvali na voz rozovyj klever,*  
 bridge-GEN on that side river-GEN SI-pile-up-PAST on cart-ACC pink-clover-ACC  
*i ja, minovav most i posmotrev vniz, uvidel, čto*  
 and I (I)PF<sup>16</sup>-cross-GER bridge-ACC and PF-look-GER down PF-see-PAST that man  
*mužčina v beloju rubaške – ne kto inoj, kak gospodin nastojatel’. (Russian)*  
 man-NOM in white shirt (be) not who other, how Mr. dean

This example consists of several actions of the protagonist, namely ‘getting up’, ‘running along something’, ‘crossing the bridge’, ‘looking down’, and ‘seeing something’. At this point, I will disregard another described eventuality, not performed by the same person (‘collecting clover’). World knowledge tells us that getting up takes place before running. In Russian, both are described by perfective verbs marking them as contingent to one another (narration relation). In Czech, on the other hand, an imperfective verb is used and the context alone (world knowledge) tells us that the running takes place after the getting up.<sup>17</sup> The action of ‘looking down’ implies that one has to be on top of something, which, in this context, is most likely the bridge that the protagonist is crossing. Therefore the two actions ‘crossing the bridge’ and ‘looking down’ should be interpreted as taking place at the same time, i.e. as being in a temporal overlap relation to one another, conveying a process meaning of both actions of the sort *while I was crossing the bridge and looking down*. This is how the Russian translator understood the Czech original when he chose two gerunds to convey the information that both actions are backgrounded with respect to (or temporally overlap with) the foregrounded event of seeing something.

In the Czech original, the first action of crossing the bridge is described by a perfective verb, supposedly not being able to convey a process meaning, if one follows traditional grammars. Thus, it might be interpreted as *after I had crossed the bridge and when I looked*

<sup>15</sup> Further data and its analysis can be found in the appendix.

<sup>16</sup> This is a biaspectual verb (cf. section 3.5, footnote 37).

<sup>17</sup> The use of a Czech directed motion verb creates a narration interpretation as well (cf. section 3.4).

*down*. But in this case one is tempted to ask, what the protagonist is looking down from. The context rather suggests that a Czech “perfective” verb like the telic motion verb *přeběhnout* – ‘to run across’ might after all convey a process meaning, and that the prefix *pře-*, indeed, only marks telicity and not semantic perfectivity, as, for example, describing a situation in its totality or from an external point of view. This is exactly the way a German literal translation would have to be understood: (... *und als ich die Brücke überquerte und hinunterschaute, sah ich ...*). The following action of ‘seeing something’ is foregrounded, and the Russian translator uses a perfective inchoative state verb (*videt’* with the prefix *u-*), conveying a perfect meaning and referring to a change of state and the resultant state. In the Czech original, on the other hand, this foregrounding is not marked on the verb but a simple imperfective state verb is used referring to the state only. The fact that it is a resultant state with a distinct starting-point being part of a sequence of events can only be inferred from the context.

In sum, Russian marks repetition by imperfectivizing suffixes on finite verb forms, whereas in Czech, the meaning of repetition is contextually induced. Backgrounded information is usually encoded by Russian (imperfective and perfective) non-finite verb forms, i.e. primarily gerunds. As Czech gerunds are archaic and out of use, one rather finds only finite verb forms and no explicit marking of a background-foreground distinction. Finally, in Czech, a narration interpretation can also arise with finite imperfective verb forms and finite perfective verb forms can have a temporal overlap reading. Both is not possible in Russian. As this small sample of data already shows, it is problematic to treat Slavic aspect as one uniform system. Apart from many shared properties, perfective and imperfective verb forms are not equally used and distributed in the particular Slavic languages, which is comparable to the different interpretations perfect tenses in, for example, Germanic languages can give rise to.

Before going into detail on the issues that were raised in the previous two sub-sections, I want to address the relation between (im)perfective verbs (as forms) and the abstract meanings of (im)perfectivity.

### 1.3 Grammaticalized phenomena

If a semantic distinction like aspect is grammaticalized and it is obligatory to use either an imperfective or a perfective form with their respective meaning effects without being able to leave it in the dark, the different forms used to make this distinction obtain several functions at once and therefore several distinct meanings, too. Above all, there does not necessarily have to be one invariant meaning, which captures all the different meanings perfective (or imperfective) verb forms may have. There might only be different meaning effects of grammatical aspect combined with different verb classes, adverbs etc. Thus, semantically, there can be some universal concept of (im)perfectivity, which does not necessarily have to be identical to grammatical perfective and imperfective aspect in a particular language with such a grammatical distinction. A grammatically perfective verb form can have a semantically imperfective meaning of e.g. duration (for example in referring to a resultant state), whereas a grammatically imperfective verb form may have a semantically perfective meaning of e.g. completion as, for instance, with the actional or the general-factual meaning (cf. section 7.3), but also when referring to some plurality of events, where there is a duration of the macro-event (universal imperfectivity) with completed micro-events (universal perfectivity).

From now on, the terms PERFECTIVE and IMPERFECTIVE will **only** refer to grammatical aspect (**form**), and where “universal” perfective and imperfective **meanings** are involved, terms like duration, completion, maybe also perspective will be used. It is necessary to analyse what is lexically, morphologically, and syntactically marked (that is what PF, IPF, SI etc. are for), i.e. the forms that are used. On the basis of this, conclusions can be drawn as to possible interpretations the combination of these forms give rise to. The more there is specified by linguistic means, the less variation (or ambiguities) should arise, whereas the variation should increase the less gets specified, which might be the case in other languages without grammatical

aspect. The fact that there is still a restriction on the possible interpretations of sentences in context even in cases where this cannot be deduced from linguistic knowledge, is due to world knowledge (of causation and the like), which has to be accounted for, as well (cf. Lascarides/Asher (1993)). But the first step is to exploit all the linguistic knowledge we can extract out of the forms of a given language as they are combined to sentences and only after that should we refute to world knowledge.

#### 1.4 Leading idea

To account for the morphological differences between imperfective simple verbs and secondary imperfectives, I have claimed that the imperfective aspect is not unmarked per se, but that there are different levels of morphological markedness, resulting in different kinds of semantic markedness, namely their complexity and specificity in meaning. There is a privative opposition of unmarked atelicity vs. marked telicity **interacting** with the equipollent opposition imperfectivity vs. perfectivity. A basic problem of many works on Slavic aspect is that they mix up telicity and grammatical aspect and thus arrive at treating grammatical aspect as a subordinative opposition. My hypothesis is that **each affix has some specific meaning effect**, which is not necessarily grammatical aspect alone. If there were only one imperfective and one perfective meaning each and every affix were used solely to express just one out of these two meanings, one would not expect to find verbs with more than one affix at a time (as in 3., 7., 8., 9., 10. in the list provided in the beginning). So, at least some of them clearly must have a different purpose if they can co-occur.

This is in accordance with Verkuyl (2003), who notices for Slavic that there is a “considerable overlap” between the two distinct phenomena of telicity and grammatical aspect, which is supposedly a question of markedness. Telicity could be seen as “carving out a unique, discernible unit that can be counted or measured”. At the same time, he suggests to take (a)telicity as a subordinate or privative opposition, where Slavic grammatical aspect might be needed as a “lubricant”. This could lead to treating the distinction perfective-imperfective as an equipollent, which would only be possible after having separated the two oppositions in a clear way by “disentangling” them. So the “leading idea” would be to “undo the Pfv/Ipfv opposition of any element belonging to predicational aspect”.

This is precisely what I will aim at in the next section, where I will try to “disentangle” the “affix chaos” in Slavic verbs in keeping telicity and grammatical aspect strictly apart. It will be in accordance with Młynarczyk (forthcoming) who claims for Polish that morphological operations of affixation are paralleled by corresponding operations in the semantic domain and that “the availability of certain (and no other) aspectual operations for a given basic verb says something about the aspectual nature of that verb”. It should help treating grammatical aspect at least as an equipollent opposition as suggested by Verkuyl, but one might even give up treating it as a binary opposition after all when talking about grammatical aspect.

## 2 Telicity, grammatical aspect, and temporal boundedness

To account for the compositionality of aspectual and temporal information at various levels, it is necessary to distinguish between different means leading to the interpretation of temporal boundedness and unboundedness, or what is referred to as events and states in most discourse theories. In principal, an event (state) interpretation at the discourse level does not necessarily rely on (grammatical) (im)perfectivity and/or (a)telicity. Hence, events and states in this sense have to be taken as outputs at the discourse level. The crucial question is therefore, what is the input at lower levels?

In this section, I will show that in Slavic languages, (A)TELICITY is a lexical feature of verbs and only one class of Slavic verbs gets its telicity value at the VP level. So in Slavic, (a)telicity is an instance of either lexical or predicational aspect. Telic verbs and verb phrases imply an internal event boundary, which is a natural point of change, comparable to Moens/Steedman (1988)’s culmination point or Krifka (1992)’s set terminal point. Telicity is not a temporal notion as it does not imply temporal boundaries of a described actual eventuality,

but event boundaries of an eventuality type. In actual cases, event boundaries can be identical to temporal boundaries but this does not have to be the case. Telicity should not be confused with (grammatical) perfectivity since not all perfective verbs are telic and not all imperfective verbs are atelic as was shown in the previous section.

In general, an interpretation of (UN)BOUNDEDNESS can arise at different levels. If the verb itself is telic in implying a natural point of change, there is something like boundedness at the verb level. The same applies to the whole VP if the telicity is decided at the predicational level, as it is the case with one class of Slavic verbs. At the V and VP level there cannot be **temporal** (un)boundedness, though, because a temporal interpretation only arises beyond VP level when Tense comes in and when the whole expression is existentially quantified. At sentence level, Tense can create an interpretation of temporal (un)boundedness, as, for example, in German, a sentence in the simple present tense can be interpreted as a currently ongoing temporally unbounded situation, whereas a sentence in the simple past can lead to the interpretation that a situation is temporally bounded, since it has already passed. At sentence level, additional means can create an interpretation of temporal (un)boundedness, as, for instance, temporal or cardinal adverbials. Finally, at discourse level, the notion of (un)boundedness can apply to whole episodes, as, for example, a (temporally unbounded) habitual episode can consist of sequences of (temporally bounded) eventualities.

Grammatical aspect cannot be relegated to one particular level, but fulfils different functions at different levels. In Russian, temporal boundedness at sentence level can be marked by perfectivizing prefixes applied to atelic predicates, whereas temporal unboundedness at discourse level (of habitual episodes) is marked by imperfectivizing suffixes. In Czech, on the other hand, grammatical aspect does not operate on these higher levels in such a way and temporal (un)boundedness is generally marked by other lexical means or contextually induced. Since the instances of (un)boundedness at the lower levels V and VP are already specified as (a)telicity, I will not refer to them by the somewhat less specific term of (un)boundedness anymore but rather reserve this notion to TEMPORAL (UN)BOUNDEDNESS at higher levels, the interpretation of which can arise due to a number of factors.

Hence, both notions of telicity and grammatical aspect should be kept apart from the notion of temporal (un)boundedness, which applies to the sentence or discourse level. A situation can be temporally bounded or unbounded due to a variety of lexical and contextual information, of which grammatical aspect (as well as grammatical tense, adverbs etc.) is only one factor. So, all three notions of grammatical perfective and imperfective aspect in Slavic (and other) languages, (a)telicity and temporal (un)boundedness refer to separate phenomena. Nonetheless, predicational and grammatical aspect interact and contribute to the aspectual (and temporal) interpretation of situations in context, i.e. their interpretation as temporally bounded or unbounded. Due to the compositionality of aspectual and temporal information at different levels, imperfectivity can be combined with telicity in secondary imperfectives, conveying the complex meaning of an eventuality type with an intrinsic point of change that is only partly realised or instantiated in the actual case (the process reading) or where the macro-event itself is still in process (the repetition reading). In other words, the culmination point is in some way stripped off in the sense of Moens/Steedman (1988). The telicity property of the VP itself, though, is not obscured by such additional morphological and/or syntactic alternations.

## 2.1 Dynamicity and stativity

In my research, I concentrated on dynamic episodes, since only dynamic eventuality descriptions have an internal temporal structure and convey aspectually and/or temporally relevant information. Thus, I treat stativity as a sort of “atemporality” without a distinct internal temporal structure, as states are always true or false. At the same time, I distinguish between STATIC AND DYNAMIC STATES, as it is done in Bach (1981) and (1986). Hence, only static states do not have an internal temporal structure. Slavic state verbs can be subdivided into static and dynamic states, as well. Static states have no duration in the sense that they are not capable of implying a beginning- or an end-point, whereas dynamic states have duration and can externally

be supplied by a starting- and/or end-point. As Filip (1993/99) notes, every “episodic eventuality” can in principle have a beginning, a certain extent, and an end. Hence, “it is cognitively significant to mark grammatically the transitions that result in a certain state, process or event or in their ending and measure their duration. They can be acquired, entered into and end, and they can be measured in terms of time periods they are associated with. In Slavic languages, **prefixes** are often used for this purpose.”

Thus, static state verbs are in general very rare since most verbs can be supplied with at least a starting-point and therefore have duration and express some kind of dynamicity. But often, if a verb like *znat'* – ‘to know’ is supplied an INCHOATIVE MEANING by prefixation, this also changes its lexical meaning (*uznat'* – ‘to get to know, to find out’). This prefixed verb then behaves like a point verb (Vendler’s achievements), which can have a secondary imperfective *uznavat'*, giving rise to a meaning of repetition. Quite clear cases of static states that cannot be modified by prefixes, are *byt'* – ‘to be’<sup>18</sup>, *imet'* – ‘to have’, *suščestvovat'* – ‘to exist’, and *carstvovat'* – ‘to reign’. Hence, there are three types of static state verbs:

- a) verbs like *znat'*, which can be modified by inchoative prefixes (less common EGRESSIVE prefixes: *razljubit'* – ‘to stop loving’),<sup>19</sup>
- b) verbs like *suščestvovat'* and *carstvovat'*, which are derived from non-dynamic nouns by a derivational suffix (*suščestvo* – ‘being, creature’, *car'* – ‘tsar’),
- c) *byt'* – ‘to be’ and *imet'* – ‘to have’.

So it has become obvious that underived verbs are most likely to give rise to some dynamic interpretation.

States themselves are either GENUINE, INHERENT state verbs or “DERIVED” states, that can be subdivided into different kinds. I would subsume genericity in the sense of Krifka et al. (1995) under the concept of static states. This “atemporality” is in most cases a derived one, as for example in *He smokes.*, where a process verb is used to refer to a generic situation. Other derived states are instances of dynamic states. For example, the English present perfect refers to a resultant state with relevance for the moment of utterance. At the same time the state has a unique starting-point and is thus located in time due to the use of the present perfect, which presents it as a dynamic state. A similar effect arises with the perfect meaning of the Slavic perfective aspect. The English progressive operator derives a dynamic state of almost any predicate, which, in most cases is the state of some process. As Comrie (1976) puts it “the type of state implicated in progressives is one that is temporary, or contingent, rather than temporally unrestricted, or absolute”. Finally, any kind of repetition can, arguably, be seen as dynamic state information as well by referring to the state of repetition itself. Filip (1993/99) points out, that “temporary state predicates and progressives are not truth-conditionally equivalent in all the contexts”. Hence, there is a need to distinguish between genuine and derived states on the one hand and dynamic and static states, on the other.

