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Differences between Russian and Czech in the Use of Aspect in Narrative Discourse and Factual Contexts

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Abstract: The aims of the paper are twofold. First, it provides a systematic qualitative corpus study into differences between Russian and Czech in the use of aspect in chains of single, episodic events, as well as in habitual contexts, which takes into account the role of verb class, aspectual affixes, discourse relations, and other factors contributing to the overall aspectual interpretation in a given sentence. The findings suggest that while Russian makes narrative progression and habituality visible already on the verb forms, by employing exclusively perfective and imperfective verb forms, respectively, Czech relies more heavily on the context itself and uses (im)perfective verb forms mostly to signal duration vs. change of state. The second part of the paper addresses differences in aspect use between the two languages in so-called general-factual contexts (presuppositional and existential). Against the background of the empirical findings of the corpus study, I argue against the received view that Czech makes use of imperfective verb forms to mark existential readings. The presuppositional reading of imperfectives, is argued to exist in both languages.

Keywords: aspect; Russian; Czech; general-factual; habituality; narrative discourse; narration; background; elaboration



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1. Introduction

Slavic languages are known for having a grammatical category of aspect, and they all make use of the same general morphological means to distinguish between perfective (PF) and imperfective (IPF) forms, primarily by prefixes and suffixes on the verb. It is also generally assumed for all Slavic languages that the lexical meaning of a given verb can often be expressed by both PF and IPF verb forms (e.g., Russian pf. opisat' / ipf. opis-yv-at' 'to describe'), and furthermore that grammatical aspect interacts with lexical aspect, resulting in a particular way verbal morphology in these languages contribute to the compositional build-up at both aspectual levels. Given these similarities, it might therefore not be surprising that in formal semantic accounts of aspect in Slavic (e.g., Filip 1999; Tatevosov n.d.) it is often (at least implicitly) assumed that the semantics of aspect is identical across Slavic languages. However, it has been observed that there can be quite striking differences when it comes to the use of aspectual forms across Slavic languages. Descriptive Slavicists early on noted variation between particularly Czech and Russian (Bareš 1956; Bondarko 1958, 1959; Dokulil 1948; Ivančev 1961; Křížková 1955), and an investigation into the differences between ten Slavic languages in various contexts is provided in the monograph by Dickey (2000).

As a first illustration, let us look at one such context that is well-described in the literature above, namely, the use of aspect in descriptions of chains of single events (see also Dübbers 2015; Eckert 1984; Petruxina 2000; Stunová 1993). In this context, Russian almost obligatorily uses the PF, whereas we find both aspects in Czech. For example, if the last event in a chain has a clear temporal onset but then evolves further and focus is on the process of this evolution, we have a case that is commonly labeled ingressivity. In

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such cases, it is plausible that there is tension between using the PF to mark the temporal onset, and the IPF to mark the process of the event. It turns out that Russian consistently employs the first strategy (the PF), leaving the evolution of the process implicit, while Czech regularly goes for the second strategy (IPF), so that in this language ingressivity is contextually derived, but not marked on the verb form. This systematic difference in aspect use has first been noted by Ivančev (1961), and one of his examples is given in (1) (from Ivančev 1961, p. 36; Czech original by Božena Němcová; my own glosses and translations).

- (1) a. ... zvolna si sedl vedle mne a Josefa, položil hlavu do slowly REFL down-sat.PF next-to me and Josef put.PF head.ACC in dlaně a **díval** na mne. palms and watched.IPF on me 'He slowly sat down next to me and Josef, put his head in his palms and looked at me.'

Another well-discussed systematic difference is found in contexts that involve the description of repeated events, i.e., iterative and habitual contexts (Dickey 2000; Dübbers 2015; Eckert 1984; Kresnin 2000; Petruxina 2000; Širokova 1963; Stunová 1994). In such contexts, Russian almost exclusively uses the IPF, whereas Czech, again, can use both aspects. The same pattern is observed in aspect use in historical present contexts (Dickey 2000; Bondarko 1958, 1959; Křížková 1955; Eckert 1984; Stunová 1993; Petruxina 2000). Table 1 summarises these differences.²

Table 1. Some aspectua	l differences	between	Russian and	Czech.
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	Russian	Czech
Chains of single/episodic events	PF	IPF, PF
Iterativity, habituality	(almost excl.) IPF	IPF, PF
Historical Present	(almost excl.) IPF	IPF, PF

A first impression we get from Table 1 is a quantitative generalisation: There are a number of contexts in which Czech allows for the use of both aspects whereas Russian uses just one aspect. Such differences have therefore also been framed in terms of the obligatory use of a particular aspect in Russian, vs. the optional use of a particular aspect in Czech, in a particular context (e.g., Bondarko 1958; Křížková 1961; Petruxina 2000; Širokova 1971). However, it is not clear what it means for a grammatical aspect to be optional, as this suggests some kind of arbitrariness, or at least that aspect use in Czech is just a matter of choice, which is usually found with lexical, but not with grammatical categories. A research question to be addressed in this paper is to not merely view aspect choice in Czech as optional, but to spell out under which circumstances one or the other aspect is motivated, and thus to give a positive characterisation of the reasons for the occurrence of a particular aspect in Czech. In other words, at this coarse-grained level, where we simply count IPF and PF forms in particular contexts (which is also something we could do statistically, even though there is less research on this; see, however, Dübbers 2015; Klimek-Jankowska 2022; von Waldenfels 2014), noting these differences is of course important, but a quantitative analysis cannot be the endpoint to understanding the differences; we have to take it as the starting point for a detailed qualitative analysis.

The main aim of this paper, then, is to take the empirical findings about quantitative differences between Russian and Czech as a point of departure for a systematic qualitative

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analysis that in its turn can serve as the starting point for a formal analysis of these differences. To date, there is no formal account that adequately captures cross-Slavic variation in grammatical aspect. The only formal proposals on the market deal with just one context, the so-called general-factual use of the IPF, which has been described to be found more often in Russian than in Czech (Dickey 2000; Dübbers 2015), but none of the other contexts are taken into account. Alvestad (2013, 2014) ties the difference in aspect use with imperatives in various Slavic languages to the general difference in the use of general-factuals, and she proposes a pragmatic account based on aspectual competition, following work by Grønn (2004). Mueller-Reichau (2018), in turn, proposes that the variation with general-factuals in Czech and Russian is due to the distinct semantics of the respective perfective operators: The Russian, but not the Czech, perfective requires target state validity.³

The qualitative analysis in this paper is built on data from a parallel corpus study (Gehrke 2002) that show differences between the two languages in the use of past tense forms in chains of single, episodic events, as well as in habitual contexts. The analysis aims to reflect the interplay between different types of aspectual morphology and verb class or event type, taking into account the discourse relations that are at play. I will show that the differences in aspect use are due to the obligatory use in Russian of PF verb forms in chains of single, episodic events to signal reference time movement, as well as of IPF verb forms in habitual contexts to signal that we are not dealing with single events, and in both contexts this aspect choice is quite independent of the verb classes involved. In Czech, on the other hand, aspect use in both types of contexts does not differ significantly and is primarily dictated by the event types involved: with states and activities the use of the IPF prevails, whereas with accomplishments and achievements we mostly find PFs, unless the narrator focuses on an accomplishment of a particular duration. More generally, from a compositional point of view, various factors play a role for the interpretation of events (in the broadest sense) and the relations between these in discourse, and grammatical aspect is just one of them. Different languages, even closely related ones, can therefore use all kinds of means, strategies, and combinations of these to arrive at a particular interpretation at the sentence- and discourse level, even if, from a formal point of view, the same means and strategies are available (see also de Swart et al. 2022, this volume, for a similar conclusion about the variety of means to arrive at semantic/pragmatic equivalence with connectives such as *until*, *before* and the like).

The more fine-grained generalisations we arrive at from the parallel corpus study will then serve as the basis for reconsidering the differences in the general-factual use of the IPF. This use has first been described for Bulgarian in comparison to Russian by Maslov (1959) and has received a lot of attention in the research on Russian aspect ever since. Subsequently, in the literature contrasting Russian and Czech, it has generally been assumed that Czech also has this use of the IPF, but that it occurs more often in Russian than in Czech (Dickey 2000; Dübbers 2015; Klimek-Jankowska 2022; Mueller-Reichau 2018). In this paper I will take issue with this general assumption by arguing, based on comparison with aspect use in the other two contexts, that Czech lacks one particular subtype of the general-factual, the existential subtype. I will propose that the use of the IPF in Czech in general-factual existential contexts is motivated by the same reasons that motivate it in chains of single events and in habitual contexts. I believe that the misinterpretation of Czech IPF forms in existential contexts as being conditioned by the existential context, rather than by general assumptions about the motivation for the use of an IPF in Czech, also in other contexts, has to do with the strong dominance of Russian as the language under investigation when dealing with 'Slavic' aspect, similarly to what we find with the dominance of English in other areas of formal linguistics. In essence, then, while we know from the traditional Slavistic literature that IPF forms can give rise to various meanings in various contexts, there simply is no guarantee that the occurrence of the IPF in one Slavic language is motivated for the same reasons that it is in the other Slavic language, but we have to look at the overall system and pattern of aspect use in a given language.

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The direction of analysis will be from language use, i.e., distributional differences between these two languages in the three different contexts discussed, to a qualitative analysis of the factors that play a role for grammar and ultimately linguistic theory. Yet, a fully worked out theoretical analysis will have to await future research. Ultimately, I believe that an adequate formal analysis has to be framed within a dynamic semantics that also takes into account the discourse structure. At the same time I discuss the empirical findings against the background of insights from the formal literature, as well as from the traditional Slavistic literature. The current paper, then, also serves as a bridge between the more descriptively oriented traditional literature, which often is also in Russian, Czech, or some other Slavic language, and the formally oriented literature.

The paper is structured as follows. Section 2 provides the terminological, morphological, functional and semantic background on aspect in Russian and Czech and outlines my assumptions about discourse relations between events in narrative texts. Section 3 provides an in-depth qualitative analysis of the differences in narrative discourse in a parallel corpus. Building on the results of that investigation and taking into account further data from the corpus and from the literature on differences in general-factual contexts, including existential ones, I argue in Section 4 against the mainstream view that the use of the IPF in Czech in existential contexts is conditioned by the context being existential and not by other considerations, and conclude that there is no existential IPF in Czech. Section 5 concludes.

2. Background Assumptions on Aspect and Narrative Discourse

In this section, I provide background information on grammatical aspect morphology in Russian and Czech (Section 2.2), a description of the canonical and non-canonical readings of imperfective and perfective verb forms in these languages (Section 2.3), some remarks on the semantics of the (im)perfective aspect (Section 2.4), as well as assumptions about narrative discourse and discourse or rhetorical relations (Section 2.5). Readers familiar with Slavic aspect are welcome to skip or merely skim through Sections 2.2–2.4. First, however, I will discuss the use of terminology in this paper.

2.1. Some Remarks on Terminology

In this paper, I follow a two-component approach to aspect (in the sense of Smith 1991), which distinguishes between INNER (LEXICAL/PREDICATIONAL) ASPECT (the level of event types), on the one hand, and OUTER ASPECT, on the other. The grammaticalised distinction between perfective and imperfective in languages such as Russian and Czech belongs to the latter (see also Borik 2002, 2006; Filip 1999 for arguments why these two levels should be distinguished in these two languages, and Mehlig 1981 for an early discussion of the relation and interaction between the two levels in Russian). I use the terms IMPERFECTIVE (IPF) and PERFECTIVE (PF) as labels for forms, not necessarily for the meanings that these forms contribute. This is so because it is not clear that, e.g., IPF forms always involve imperfective semantics; however, we want to characterise this semantics. I will come back to this in Section 2.4.

Furthermore, I use EVENT in a broad sense, to also include states (like 'eventuality' in Bach 1981, 1986; Filip 1999). I will stick to the four most commonly used event types states, activities, accomplishments, achievements, in the sense of Vendler (1957), with the semantics of Rothstein (2004) in mind, even if I will not provide a formal characterisation in this paper. STATES (e.g., know the answer, exist) describe mental or other states that entities are in, without necessarily involving any force input, though some (e.g., those that Bach 1981, 1986, calls dynamic states) can have temporal duration. ACTIVITIES (e.g., dance, sleep), in turn, do need force input to be upheld, and they typically involve a process and temporal duration, but no change of state (or location). Finally, ACCOMPLISHMENTS (e.g., deliver a sermon, grow up) and ACHIEVEMENTS (e.g., reach the top, recognise the error) are more complex event types whose templates make available a change of state or location (modeled in terms of a BECOME predicate in Rothstein 2004), and this change can be gradual (accomplishments) or (conceptualised as) instantaneous (achievements); such

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event templates contain something like a result state (or TARGET STATE, in the sense of Parsons 1990).

When I use the term EVENT TYPE, I have in mind the concepts and the event templates associated with such types, rather than descriptions of particular events. For example, while predicates involving to run are commonly associated with an activity event type (some process component and in this case also the movement of an entity), such predicates conceptually do not involve a definite change of location, even if at some point in time the movement in the actual situation described by such predicates stops. It is possible (in some languages at least) to add a directional prepositional phrase such as to the store, and such combinations have been analysed as derived accomplishments (e.g., Dowty 1979), for example by assuming complex predicate formation (see, e.g., Gehrke 2008), or as bounded/delimited activities (e.g., Rothstein 2004). Another example is to sleep, which is typically associated with an activity event type, but we can add for a while to temporally bound this activity; nevertheless, it remains a simpler event type than that of accomplishments and achievements. The event type state can often be supplemented by the inception of such a state (e.g., the inchoative state Suddenly, I saw a thunder.), and states can also be temporally bounded (e.g., I believed this for most of my childhood, but I don't believe it anymore.). Nevertheless, I assume that the basic event type is a simple state, with initial and/or final bounds added contextually or by linguistic means that I will discuss in more detail in Sections 2.2 and 3.

While I agree with the general view that TELICITY is a property of predicates and belongs to the level of lexical/predicational aspect, I will refrain from using this term in any deep theoretical sense, since its use in the literature is not uniform and, moreover, formal semantic accounts of telicity can differ immensely. If at all, I will use the term 'telic' as a more descriptive characterisation of TELIC EVENT TYPES that involve a definite change of state or location (accomplishments, achievements) and ATELIC EVENT TYPES that do not involve such a change (states, activities). I am aware that at the level of the description of actual events there might not be an actual change or that temporal bounds can be supplemented (as mentioned above), and that therefore the predicates, as they are used in such cases, might behave like atelic or telic predicates with respect to common telicity diagnostics, but I keep the term to the level of event types, as a mere descriptive term.

GRAMMATICAL ASPECT operates on event types by taking them as their input. For example, we can present an accomplishment event type in the progressive (an instance of the imperfective aspect) and focus on the process part of the accomplishment event type, thereby somehow leaving out the change of state/location, leading to what Dowty (1979) called the imperfective paradox. From a semantic point of view, a progressive accomplishment has a lot in common with states, so that under a one-component approach to aspect, it can be argued that we do not have an accomplishment anymore but a derived state (see, e.g., de Swart 1998, for such an approach). Nevertheless, I will continue talking about imperfective accomplishments in such cases. I assume that the same is true for Slavic languages: we can present accomplishments and achievements imperfectively (e.g., by referring to the process or by presenting an unbounded repetition), and we can present states and activities perfectively (e.g., by adding temporal bounds). I will come back to this in Section 2.2 and to the semantic effects of (im)perfectivity in Section 2.3.

Finally, the use of the term AKTIONSART in the Slavistic tradition is different from its use in the 'Western' tradition. In the Western tradition, the term Aktionsart is not necessarily tied to morphology and is often used to refer to the different event types outlined above, and thus to the level of inner aspect. In the Slavistic tradition (e.g., Isačenko 1962), on the other hand, this term is strictly tied to morphology and is used to classify certain prefixes and suffixes that contribute a particular aspectual or other interpretation, not necessarily (and often not) at the level of inner aspect, but rather at the level of outer aspect, or they are not related to aspect per se. I will come back to the discussion of particular Aktionsart prefixes (in the Slavistic sense) in the following section, Section 2.2.