This treatment of different kinds of states with their different meaning effects is partly in accordance with ter Meulen (1995/97). She treats any state information as stickers, attaching to some described event in the discourse (in her terminology some node in the dynamic aspect tree). At the same time, nothing is said about the temporal relation of, for instance, the event leading up to the resultant state to the event the resultant state is attached to. Russian gerunds could thus be treated as such stickers as they provide dynamic state information but cannot create R-time movement.

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<sup>18</sup> There are a few perfective verbs like *pribyt'* – ‘to arrive’ and *zabyt'* / *zabyvat'* – ‘to forget’, which - at least synchronically - should not be considered to be modifications of the verb *byt'*, though, since they have no semantic connection to it (anymore). The preposition and prefix *pri(-)* has the meaning ‘at’, whereas *za(-)* can have different meanings, namely ‘behind’, ‘within’, or ‘for’.

<sup>19</sup> This group is disputable and could be part of the dynamic states.



## 2.2 The interaction of grammatical aspect and telicity

In following Di Sciullo/Slabakova (forthcoming), I claim that in Slavic, telicity is grammaticalized by INTERNAL PREFIXES. EXTERNAL PREFIXES, on the other hand, do not render a verb telic but only supply external boundaries, i.e. boundedness at sentence or discourse level. DiSciullo/Slabakova (forthcoming) address the problem that not all verbal prefixes have the same effect over argument DPs and that, for example, in Romance, there is a configurational difference between internal (directional and locational) and external (iterative and inversive) prefixes. Only internal prefixes may change the telicity of the event denoted by the verbal projection they are part of. They show that a similar distinction can be made for Slavic prefixes by bringing forward primarily Bulgarian data. Whereas internal aspectual features are part of the v projection, external aspectual features are part of the Tense projection. This is supported by certain properties of Bulgarian prefixes:

1. An external prefix must precede an internal one, whereas the reverse order is ungrammatical.
2. External prefixes do not alter the “Aktionsart” of the verb, while internal prefixes do so, since they signal telicity.
3. When more than one prefix occur on a given stem, it is only one of them that supplies the endpoint of the event, the others offer additional meanings similar to adverbial modification.

These properties apply to Russian and Czech prefixes, as well. As to the first point, the Russian *po-vy-daval* ‘gave out for a while’ and the Czech *po-od-stoupil* ‘stepped aside a bit’ are used instead of the ungrammatical *\*vy-po-daval* and *\*od-po-stoupil*. As to the other two properties, an external prefix such as the delimitative *po-* functions as an adverbial modification with the meaning ‘a bit’, whereas an internal one (as in Russian *na-pisat*, Czech *na-psát* – ‘to write s.th.’) has prepositional properties and can be treated as a telicity marker. Hence, telicity is grammaticalized by internal prefixes, whereas external ones do not render a verb telic but only supply additional adverbial modification to an eventuality description.

In Russian, the most common external prefix is the DELIMITATIVE *po-* supplying the extra information ‘a bit’. The external PERDURATIVE prefix *pro-* refers to an unexpectedly long duration of a situation, where this duration always has to be lexically specified (in (22): *20 let, vosem’ časov*):

- (21) delimitative: *On po-sidel.* – ‘He sat / was sitting (for a while).’  
*On po-ležal.* – ‘He lay / was lying (for a while).’ (Russian)
- (22) perdurative: *On pro-sidel v tjurme 20 let.* – ‘He was (sat) in prison for 20 years.’  
*On pro-ležal tam vosem’ časov.* – ‘He lay there for eight hours.’ (Russian)

The Russian *po-* in this example functions as a temporal delimiter, comparable to for-adverbials, and provides the interpretation of temporal boundedness at sentence and discourse level. The VP itself stays atelic, though, since there is no additional change in argument structure and no telicity effect. The claim that such external prefixes attach at a higher level to the whole VP without changing its telicity value is further supported by the fact that they cannot occur as infinitival subjects. In the dictionaries, one does not find independent lexical entries of these verbs and infinitives are always dependent on some other verbal form, e.g. *Nado pogovorit’ s nim.* – ‘It is necessary to (have a) talk with him.’ Hence, this external prefixation takes place beyond the VP level.

In addition to marking telicity on a simple verb, most Slavic internal prefixes derive new lexical item, which often leads to a change in argument structure. From these new lexical items Slavic languages regularly derive SECONDARY IMPERFECTIVES by means of suffixes<sup>20</sup>, which never change the argument structure or the lexical meaning of the base verb, but only its aspect. Hence, secondary imperfectives in Slavic languages should be considered telic as well, since they contain internal prefixes. They still imply a natural point of change, the existence of which

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<sup>20</sup> There are some secondary imperfectives with vowel alternation but, as I already mentioned in the beginning, this way of deriving secondary imperfectives is not productive anymore.

is stripped off by the suffix. In this case the suffix explicitly marks that the natural point of change of the eventuality type described by the prefixed verb has not been reached in the actual case. This can give rise to different interpretations, e.g. a process meaning: it has not been reached yet, or any meaning of repetition: the whole macro-event (process of the macro-event) has not come to an end, but its micro-events might have reached their particular points of change.<sup>21</sup>

The compatibility with FOR-ADVERBIALS and IN-ADVERBIALS is often taken as a test for telicity. For-adverbials are not compatible with an actual point of change but can only apply to an unbounded situation, thereby delimiting it temporally (externally). So they can only be combined with telic predicates, if these refer to temporally unbounded situations, which is the case with the English progressive as well as with Slavic secondary imperfectives. In-adverbials, in general, only combine with telic predicates, i.e. with (perfective and imperfective) telic verbs usually with an internal prefix, referring to the process and its culmination point, taking place within the amount specified by the adverbial. Section 1 provided examples with telic and atelic perfective verbs, repeated here as (23) and (24).

- (23) *On napisal pis'mo \*dva časa / za dva časa.* (Russian)  
 he-NOM PF-write-PAST letter two hours in two hours

‘He wrote a / the (whole) letter for two hours / in two hours.’

- (24) *On popisal dva časa / \*za dva časa.* (Russian)  
 he-NOM PO-write-PAST two hours in two hours

‘He was writing for two hours / \*in two hours.’

PERFECTIVE TELIC VERBS (with internal prefixes) only combine with in-adverbials as they always lexicalise the actual reaching of the culmination point, which is incompatible with for-adverbials, as shown in (23). PERFECTIVE ATELIC VERBS (with external prefixes), on the other hand, are only compatible with for-adverbials, because they never supply a culmination point, which is necessary for the use of an in-adverbial, as shown in (24). SECONDARY IMPERFECTIVES can combine with both adverbials as they are telic (compatible with in-adverbials) and refer to temporally unbounded situations (compatible with for-adverbials):

- (25) *On perepisyval pis'mo dva časa / za dva časa.* (Russian)  
 he-NOM SI-re-write-PAST letter two hours / in two hours

In combination with for-adverbials the secondary imperfective can refer to the process of a unique event, which gets delimited by the adverb itself. If, on the other hand, the for-adverbial has scope over the whole sentence and not just the VP, the secondary imperfective it combines with gives rise to a repetition interpretation. So there can be a scope ambiguity with secondary imperfectives in combination with a durative as to whether it refers to the VP or to the whole sentence, which might be solved by other linguistic means or world knowledge.<sup>22</sup> In all of these interpretation possibilities the durational adverb creates the interpretation of temporal boundedness at sentence level.

Secondary imperfectives in combination with in-adverbials always involve some sort of repetition (under the condition that the situation can be repeated and hence be non-unique). They convey the information that the culmination points of each repeated sub-event have been reached within the amount of time indicated by the in-adverbial (temporal non-uniqueness of the macro-event).

<sup>21</sup> A similar effect of the combination of telicity and imperfectivity arises when the English progressive operator is combined with a telic VP. It is not exactly the same, though, because English has an overt marking of imperfectivity but neither of telicity nor perfectivity.

<sup>22</sup> For example, a sentence like *On čital knihu 10 minut.* – ‘He was reading a book for ten minutes.’ is more likely to get a process meaning than *Ona igrala sonatu 20 let.* ‘She played the sonata for 20 years.’ With a reference to a situation that cannot be repeated, the process reading is the only one available as in *On umiral 10 let.* ‘He was dying for 10 years.’ Then again, in the last case, he could recover, and fall ill again and so on, but this repetition reading would need very strong contextual support.

What has been said so far about secondary imperfectives, also applies to under-specified imperfective simple verbs that are combined with a quantized incremental theme argument, yielding a telic predicate:

- (26) *On pisał pis'mo dva časa / za dva časa.* (Russian)  
 he-NOM IPF-write-PAST letter-ACC-SG two hours / in two hours

The data I presented is Russian, but similar observations can be made for Czech. In Czech, though, secondary imperfectives primarily convey a process meaning only rather than a meaning of repetition. Hence, in-adverbials usually combine with perfective verbs, though the combination with secondary imperfectives is not ungrammatical. Section 3.5 will deal with secondary imperfectives in more detail.

Filip (through DiSciullo/Slabakova (forthcoming)) claims that Czech source-oriented prefixes like *vy-* - ‘out’ as in *vyjít* – ‘to go out, leave’, do not yield “quantized” verbs, as they can still be combined with measuring expressions like *asi metr* – ‘about a metre’ or the delimitative prefix *po-*, unlike verbs with goal-oriented prefixes:

- (27) *Povytl káru z příkopu.* (Czech)  
 PO-out-pull-PAST cart-ACC from ditch-GEN  
 ‘He pulled the cart partly out of the ditch.’
- (28) *\*Podotl káru k/do příkopu.* (Czech)  
 PO-to-pull-PAST cart-ACC (in)to ditch-DAT (with *k*) /GEN (with *do*)  
 ‘He pulled the cart partly into the ditch.’

This would mean that they are on a par with other external prefixes such as the delimitative *po-*. I disagree though, as verbs with the source-oriented prefix *vy-* cannot be atelic, because they still imply a distinct natural point of change. In the actual case this point of change will be interpreted as a temporal boundary to the left, which is a unique starting-point (just as with the verb ‘to leave’). The whole issue is deeply connected to the problem of the “right” definition of telicity. If it is taken to be a temporal notion by meaning inherent **end-point**, then a verb like *vyjít* cannot be considered to be telic, but if it is not defined as a temporal notion but instead as implying some point of change, *vyjít* has to be considered to be telic since there is a distinct point of change (in this case with the derived temporal interpretation of being the starting-point) and the prefix *vy-* is in fact an internal one rendering the verb telic. This is preferable since it really rather seems to be an internal prefix as it also changes the argument structure: Whereas the simple verb *táhnout něco* – ‘draw, pull, drag s.th.’ has only one obligatory internal argument (acc), the (source) argument of *dotáhnout něco do čeho* or *k čemu* has to be specified, as well, just as the goal argument has to be specified with *vytáhnout něco z čeho*. I will come back to this in section 3.3.

Taking telicity as a non-temporal concept and defining it as implying a point of change is in accordance with Moens/Steedman (1988) relying on the concept of contingency rather than temporality. This could also help to distinguish between internal prefixes used for inchoative state verbs (e.g. *u-videt* – ‘to catch sight of’ vs. *videt* – ‘to see’), which are part of the VP and its argument structure, and the external ingressive prefix *za-* attaching to a whole VP by supplying an external purely temporal boundary (cf. section 3.3). So instead of defining it as implying an inherent **end-point** a telic predicate implies a natural **point of change**, which could be identical to an actual end-point, but which could also be just a natural intrinsic starting-point as with inchoative verbs or motion verbs with source-oriented prefixes.

### 2.3 Slavic verb types

This section consists of some general remarks on Slavic verbs that hold for Russian and Czech and where Russian examples will be used. Slavic simple verbs are semantically under-specified and in their default interpretation refer to either a STATE, a PROCESS, or a POINT, which is a change of state. If an affix is added to a simple verb it becomes more specific and

semantically more complex. So adding the prefix *u-* to the state verb *znat'* gives rise to (only) an inchoative meaning (cf. Młynarczyk (forthcoming)):

- (29) *u-znat'* – ‘to get to know, to find out’ vs. *znat'* – ‘to know’  
*u-videt'* – ‘to catch sight of’ vs. *videt'* – ‘to see’

These prefixes are internal as they change the argument structure as well. Prefixed state verbs describe a point of change of state (the inchoative meaning) in combination with the resultant (or consequent) state (of knowing or seeing) and can be seen as an instance of the perfect meaning of the perfective aspect (cf. section 3.1 and 3.2). A prefixed process verb gives rise to the combined meaning of process and state change, which is a starting point, an end-point, or both (intrinsic or externally provided):

- (30) external prefix: *On za-pel.* – ‘He started to sing.’  
external prefix: *On ot-pel.* – ‘He stopped to sing.’  
external prefix: *On po-pisal.* – ‘He wrote (for a while).’  
internal prefix: *na-pisat'* – ‘to write s.th.’  
internal prefix: *pod-pisat'* – ‘to sign’

Whereas state and process verbs are traditionally considered to be imperfective and can be combined with prefixes to become perfective<sup>23</sup>, point verbs are already perfective. They are always telic since they lexicalise the point of change itself and hence need no extra marking of telicity by internal prefixes. They can be imperfectivized by suffixes creating an imperfective verb with the same lexical meaning. As most simple verbs, they can also be combined with lexical (internal) prefixes, giving rise to a different lexical meaning (with a potential change in argument structure):

- (31) suffixation: *dat' / davat'* – ‘to give’  
vowel alternation: *sest' / sadit'sja* – ‘to sit down’  
lexical prefix: *vy-dat'* – ‘to give out’

There are not many perfective verbs without prefixes, though.<sup>24</sup> A part of them display a quite archaic morphology and form aspectual pairs with suppletive imperfective verbs, e.g.: *sest' / sadit'sja* – ‘to sit down’, *leč' / ložit'sja* – ‘to lie down’, *lovit' / pojmat'* – ‘to catch’. With the first two examples there is still an apparent lexical tie with the simple atelic state verbs *sidet'* – ‘to sit’ and *ležat'* – ‘to lie’, to which they form causative verbs.<sup>25</sup> Usually, point verbs only refer to a change of state and do not imply a process leading up to this change. As a consequence, their imperfective counterparts do not give rise to a process interpretation, but only to one of repetition. A process meaning can be contextually induced but it is not the first available with these imperfective verbs. The argument structure of point verbs is often quite complex, as in *dat' / davat' komu čto* – ‘to give s.th. to s.o.’ or Czech *koupit / kupovat (si) něco* – ‘to buy s.th.’ (for oneself: with the reflexive pronoun *si* / for someone else: without the reflexive pronoun, but with a dative NP). This is a topic for future research, though.