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2.2. The Formal Side: Russian and Czech Aspect Morphology

As mentioned in the introduction, all Slavic languages have a grammatical category aspect. This means that a given verb form is either IPF or PF. Identical lexical meaning can be expressed by IPF and PF verb forms, and there is the common assumption that many verb(form)s come in ASPECTUAL PAIRS. One type of aspectual pair can be derived by so-called 'empty' prefixes from SIMPLE IPFs (IPFs without aspectual morphology), as in (2) and (3).⁴

(2) Russian gradual pairs

a. ipf. pit' > pf. vy-pit'
b. ipf. risovat' > pf. na-risovat'
to drink (up)'
to draw'

(3) Czech gradual pairs

a. ipf. jist > pf. s-n-ist 'to eat (up)' b. ipf. psat > pf. na-psat 'to write'

In the descriptive classification of Russian aspectual pairs found in Padučeva (1996) and Zaliznjak and Šmelev (1997), pairs of the type in (2) are labeled GRADUAL PAIRS. Filip (1999) postulates an event type for such predicates (in Russian and Czech), in addition to the traditional Vendler classes, which she calls the INCREMENTAL EVENTUALITY TYPE, a type between (atelic) activities and telic events (accomplishments, achievements); this type is argued to be underspecified with respect to telicity (or what she calls quantisedness, in the sense of Krifka 1989, 1992).

A morphologically similar type of aspectual pair derived by prefixes are what Padučeva (1996) and Zaliznjak and Šmelev (1997) label PERFECT PAIRS (for Russian), illustrated in (4).

(4) Perfect pairs

a. RU ipf. videt' > pf. u-videt' 'to see'
CZ ipf. vidět > pf. u-vidět

b. RU ipf. čuvstvovať > pf. po-čuvstvovať 'to feel' CZ ipf. cítit (se) > pf. u-cítit (se)

In these pairs, the simple IPF describes a (mental, psychological or other) state, and the prefixed PF (often with the prefixes *u*- or *po*-) describes the inception of such a state.

A second morphological type of aspectual pair involves a suffix that derives an IPF from a PF, as in (5).⁵

(5) Telic and trivial pairs

a. RU pf. dat' > ipf. da-va-t' 'to give' CZ pf. dát > ipf. dá-va-t

b. RU pf. *pro-dat'* > ipf. *pro-da-va-t'* 'to sell' (lit. through-give) CZ *pro-dat* > ipf. *pro-dá-va-t*

c. RU pf. pod-pisat' > ipf. pod-pis-yva-t' 'to sign' (lit. under-write) CZ pf. pode-psat > ipf. pode-pis-ova-t

d. RU pf. ot-kryt' > ipf. ot-kry-va-t' 'to discover, open' (lit. from-cover) CZ pf. ot- $v\check{r}it$ > ipf. ot- $v\check{r}r$ -a-t

Given that imperfectivising suffixes most often attach to already prefixed verbs (but not always, see (5-a)), such derivations are descriptively labeled SECONDARY IMPERFECTIVES (SI). The prefixes involved are INTERNAL PREFIXES (aka LEXICAL PREFIXES), which have been argued to derive new lexical items, to attach to the verbs within the VP and to signal a change of state (e.g., Arsenijević 2006; Babko-Malaya 1999; Di Sciullo and Slabakova 2005; Gehrke 2005, 2008; Ramchand 2004, 2008; Svenonius 2004; Tatevosov 2011, 2015). Whether empty prefixes of the type in (2) belong to the group of internal prefixes is a matter of debate since it is not clear that they derive new lexical items; given that they signal a change of state I will assume that they also belong to the group of internal prefixes. In the descriptive

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classification of Padučeva (1996) and Zaliznjak and Šmelev (1997) aspectual pairs derived by suffixation can further be divided into TELIC PAIRS, for which the change of state is gradual (~ accomplishments), and TRIVIAL PAIRS, for which the change is conceptualised as instantaneous (~ achievements); Padučeva calls these 'trivial' because the only IPF reading that the IPF partner can give rise to is one involving repetition, in the broadest sense, a reading that all (Russian) IPFs can give rise to 'trivially', so to say. I will come back to the different readings of IPFs and PFs in Section 2.3.

There are also verbs that are assumed not to be paired up in an aspectual pair; these are called (IM)PERFECTIVA TANTUM (see, e.g., Isačenko 1962). Predicates that express static states (in the sense of Bach 1981, 1986), such as Russian suščestvovať 'exist', as well as predicates that do not naturally come with an inception or do not express a gradual change, such as Russian prygat' 'to jump', Czech chodit 'to walk', and also intransitive uses of incremental verbs, e.g., Russian pet' 'to sing', Czech číst 'to read', are traditionally considered imperfectiva tantum (under this use). Nevertheless, especially in Russian it is possible to add perfectivising prefixes to some of these, and this derives perfectiva tantum. In the traditional Slavistic literature the relevant prefixes are labeled AKTIONSART prefixes (e.g., Isačenko 1962). Here, I will focus on three such prefixes, which are fairly productive in Russian and which regularly derive PF verbs, namely, those that add temporal bounds to otherwise unbounded eventualities; these will play an important role in the comparison of Russian and Czech in Section 3. In particular, there are the DELIMITATIVE prefix po- in (6-a) and the perdurative prefix pro- in (6-b); both temporally delimit an event on both sides, with the difference that the latter requires an additional stretch of time to be added (which is often perceived as an unnecessarily long stretch of time).

(6) a. pf. po-sidet' 'to sit (for a while)'
b. On pro-sidel v tjurme 20 let.
PERDURATIVE
he.NOM PRO-sat.PF in prison 20.ACC years
'He spent twenty years in prison.'

Furthermore, there is the INGRESSIVE prefix *za*- in Russian, which provides a temporal onset bound for a state or activity that continues to hold or to proceed after the onset (7).

(7) pf. za-govorit' 'to (start) speak(ing)' INGRESSIVE

The function of the ingressive prefix za- is similar to that of a phase verb in examples such as (1-b), discussed in the introduction.

We will see in the data discussion in Section 3 that such Aktionsart prefixes are widely used in narrative discourse in Russian, but not in Czech. While I did not find many instance of perdurative *pro*- in either language, Russian delimitative *po*- occurs quite frequently and receives an exclusively temporal interpretation, whereas Czech *po*- occurs a lot less and can also be interpreted non-temporally (e.g., spatially 'a bit') (on Czech *po*- see also Součková 2004a, 2004b). We will also see that while Russian ingressive *za*- as an ingressive Aktionsart prefix is quite common, it does not exist in Czech in this use (as first described in detail in Ivančev 1961).

What does it mean when I say that Czech lacks the ingressive Aktionsart? It is important to note that most of the Slavic prefixes are homophonous in multiple ways and have more than one meaning or function. Certain prefixes can be used as 'empty' prefixes that derive a PF aspectual partner (e.g., Russian po-smotret' 'to watch'), as prefixes that derive new lexical items (PF), to which the IPF is derived by a SI (e.g., Russian za-žeč'/-žigat' cigaretu 'to light a/the cigarette', lit. 'to ZA-burn cigarette'), or they can be used as Aktionsart prefixes, such as Russian delimitative po- and ingressive za-, illustrated in (6-a) and (7), respectively. In most cases it is difficult to trace back these different uses to a single function of the prefix in question. At the same time it is sometimes difficult to draw the line between Aktionsart uses and some of the other uses, but at least for ingressive za- it is commonly assumed that once a SI is derived we are not dealing with the Aktionsart prefix use (see, e.g., Isačenko 1962). Therefore, while Czech has aspectual pairs with a prefix za-,

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where it might be possible to recover something like an inceptive meaning, there is general agreement that it does not have the use of *za*- as an ingressive Aktionsart prefix to mark the beginning of a state or activity (see also Berger 2013; Dickey 2000; Dübbers 2015; Ivančev 1961; Petruxina 2000), and I did not find forms that are interpreted in such a way in my corpus data either (see Section 3). There are further prefixes that can express something like ingressivity or inchoativity, e.g., *roz*- (expressing the 'evolutive' Aktionsart, cf. Isačenko 1962), and such prefixes are also found in Czech (see Petruxina 2000, for further discussion).

There are also non-temporal Aktionsart prefixes that add other meaning dimensions and sometimes lack a perfectivising function (e.g., some can attach to already PF verbs), in particularly in Czech (see Filip 2003, on Czech prefixes more generally). In the data discussion in Section 3, I will exclusively focus on *po-, pro-*, and *za-*. Aktionsart prefixes of this type are assumed to be EXTERNAL PREFIXES (aka SUPERLEXICAL PREFIXES) (Babko-Malaya 1999; Di Sciullo and Slabakova 2005; Gehrke 2005, 2008; Ramchand 2004, 2008; Svenonius 2004) since they do not display argument structure effects and do not derive new lexical items, but only modify the event description in question. The three (Russian) external prefixes I focus on in this paper all have in common that they temporally delimit an event and derive a PF counterpart to an otherwise atelic predicate (a state or an activity). In what kinds of contexts, then, do we find IPF and PF forms in Russian and Czech? In the following, I will briefly outline readings that have been attributed to (I)PF forms before I turn to the semantics of (im)perfectivity.

2.3. The Functional Side: Canonical and Non-Canonical Readings of the PF and IPF

The literature on Russian aspect describes different readings that IPF and PF forms give rise to in different contexts, and similar observations have been made about Czech (see, e.g., Kopečný 1962). In the following, I will illustrate these readings by using Russian examples; the same readings are available in Czech, unless explicitly stated otherwise. Zaliznjak and Šmelev (1997) and others identify the description of a 'concrete fact' as the main reading of the PF, i.e., a single, episodic event that took place in the past (with past tense forms) or is expected to take place in the future (with present tense forms).⁷ This is illustrated in (8) (from Zaliznjak and Šmelev 1997, 19ff.).⁸

(8) Ivan **uexal** za granicu i **postupil** v universitet.

John AWAY-drove.PF behind border.ACC and ON-stepped.PF in university.ACC 'John went abroad and entered university.'

Additionally, there are marked, 'non-canonical' uses of the PF. Such uses are particularly prominent with PF present tense forms, which often express overall modal meanings. For example, the literature on Russian describes the vivid-exemplifying use in habitual contexts, to be addressed in Section 3.2.2, and the potential use, illustrated in (9) (see Zaliznjak and Šmelev 1997, for further discussion).

(9) Ona rešit ljubuju zadaču. she solves.PF any.ACC task.ACC 'She will solve/is able to solve any task.'

In the empirical investigation of this paper, I focus exclusively on non-modal past tense forms and their correspondences in the other languages. While I am aware that a complete understanding of the differences in the use of aspect between Russian and Czech also has to take into account other tense forms, modality, and the whole range of non-finite verb forms, for reasons of space I cannot go into these other forms in detail, but some references that describe differences with these have been mentioned in the introduction.

Let us then turn to the IPF, which has been attributed more readings. There are two 'canonical' readings (or two groups of readings) that IPF forms give rise to; these readings are canonical because such readings are commonly attested for IPF forms cross-linguistically (see, e.g., Deo 2009). The first canonical IPF reading is a process/durativity

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reading, which for example is the reading expressed by the English Progressive, an instance of the imperfective aspect. This reading is illustrated for Russian in the main clause of (10).

(10) Kogda ja vošla, moj brat **ležal** na divane i **čital** knigu. when I in-went.PF my brother lay.IPF on couch and read.IPF book.ACC 'When I came in, my brother was lying on the couch and reading a book.'

The second canonical reading involves repetition in the broadest sense, which subsumes both iterativity (events happening more than once) and habituality (events happening regularly); the use of IPFs for generic statements could also fall under this category, but I will refrain from making any theoretical claims about the connection between genericity, on the one hand, and iterativity and habituality, on the other. Habituality is illustrated in (11).

(11) Ona každyj den' **otkryvaet** okno. she every day opens.SI window.ACC 'She opens the window every day.'

This is not a reading that the English Progressive expresses primarily but it is a reading that IPF forms in other languages with grammatical aspect sometimes give rise to (see discussion in Deo 2009). In Russian whenever an event of a particular type happened (is instantiated) more than once (or potentially more than once), i.e., whenever the reference does not involve a single, episodic event (token), the IPF has to be used. ¹⁰ In Czech, on the other hand, both IPF and PF can be used in this context, and Czech additionally has at its disposal a third morphological type of verb form that is exclusively used in habitual contexts, so-called frequentatives. I will get back to these in Section 3.2.

There are also non-canonical IPF readings, i.e., readings that IPF forms give rise to that are not common IPF readings cross-linguistically (and outside of Slavic they might not even be attested). In particular, under the GENERAL-FACTUAL reading(s) (obščefaktičeskoe, after Maslov 1959), IPFs can appear in contexts with typical perfective meanings, namely, when referring to bounded 'completed' events. Note however that the traditional literature also discerns subtypes of the general-factual with intuitively non-completed events (e.g., Glovinskaja 1981, 1982; Padučeva 1996). In formal accounts of the general-factual (e.g., Grønn 2004), theses subtypes are usually not addressed so that there is the somewhat distorted impression from the theoretical literature on the topic that general-factual contexts always involve 'completed' events (see Gehrke n.d., for further discussion). In generalfactual contexts that involve intuitively completed events, it is commonly assumed that the IPF is in 'aspectual competition' with the PF (a term that goes back to at least Mathesius 1938), because both can (often) be used interchangeably with only subtle differences that are hard to pin down. The literature on Russian aspect distinguishes between at least two subtypes of the general-factual IPF, the existential type (Grønn 2004; Padučeva 1996) and what Grønn calls the presuppositional type (the 'actional' type in Padučeva 1996).

The (Russian) EXISTENTIAL IPF is illustrated in (12) (corpus example from Grønn 2004).

(12) Ne bylo somnenij, čto ja prežde **vstrečal** ee. not was.NEU.SG.IPF doubts.GEN that I before met.MASC.SG.SI her 'There was no doubt that I had met her before.'

Here, the (male)¹¹ speaker asserts that he had a meeting with a female person in the past, and a meeting or meetings in the past intuitively involve completed events that actually happened (at some time in the past). Nevertheless, we find an IPF form here to describe such a meeting or such meetings. In general, with the existential IPF stress is on the verb form, and this reading can be paraphrased as 'There has been/is/will be (at least) one event of this type.' (following the idea that existential IPFs involve event types or kinds; see Mehlig 2001, 2013; Mueller-Reichau and Gehrke 2015). Therefore, in this case the paraphrase would be 'There has been at least one event of the type "meet her". The exact time when this event happened, and also whether it happened more than once, remains

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non-specific. We will see in Section 4 that in some existential contexts Russian has to use the IPF and cannot switch to the PF. Thus, the general impression one gets from the literature about the interchangeability between the IPF and the PF in general-factual contexts as a whole has to be taken with a grain of salt (see also Dübbers 2015).

The PRESUPPOSITIONAL IPF is illustrated in (13) (from Glovinskaja 1982).

(13) Zimnij Dvorec **stroil** Rastrelli. winter-.ACC palace.ACC built.IPF Rastrelli.NOM 'It was Rastrelli who built the Winter Palace.'

The presuppositional IPF, at least with 'completed' events, is probably the most noteworthy mismatch between event completion and aspect use in Russian, and this is also where switching from the IPF to the PF is generally possible. In our example at hand, we are dealing with a single event that happened in the past, namely, the building of the Winter Palace in Saint Petersburg (which now houses the Hermitage Museum). It is a well-known fact that this event took place only once and that it was completed, because we can see the result in front of us. It is also known when exactly this event happened, so we are not dealing with temporal non-specificity, either. Nevertheless, an IPF verb form is used to describe this event.