With some Slavic simple verbs the telicity value can only be decided upon at the VP level. First, there are process verbs with an optional internal argument subjected to a gradual change by the action denoted by the verb. Only in these cases, the telicity value is influenced by the QUANTIZED-CUMULATIVE distinction of the internal arguments as worked out in Krifka (1992). The whole VP is either telic when combined with a quantized incremental theme argument or atelic in combination with a cumulative incremental theme argument, resulting in a homomorphic mapping from the domain of events to the domain of objects. This is in accordance with Filip (1993/99) for Czech and DiSciullo/Slabakova (forthcoming) for

<sup>23</sup> They can also be combined with iterative suffixes staying imperfective, which is productive in Czech but not productive anymore in Russian.

<sup>24</sup> Isačenko (1962) gives a presumably exhaustive list, consisting of 26 verbs belonging to the (smallest and not productive) conjugation class on *-it'*, 6 irregular verbs, and a few others, where - from a synchronic point of view - the prefix cannot be separated from the root, since the root itself does not constitute a verb of its own (anymore).

<sup>25</sup> The *-sja* on the imperfective verbs is the productive reflexive marker / particle.

Bulgarian. Ramchand (forthcoming) points out that, in general, the properties of the internal argument influence the telicity value of the predicate only with one class of verbs, which stands in sharp contrast to, for example, other theories deducting the telicity value of a predicate from the properties of the internal argument (e.g. Verkuyl (forthcoming)). Then there are simple (directed) motion verbs, which imply a path, an end-point of which can be specified by a goal argument or a source argument. With both kinds of verbs, the internal or goal argument is capable of providing a natural end-point (or culmination point) and rendering the whole VP telic. As proposed in Filip (1993/99), these verbs (i.e. the simple process verbs) by themselves are not specified with respect to their telicity value. Hence, Slavic verbs, in general, can be divided into strictly atelic verbs, strictly telic verbs and verbs that can give rise to either a telic or an atelic interpretation.

Since the imperfective simple process verb is somewhat under-specified in meaning, it is more sensitive to the context, giving rise to various meanings:

- (32) *Ivan čital knigu.*  
Ivan-NOM IPF-read-PAST book-ACC

Example (32) can be translated into English by the following sentences (and additionally perfect varieties)<sup>26</sup>:

- (33) a) ‘Ivan was reading the / a (specific) book.’  
b) ‘Ivan read the / a (specific) book (at least once).’ = ‘There was a reading of the / a (specific) book by Ivan.’ (token-reading)  
c) ‘Ivan read the / a (kind of) book.’ (type-reading)  
d) ‘Ivan read the / a (specific or kind of) book (repeatedly).’

The more specific (perfective) prefixed process verb, on the other hand, can only describe a unique situation:

- (34) *Ivan pročital knigu.*  
Ivan-NOM PF-through-read-PAST book-ACC  
‘Ivan (has / had) read the / a (specific) (whole) book.’<sup>27</sup>

If such a process verb with an optional internal argument is prefixed by a specific prefix, these prefixes are often considered to be “empty” since they only contribute a perfective meaning, namely that the writing of something unique and quantized has come to a natural end, i.e. has been finished.<sup>28</sup> DiSciullo/Slabakova (forthcoming) for example note that such prefixes get a telic interpretation “only”. At the same time, there is a change in argument structure though, as the use of the internal argument with the prefixed verb is not optional anymore but obligatory. Whereas it is true that for instance with *na-pisat*’ there is no secondary imperfective *\*napisyvat*’ (which is a sign that the simple imperfective has the same lexical meaning as the perfective and a secondary imperfective is not “needed”), most other perfectives with “empty” prefixes can also derive secondary imperfectives that should have some different meaning effects than the simple imperfective verbs, as, for instance *čitat*’ > *pročitat*’ > *pročityvat*’ – ‘to read’.

There is a group of process verbs that are always intransitive but where the NP in subject position undergoes a gradual change. Ramchand (forthcoming) claims that such verbs “display

<sup>26</sup> Since Russian and Czech (as most Slavic languages) only have one tense referring to situations in the past, there might be a variety of translations - depending on the context - when translated into other languages with more than one tense referring to situations in the past (as English simple past, present perfect and past perfect) (cf. section 7.1).

<sup>27</sup> The readings in (32) and (33b) differ as the first implies a potential repetition (cf. section 7.3), whereas the second refers to a discrete unique event.

<sup>28</sup> The prefixes used in these cases can be considered to contribute a redundant meaning since they only supply information that is already presupposed in the simple verb. Prefixes stem from prepositions. So if, for example, something is usually V-ed **onto** something, the preposition *na* - ‘on’ is used: *napisat*’ – ‘to write’, *narisovat*’ – ‘to draw’. If something is V-ed **away** or **out**, the prepositions *s* – ‘away’ or *vy* – ‘out’ are used: *vypit*’ – ‘to drink’, *s’est*’ – ‘to eat’.

unaccusative behaviour and actually have internal arguments”. In combination with an internal prefix, they receive a culmination point as well, which is not an absolute, but only a relative end-point (cf. Mehlig (1996)). This is born out by the fact, that a sentence containing such a perfective verb can be continued by using the imperfective counterpart, which then refers to the same situation only with a different perspective on it:

- (35) *On pokrasnel i ešče krasneet.*  
 he PF-turn-red-PAST and still IPF-turn-red-PRES-3sg  
 ‘He turned red and is still turning redder (blush).’

Many of these verbs are derived from gradual adjectives (e.g. *krasnyj* – ‘red’ > *(po)krasnet*’; *tolstyj* – ‘fat’ > *(po)tolstet*’ etc.) so it is not surprising that they supply a relative end-point and a meaning of gradual change (Dowty (1979)’s degree achievements), others are not derived from adjectives and still behave in a similar way. For example, the Russian equivalence for ‘to melt’ would be - depending on what it is that melts - *(ras)tajat*’, *(ras)topit*’, or *(ras)plavit*’, where the prefix *ras-* (or *raz-*) contributes the meaning ‘apart’. Less often, the perfective verb is derived by means of the perfective suffix (the only perfective suffix that exists in Slavic languages) *-nut-*, e.g. *otdyxat*’ / *otdoxnut*’ – ‘to rest’.<sup>29</sup> In Russian, the simple verbs cannot be modified by external prefixes such as the delimitative *po-* or the perdurative *pro-*, which can be taken as evidence for their being telic, i.e. implying a natural point of change (*\*po-/pro-/za-tajat*’).

Bohnenmeyer/Swift (forthcoming) address the issue of aspect and markedness from a quite different angle than what is usually done in the Slavistic tradition. They define grammatical aspect as viewpoint aspect and constitute a TELICITY BIAS IN VIEWPOINT SELECTION with some languages, where there are marked imperfective aspect and unmarked perfective aspect for telic predicates, but just the opposite distribution for atelic predicates (e.g. Russian, Yukatek Maya). Such a telicity bias can also be found in Early Child Language, where in English, for example, there is a preference for using the *ing*-form with atelic predicates, and the *ed*-form with telic ones. In order to capture these observations they introduce the notion of Default Aspect (DASP) as an operator that assigns interpretations to predicates that are not overtly marked for aspect. If a language marks aspect differentially based on the telicity of the predicate, it can exploit DASP to assign an aspectual interpretation to the unmarked member of the aspect opposition, where “overt marking then fills the gaps”.

In Russian, aspect marking, supposedly, depends on the telicity of the predicate “or on a feature closely correlated with telicity, namely state change”. In referring to Klein (1995) they claim that “Russian unprefixated verbs are overwhelmingly atelic and semantically allow for both imperfective and perfective interpretations”. Russian prefixed verbs, on the other hand, are “inherently telic for the great majority of prefixes, and without further marking such stems are interpreted perfectly.” To express imperfective aspect, prefixed verbs require a marked form. Hence, the particular aspectual reading is **encoded** and not just **implicated** by the unmarked form, and marked forms are obligatorily used “to express non-default aspect”.

The idea of a DASP-operator captures the intuition that telicity and grammatical aspect are two distinct phenomena, which interact at the same time. Principally, it is true, that the majority of simple verbs are atelic and imperfective whereas the majority of prefixed verbs (without any further affixes) are perfective and telic, but at the same time it is a bit of an oversimplification. In general, the argument structure of simple verbs determines whether the predicate is telic or atelic. Thus, whereas the majority of simple verbs are really imperfective, there are a number of unmarked simple verbs that are always telic and perfective without any prefixes. On the other hand, there are simple verbs with an optional internal argument that can have a telic reading if the argument is quantized. Finally, there are simple verbs that are always atelic but which could still be perfectivized by external prefixes if they describe a dynamic

<sup>29</sup> The *ot-* used to be a prefix but since there is no simple verb *\*dyxat*’ (anymore) (only *dyšat*’ – to breathe), I consider this verb a simple verb. This is debatable.

eventuality leading to perfective prefixed atelic verbs. It should not be ignored that these verbs are not that rarely used and hence should not be treated as an exception.

### 3 Differences in the availability and use of affixes in Russian and Czech

#### 3.1 Perfect meaning

In the previous section it was noted, that prefixed state verbs describe a point of change of state (the inchoative meaning) in combination with the resultant (or consequent) state. In the Slavistic tradition, this meaning effect of the perfective aspect is labelled the PERFECT MEANING OF THE PERFECTIVE ASPECT since it resembles the meaning effect that the perfect operator in, for example, Germanic and Romance languages gives rise to. Glovinskaja (1989) defines this meaning as follows: “the result of an event in the past is present at the moment of speech”. Padučeva (1996) is more precise and differentiates between narrative and dialogue. She states that there is an “inceptive component” in every Russian perfective verb form with the meaning “the resultant state holds at R”. Even perfective verbs like *soxranit’* – ‘to keep’ and *zaščitit’* – ‘to defend’ include such a meaning component as they explicitly mark that a new state or process has **not** started. Depending on the context, a perfective verb form can thus refer to this inceptive component (the point of change), which Padučeva calls the “event meaning” of the perfective aspect, or it can refer to the new state starting after the inceptive moment, the “perfect meaning” of the perfective aspect. This component in a perfective verb form guarantees that the resultant state still holds at R.

Russian makes wide use of this meaning of the perfective aspect to refer to a temporally bounded consequent state of a state or process verb in foregrounded situations (narrative continuation), whereas it is avoided in backgrounded and elaborating situations. In Czech, the perfect meaning is used far less often and usually, imperfective simple verbs are used to refer to simple states. For example, Russian has a variety of perfective copula verbs describing stative situations that, in Czech, are usually referred to be the simple verb *být* – ‘to be’ (sometimes also *mít* – ‘to have’):

- (36) *A když bylo největší ticho a [...] (JR) (Czech)*  
 and when IPF-be(copula)-PAST totally quiet and  
 ‘And when it was totally quiet and ...’
- Kogda že nastala glubokaja tišina i [...] (Russian)*  
 when however PF-on-stand(copula)-PAST deep quietness and

Another Russian perfective copula verbs already appeared in example (6) (*okazaljsa* – ‘to appear’), which even showed up as a secondary imperfective in the habitual episode of example (5) (*okazyvalsja*), still conveying the same perfect meaning (referring to the resultant state), where the suffix marks the regular occurrence of such the described situation. Hence, in Russian, the perfect meaning is not just a meaning component of perfective verb forms, but of secondary imperfectives in habitual contexts, as well.

With adverbs like ‘SUDDENLY’ or ‘ACCIDENTALLY’, referring to an immediate point of change without a preparatory phase, Russian even has to use the perfective aspect with unique events, but Czech can also use an atelic imperfective verb in these cases to refer to a simple state:

- (37) *[...] když se potom dal se mnou do řeči,*  
 when REFL then PF-give-PAST with me-INSTR to speech-GEN
- cítila jsem najednou, jak [...] (Kun) (Czech)*  
 IPF-feel-PAST-SG-FEM AUX-1sg suddenly how  
 ‘... and when he started talking to me, I suddenly felt, that ...’
- [...] ja vdrug počuvstvovala, čto [...] (Russian)*  
 I suddenly PF-feel-PAST-SG-FEM that

Here, ‘suddenly’ implies a unique starting-point that has to be marked on the verb in Russian, but not in Czech, where one lexical marking by the adverb itself seems to be enough, at least with state verbs. If adverbs like ‘suddenly’ or ‘accidentally’ refer to the natural end-point of a telic verb (usually only with achievements, because both adverbs imply the absence of a preparatory phase), both languages will use the perfective aspect:

- (38) *Vnezapno on razbil čašku.* (Russian)  
by-accident he-NOM PF-apart-hit-PAST cup-ACC

‘By accident, he broke a / the cup.’

*Omylem rozbil šálek.* (Czech)  
by-accident PF-apart-hit-PAST cup-ACC

Even though this meaning effect of perfective verb forms is not encountered that often in Czech, it can be used in some cases as a stylistic device to liven up a story. But it is never used in the way as it is used in Russian, where foregrounded states have to be described as temporally unique and thus marked by perfective verb forms. Whereas in Russian, this meaning is regularly encountered with state verbs, it is primarily conveyed by telic verbs (prefixed process verbs and point verbs) in Czech regardless of the situation being foregrounded or backgrounded. For instance, in (39), the stative information in the first part is not relevant for the course of the whole story, consisting of unique, non-repeated situations, but only conveys additional atemporal background information. The translator decided to literally translate the first two when-clauses using finite verb forms, even though subordinate clauses are usually not very often used in Russian. The finite verb forms themselves are necessarily imperfective (a secondary imperfective and a simple under-specified state verb), as Russian finite perfective verb forms would cause a temporal updating (a narration interpretation). The third Czech when-clause, containing two finite verb forms, is rendered by a Russian NP. In the Czech original, four finite verb forms are used, where perfective and imperfective verbs regularly alternate. This creates an effect of speeding up (by means of perfective verbs) and slowing down (by means of the imperfective verbs).

- (39) *Když přišlo pozdní jaro, když bylo léto, když se setmělo a byla sobota, přešel*  
when PF-to-go-PAST late-spring-NOM, when IPF-be-PAST summer-NOM, when  
REFL PF-grow-dark-PAST and IPF-be-PAST Saturday-NOM, PF-across-go-PAST

*jsem osvětlený most, pak zahrnul k mlýnu a podle Staré rybárny*  
AUX-1Sg illuminated-bridge-ACC, then PF-turn-PAST to mill and past Old fisher’s

*jsem kráčel kolem plotu farní zahrady.* (JR) (Czech)  
AUX-1Sg IPF-stride-PAST around fence church-yard-GEN

‘When late spring had arrived, when it was almost summer, when it had grown dark and it was Saturday, I crossed the illuminated bridge, then turned towards the mill and strode past The Old Fisher’s Inn along the churchyard fence.’