More generally, the presuppositional IPF is used when it is already clear from the context that the event in question (including its completion, in case 'completed' events are involved) exists; this is why Grønn (2004) labelled it presuppositional: the existence of the event (and its completion) is presupposed, which in Grønn's account is the same as being backgrounded, following Geurts and van der Sandt (1997). The utterance in which the presuppositional IPF form appears provides further information about this presupposed event. A suitable paraphrase is therefore 'The (already mentioned or contextually retrievable) event was/is/will be such and such.' In our example, this means that context (or world knowledge) presupposes the existence of the 'complete' event 'build Winter Palace' (the sheer existence of the actual building presupposes it already, but it could also have been talked about in the previous context), and the new information is that the architect of the building was Rastrelli. This use of the IPF often goes hand in hand with a particular information structure (see also Borik and Gehrke 2018, for further discussion), which is also evident from our example, and from the English translation I provided, a cleft construction: What is presupposed (backgrounded) appears sentence-initially and unstressed (the building of the Winter Palace) and the new information in focus is Rastrelli, in sentence-final position, resulting in a non-canonical OVS order. 12

As already mentioned in the introduction, it is generally assumed that the general-factual IPF reading is also available in Czech (and other Slavic languages), but that it is more frequent in Russian (Alvestad 2013, 2014; Dickey 2000; Dübbers 2015; Klimek-Jankowska 2022; Mueller-Reichau 2018), and this is independent of whether the authors in question assume a single general-factual meaning or several subtypes (such as the existential and the presuppositional type). The main novel contribution in the current paper is to call into question this received view. In Section 4, I will propose that Czech does not use IPF forms to signal existential readings; rather, the use of IPF forms in such contexts in Czech can be explained entirely on the same grounds as the use of IPFs in the description of single/episodic and habitual events, as addressed in Section 3. Czech does, however, have presuppositional IPFs, because, as I argue in Gehrke (n.d.), presuppositional IPFs come with a standard imperfective semantics, a partitive semantics. Let us then turn to the semantics of (im)perfectivity in these two Slavic languages.

2.4. The Formal-Semantic Side: The Semantics of (Im)Perfectivity

Common theoretical approaches to the semantics of Russian (and sometimes more generally Slavic) aspect treat it as a relation between the reference time and some other temporal interval (e.g., Altshuler 2012, 2014; Borik 2002, 2006; Grønn 2004, 2015; Klein 1995; Paslawska and von Stechow 2003; Ramchand 2008; Tatevosov 2011, 2015), or as

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an event predicate modifier, in the opposition of total vs. partial events (e.g., Filip 1999, for Czech). Traditional approaches to the semantics of aspect in both Russian and Czech are framed within the structural markedness theory and assume that the perfective is semantically marked for a particular feature A, whereas the imperfective is unmarked for this feature. This means that the imperfective either expresses the absence of the feature (-A) or is indifferent to it $(\pm A)$. The idea that the imperfective is unmarked with respect to the perfective is a wideheld assumption, at least for Russian, and this has influenced some formal approaches as well, as we will see. The distinction between (I)PF forms and (im)perfective meaning is not always clear in the literature. At the same time, there are authors that explicitly deny a one-to-one correspondence (more recently, for instance Borik 2018; Grønn 2015). Definitions that treat the IPF/imperfective as unmarked, as well as the strategy to deny a form-meaning link for, e.g., Russian aspect, aim at reflecting descriptions of the readings that IPF and PF verb forms give rise to in different contexts, which were outlined in the previous section. In particular the general-factual readings in the description of intuitively 'completed' events are difficult to capture by a general understanding of the semantics of (im)perfectivity across languages.

Cross-linguistically, it is common to assume some kind of universal semantics for perfective and imperfective viewpoint aspect, independently of particular forms that are associated with such meanings. A common approach is to frame the semantics of tenses and aspects in terms of three temporal points or (nowadays) intervals: Event time, utterance time, and reference time (an auxiliary temporal interval) (Klein 1994; Reichenbach 1947). With the perfective aspect, the event time is included in the reference time, leading to an external perspective on the event, whereas with the imperfective aspect, the reference time is included in the event time, leading to an internal perspective on the event (formal variants of this idea and applications to Russian can be found in, e.g., Altshuler 2012; Paslawska and von Stechow 2003; Ramchand 2008; Tatevosov 2011).

We encounter some variation on this theme in Borik (2002, 2006) and Grønn (2004, 2015). Borik (2002, 2006) argues that the semantics of the PF in Russian is not a relation between event time and reference time, but rather what we find in (14-a). In particular, the semantics of the PF is defined as a conjunction of two conditions that have to be met: The intersection of the speech time S and the reference time R is empty, and the event time E is included in the reference time. Negating this conjunction leads to a disjunction for the IPF in (14-b): The intersection between speech time and reference time is not empty, or the event time is not included in the reference time.

(14) a.
$$PF: S \cap R = \emptyset \& E \subseteq R$$

b. $IPF: \neg (S \cap R = \emptyset \& E \subseteq R)$
 $= S \cap R \neq \emptyset \lor E \not\subseteq R$

This disjunction in the definition of the IPF in (14-b) captures what Borik (2002) labels the 'progressive' reading of the IPF (when the event time is not included in the reference time) as well as what she labels the 'present perfect' reading (the intersection between speech time and reference is not empty). Borik (2002)'s 'present perfect' reading is functionally similar to the existential perfect (see also discussion in Borik 2018), and this is essentially the existential IPF reading outlined in the previous section. Borik (2002) explicitly sets habitual and iterative readings of the IPF aside, but we could assume that this can be added along the lines of other proposals in the literature. For instance, Altshuler (2014) argues that Russian IPFs are used for plural events, building on Ferreira (2005). What is problematic for Borik (2002)'s account, though, is that it leaves the presuppositional IPF unaccounted for.

Grønn (2004), in turn, works with a standard perfective semantics but employs a very weak semantics for Russian IPF forms, which merely requires an overlap between the event time and the reference time ($e \bigcirc t$) (building on Klein 1995). This rather weak semantics gets pragmatically strengthened to a 'proper' IPF (the reference time is included in the event time), or to an actual PF semantics (the event time is included in the reference time), which, he argues, happens in the case of factual IPFs. Grønn takes into account the role of

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information structure to characterise the contexts in which strengthening happens in one or the other direction. This proposal is a precursor to his latest account (Grønn 2015), in which he proposes that IPF forms can express both imperfective (the reference time is included in the event time) and perfective semantics (the event time is included in the reference time), as in (15).

```
(15) a. [PF] = \lambda t \lambda e.e \subseteq t
b. [IPF_{ongoing}] = \lambda t \lambda e.t \subseteq e
c. [IPF_{factual}] = \lambda t \lambda e.e \subseteq t 'Fake' IPF
```

Grønn calls the IPF that has the same semantics as the PF in (15-c) a 'fake' IPF. The existence of IPF $_{factual}$ alongside the semantically identical PF, he argues, leads to aspectual competition: In the default case the PF appears but in certain contexts, the IPF $_{factual}$ wins the competition. This gives rise to the presuppositional IPF in cases where narrative progression is to be avoided (under the assumption that the PF always leads to narrative progression). The existential IPF, in turn, is argued to appear when the reference time is too large for the perfective semantics to be informative.

In Gehrke (n.d.), I take issue with Grønn's proposal that the semantics of Russian IPFs can be either imperfective or perfective, depending on the context. Instead, I argue that the existential IPF arises in contexts of repeatability, i.e., when there is no guarantee that we are dealing with a single event, and that this use of the IPF should be seen as being conditioned by the same circumstances that it is conditioned by in iterative and habitual contexts. Therefore, whichever account one follows for capturing the use of IPFs in repetitive contexts (e.g., event plurality), such an account also captures its use in existential contexts. For the presuppositional IPF, in turn, I propose that it arises in contexts where the IPF is used to elaborate on a previously introduced or contextually retrievable event, by zooming in on parts of the reference time of that event. This use of the IPF, then, can be related to the use of IPFs to describe partial events, or parts of an event, so it is related to the use of IPFs in descriptions of durative or ongoing events. In both cases, the IPF form does not express a 'fake' but a 'true' imperfective meaning. The current paper follows this approach.

Let me illustrate my account of Russian presuppositional IPFs as 'true' imperfectives with the example in (16) (from Gehrke n.d.).

(16) Zaplatili. **Plačeny** byli naličnymi šest' tysjač rublej. paid.3PL.PF paid.IPF were in-cash six thousand Rubles 'They paid. It was paid 6.000 Rubles in cash.'

In this example, the PF verb form *zaplatili* '(they) paid.PF' in the first sentence introduces a 'completed' paying event. The presuppositional IPF past passive participle *plačeny* 'paid' in the second sentence links back to this already introduced event. The marked word order and the most natural way to read this example indicate a marked information structure, a hallmark of the presuppositional IPF: The paying event appears in the beginning of the (second) sentence and is backgrounded, focus lies on the sentence-final subject and (possibly also on) the modifier ('6000 Rubles (in cash)'). The formal analysis of this example proposed in Gehrke (n.d.) is given in (17), using a linear notation for the discourse representation structure.¹⁴

(17)
$$[e_1, e_2, t_1, t_2, n, x | \mathbf{pay}(e_1), \tau(e_1) \subset t_1, t_1 < n, \mathbf{pay}(e_2), \text{THEME}(e_2, x),$$

6.000R(x), in-cash(e_2), $e_2 = e_1, t_2 \subset \tau(e_2), t_2 < n$

Under this analysis, the first sentence introduces a new eventive discourse referent e_1 , whose run time, $\tau(e_1)$, is included in the reference time t_1 (the semantics of perfective aspect), which is before n(ow) (the semantics of past tense). The presuppositional IPF past passive participle in the second sentence introduces a second paying event e_2 , which—due to the information structural cues—is treated on a par with definite descriptions in

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Discourse Representation Theory (see Section 2.5) and is anaphorically linked to e_1 , i.e., $e_2 = e_1$. The new information in focus is about e_2 , and since e_2 is identical to e_1 it is also about e_1 : the theme of e_2 is '6.000 Rubles' and this was payed 'in cash', which I treat as an event modifier. The imperfective semantics for the IPF specifies that there is a second reference time, t_2 , which is included in the run time of the event, $\tau(e_2)$; past tense indicates that this reference time is before n(ow).

How does this analysis still capture the intuition that the paying event is 'completed', if the presuppositional IPF is analysed as involving imperfective semantics? I argue that event completion information is already given in the first sentence about e_1 (its run time is included in the first reference time t_1). Since e_2 equals e_1 , the actual event of paying remains completed. Furthermore, the second reference time, t2, is included in the run time of e_2 , and therefore it is also included in the run time of e_1 (since e_2 is identical to e_1). By transitivity, t_2 must also be included in the first reference time, t_1 . The effect of the presuppositional IPF, then, is that it is used to zoom in on a narrower reference time within a bigger reference time; the link between the two reference times t_1 and t_2 is only indirect, via the events involved, but it can still be made. The assertion that the sentence with the presuppositional IPF makes, then, is only for part of the bigger reference time (and therefore also for only part of the actual event), and this is what is captured by the IPF semantics. In other words, the event description provided by the presuppositional IPF elaborates on the first event. What does elaboration mean? In the following section, I will outline my background assumptions on elaboration and other discourse relations. I do this because ultimately, a full understanding of the functions of grammatical aspect in Russian and Czech requires taking into account the structure of the discourse that (I)PF forms appear in (see also Altshuler 2012, who makes the same point for Russian).

2.5. Narrative Discourse: Discourse Relations, Fore- and Backgrounding

Discourse Representation Theory (DRT; Kamp and Reyle 1993) distinguishes between (somehow derived) events and states at the level of the discourse, which add the following conditions to the discourse representation structure (DRS): An event_{disc} is included in its location time, a state_{disc} overlaps its location time (18). 15

(18) a.
$$e \bigcirc t$$
 EVENT_{DISC} b. $s \subseteq t$ STATE_{DISC}

As Kamp and Reyle argue, the condition that events add to the DRS leads to what they call reference time movement, because for each new event we add a new location time that then (by default) follows the previous location time if two events are described one after the other. In DRT it is not quite clear how we compositionally arrive at the interpretation of a state_{disc} or event_{disc} at the discourse level, but de Swart (1998) outlines a proposal that integrates the semantic contribution of at least some grammatical aspects and adverbials.

Lascarides and Asher (1993) amend the dynamic semantics of DRT in their framework of Segmented DRT (SDRT), by outlining different discourse or rhetorical relations that can hold between events (or events_{disc} and states_{disc}) when two clauses α and β follow one another (19) (from Lascarides and Asher 1993, p. 440), they argue that these relations are governed by common sense reasoning associated with particular laws and axioms (see also Lascarides and Asher 2007).

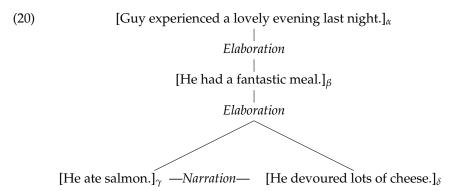
- (19) a. $Explanation(\alpha, \beta)$: The event described in β explains why α 's event happened (perhaps by causing it) [...].
 - b. $Elaboration(\alpha, \beta)$: β 's event is part of α 's (perhaps by being in the preparatory phase) [...].
 - c. $Narration(\alpha, \beta)$: The event described in β is a consequence (but not strictly speaking caused by) the event described in α [...].

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d. $Background(\alpha, \beta)$: The state described in β is the 'backdrop' or circumstances under which the event in α occurred (no causal connections but the event and state temporally overlap) [...].

e. $Result(\alpha, \beta)$: The event described in α caused the event or state described in β [...].

Lascarides and Asher's (1993) discourse tree in (20) illustrates some of these relations.



What we can see here is that a DRS in this system can be subordinated to another one (here due to *Elaboration*, but this also happens with *Explanation*), and this leads to a vertical connection in a discourse tree. They can also be coordinated (in the case of *Narration*), leading to a horizontal connection in a discourse tree. Furthermore, a DRS can be open (e.g., in the case of *Elaboration*) or closed (e.g., in the case of *Narration*).

Again, we have to assume that events and states in SDRT are derived notions at the discourse level, and also these authors are not fully explicit about how we arrive at these interpretations compositionally. Narrative progression is comparable to reference time movement in classical DRT: The event_{disc} in β is interpreted as temporally following the event_{disc} in α , in the case of *Narration* and *Result*. Explanation, in turn, is a kind of backward movement in time (the event_{disc} in β temporally precedes the event_{disc} in α), and this kind of rhetorical relation is more marked and needs contextual support, according to the authors. Finally, *Elaboration* and *Background* are both relations, under which there is no narrative progression but rather temporal overlap, at least partially. In the former case, the second event_{disc} is part of the first one; in the latter case, we are dealing with a state_{disc} that temporally overlaps the event_{disc}.

While a fully compositional account of the discourses I discuss in this paper has to await future research, let me say a few words about how we arrive at the interpretation of events_{disc} and states_{disc} at the discourse level, more generally. Different ingredients play a role: the event type, adverbials, the tense-aspect system of a given language (as illustrated for some such interaction in English and French in de Swart 1998), syntactic structure (e.g., subordinate vs. main clauses), or simply pragmatic reasoning based on the context and on common sense in general. If a language does not have grammatical (im)perfective aspect, such as German, and if we ignore the perfect and the pluperfect for the moment (on the English counterparts see de Swart 1998; Kamp and Reyle 1993; Lascarides and Asher 1993), we can hypothesise that the event type, adverbials, syntax, and pragmatics/overall context play a role. For example, it could be that accomplishments and achievements are interpreted as events_{disc} by default, whereas states and activities are interpreted as states_{disc} by default, and that temporal adverbials of the type *for an hour* provide a temporal bound and turn these into events_{disc}. Moreover, we could assume that context plays a crucial role, as well, for example in a sentence such as (21).

(21) Sie stand auf, ging zum Klavier und klimperte vor sich hin. she stood up went to-the piano and tinkled in-front-of REFL PRT 'She got up, went to the piano and tinkled away.'