*Kogda vesnja približalas’ k koncu, kogda bylo uže*  
when spring-NOM SI-come-closer-PAST-REFL to end, when IPF-be-PAST already

*počti leto, odnaždy v subbotnie sumerki ja perešel osveščennyj most,*  
almost summer, once in saturday twilight I PF-across-go-PAST illuminated-bridge,

*a potom svernul k mel’nice i zašagal mimo starogo „Rybnogo podvor’ja“*  
and then PF-turn-PAST to mill and ZA-stride-PAST past old Fisher’s inn

*vdol’ ogrady cerkovnogo sada.* (Russian)  
along fence church-yard-GEN

It seems that the author (Hrabal) wanted to play with this stylistic effect Czech perfective and imperfective verb forms can have on a narration. Such an effect cannot be created in Russian in



this way. In sum, Russian uses the perfect meaning of the perfective aspect to foreground state information by presenting it with a distinct starting-point thereby stressing the relevance of the consequent state. In Czech, on the other hand, the perfect aspect can be used as a stylistic device to liven up a story and to present backgrounded achievements as states.

### 3.2 Perception verbs

Slavic perception verbs are either states, which can be prefixed by *u-* to get an inchoative meaning (*(u)videt'* – ‘to see’, *(u)slyšat'* – ‘to hear’), or they are processes, which can be prefixed mostly by *po-* (*(po)smotret'* – ‘to look, to watch’, *(po)slušať* – ‘to listen’) to signal either that the situation they refer to is temporally bounded (*On posmotrel na kartinu.* – ‘He looked at the picture.’) or (when used with an incremental theme) that the VP is telic (*On posmotrel fiľm.* – ‘He watched a / the (whole) film.’). When comparing Czech and Russian aspect usage in context it becomes obvious that Czech hardly ever makes use of the perfective verbs of resultant state pairs, whereas Russian regularly does. In most cases the Russian perfective verbs convey the above-mentioned perfect meaning of the perfective aspect as in example (37). Another example where this difference in aspect usage was already encountered is the last verb form in (20) (*uvidel* vs. *viděl* – ‘saw’).

Comparing verbs of perception in Russian and in Czech by looking at their lexical entries in dictionaries, one even finds that all Russian perception verbs form aspectual pairs by prefixing the simple verb, whereas in Czech about half of them remain imperfective, as it is shown in the following table.<sup>30</sup>

	<u>RUSSIAN</u>	<u>CZECH</u>
see; notice	<i>(u)videt'</i> ; <i>zamečat'</i> / <i>zametit'</i>	<i>(u)vidět</i> (Pons: ipf.t. – Siebenschein: pf.t.)
hear	<i>(u)slyšat'</i>	<i>(u)slyšet</i>
look / watch	<i>(po)smotret'</i> ; <i>(po)gljadet'</i>	<i>(po)dívat se</i> ; <i>hledět</i> / <i>pohlédnout</i>
listen	<i>(po)slušať</i>	<i>poslouchat</i> / <i>(vy)poslechnout (si)</i>
feel / sense	<i>(po)čuvstvovat'</i>	<i>(po)cítit</i> / <i>pocít'ovat = cítit</i>
smell	<i>(po)njuhat'</i>	<i>(u)cítit</i> ; <i>ěchat</i> / <i>ěchnout si</i>
feel / touch	<i>(po)čujat'</i>	<i>nahmatávat</i> / <i>nahmatat and nahmatnout</i>
taste (good); taste (= try)	<i>(ěto vkusno)</i> ; <i>((po)probovat')</i>	<i>chutnat</i> ipf.t.; <i>ochutnávat, ochutnat</i>
breathe	<i>dýšať</i> ipf.t.	<i>dýchat</i> ipf.t.
seem	<i>(po)kazat'sja</i>	<i>zdát se</i> ipf.t.; <i>zazdát se</i> pf.AA
think	<i>(po)dumat'</i> ; <i>(myslit'</i> ipf.t. (phil.))	<i>myslet</i> / <i>myslit</i> ipf.t. ( <i>dumat</i> ipf.t. – ‘brood’)
consider	<i>(ob)dumat'</i>	<i>pomyšlet</i> / <i>pomyslit</i>
(it makes you think)	<i>zadum(yv)at'sja</i>	<i>zamyslet (zamyslit) se</i> pf.t. (Siebenschein)
think about	<i>razmyslit'</i> / <i>razmysľjat'</i>	<i>zamyšlet se</i> ipf.t. (Pons)
intend	<i>(imet' namerenie</i> etc.)	<i>zamyšlet</i> ipf.t. (Pons)
know	<i>znat'</i> ipf.t.	<i>znát</i> ipf.t.
find out / recognize	<i>uzna(va)t'</i>	<i>poznávat</i> / <i>poznat</i>
tell by s.o.'s face/look		<i>poznávat</i> ipf.t.
know		<i>věděť</i> ipf.t.
get to know / learn		<i>dovídat, dověděť</i>
understand	<i>ponjat'</i> / <i>ponimat'</i>	<i>(po)rozumět</i> (Siebenschein: <i>rozumět</i> pf.t.)

**Table 2: Perception verbs**

### 3.3 Temporal Aktionsart verbs

Since all atelic verbs describing dynamic eventualities have duration, they can be temporally bounded and supplied by an external starting- and/or end-point. This is done by the

<sup>30</sup> For Czech, the dictionaries I consulted (Pons and Siebenschein) did not even agree in all cases. Where they did not I listed both entries. The abbreviations *ipf.t.* and *pf.t.* are used for imperfectiva and perfectiva tantum, i.e. verbs that are considered not to be part of any aspectual pair, which means that there is no counterpart with the same lexical meaning but only with a different aspect (cf. section 7.2).

aspectual external prefixes *po-* and *pro-* (cf. section 2.2), creating TEMPORAL AKTIONSART VERBS<sup>31</sup>:

- (40) delimitative AA: *On po-sidel.* – ‘He sat / was sitting (for a while).’  
*On po-ležal.* – ‘He lay / was lying (for a while).’
- (41) perdurative AA: *On pro-sidel v tjurme 20 let.* – ‘He was (sat) in prison for 20 years.’  
*On pro-ležal tam vosem’ časov.* – ‘He lay there for eight hours.’

The DELIMITATIVE prefix *po-* supplies the extra information ‘a bit’, which in Russian is interpreted only temporally as ‘for a while’. The PERDURATIVE prefix *pro-* refers to an unexpectedly long duration of a situation, where it always has to be made explicit that this duration is specific. In Russian, a specification by *dolgo* – ‘for a long time’ would already be enough, whereas in Czech the duration has to be specified, as well. In Russian, both prefixes can only be used with temporally unbounded situation without an explicit actual point of change or end-point. This is the case with atelic simple verbs as in (40) and (41) but also with non-unique, repeated (in the following example distributive) telic events, as Mehlig (1996) points out:

- (42) *Igor’ nemnogo povydaval knigi i zakryl biblioteku.* (Russian)  
 Igor’ a-bit PO-(SI)-out-give-PAST books and PF-close-PAST library  
 ‘Igor’ handed out books for a while and (then) closed (or: before closing) the library.’

In Russian, the delimitative *po-* is highly productive, whereas in Czech, *po-* is not that productive and its meaning ‘a bit’ most often does not render a temporal but spatial interpretation. In my data, I only found one case of *po-* supplying a temporal boundary. In the few other cases where this prefix was used in Czech, it was even combined with perfective telic verbs (the verbs under 8. and 9. in section 3). Here, I will only give one example:

- (43) *Pak holička poodstoupila [...] (Kun) (Czech)*  
 then hairdresser-NOM PO-PF-from-step-PAST  
 ‘Then the hairdresser stepped aside a little bit.’

This spatial meaning cannot be rendered by the delimitative prefix in Russian so the translator decided to use the additional lexical item *čut’* – ‘a bit’:

- (44) *Potom parikmaxerša otošla čut’ [...] (Russian)*  
 then hairdresser-NOM PF-from-go-PAST bit

Hence, in Russian, external prefixes can only mark temporal boundaries, whereas in Czech, these boundaries can also get a spatial interpretation.

As I already mentioned in 2.2, Filip (through DiSciullo/Slabakova (forthcoming)) claims that Czech source-oriented prefixes like *vy-* – ‘out’ as in *vyjít* – ‘to go out, leave’, do not yield “quantized” verbs. She grounds this on the fact that they can combine with the prefix *po-*, whereas verbs with goal-oriented cannot:

- (45) *Povyťáhl káru z příkopu.* (Czech)  
 PO-out-pull-PAST cart-ACC from ditch  
 ‘He pulled the cart partly out of the ditch.’
- (46) *\*Podotáhl káru k/do příkopu.* (Czech)  
 PO-to-pull-PAST cart-ACC (in)to ditch  
 ‘He pulled the cart partly into the ditch.’

I suggested instead, that both source-oriented and goal-oriented prefixes should be treated as internal prefixes deriving telic verbs where telicity is not a temporal notion but refers to a

<sup>31</sup> In accordance with the Slavistic tradition, I will call Aktionsart verbs only particular verbs derived by prefixes that modify the base verb aspectually, namely the ones with aspectual external prefixes as defined above.

natural point of change. The fact that verbs with source-oriented prefixes can be combined with the external prefix *po-* whereas verbs with goal-oriented prefixes may not, can be explained by the fact that in Czech, this external prefix primarily supplies spatial rather than temporal boundaries. So if the goal of some motion is already specified by a goal-oriented prefix, there cannot be a further motion of ‘a bit’ after the goal has been reached, whereas if only the source is specified by the corresponding prefix, the additional motion of ‘a bit’ can still take place. This can be shown by looking at Russian, where the external prefix *po-* only and exclusively supplies external temporal boundaries (to the left and to the right: ‘for a while’). So it should not be possible to attach this prefix to verbs with neither a goal-oriented nor a source-oriented prefix which both lexicalise a point of change, which in turn gets the interpretation of a temporal boundary to the left or to the right. This is, indeed, true for Russian where the corresponding translations of both Czech examples given above are ungrammatical:

(47) \**Povytaščil* *teležku iz rova.* (Russian)  
 PO-out-pull-PAST cart-ACC from ditch-GEN  
 ‘He pulled the cart out of the ditch (for a while).’

(48) \**Podotaščil* *teležku k rovu.* (Russian)  
 PO-to-pull-PAST cart-ACC to ditch-DAT  
 ‘He pulled the cart into the ditch (for a while).’

The fact that both verbs are perfectly fine with *po-* in Bulgarian (cf. DiSciullo/Slabakova (forthcoming)) is even a further indication for viewing them both as internal prefixes marking telicity, which has nothing to do with the temporal notion of e.g. end-point.

The perdurative Aktionsart with *pro-* is very limited in use. In my data, I found three Russian cases, one of which was even additionally imperfectivized by a suffix (in this case giving rise to a habitual meaning). This was translated into Czech by the only perdurative Aktionsart verb found in the Czech data at all:

(49) *V to vremja, kak Persikov, xudeja i istoščajas’*,  
 in that time how Persikov IPF-grow-thin-GER and IPF-become-exhausted-GER  
*prosižival dni i polovinu nočej za mikroskopom, Ivanov [...]* (RJ) (Russian)  
 PRO-(SI)-sit-PAST days and half nights behind microscope Ivanov  
 ‘While Persikov sat behind the microscope days and half nights, growing thinner and becoming exhausted, Ivanov ...’  
*Mezitímco Persikov, vyhublý a scvrklý, proseděl celé dny a polovinu noci*  
 while Persikov emaciated and shrunk PRO-sit-PAST whole days and half nights  
*u mikroskopu, Ivanov [...]* (Czech)  
 at microscope Ivanov

As already mentioned, process verbs can only have a telic interpretation when combined with a quantized internal argument (at the VP-level). Hence, when they are used intransitively or in combination with a cumulative incremental theme argument they are always atelic but can be modified by external Aktionsart prefixes like the above-mentioned *po-* or *pro-*, as well as the INGRESSIVE AKTIONSPORT prefix *za-*:

(50) *On zapel (pesnju).* (Russian)  
 He ZA-sing-PAST (song-ACC).  
 ‘He started to sing (a / the song). / He burst out in a song.’

In this example nothing is said about whether he finished singing the (whole) song, but only the temporal starting-point is explicitly marked by the ingressive Aktionsart. This Aktionsart does not exist in Czech, where ingressivity with atelic verbs is regularly contextually induced (cf. Ivančev (1959/60)). The Czech translation of this sentence therefore contains an imperfective simple process verb: *Zpíval písni*.

### 3.4 Directed motion verbs

Slavic simple motion verbs come in pairs of directed (towards a specific implied or lexicalised goal, i.e. implying a determinate path) and non-directed motion verbs (no implicit or explicit goal), both being imperfective.<sup>32</sup> Referring to a habitual motion or to an ability, both Russian and Czech use the non-directed motion verbs, even in combination with a goal argument:

- (51) *On xodit v školu. Pticy letajut.* (Russian)  
He NDIR-go-PRES in school-ACC. Birds NDIR-fly-PRES  
'He goes to school. Birds fly.'

*Chodí do školy. Ptáci létají.* (Czech)

Only Russian has a special use of the non-directed motion verbs with a lexicalised goal argument, giving rise to the meaning 'there and back (once)'<sup>33</sup>:

- (52) *Včera on xodil v kino.* (Russian)  
yesterday he NDIR-go-PAST in cinema-(ACC)  
'Yesterday he went to the movies (and came back afterwards).'<sup>34</sup>

*Včera šel do kina.* (Czech)  
yesterday DIR-go-PAST to cinema-GEN

Prefixed motion verbs cannot be divided into directed and non-directed motion verbs anymore but show the same aspectual distinction as other prefixed verbs and their secondary imperfectives: *prixodit' / přijti* – 'to come / arrive (on foot)'.<sup>32</sup>

Simple motion verbs can get a telic reading in combination with a goal argument supplying an incremental path theme in the sense of Filip (1993/99), which triggers a verb of directed motion when referring to unique situations. In Russian and most other Slavic languages, they can be prefixed with *po-* (*exat' / poexat'* – 'to drive (directed motion)'), creating either an ingressive or a completed path reading. Czech directed motion verbs do not have a perfective counterpart with the prefix *po-* in the past tense, where an actual (spatial and/or temporal) boundary of a directed motion can only be induced by the context or marked by other internal prefixes.

In the present tense, on the other hand, Czech has both verb forms *jdu* and *půjdu* ('I go'). In most Czech grammars, forms like *půjdu* are labelled the imperfective future forms of the verb *jít* – 'to go' (the same holds for *pojedu > jet* – 'to drive' and others), because there are no periphrastic future forms as there are with any other imperfective verbs: *\*budu jít / jet* (cf. section 7.1). Another possibility (cf. Eckert (1984) and (1991)) is to consider these synthetic forms perfective present tense forms, which I will opt for, since it is in accordance with the morphology of Slavic verbs, in general. They cannot be future tense forms, since all future tense forms make use of forms of the auxiliary *byt'* – 'to be' (cf. section 7.1). Prefixes, on the other hand, render a verb perfective (at least in the traditional point of view) and it stays perfective if no other suffix is added. The Russian equivalents are, in general, taken to be perfective, although Russian periphrastic future forms with directed motion verbs are not too common,

<sup>32</sup> From a historical point of view, the non-directed motion verb is derived from the directed motion verb by means of vowel alternation and possibly consonant change (e.g. *nesti' > nosit'* – 'to carry' or *letit' > letat'* – 'to fly').