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In this example, we have two telic event types (getting up and walking to the piano), followed by an atelic event type (the activity of tinkling away). The most natural interpretation is that the tinkling away temporally follows the walking to the piano: it starts only once the piano is reached, since we contextually enrich the tinkling away by 'on the piano'. However, nothing about the verbal predicate (*vor sich*) *hinklimpern* or the event type associated with it indicates that we are dealing with *Narration*. It is not that the interpretation of the tinkling away temporally overlapping with the movement to the piano is entirely impossible, but given that one needs to be at the piano in order to play on it, it is not available in this context. If we added that she tinkled away on a keyboard or a guitar she was holding in her hands, context would allow for either a narrative progression or a temporal overlap interpretation. The temporal overlap reading can be facilitated by adding *dabei* 'thereby, at the same time'. Similarly, it is quite easy to interpret two events described by accomplishments and achievements as temporally overlapping, as long as common sense allows for this or this is indicated by adverbials or other grammatical means (e.g., in temporal subordinate clauses introduced by *während* 'while').

In languages such as Russian and Czech, on the other hand, which have grammaticalised imperfective and perfective aspect, one could assume that a lot depends on whether we have a PF or an IPF verb form. This is so because it is commonly assumed that crosslinguistically perfectives describe (intuitively) 'complete' events and should thus involve the event being located completely within its location time (an event_{disc} interpretation in (S)DRT), whereas imperfectives are commonly assumed to involve some reverse temporal relation and thus temporal overlap between the event and its location time (a statedisc interpretation in (S)DRT). Now, the main question is whether this is the only thing that plays a role or whether event type, adverbials, syntax, and the overall context can also contribute to the interpretation of a given situation as involving a state_{disc} or an event_{disc}. In addition, what happens if we take the more elaborate system of Lascarides and Asher (1993) into account? According to these authors, we still have derived events_{disc} and states_{disc}, but it is less clear now that all events_{disc} need to involve perfective verb forms; it might be that this is only the case with Narration and Result, but possibly not with Explanation and certainly not with Elaboration, which involves temporal overlap (or even stronger: partitivity) and should thus, all else being equal, require the imperfective ¹⁷; this is precisely why the presuppositional IPF is used, as I argued at the end of Section 2.4.

Finally, the role of syntax should play a role in any case. For example, it could be the case that some subordinate clauses can place events in the background or can explicitly state that a particular event temporally overlaps the foregrounded event in the main clause. Furthermore, the same kind of backgrounding and temporal overlap can be created by gerunds, i.e., non-finite verb forms that are always interpreted as temporally overlapping the event described by the finite verb form that the gerund appears with, as in (22).

- (22) a. She opened the window, singing a song.
 - b. She opened the window, having noticed that it was cold.

In (22-a), the backgrounded singing-event temporally overlaps the foregrounded opening-event, whereas in (22-b)—with a gerund related to a perfect—the backgrounded result state of the noticing-event temporally overlaps the foregrounded opening-event.

In the corpus data discussion in Section 3, I will primarily focus on chains of foregrounded events and backgrounded events (including states_{disc}) that temporally overlap the foregrounded events, and thus on the discourse relations *Narration* and *Background*. In Section 4, in turn, I will also deal with the discourse relation *Elaboration*, in particular in the discussion of presuppositional IPFs. More generally, foregrounded events in chains of events drive the narration and create reference time movement. Such events can only follow one another if they are bounded in some sense, i.e., if they are events_{disc}. Returning again to a 2-component approach to aspect, this means that with telic events, they are bounded at the event level if the change of state has happened (the result is reached) and we do not dwell on the duration or process of the event in question. In contrast, atelic

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events can only be temporally bounded, either explicitly (e.g., by temporal *for*-adverbials or by the temporal Aktionsart prefixes described for Russian in Section 2.2) or implicitly, by contextual enrichment. Backgrounded or temporally overlapping events, as well as events elaborating on other events, on the other hand, are not (or at least not necessarily) bounded in this way, and there are different ways to express this (explicitly or just contextually). We will see that while Russian makes a clear distinction between these discourse relations already on the verb forms employed, Czech leaves more room for the role of context.

With these background assumptions in place, we are now finally ready to tackle differences between Russian and Czech in the use of aspect in the three contexts under investigation.

3. Corpus Data and Qualitative Analysis of Differences in Narrative Discourse

The corpus that the qualitative empirical study presented in this section is based on was compiled for my master thesis (Gehrke 2002) and is made up of past tense contexts from Russian and Czech 20th century prose in the original and the respective translations. The Russian and Czech sources (and their translations) are given in (23) and (24), respectively.

- (23) a. **(MM)**: Bulgakov, Mixail: Master i Margarita. In Bulgakov, Mixail: *Master i Magarita. Rokovye jajca. Sobač'e serdce: Roman, povesti.* Irkutsk 1988, pp. 3–382. [The Master and Margarita] translation: Bulgakov, Michail: *Mistr a Markétka.* Prague 1990.
 - b. **(RJ)**: Bulgakov, Mixail: Rokovye jajca. In Bulgakov, Mixail: *Master i Magarita*. *Rokovye jajca. Sobač'e serdce: Roman, povesti.* Irkutsk 1988, p. 383-456. [The Fatal Eggs]
 - translation: Bulgakov, Michail: Osudná vejce. Prague 2000.
 - c. **(Dov)**: Dovlatov, Sergej: Zona: Zapiski nadziratelja. In Dovlatov, Sergej: *Sobranie prozy v trex tomax*. Saint Petersburg 1993, Tom 1, pp. 25–172. [The Zone: A Prison Camp Guard's Story] translation: Dovlatov, Sergej: *Lágr*. Prague 1988.
- (24) a. (JR): Hrabal, Bohumil: Jetel růžak. In Hrabal, Bohumil: Sebrané spisy 10. Prague 1994, p. 106-112.
 translation: Grabal, Bogumil: Rozovyj klever. In Biblioteka Maksima Moškova (http://lib.ru/, accessed on 30 October 2021): Inostrannaja literatura 4 (2001).
 - b. (MP): Hrabal, Bohumil: Mořská panna. In Hrabal, Bohumil: Sebrané spisy 10.
 Prague 1994, pp. 9–17.
 translation: Grabal, Bogumil: Rusalka. In Biblioteka Maksima Moškova (http://lib.ru/, accessed on 30 October 2021): Inostrannaja literatura 4 (2001).
 - c. **(RP)**: Hrabal, Bohumil: Rukovět Pábitelského učně. In Hrabal, Bohumil: *Sebrané spisy 10*. Prague 1994, pp. 179–82. translation: Grabal, Bogumil: Rukovodstvo Il'ja učenika Pabitelja. In Biblioteka Maksima Moškova (http://lib.ru/, accessed on 30 October 2021): Inostrannaja literatura 4 (2001).
 - d. (Sext): Hrabal, Bohumil: Sextánka. In Hrabal, Bohumil: Sebrané spisy 10. Prague 1994, pp. 145–53. translation: Grabal, Bogumil: Šestiklassnica. In Biblioteka Maksima Moškova (http://lib.ru/, accessed on 30 October 2021): Inostrannaja literatura 4 (2001).
 - e. **(Kun)**: Kundera, Milan: *Žert*. Prague 1967. [The Joke] translation: Kundera, Milan: *Šutka*. Saint Petersburg 1999.

I extracted all differences between the original and its translation in the first 50 pages of each novel and in the complete short stories by Hrabal.