<sup>33</sup> In the Slavistic literature, this is sometimes considered to be an instance of the general-factual meaning, cf. section 7.3.

<sup>34</sup> In Russian, a construction with the verb *byt'* – 'to be' as in *Včera on byl v kino.*, is equivalent to one containing a non-directed motion verb. In general, *byt'* is avoided in Russian dynamic contexts, though, probably due to its lack of implicit dynamicity. It is interesting to see a similar strategy in English where the most natural answer to a question like *What did you do yesterday?* seems to be *I went to the movies.* instead of *I was at the movies.*, whereas in German it is the other way around (*Ich war im Kino.* instead of *Ich ging ins Kino / bin ins Kino gegangen.*). All these cases refer to the consequent state of being at the movies rather than to the motion itself.

either. As opposed to Czech, these forms are grammatical, though, and refer to durative or backgrounded situations, as Hans-Robert Mehlig pointed out to me:

- (53) *Dolgo my budem idti do parka?*  
 long we FUT DIR-go-INF to park-GEN  
 ‘Will we be walking to the park for a long time?’ (= ‘Is it far to the park?’)
- (54) *Kogda ty budeš’ exat’ do parka, ja dočitaju stat’ju.*  
 when you FUT DIR-drive-INF to park-GEN I PF-to-read-PRES article-ACC  
 ‘While you will be driving to the park, I will finish reading the article.’

Hence, motion verbs obviously have to be treated as a separate group of verbs, showing some atypical behaviour and possibly being outside the perfective/imperfective distinction at least in Czech.

In sum, ingressivity with atelic verbs in general (section 3.3) and ingressivity and/or a reached culmination point with motion verbs is regularly marked on the verb in Russian and contextually induced in Czech, as the following example shows:

- (55) *On vstal, pošel k piano i zapel (pesnju).* (Russian)  
 he PF-get-up-PAST, PO-DIR-go-PAST to piano and ZA-sing-PAST (song-ACC)  
 ‘He got up, went to the piano, and started to sing / sang (a song).’
- Vstal, šel ke klavíru a zpíval (písni).* (Czech)  
 PF-get-up-PAST, DIR-go-PAST to piano-DAT and IPF-sing-PAST (song-ACC)

Czech is not capable of marking an ingressive meaning with the prefix *za-* or perfective directed motion verbs as these verbs are ungrammatical. It is interesting that German behaves just like Czech in these cases and does not mark ingressivity with motion verbs and process verbs either:

- (56) Er **stand auf**, **ging** zum Klavier / \* **ging an** zum Klavier **zu gehen** und **sang** (ein Lied).<sup>35</sup>

Ivančev (1959/60) suggests that the lack of marked ingressivity and prefixed past tense forms of directed motion verbs in Czech is due to language contact with German, since Czech must have lost this possibility of marking the temporal boundaries on the verb. He shows that Old Czech still made use of these forms (i.e. *po-* with directed motion verbs and ingressive *za-* with process verbs) and behaved no differently from Old Russian.

### 3.5 Repetition

In the following, I will use ‘repetition’ to refer to a whole cluster of meanings, namely iterativity, distributivity, habituality<sup>36</sup>. As I already pointed out in section 1.2, a repetition reading in Czech is usually contextually induced, whereas in Russian, any kind of repetition triggers the use of the imperfective aspect. To mark repetition on the verb, secondary imperfectives are used. Historically, the Russian suffix *-yva-* (Czech *-va-*) was used to derive iterative verbs only. Russian does not derive iterative verbs anymore but uses this suffix as the only productive means to derive secondary imperfectives. There are hardly any iterative verbs left except for a few remnants, *byvat’* – ‘to be (regularly)’ being the most common one.

Czech, on the other hand, still uses this suffix *-va-* to derive iterative verbs in a productive way. According to Czech grammars, iterative verbs can only be derived from imperfective simple verbs, which are here considered to be atelic. This suffix can be applied even more than

<sup>35</sup> Whereas the marking of the beginning of the motion is surely ungrammatical in German (in this case it might be considered to be blocked due to the lexical carrier of the same inherent ingressive meaning in (*er stand*) **auf**, but in other cases it cannot be marked either), the beginning of the singing could be marked, but the most natural translation would be without marking it.

<sup>36</sup> Not in the sense of genericity but rather frequentativity (cf. van Geenhoven (forthcoming)), still describing dynamic eventualities.

once: *říkat* – ‘to say, to talk’ > *říkávat, říkávávat*. In addition to that, Czech secondary imperfectives have a far more diverse morphology than Russian ones. Whereas the majority of Russian secondary imperfectives are derived by the suffix *-(y)va-* (the only one still productive) and only a few by other suffixes or vowel alternation, Czech secondary imperfectives are derived by the suffix *-ova-*, the suffix *-va-*, or vowel alternation, seemingly evenly distributed. In Russian, the suffix *-ova-* is only used as a derivational suffix, mainly to integrate loan words (*normalizovat* – ‘to normalize’)<sup>37</sup> but also to derive verbs from nouns (*car*’ > *carstvovat*’ – ‘to reign’).

I want to argue that iterative verbs are also derived from prefixed telic verbs by means of the same suffix (*dát / dávat* – ‘to give’, *prodat / prodávat* – ‘to sell’) and that these verbs differ essentially in their interpretation from secondary imperfectives with *-ova-* or vowel alternation. The latter primarily give rise to a process meaning only. In only 6% (i.e. 32 verb forms) of the investigated verb forms in repetitive contexts, Czech marked this repetition on the verb. The marking was done almost exclusively by iterative atelic verbs, non-directed motion verbs and secondary imperfectives with the suffix *-va-*. Only in three cases, exclusively found in the Czech translation of Dovlatov’s *Zone*, secondary imperfectives with other suffixes or vowel alternation were used. It is revealing that these cases never occurred in the Czech originals and even more revealing that they occurred in one Czech translation only (out of three investigated ones). During the course of my investigation this translation turned out to be a bad one in other respects, though, so that these three verb forms might just be a bad translation altogether.

Thus, in addition to grammatical imperfective and perfective aspect with the primary meaning distinction process vs. result, Czech has a third aspectual category of iterativity marked by the suffix *-va-*. Russian, on the other hand, only has grammatical imperfective and perfective aspect and the aspectual meaning of repetition is marked by (secondary) imperfectives.

### 3.6 Summary

In sum, the main differences between Czech and Russian with respect to the use of affixes arose in the following cases:

- **state verbs** in general: Russ. **perfective** meaning often with pf. copula verbs e.g. *okazalsja* vs. Czech *byl* – ‘was’ / *měl* – ‘had’
- Russian perfective **temporal Aktionsart verbs** (prefixes *po-*, *pro-*, *za-*) vs. Czech imperfective state and process verbs.<sup>38</sup>
- **directed motion verbs**: Russ. pf. *pošel* vs. Czech ipf. *šel* (‘went’).<sup>39</sup>
- **perception verbs**: Russ. pf. *uvidel / posmotrel* vs. Czech ipf. *viděl / díval* (‘saw’ / ‘looked / watched’)
- **repetition**: Russian secondary imperfectives vs. Czech “simpler” verb forms
- Russian **gerunds** vs. Czech finite verb forms (more subordinate clauses)

Concluding this paper, I will now sum up the major differences I encountered in the comparison of Russian and Czech aspect usage and their prevailing discourse strategies in past tense narrative discourse.

If a dynamic episode in narrative discourse consists of contingent unique situations (i.e. no repetition in any form), Russian has to use finite perfective verb forms of telic and atelic verbs (predicates) to temporally bound them and to mark their uniqueness. With other discourse relations like backgrounding or elaboration, situations are not described as temporally bounded as they temporally overlap with or are part of some other described event. In these cases,

<sup>37</sup> These loan words either stay biaspectual or derive a perfective or imperfective counterpart by means of a prefix or a suffix, creating new aspectual pairs. There is a tendency for the atelic verbs or verbs with an under-specified telicity value to be prefixed (*(s)kopirovat* – ‘to copy’) and for the telic ones either to remain biaspectual or to be suffixed (*normalizov(yv)at*).

<sup>38</sup> Czech *za-* cannot express an ingressive meaning. Czech *po-* is not necessarily temporal.

<sup>39</sup> Czech *pošel* has a different lexical meaning – ‘kicked the bucket’.

Russian tends to use non-finite verb forms (preferably gerunds). In episodes of unbounded “atemporal” situations, e.g. scenery descriptions, Russian will also use finite (imperfective) verb forms.

Czech does not mark (temporal) boundedness or uniqueness on the verb and therefore there are perfective (telic) verbs referring to the result of an event (its culmination point), and imperfective verbs referring to a situation in its process, backgrounding, or elaboration. Czech secondary imperfectives primarily refer to a situation in its duration while situations described by atelic imperfective verbs can still be interpreted as temporally bounded due to other lexical items or the context, since Czech – unlike Russian – does not obligatorily mark temporal (un)boundedness on the verb. Gerunds in Czech are archaic and hardly used anymore, so there are primarily finite verb forms in main and subordinate clauses. In Russian, there are far less subordinate clauses due to the widespread use of gerunds and participles.

Russian cannot use the perfective aspect anymore, if a situation is not unique due to any kind of repetition. It is striking, however, that Russian will still employ the same discourse strategies as with unique situations by using finite (mostly) prefixed imperfective verb forms (secondary imperfectives) for foregrounded, contingent situations (narration), and non-finite verb forms for backgrounding and elaboration (temporal overlap). So in order to nevertheless convey the information that the culmination point of each repeated sub-event has been reached, Russian will use secondary imperfectives with the prefix marking the culmination point (telicity) and the suffix marking repetition. In rare cases a prefixed-suffixed verb (containing an external prefix) might also be used with atelic verbs so that the suffix marks repetition and the prefix marks temporal boundedness of the micro-events, i.e. their being contingent to other micro-events or other situations. So, comparing Russian aspect usage in episodes of unique situations with that in episodes, involving repetition, one comes to the conclusion that the discourse strategies are the same and that a suffix is added to every finite verb-form to additionally mark habituality (i.e. temporal non-uniqueness).

Czech is not concerned with the fact that a repeated situation is not unique anymore but uses the perfective aspect with telic verbs if the result of the situation they describe is relevant, a secondary imperfective if the process (slowness, elaboration etc.) is referred to, or imperfective atelic verbs. Hence, in Czech, aspect usage in repetitive contexts hardly differs from that in episodes with unique situations and the difference between temporal uniqueness and non-uniqueness is only contextually induced. Sometimes, Czech will use an iterative verb or a verb of non-directed motion, preferably once at the beginning of an episode, to mark the whole episode as habitual but this does not have to be the case.

In this way, discourse relations in Russian are partly expressed by the contrast finite vs. non-finite verb forms, whereas in Czech, a variety of factors play a role (grammatical aspect, telicity, context, world knowledge). The different discourse strategies can primarily be related to the morphological differences outlined in [section 3.1 to 3.5](#) and summarized in the following. The first main difference is the use of perfective verb forms of ATELIC VERBS in Russian, i.e. the explicit marking of the temporal boundaries of a situation by using external Aktionsart prefixes *po-*, *pro-*, and *za-*, prefixed inchoative state verbs, and perfective directed motion verbs. In most of these cases, Czech simply uses imperfective simple verbs (especially since ingressivity cannot be marked on the verb but has to be contextually induced), unless, for example, the inchoativity of a state is really at issue. In my data, I found only one example each for the delimitative and the perdurative Aktionsart in Czech, and both cases were translations from Russian. The second main difference concerns BACKGROUNDING and ELABORATION (temporal overlap), where Czech uses finite (mostly) imperfective verb forms and subordinate clauses, but Russian uses non-finite verb forms. Finally, both languages differ with respect to TEMPORAL NON-UNIQUENESS, marked on the verb by suffixes in Russian but generally contextually induced in Czech.

#### 4 Final remarks

In the course of the paper, I showed the importance of separating grammatical aspect from telicity at the V and VP level, which led to the distinction between internal and external prefixes for Slavic. At the same time, I indicated how these two phenomena interact and contribute to the interpretation of temporal (un)boundedness at sentence and discourse level. I have singled out three groups of Slavic verbs, namely telic verbs (mostly with internal prefixes), verbs that are underspecified with respect to telicity and get a telic interpretation only with a quantized incremental theme argument and atelic verbs (without internal prefixes or incremental theme argument). Secondary imperfectives were treated as different from simple imperfectives as a result of the interaction of imperfectivity with (a)telicity. All secondary imperfectives have to be considered to be telic, where the internal prefix functions as a telicity marker and the suffix as an imperfectivity marker. This creates the meaning of realisation or instantiation of a part of an eventuality type with an intrinsic point of change, leading to several possible interpretations, namely process or any meaning of repetition. Finally, I showed in more detail that Russian and Czech differ with respect to the encoding and use of grammatical aspect and telicity.

Thus, I treated just two phenomena, contributing to the aspectual and temporal interpretation of situations in context, namely (a)telicity, and grammatical aspect. Beyond VP level, i.e. at sentence and discourse level, there are different ways to temporally bound a situation, among which grammatical aspect and telicity play an important but not the only role. Other such means do not touch the telicity value of the verb or the VP. The main difference between Russian and Czech in narrative discourse is that Russian marks temporal boundedness on the verb, whereas Czech does not. In Czech, though, it is not a matter of arbitrary choice to mark it or not, but rather dependent on the verb type. Future work will have to lay more emphasis on a verb's argument structure and thematic relations as well as other means contributing to the aspectual and temporal interpretation of a text such as adverbials or connectives.



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## 7 Appendix

This paper presented the results of parts of my Master’s thesis (Gehrke (2002)), representing an empirical research on the differences between Russian and Czech with respect to the use of grammatical aspect in different contexts. I primarily investigated dynamic past tense contexts in narrative discourse, concentrating on finite past tense verb forms and disregarding negation and modality. Evaluating Russian and Czech prose in the original in comparison to their respective translations<sup>40</sup>, I took into consideration about 1500 verb forms per language. The first two chapters of the main investigation dealt with unique situations and repeated situations. I divided the repeated situations into distributive, iterative, and habitual ones, from which habituality was more thoroughly investigated. Under habituality I subsumed any description of dynamic situations, taking place on a regular basis, so I did not consider static, “atemporal” episodes. The last chapter of the main investigation dealt with the so-called GENERAL-FACTUAL MEANING of the imperfective aspect.

Other inner-Slavic differences in aspect usage can be found in other contexts as well and are partly described in a few Slavistic works.<sup>41</sup> Just to give a clue about some of these, Table 3 roughly summarizes the main differences between Russian and Czech as described in the literature, excluding negative and modal contexts.

	<b>Russian</b>	<b>Czech</b>
<b>Sequence of unique events</b>	exclusively PF	<b>Both</b>
<b>Iterativity</b>	almost exclusively IPF	<b>Both; (iteratives)</b>
<b>Habituality</b>	almost exclusively IPF	<b>Both; (iteratives)</b>
<b>General-factual (IPF)</b>	<b>YES</b>	<b>NO</b>
<b>Historic present</b>	almost exclusively IPF	<b>Both</b>
<b>Past passive participle</b>	exclusively PF	<b>Both</b>
<b>Verbal nouns</b>	(neutral with respect to aspect)	<b>Both</b>

**Table 3: Main differences between Russian and Czech aspect usage**

In the following, I will provide some further information connected to the topic of this paper.

### 7.1 Grammatical Tense

Grammatical Tense should be included in the means temporally bounding a situation, as well. For example, if something happened in the past and is referred to by the past tense, in most cases, it can be inferred that the situation has passed and that it is thus in a way temporally bounded. In some languages, this can be enough to render the meaning of temporal boundedness, as it is the case in Czech with atelic verbs. In Russian, past tense also seems to play a role, since only finite verb forms can create a narration interpretation. In addition, each verb form still has to be marked by a prefix unless it is an inherent telic point verb.

Russian and Czech (as most Slavic languages) have a very simple tense system. All verbs can have past tense and present tense forms, and only imperfective verbs have a periphrastic FUTURE TENSE with forms of the auxiliary *byt’* – ‘to be’ in combination with an imperfective infinitive (57). The PRESENT TENSE morphology is the same for imperfective and perfective verbs (with different declination classes, not relevant for this paper) (58).

<sup>40</sup> The sources I evaluated can be found at the end of this paper after the references.

<sup>41</sup> Within the last 20 years, these are Eckert (e.g. (1984), (1991)) and Stunová (e.g. (1993)), dealing with differences between Russian and Czech, and Dickey (2000), using a cognitive framework to investigate aspect usage of ten different Slavic languages in various contexts. A recent and very thorough investigation in Russian, comparing Russian to Czech, Polish, Slovak, and Bulgarian, can be found in Petrušina (2000).

(57)	Russian Sg	<i>ja</i>	<i>budu</i>	<i>sidet'</i>	Czech	<i>budu</i>	<i>sedět</i>	(sit)
		<i>ty</i>	<i>budeš'</i>	<i>vydavat'</i>		<i>budeš</i>	<i>vydávat</i>	(give out)
		<i>on(a/o)</i>	<i>budet</i>	<i>znat'</i>		<i>bude</i>	<i>znát</i>	(know)
	Pl	<i>my</i>	<i>budem</i>	<i>pisat'</i>		<i>budeme</i>	<i>psát</i>	(write)
		<i>vy</i>	<i>budete</i>	<i>sadit'sja</i>		<i>budete</i>	<i>se posadit</i>	(sit down)
		<i>oni</i>	<i>budut</i>	<i>kričat'</i>		<i>budou</i>	<i>kričet</i>	(shout)
(58)	Russian Sg	<i>ja</i>	<i>(na)pišu</i>		Czech	<i>(na)pišu</i>		(write)
		<i>ty</i>	<i>(na)pišeš'</i>			<i>(na)pišeš</i>		
		<i>on(a/o)</i>	<i>(na)pišet</i>			<i>(na)piše</i>		
	Pl	<i>my</i>	<i>(na)pišem</i>			<i>(na)pišeme</i>		
		<i>vy</i>	<i>(na)pišete</i>			<i>(na)pišete</i>		
		<i>oni</i>	<i>(na)pišut</i>			<i>(na)pišou</i>		

The perfective present tense forms cannot refer to a current ongoing situation, this being the result of the aspectual and not the temporal semantics: All perfective verb forms refer to a bounded situation (i.e. telic and / or temporally bounded) or a situation in its totality, which clashes with the concept of a currently ongoing situation (in process). Latter can only be referred to by using the imperfective aspect. Therefore, I will continue calling them perfective present tense forms instead of referring to them as future tense forms as done in some works on Slavic aspect. In rare cases, perfective present tense forms can refer to a current ongoing situation, e.g. with the performative use of performative verbs (*Ja skážu* (PF) *pravdu*. – ‘I am telling the truth.’) or in the reporter present.<sup>42</sup> Usually, perfective present tense forms either refer to the future (that is, the situation might have started at the present moment but its culmination point is anticipated in the future) or convey a modal meaning (e.g. in sayings and habitual contexts).<sup>43</sup> The same applies to Czech, although there are more cases of perfective present tense forms in performative uses and reporter present (Dickey (2000)). There also seems to be a tendency for Czech perfective present tense forms to convey modal meanings less often than the Russian ones do.

The PAST TENSE in Slavic languages used to be (Russian) or is still (Czech) a periphrastic tense where the present tense forms of the auxiliary Czech *být* – ‘to be’ is combined with a present active participle (the L-PARTICIPLE) of perfective and imperfective verbs. In Russian, the auxiliary was dropped from the 11th century on, whereas in Czech, it is still used with the first and second person singular and plural. Since Slavic past tense forms comprise a participle, this is marked for number and gender, but not for person. Czech is a pro-drop language and marks person primarily on the auxiliaries, whereas Russian cannot drop the pronouns with finite verb forms and marks the person on the pronouns (or other subject NPs):

(59)	Russian Sg	<i>ja</i>	<i>(na)pisal(a)</i>	Czech	<i>(na)psal(a)</i>	<i>jsem</i>	(write)
		<i>ty</i>	<i>(na)pisal(a/o)</i>		<i>(na)psal(a/o)</i>	<i>jsi</i>	
		<i>on(a/o)</i>	<i>(na)pisal(a/o)</i>		<i>(na)psal(a/o)</i>		
	Pl	<i>my</i>	<i>(na)pisali</i>		<i>(na)psali/y</i>	<i>jsme</i>	
		<i>vy</i>	<i>(na)pisali</i>		<i>(na)psali/y</i>	<i>jste</i>	
		<i>oni</i>	<i>(na)pisali</i>		<i>(na)psali/y</i>		

There are various reasons to consider these tense forms to be simple past tense forms. First of all, they are the only tense forms with past tense reference. Secondly, the aspectual and temporal value of the auxiliary (if still in use) does not contribute any aspectual-temporal information to the whole periphrastic verb form. Finally, since the l-participle does not necessarily and by itself convey a resultant state information, either, this tense has to be considered a simple past tense. The past tense forms are perfective if the l-participle is derived

<sup>42</sup> These are universal phenomena not just pertaining to Slavic languages.

<sup>43</sup> In some cases, Russian and Czech perfective present tense forms can also be translated with the future perfect, depending on the context.

from a perfective verb and they are imperfective if the l-participle is derived from an imperfective verb. Slavic imperfective and perfective past tense forms can be translated into English with the simple past, the present perfect, or the past perfect, depending on the context. The semantic contribution and use of grammatical tense is quite similar in both languages.

## 7.2 Aspectual pairs, imperfectiva and perfectiva tantum

In the Slavistic literature, the notion of ASPECTUAL PAIRS is taken to be crucial. A perfective and an imperfective verb constitute an aspectual pair if they do not differ in lexical meaning but only in their aspectual value (i.e. external vs. internal viewpoint on the same situation). It is a much debated question as to what should count as an aspectual pair and what should not, which can sometimes lead to neglecting the really important questions. The main issue is whether only suffixation leads to aspectual pairs or whether there is such a thing as “empty prefixes” (i.e. contributing no additional lexical meaning) creating aspectual pairs by prefixation. The problem is that a prefix usually has a lexical meaning of its own, whereas a suffix does not. There is an alternative, less pursued approach in taking (certain) verbs to have a full paradigm of perfective and imperfective forms.

Verbs that do not enter into an aspectual pair are called IMPERFECTIVA AND PERFECTIVA TANTUM. In the Slavistic tradition, state verbs and some process verbs are considered to be IMPERFECTIVA TANTUM, which can sometimes be modified by the delimitative and the perdurative Aktionsart, creating PERFECTIVA TANTUM. So they are not treated as aspectual pairs. In the case of the highly productive Russian delimitative Aktionsart, one could object to this as the sole purpose of *po-* is to provide one specific perfective meaning, namely temporal boundedness, without changing the lexical meaning, so that these verbs could be seen as DELIMITATIVE PAIRS. In Czech, on the other hand, it should still be considered to be an Aktionsart prefix as its lexical meaning ‘a bit’ most often does not render a temporal but spatial interpretation.

Usually the fact that there is no secondary imperfective to a perfective prefixed verb is taken as an evidence for treating it as entering an aspectual pair with the simple verb it is derived from by prefixation. This is the case with, for instance, *napisat'* – ‘to write s.th.’ where there is no *\*napisyvat'*. So, *pisat'* / *napisat'* *čto-to* – ‘to write s.th.’ (only in the telic interpretation) is considered to be an aspectual pair, because the prefix only contributes a perfective meaning, namely that the writing of something unique and quantized has come to a natural end, i.e. has been finished. To save the aspectual pair account, the prefixes used in these cases can be considered to contribute a redundant meaning as they only supply information that is already presupposed in the simple verb. Prefixes stem from prepositions. For example, if something is usually V-ed **onto** something, the preposition *na* – ‘on’ is used: *napisat'* – ‘to write’, *narisovat'* – ‘to draw’. If s.th. is V-ed **away** or **out**, the prepositions *s* – ‘away’ or *vy* – ‘out’ are used: *vypít'* – ‘to drink’, *s'est'* – ‘to eat’.

But there is a problem with considering simple verbs and their prefixed counterparts as aspectual pairs, i.e. having the exact same lexical meaning, as one would have to consider process verbs with an incremental theme argument to be synonymous to but different lexical items than the process verbs without the internal argument, which is not desirable. Another problem with the traditional account for aspectual pairs is that there are also no secondary imperfectives to most delimitative Aktionsart verbs (e.g. *\*posižival* to *posidel*). This would count as an argument in favour of treating the corresponding verbs as aspectual pairs, as well (cf. Petruchina (2000)), which is usually not done in the Slavistic tradition. Other verbs that are treated as aspectual pairs created by prefixation, on the other hand, sometimes do have secondary imperfectives thereby creating ASPECTUAL TRIPLES as is pointed out in a number of works (e.g. Isačenko (1962), Padučeva (1996)).

Finally, even though *čítat'* / *pročítat'* are considered to form an aspectual pair, it is interesting that there is a secondary imperfective *pročityvat'*. This verb is more complex and specified in its semantics than the simple verb *čítat'*, since it implies a natural point of change and a sense of stripping off of the culmination point (cf. Moens / Steedman (1988)). This

stripping off can have different interpretations, namely a process reading, an actional reading (cf. next section) or one of the repetition meanings. Since the actional reading is in general preferably rendered by under-specified simple verbs (cf. Comrie (1976) referring to the general-factual meaning, though) and the process meaning might rather be rendered by the simple verb *čítat*, a repetition reading is the most likely one with secondary imperfectives of ASPECTUAL TRIPLES.

Simple motion verbs can get a telic reading in combination with a goal argument supplying an incremental path theme in the sense of Filip (1993/99), which triggers a verb of directed motion when referring to unique situations. Therefore, directed motion verbs and their perfective counterparts with the prefix *po-* could be considered to form aspectual pairs, as well (*exat* / *poexat* – ‘to drive (directed motion)’). On the other hand, verbs of directed motion with the prefix *po-* are often treated as not entering into aspectual pairs but being instantiations of the ingressive Aktionsart (e.g. Isačenko 1962)), which usually uses the prefix *za-*, though. In the following, I will discuss this point in more detail since the marking of both ingressivity with atelic verbs by the prefix *za-* and perfectivity of directed motion verbs by the prefix *po-* are a common practice in Russian but ungrammatical in Czech, where these meaning effects are regularly contextually induced. This suggests a close connection between ingressivity and perfective directed motion verbs (cf. Ivančev (1959/60)).

The problem is that perfective directed motion verbs with the prefix *po-* can express both meanings of either ingressivity or that the end of an incremental path has been reached, which is always implied with every directed motion verb, so that it is difficult to choose only one of these options. Directed motion verbs cannot express ingressivity and perfectivity in combination with a perfective aspectual verb as other imperfective verbs can (e.g. *načat*: ?*On načal idti.* – ‘He started going.’) but only with the prefixed synthetic form (*On pošel.*). On the other hand, if the final destination of the path is really stressed, another prefix might sound more felicitous (e.g. *On přišel / zašel ko mne.* – ‘He came to me / dropped by my place.’). All verbs of non-directed motion can be modified by the delimitative Aktionsart (*po-*), the perdurative Aktionsart (*pro-*), or the ingressive Aktionsart (*za-*), depending on the context. These modifications are less likely but not necessarily ungrammatical with directed motion verbs. This could be a sign that they behave telic in most cases but atelic in others, comparable to the process verbs with optional incremental theme arguments, described in section 2.3.

The whole discussion reveals that Slavic prefixes are not just perfectivity markers and otherwise lexically ‘empty’ but that most of them supply some additional lexical meaning to the root they are attached to. Suffixes, on the other hand, always lead to a predictable change in meaning which can always be associated with imperfectivity. Isačenko (1962), for example, rejects the concept of “empty” prefixes altogether and labels such prefixed verbs as *napisat*, *pročítat* Aktionsart verbs, as well, expressing the RESULTATIVE AKTIONSART. In his opinion, only suffixation creates aspectual pairs. This might actually be the most elegant solution after all.

### 7.3 General-factual and actional meanings

The last chapter of my MA thesis dealt with the so-called general-factual meaning of the imperfective aspect. This chapter was the only one including non-narrative discourse, where this particular meaning is primarily encountered. It would go too far to go into detail about the general-factual meaning of the imperfective aspect, since there is not even a consensus in the Slavistic literature as to what it exactly is, how many sub-types there are and the like. In my thesis, I primarily followed Glovinskaja (1989) and Padučeva (1996) for Russian, so that most instances of the general-factual meaning can be seen as references to (potentially) repeated, non-unique situations. This particular meaning can be triggered by the quantificational adverbial *kogda-nibud* – ‘ever’ or by an adverb with the meaning ‘once’, implying ‘(at least) once’ and hence a potential repetition, as in the following example:

- (60) *Ona vxodila v kalitke odin raz, a bienij serdca do togo ja*  
 she SI-in-come-PAST in gate one time and beating-GENPL heart-GEN to that I  
*ispytyval ne menee desjati.* (Russian) (MM)  
 SI-experience-PAST not less ten-GEN  
 ‘One time she entered the gate and till then my heart was beating not less than ten times.’  
*Než jedenkrát vešla, rozbušilo se mi*  
 then once PF-in-come-PAST PF-heavy-beat-PAST REF me-DAT  
*nejméně desetkrát srdce.* (Czech)  
 at least ten times heart-NOM

So even if a merely potential repetition is involved, as it is always the case with the general-factual meaning, Russian has to use the imperfective aspect, whereas it does not influence aspect choice in Czech. Hence, in (60) the Czech translator used a perfective telic verb as it is not necessary or desirable to dwell on the situation in process. In addition to that, Czech cannot use the imperfective aspect in cases, where the reaching of the culmination point is lexically referred to. This can be seen in the following example taken from Dickey (2000), where the **whole** book is completely read. Russian still has to use the imperfective due to potential repetition:

- (61) *Ty kogda-nibud’ \*pročitaľ / čitaľ / dočityvaľ etu knigu ot načala do konca?* (Russian)  
*Přečetľ / \*Četľ jsi někdy vůbec tu celou knihu?* (Czech) (Dickey 2000, 117)  
 ‘Did you ever read this whole book?’

There is one particular meaning of the imperfective aspect where its use is not related to (a potential) repetition (cf. Mehlig (forthcoming)) and which is sometimes treated as an instance of the general-factual meaning. Padučeva (1996) separates this meaning from the other general-factual one by labelling it ACTIONAL MEANING (*akcional’noe značenie*). This meaning comes in when, from a semantic point of view, any aspectual semantics is completely irrelevant. My data shows that in these cases both languages tend to use simple verbs, not specified or marked for aspectual information rendered by affixes. One often finds this use of imperfective simple verbs in wh-questions that are only concerned with the **who** / **when** / **why** / **what** and not necessarily the **how**:

- (62) *Kto čitaľ Vojnu i mir?*  
 who-NOM IPF-read-PAST war-ACC and peace  
 ‘Who (has) read War and Peace?’

For a detailed investigation of Russian aspect usage in wh-questions, cf. Mehlig (forthcoming).

Borik (2002) talks of two possible interpretations of Russian past imperfective sentences, the "present perfect and progressive", but at no point it is made clear what exactly is meant by this. In any case, one cannot simply equate these two English aspectual-temporal forms with their complex meanings to certain meaning effects the Russian imperfective past might have. This does not hold for the progressive (which is still more likely if understood as “process” meaning) and it is definitely not true for the present perfect. The examples she subsumes under the “present perfect meaning of the Russian imperfective aspect”, are mostly instances of the general-factual meaning of the imperfective aspect. The problem is, though, that this meaning is totally different from the meaning of e.g. the English present perfect. One instance of the general-factual meaning, for example, is that a result (a point of change) has been reversed, whereas with the present perfect it is exactly the opposite due to the relevance of the change (its resultant state) for the present moment. For example, when referring to the opening of a window, being closed at the moment of utterance (or reference), Russian has to use the imperfective verb:



(63) *Ja otkryval okno.* – ‘I (had) opened the window (once and it is closed now).’

The use of the corresponding perfective verb implies that the window is still open (at least at the point of reference), an effect, which is comparable to that of the present perfect (or past perfective in past tense narrations) in English:

(64) *Ja otkryl okno.* – ‘I have opened the window (and it is still open).’

Other examples she provides are instances of the actional meaning of the Russian imperfective aspect where the internal temporal structure of the described situation (i.e. the aspectual information) is altogether irrelevant. These cases can sometimes be translated into English by the present perfect (as in (61)), but this does not mean that both have identical meaning effects. The actional meaning is conveyed in another example that puzzles Borik at the end of her thesis and “where the best English translation of the imperfective sentences would be passive”:

(65) *Zimnij dvorec stroil Rastrelli.* (taken from Borik (2002))  
winter- palace-ACC IPF-build-PAST Rastrelli-NOM

‘The Winter Palace was built by Rastrelli.’

This is a topic-focus phenomenon, where, again, the internal temporal structure of the situation in topic position is not relevant and, instead, the focus is on Rastrelli. In English, this can be expressed by using the passive to move the focused part to the end of the sentence. The focus is on Rastrelli and not on the building itself. To express the actional meaning in Russian (as well as Czech and probably most other Slavic languages), the least marked verbs, namely simple verbs are used, which are mostly imperfective, because they are the most under-specified (the least specific) with respect to any aspectual information. Due to the fixed word order in English Rastrelli can only appear in the last position of the sentence by passivizing, thereby focusing on the agent. She also claims that the “imperfective corresponds to the English present perfect when the intuition about the relevance of the situation for the present moment is clear”. This is true in cases, where the relevance of something inside the situation and not the change itself is at case. If the point of change and a resultant state are relevant, Russian will rather use the perfective aspect in the perfect meaning, which is not accounted for in Borik's approach, at all. According to her, only the IPF, but not the PF can have a “present perfect meaning”.

## 7.4 Additional data

Some examples that I already mentioned in the main part of the paper will be addressed in this section in more detail.

### 7.4.1 Unique situations

Example (66) consists of three actions (in a broad sense) performed by the antagonist, namely ‘being quiet’, ‘looking at the moon’, and ‘saying something’. World knowledge forbids ‘being quiet’ and ‘saying something’ to take place at the same time, i.e. to temporally overlap, but world knowledge does not say anything about the relation of ‘looking at the moon’ to either of the other two actions. In the Russian original the relations between all three actions is specified on the verb forms used to describe them: the external Aktionsart prefixes on the atelic verbs *pomolčal* and *zagovoril* specify that both actions described by them must not temporally overlap, whereas the non-finite verb form (the gerund *vsmatrivajas* ‘) describes the ‘looking at the moon’ as temporally overlapping with the first action, it is attached to by a comma. Both actions temporally precede the new action of saying something, set apart from the other two verb forms by the conjunction *i* – ‘and’ and the ingressive Aktionsart prefix *za-*.

- (66) *On pomolčal                    nektoroe vremja v smjatenii, vsmatrivajas'                    v lunu,*  
 he PO-be-quiet-PAST some time in confusion,                    SI-look-into-GER in moon-ACC  
*plyvuščuju                    za rešetkoj, i                    zagovoril: [...]* (MM) (Russian)  
 swimming-ACC behind bars, and ZA-say-PAST

‘Bewildered, he was quiet for a while, looking at the moon, shimmering behind the bars, and then he said: ...’

*Chvíli                    zaraženě mlčel,                    sledoval                    plující měsíc*  
 for-a-while bewildered IPF-be-quiet-PAST IPF-follow-PAST swimming-moon-ACC  
*za mříží,                    a pak se                    zeptal: [...]* (Czech)  
 behind bars, and then REFL PF-ask

In the Czech translation, the durational adverbial *chvíli* – ‘for a while’ temporally delimits the action described by the simple imperfective atelic verb.<sup>44</sup> Since the second verb is atelic as well and not delimited by other means, its temporal relation to the first action is not quite clear, since the first one is temporally delimited, so it could be temporal overlap or succession. Since the third action is described by a perfective verb and in addition to that even lexically set apart from the other two by *a pak* – ‘and then’ one might infer that the first two take place at the same time. If they did not temporally overlap they would probably rather be connected with a conjunction and not just with a comma.

In (67), there are two stative eventuality descriptions, referring to the protagonist’s ‘liking a tattoo’ and ‘wanting a tattoo’. Both stand in a causal relation to each other, namely the liking resulting in the wanting. This is expressed by the connectives *tak ... že* – ‘so much, that’, which are enough to render the causal effect in the Czech original where atelic state verbs are used to refer to the states of liking and (the causally linked and thereby temporally succeeding) wanting:

- (67) *Jedna ta vytetovaná plachetka se                    mi tak líbila,                    že jsem si*  
 one that tattooed sailing boat REFL me so IPF-please-PAST, that AUX-1sg REFL  
*přál                    mít                    ji vytetovanou na prsou taky.* (MP) (Czech)  
 IPF-wish-PAST IPF-have-INF it tattooed on chest also

‘I liked one sailing boat tattoo so much, that I wanted one just like it tattooed on my chest.’

*Odin parusnik                    tak mne ponravilsja,                    čto ja zaxotel,                    čtoby u menja*  
 one sailing boat so me PF-please-PAST-REFL, that I ZA-want-PAST, so-that with me  
*na grudi tože byl                    takoj že.* (Russian)  
 on chest also IPF-be-PAST the same kind

In the Russian translation, on the other hand, this temporal relation between both eventuality descriptions is marked by the perfective inchoative state verb *ponravilsja*, referring to the beginning and the consequent state of liking, and the ingressive Aktionsart verb *zaxotel*, describing the starting-point and the consequent state of wanting. One can infer that both consequent states overlap, but in the Russian case the explicit marking of the starting-points of both states are focused on, implying that these starting-points are at least in a narration relation to one another. That the discourse relation is, in fact, one of result can be inferred from the connectives *tak ..., čto* – ‘so, that’.

In (68), three actions of the protagonist are sequenced, namely ‘putting on a cap’, ‘showing himself’, and ‘adding something’. One can infer from world knowledge that he only shows himself after having put on the cap. The ‘adding something’ could take place at the same time as the ‘showing’ but could also stand in a narration relation to it. In the Russian original,

<sup>44</sup> Note that this temporal delimitation provided by an additional lexical item is also present in the Russian original (*nektoroe vremja*). It is not enough to convey the meaning of temporal boundedness, though, which still has to be marked on the verb. It could also be argued that this marking by a temporal Aktionsart verb is even triggered by the durational adverb.

all three actions are described by finite telic perfective verb forms, so that they all stand in a narration relation to one another.

- (68) *On nadel šapočku i pokazalsja Ivanu i v profil' i v*  
 he PF-put-on-PAST cap and PF-show-PAST-REFL Ivan-DAT and in profile and in  
*fas, čtoby dokazat', čto on – master. – Ona svoimi rukami*  
 front,so-that PF-show-INF, that he (be) master-NOM she own-INST.PL hands-INST  
*sšila ee mne, - tainstvenno dobavil on.* (MM) (Russian)  
 PF-sew-PAST it me-DAT mysteriously PF-add-PAST he-NOM.

‘He put on the cap and showed himself to Ivan from the side and from the front to show that he was the master. “She sewed it for me with her own hands”, he said mysteriously.’

- [...], *nasadil si ji a předváděl se ze všech stran,*  
 PF-put-on-PAST REFL it-ACC and SI-in front of-lead REFL out-of all sides-GEN  
*aby dokázal, že je Mistr. „Tu čepičku mi vlastnoručně*  
 so-that PF-show-(MOD), that is master-NOM. This-cap-ACC me-DAT own-handly  
*ušila“ dodal tajemně.* (Czech)  
 PF-sew-PAST PF-add-PAST mysteriously

In the Czech translation, the fact that ‘showing himself **from the side and from the front**’ takes some time, is rendered by a secondary imperfective. This verb form creates an internal perspective on the situation and conveys a process meaning. The other two surrounding situations of ‘putting on the cap’ and ‘adding something’ are both described by perfective verb forms. These external viewpoints of the contingent situations, “sandwiching” the second event of ‘showing himself’, at the same time temporally delimit it.

The first part of (69) consists of an “atemporal” static episode, a scenery description, where the in Czech original, four finite verb forms are used but in the Russian translation only two. An analysis was already provided in section 1.3. The second part is a dynamic episode again, consisting of the actions ‘crossing the bridge’, ‘turning’, and ‘striding’. Whereas the first two are related by narration in both languages due to world knowledge (one cannot turn before having crossed the bridge, unless one wants to fall of) and to linguistic knowledge (two finite perfective telic verbs connected with sentence-initial *pak / potom* – ‘then’, lexically marking temporal succession, cf. Glasbey (1993)), the third action temporally follows the second as well, the beginning of which is marked on the Russian atelic verb with the ingressive Aktionsart prefix. In Czech, the ingressivity is only contextually induced by the contingent, preceding eventuality described by the perfective telic verb and possibly also the use of the additional auxiliary<sup>45</sup> and a motion verb. In both languages nothing is said about an end-point of the third action.

- (69) *Když přišlo pozdní jaro, když bylo léto, když*  
 when PF-to-go-PAST late-spring-NOM, when IPF-be-PAST summer-NOM, when  
*se setmělo a byla sobota, přešel*  
 REFL PF-grow-dark-PAST and IPF-be-PAST Saturday-NOM, PF-across-go-PAST  
*jsem osvětlený most, pak zahrnul k mlýnu a podle Staré rybárny*  
 AUX-1Sg illuminated-bridge-ACC, then PF-turn-PAST to mill and past Old fisher’s  
*jsem kráčel kolem plotu farní zahrady.* (JR) (Czech)  
 AUX-1Sg IPF-stride-PAST around fence church-yard-GEN

<sup>45</sup> Note that there is no auxiliary with the second finite verb form, which is “parasitic” on the auxiliary of the first finite verb form.

‘When late spring had arrived, when it was almost summer, when it had grown dark and it was Saturday, I crossed the illuminated bridge, then turned towards the mill and strode past The Old Fisher’s Inn along the churchyard fence.’

**Kogda vesnja približalas** ‘ k koncu, **kogda bylo** uže  
 when spring-NOM SI-come-closer-PAST-REFL to end, when IPF-be-PAST already  
*počti leto, odnaždy v subbotnie sumerki ja perešel osveščennyj most,*  
 almost summer, once in saturday twilight I PF-across-go-PAST illuminated-bridge,  
**a potom svernul k mel’nice i zašagal mimo starogo „Rybnogo podvor’ja“**  
 and then PF-turn-PAST to mill and ZA-stride-PAST past old Fisher’s inn  
*vdol’ ogrady cerkovnogo sada.* (Russian)  
 along fence church-yard-GEN

## 7.4.2 Repeated situations

In (70), Balodis’s every-day activities are described. The first glossed sentence contains the two actions of ‘going to sleep’ and ‘tying the keys’, which are temporally related to each other. The fore-grounded tying regularly takes place in the preparatory phase of the backgrounded going to sleep. This is conveyed by the finite secondary imperfective *privjazyval* (suffix for repetition, prefix for contingency: before going to sleep) and the gerund *zasypaja*. Both actions are described by finite verbs in Czech, where a temporal connective (*než*) makes explicit the temporal relation between both actions. I will disregard the next sentence since it contains negation. The last two sentences describe iterated eventualities of ‘untying the keys’, ‘stealing the food’, and ‘eating the flour’. The numeral *dvaždy* – ‘twice’ marks the repetition lexically, which, in general, could license the use of the Russian perfective aspect in its collective meaning. In this case, a collective reading is not possible, though, since on each iterated occasion a complete untying of the keys must precede the stealing of the food. Therefore, two imperfective telic VPs (a secondary imperfective and a verb with a quantized incremental theme argument) are used, giving rise to the interpretation of a) contingency of both eventuality descriptions (when referring to the micro-events) and b) repetition of the whole sequence (temporal non-uniqueness of the macro-event). In the last sentence, the Russian periphrastic passive is used, where a (in this case past tense) form of the auxiliary *byt’* is combined with a perfective past passive participle<sup>46</sup>. Nothing can be said about the temporal relation of stealing and eating since the passive construction only refers to the resultant state. Not even world knowledge can give a clue about whether both actions took place at the same time (elaboration) or whether the stealing preceded the eating (narration), but all that is said and relevant is that the flour is gone.

- (70) *Balodis služil povarom. Glavnoj ego zabotoj byla prodovol’stvennaja kladovaja. Tam xranilis’ salo, džem, muka. Ključi Balodis celyj den’ nosil v rukax.*

**Zasypaja, privjazyval** ix špagatom k svoemu detorodnomu organu.  
 IPF-go-to-sleep-GER, SI-to-tie-PAST them string-INST to his(own) childbearing organ

*Ěto ne pomogalo. Nočnaja smena dvaždy otvjazyvala ključi i*  
 this not SI-help-PAST night-shift-NOM twice SI-un-tie-PAST keys-ACC and

**vorovala produkty. Daže muka byla s“edena...** (Dov) (Russian)  
 IPF-steal-PAST provisions even flour-NOM IPF-be-PAST PF-eat-up-pastpasspart

<sup>46</sup> The Russian periphrastic passive is only possible with perfective verbs as imperfective verbs do not form past passive participles. There are certain other constructions that can be used in connection with imperfective verbs, as the addition of a reflexive pronoun, which is only possible in the third person, though, or the undefined-personal construction, which consists of a third person plural verb form without an external argument. Czech, on the other hand, can form past passive participles of perfective and imperfective verbs, so all verbs in Czech can form periphrastic passive forms. Undefined-personal constructions are also used, though, as in (70) (last verb form) or in the announcement on the metro: *Dveře se zavirají.* – ‘The doors are being closed.’

‘Balodis worked as a cook. His main duty was to look after the pantry. There they kept bacon, jam, flour. Balodis carried the keys in his hands all day long. Before going to sleep, he tied them with a string around his “childbearing organ”. That did not help. People on the night shift untied the keys twice and stole the food. They even ate the flour.’

*Balodis v lágru pracoval jako kuchař. Jeho hlavní každodenní starostí byl sklad potravin. Tam měl uložen veškerý proviant včetně špeku, džemu a mouky. Klíče od skladu Balodis po celý den nedal z ruky.*

*Než šel spát, přivazoval si je provázkem k*  
 than DIR-go-PAST IPF-sleep-INF, SI-to-tie-PAST REFL them string-INST to

*přirození. Nepomáhalo to. Noční směně se dvakrát*  
 natural-NOUN-DAT SI-not-help-PAST this night-shift-DAT REFL twice

*podářilo klíče odvázat a potraviny si nakrást.*  
 PF-succeed-PAST keys-ACC PF-un-tie-INF and provisions REFL PF-steal-INF

*Dokonce i mouku sežrali... (Czech)*  
 even and flour-ACC PF-away-devour-PAST

The Czech translator, who in general had some problems with his work, did not render this case literally, probably being aware of the fact that the direct translation of the Russian imperfective aspect would not be appropriate. He did not feel confident enough to select the most natural perfective aspect either, but chose an altogether different perfective (achievement) verb *podářilo se* – ‘succeeded’ in connection with two perfective infinitives. A closer translation would have been simply using two finite past tense forms of these two perfective verbs. The last sentence is again not a direct equivalence, but rather an active undefined-personal construction is used with a perfective verb. This perfective construction, directly translated into Russian, would not be possible, because in Russian, repetition cannot be combined with a finite perfective verb form unless the collective reading is possible. In Czech, only perfective finite verb forms are used because a) Czech does not mark repetition on the verb (it is enough to mark it lexically by using *dvakrát* – ‘twice’), b) it is not necessary to dwell on the process, and c) nothing is backgrounded or elaborated. Therefore, only successive contingent situations are being described. This might be debatable in the last case, which could also be an elaboration of the stealing.

(71) consists of a sequence of regular eventualities in combination with a plural NP in subject position, namely many trams’ driving around Moscow, running along Herzen Street, rushing over the pavement, and chasing from Herzen Street to Moss Street. The temporal frame is the year of 1928, referred to by the temporal point adverbial *v 28-om godu* – ‘in 1928’. This temporal frame is connected with the backgrounded setting of trams’ running around Moscow. The trams themselves are restricted by the declined quantificational adverbial *mnogie*, referring to a distributive plural entity as opposed to the collective non-declined neuter singular form *mnogo* in combination with a genitive plural NP.<sup>47</sup> Hence, this sequence involves two kinds of repetition, namely distributivity and habituality. The backgrounded setting of the trams’ running around Moscow in 1928 is marked by a gerund, whereas the eventualities of running along Herzen Street and chasing from Herzen Street to Moss Street are foregrounded by finite verb forms. In both cases secondary imperfectives are used to mark both actions as telic and contingent to others (prefix) as well as repeated (suffix). The temporal adverbial *čerez každou minutu* – ‘every minute’ is a marker for habituality. In this case, the preposition *čerez* – ‘within’ functions very much like the preposition *za* – ‘in’ in frame adverbials (cf. section 6.2). Hence, the use of expressions like *čerez každou nedelju* is restricted to telic VPs in a similar way. A gerund is used to refer to the action of rushing over the pavement as an elaboration of the trams’ running along Herzen Street. To sum up, there are two lexical markings of repetition, *mnogie*

<sup>47</sup> The adverbs *mnogie* vs. *mnogo* are in some way comparable to English *many* vs. *much*, although *mnogo* has a wider range of use in not just combining with mass terms, e.g. *mnogo rabočich* – ‘many workers’ (collective reading).

for distributivity and *čerez každou minutu* for habituality. There is a backgrounded setting, marked by the gerund *begavšie* in combination with the point adverbial *v 28-m godu*. Two actions are foregrounded by finite secondary imperfectives, which mark the repetition of contingent micro-events making up temporally unbounded (due to the repetition) macro-events. The first foregrounded action is elaborated by another one, marked by the gerund *šurša*.

- (71) *Mnogie* *iz 30 tysjač mexaničeskich ekipažej,* *begavšie* *v 28-m*  
 Many-NOM-PL out-of 30 thousand mechanical carriages, DIR-run-pastpart in 28<sup>th</sup>  
*godu po Moskve,* *proskakivali* *po ulice Hercena,* *šurša*  
 year along Moscow, SI-through-jump-PAST along street Herzen-GEN, IPF-rush-GER  
*po glatkim torcam,* *i čerez každou minutu* *s gulom i skrežetom skatyvajsja*  
 over smooth pavement and through every minute with din and squeak SI-down-roll-PAST  
*s Hercena* *k Moxovoj* *tramvaj 16, 22, 48 ili 53-go maršruta.* (RJ) (Russian)  
 from Herzen-GEN to Moxovaja-DAT tram 16, 22, 48 or 53<sup>rd</sup>-GEN line-GEN  
 ‘Many of the 30 thousand mechanical carriages, driving around Moscow in 1928, ran along Herzen Street, rushing over the smooth pavement, and every minute tram line 16, 22, 48, or 53 chased from Herzen Street to Moss Street with a din and a squeak.’

*Mnohé* *z třiceti tisíc drožek,*  *které v osmadvacátém jezdily* *po*  
 Many-NOM-PL out-of 30 thousand carriages, which-PL in 28<sup>th</sup> NDIR-drive-PAST along  
*Moskvě,* *proklouzly* *Hercenovou ulicí a zasvištěly* *na hladkém*  
 Moscow PF-through-glide-PAST Herzen-street-acc and ZA2-whiz-PAST on smooth  
*dřevěném dláždění; každou minutu* *se s řinkotem a skřipěním přehnala*  
 wooden pavement; every-minute-ACC REFL with din and squeak PF-over-chase-PAST  
*od Hercenovy ulice k Mechové* *tramvaj číslo 16, 22, 48 nebo 53.* (Czech)  
 from Herzen-street to Mechova-DAT tram No. 16, 22, 48 or 53

In the Czech translation, distributivity and habituality are marked in the same way by *mnohé* and *každou minutu*. In addition to that the backgrounded setting is translated with a relative clause in combination with a finite form of a non-directed motion verb. These verbs can be used to mark habituality as well but in this case it could also just express the non-directed motion of driving **around** Moscow.<sup>48</sup> To describe the other three eventualities, three finite perfective verb forms are used, one of which is the quantum-pragmatic Aktionsart of a multiplicative verb with *za-*. The interpretation that the running along Herzen Street and rushing over the pavement temporally overlap, i.e. that the second elaborates the first eventuality, can only be derived from world knowledge and arguably from the fact that for the second eventuality description a multiplicative verb is used. In all three cases perfective verb forms are used since all actions take place quickly (this is already implied by some of the verbs like *run*, *jump*, *rush*, *hunt*), so there is no need to dwell on the process, nothing is backgrounded, and repetition is sufficiently marked by other means.

Finally, (72) is included in the list of examples as one habitual episode to exemplify the differences between Russian and Czech aspect usage in a longer context, but I will not give an exhaustive comment on it. Every relevant marking of temporal relations and all the past tense verb forms are put in bold letters, the latter coming with superscripts for i(mperfective), p(erfective), GER(und), i(mperfective)dir(ected motion), i(mperfective)n(on-)dir(ected motion), i(mperfective)it(erated), A(ktions)A(rt). I underlined all the differences to show that in habitual episodes almost every Russian verb form differs in aspect from the Czech equivalent since only Russian marks repetition on the verb. In the Czech translation, the habituality of the whole episode is made clear once at the beginning by using a non-directed motion verb (*chodila*) and an iterative verb (*čekával*). This would not have been necessary, though, since repetition is also

<sup>48</sup> Note, that in Russian, a directed motion verb is used since means of public transport usually have a fixed and determinate path.

lexically marked by *denně* – ‘daily’. All the other Czech verb forms are not marked for repetition anymore. The difference with respect to ingressivity (Russian marking on the verb vs. Czech contextual ingressivity) shows up in habitual episodes as well as this example shows, as can be seen in the first line: *načínal ždat’* – ‘started waiting’ vs. *čekával* – ‘used to wait’; and the third line: *načínal prislušivat’sja* – ‘started (intently) listening’ vs. *poslouchal* – ‘(intently) listened’.

- (72) *Ona **prixodila**<sup>i</sup> ko mne každý den‘, a **ždat**<sup>si</sup> ee ja **načínal**<sup>i</sup> s utra. Ožidanie éto **vyražalos**<sup>si</sup> v tom, čto ja **perestavljaj**<sup>i</sup> na stole predmety. Za desjat’ minut ja **sadilsja**<sup>i</sup> k okoncu i **načínal**<sup>i</sup> **prislušivat’sja**<sup>i</sup>, ne stuknet li vetxaja kalitka. I kak kur’ezno: do vstreči moej s neju v naš dvorik, malo kto **prixodil**<sup>i</sup>, prosto skazat’, **nikto ne prixodil**<sup>i</sup>, a teper‘ mne **kazalos**<sup>si</sup>, čto ves‘ gorod ustremilsja v nego. [...] Ona **vxodila**<sup>i</sup> v kalitku odin raz, a bienij serdca do toho ja **ispytyval**<sup>i</sup> ne menea desjati. Ja ne lju. **A potom**, kogda **prixodil**<sup>i</sup> ee čas i strelka **pokazyvala**<sup>i</sup> polden‘, ono daže i ne **perestavalo**<sup>i</sup> stučat’ do tex por, poka bez stuka, počti sovsem bessumno, ne **ravnjalis**<sup>si</sup> s oknom tufli s černymi zamševymi nakladkami-bantami, stjanutymi stal’nymi prjažkami. **Inogda** ona **šalila**<sup>i</sup> i, **zaderžavšis**<sup>spGER</sup> u vtorogo okonca, **postukivala**<sup>i</sup> noskom v steklo. Ja v tu že sekundu **okazyvalsja**<sup>i</sup> u éтого okna, no **isčezala**<sup>i</sup> tuflja, černyj šelk, zaslonavšij svet, **isčezal**<sup>i</sup>, - ja **šel**<sup>indir</sup> ej **otkrývát**<sup>si</sup>. Nikto ne **znať** o našej svjazi, za éto ja vam ručajus’, xotja tak nikogda i ne byvaet. Ne **znať** ee muž, ne **znal**<sup>i</sup> znakomye. V staren’kom osobnjačke, gde mne **prinadležal**<sup>i</sup> étot podval, **znal**<sup>i</sup>, konečno, **videl**<sup>i</sup>, čto prixodit ko mne kakaja-to ženščina, no imeni ee ne **znal**<sup>i</sup>. (MM) (Russian)*

‘She came to me every day (in the afternoon) and I started waiting for her from the morning on. Waiting meant that I re-arranged things on the table. Within ten minutes (before she was about to arrive) I sat down at the window and started listening, to see if the old gate didn’t slam. And how strange: up until I met her, hardly anyone had entered our yard, actually, no-one had come, and now it seemed to me that the whole city flocked to it. [...] One time she entered the gate and my heart was beating not less than ten times. I am not lying. And then, when her time had arrived and the hands of the clock were pointing to noon, it (the heart) only stopped bounding when, without a slam, almost without a sound, the shoes with the black velvet ribbons showed up at my window. Sometimes, she would tease me and hide close to the neighbour’s window and knock on the glass with a stick. I would show up at the window at the same time, but the shoe, the black silk, would disappear and I would go to open the door for her. Nobody knew about our relationship, I swear, although that kind of thing never happens. Her husband did not know, acquaintants did not know. In the old building I owned this basement flat in, people knew, of course. They saw, that some woman came to me, but they did not know her name.’

***Chodila**<sup>indir</sup> ke mně denně za poledne a já na ni **čekával**<sup>it</sup> už od rána. Čekání **spočivalo**<sup>i</sup> v tom, že **jsem přestavoval**<sup>i</sup> na stole věci. Deset minut před tím, než **měla**<sup>i</sup> **přijít**<sup>p</sup>, **jsem se uchýlil**<sup>p</sup> k oknu a napjatě **poslouchal**<sup>i</sup>, kdy klapne omšelá branka. A kupodivu: než jsme se poznali, málokdo **zabloudil**<sup>p</sup> na náš dvorek, prostě **nikdo nepřišel**<sup>p</sup>, a ted‘ se mi **zdálo**<sup>i</sup>, že se k nám hrne celé město. [...] Než jedenkrát **vešla**<sup>p</sup>, **rozbušilo**<sup>pAA</sup> se mi nejméně desetkrát srdce, nelžu vám. **Vždycky** když se **přiblížila**<sup>p</sup> hodina schůzky a ručička **ukazovala**<sup>i</sup> poledne, **nepřestávalo**<sup>i</sup> mi srdce tlouct jako na poplach až do chvíle, kdy se bez jediného klapnutí, téměř neslyšně **objevily**<sup>p</sup> v okně střevičky s černými semišovými ozdobami v podobě mašli, sepnutých kovovými přezkami. **Někdy** se uličnický **zastavila**<sup>p</sup> u sousedního okna a **poklepávala**<sup>i</sup> špičkou na sklo. **Rozběh**<sup>p</sup> **jsem se tam, ale mezitím zmizel**<sup>p</sup> střeviček i černý hedvábný stín a já **šel**<sup>indir</sup> **otevřít**<sup>p</sup>. Nikdo **nevěděl**<sup>i</sup> o našem vztahu, jsem si jistý, ačkoli se to nestává. Nic **netuší**<sup>i</sup> ani její muž, ani známí. Ve staré vilce, kde **jsem bydlel**<sup>p</sup> ve sklepním bytě, to samozřejmě **věděli**<sup>i</sup>, **všimli**<sup>p</sup> se, že ke mně chodí nějaká žena, ale **neznal**<sup>i</sup> její jméno. (Czech)*