Obviously, there are potential problems with making claims about the use of aspect in a translation. On the one hand, the aspect of the original could influence the aspect used in the translation. On the other hand, there is the possibility of indirect translations. For example, there are instances in the data where a translator resorted to a different lexical

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item, which can also result in a change of event type description (e.g., by changing from a state to an achievement, or vice versa). Finally, in rare cases, there is the possibility of inadequate translations. More importantly, however, the occurrence of a particular verb form does not inform us about whether the aspectual choice is optional or obligatory. Therefore, in the following sections when I comment on the aspect use in the corpus data under investigation, I do not make a general claim about the use of a particular aspect as the only possibly choice, unless I explicitly state that the other aspect is unacceptable because I asked native speakers or because there is consensus in the literature that it is the case. Since we generalise over originals and translations in both directions and across various writers and translators, I believe we can still get a general idea of the nature of the differences in aspect use. The fact that we have independent evidence for the more general differences described in previous literature mentioned in the introduction also strengthens this position.¹⁸

Throughout the investigation, I concentrate on the formal side only, i.e., on the use of particular IPF and PF forms. At the same, I will not simply stay at the coarse-grained level of IPF vs. PF but I will also take into account different types of prefixes and suffixes and the opposition between simple IPFs and SIs. I will also consider finite vs. non-finite forms and, when relevant, the contribution of additional adverbials and other elements. I will then interpret these differences and provide a general picture that emerges. As outlined in Sections 2.1 and 2.5, it is important to keep in mind that the interpretation of a sentence as involving an event_{disc}, which could be interpreted (at least statically) as the sentence having a perfective semantics, can be brought about by the composition of various elements, and different strategies can be employed. For example, in such a context we could still have IPF forms, and the impression of an overall perfective semantics could be brought about in combination with other elements in the sentence (e.g., adverbials, event type), or also contextually induced or based on common sense reasoning.

The empirical investigation of the corpus data proceeds in two parts. First, I address the findings in descriptions of single, episodic events (Section 3.1), and then I turn to habitual contexts (Section 3.2), by discussing some representative examples for both contexts; more data are discussed in Gehrke (2002) and are also provided in Supplementary Materials. The generalisations arrived at at the end of this section will serve as the backdrop against which we can address differences in aspect use in general-factual contexts in Section 4.

3.1. Single, Episodic Events: Chains of Events and Grounding

This section deals with aspect use in contexts that describe single, episodic events in narrative discourse. In a nutshell, the main differences we find between Russian and Czech in this context are as follows. In Russian chains of single events we find the exclusive use of the PF, foremost of prefixed PF verb forms (and the few PF simplex verbs; see Section 2.2), independently of the underlying event type. In particular, with telic predicates we find internal prefixes, and with atelic ones we find external prefixes (Aktionsart prefixes) or the prefixes that signal the inception of a state in perfect pairs (recall (4)). This means that prefixes and PF (+ finiteness) temporally separate single events that are following one another, leading to their interpretation as events_{disc} and to reference time movement, as discussed in Section 2.5. The distinction between events in process or events of a particular duration, on the one hand, and actual changes of states, on the other, is not explicitly expressed in Russian finite verb forms. In contrast, in Czech we can find this distinction, also with foregrounded events in a chain of events. For backgrounded, temporally overlapping events, we regularly encounter non-finite verb forms in Russian, whereas in Czech we mostly find subordinate clauses and no explicit marking of backgrounding and temporal overlap on the verb form itself.

These differences are exemplified in (25), with the Czech original in the a. example and the Russian translation in the b. example.¹⁹ To make the long examples more accessible, also for readers not familiar with Slavic languages, I put the verb forms I focus on in the

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discussion in boldface and underlined additional non-verbal material that is of relevance for the discussion.

(25)potom dal a. [...] ale když se mnou do řeči, se but when REFL then gave.MASC.PF with me.INSTR in speech.GEN isem najednou, jak se zaplétám, felt.FEM.IPF AUX.1SG suddenly how REFL untangle.PRES1SG.IPF plácám, jak mluvím hloupě, a on **když** babble.PRES1SG.IPF how speak.PRES1SG.IPF stupidly and he when že jsem viděl, v rozpacích, obrátil saw.MASC.IPF that AUX.1SG in awkwardnesses.PREP turned.MASC.PF na obyčejné věci [...] immediately speech.ACC on ordinary.PL.ACC things.ACC '... but when he then started talking to me, I suddenly felt how I become tangled up, babble, how I say stupid things, and when he saw that I was embarrassed (lit. in awkwardnesses) he immediately changed the course of conversation to ordinary things ...' (CZ Kun 25/30)b. emu

[...] no stoilo zagovorit' mnoj but was-worthwile.NEU.IPF him.DAT ZA-speak.INF.PF with me.INSTR kak ja vdrug počuvstvovala, čto sbivajus', how I suddenly felt.FEM.PF that become-confused.PRES1SG.IPF boltaju vsjakuju čuš', govorju glupo, a babble.PRES1SG.IPF any.ACC nonsense.ACC speak.PRES1SG.IPF stupidly and rasterjannost', svernul razgovor on, **zametiv** moju he realise.AP.PF my.ACC confusion.ACC turned.MASC.PF conversation.ACC na banal'nye temy [...] on banal.PL.ACC topics.ACC

'... but he felt it worthwhile to start to talk to me, so that I suddenly felt that I become confused, babble random nonsense, say stupid things, and upon realising my confusion he changed the course of conversation to banal topics ...'

(RU translation)

The three boldfaced verb forms describe three events, one of the female first person protagonist feeling something (this event is further elaborated on by present tense forms, which I do not discuss here), one of 'him' seeing/realising something, and one of 'him' changing the topic. Events of feeling and seeing are stative events, while changing the topic describes a telic event. Temporally, the event of changing the topic follows the event of seeing. The event of seeing temporally overlaps the event of feeling and elaborates on the reason for 'him' to change the topic, so in that sense it is backgrounded with respect to that event. The event of feeling starts suddenly after the event of 'him' starting to talk to her, as specified by the underlined adverb *najednou* 'suddenly' (Czech) (Russian *vdrug*). This temporal update by the feeling event is not marked by the PF in Czech, which uses an IPF for the stative predicate, and so it can only be deduced from the adverb (and this might also be the reason why it appears in the Czech original). In Russian, on the other hand, the stative predicate contains an additional prefix, i.e., the PF partner of a perfect aspectual pair is used, and there is an additional conjunction kak '(lit.) how' to further mark the temporal update (given that the previous finite verb form is IPF). The next event of 'him' seeing/realising her confusion, which leads to the change of topic, is expressed by a finite IPF in Czech in a temporal subordinate clause, but by a non-finite PF adverbial participle in Russian, and both means serve to background this event. The final event in this chain, the one of changing the topic, is described by a PF in both languages, and this is a telic event of no particular duration.

Let me add some more general remarks. As one reviewer points out, there could in principle be at least two reasons for the Czech IPF *cítila* 'felt.FEM' to appear, in contrast to the Russian PF *počuvstvovala*. One reason could be that there is no PF counterpart in

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Czech for this kind of verb. However, we already saw in (4-b) that this is not true because Czech has a PF aspectual partner for 'feel' that could have been used as well, namely, the PF partner *u-cítila*. Another reason, then, could be that the author chose to express this as a simple state rather than a state and its inception. This, however, can also not be quite correct because adding the adverb 'suddenly' stresses the inception of the state. Therefore, the conclusion I reached above remains, and this case illustrates a general difference I found in a number of examples: there is a sudden beginning of a feeling in a chain of single events (after 'him' starting to talk to her), and this inception is not marked directly on the verb form in Czech (even though it would have been possible) but it is marked directly on the verb form in Russian (and here this is the only option).

A second remark concerns the objection of a second reviewer to the term 'adverbial participle' for forms such as zametiv in (25-b). I use this term here in a descriptive sense, as it is found in the literature for the Russian established term *deepričastie* (from *de(jat')'*to do' + interfix e + pričastie 'participle'). ²⁰ Sometimes these forms are also called converbs or gerunds. Adverbial participles can be IPF and PF and are never inflected. They commonly describe a state that is simultaneous to the event associated with the finite verb form they appear with. This is either an event/dynamic-state-in-progress with IPF adverbial participles, or a consequent state with PF adverbial participles, much like what we saw for English gerunds in (22). Therefore, the direct English translation of the Russian PF adverbial participle *zametiv* in (25) would be 'having realised'. Czech does not use these adverbial participles (anymore) but regularly employs subordinate clauses in cases where we find adverbial participles in Russian. Thus, there is a second general difference between Russian and Czech we find in this example, but also in a number of other examples: backgrounding is signalled by a non-finite verb form in Russian (the adverbial participle), whereas in Czech it is signalled by a finite verb form in a subordinate clause. Note that subordinate clauses are in principle also possible in Russian, but adverbial participles are quite common, at least in written texts.

A similar use of a finite IPF verb form for a backgrounded or temporally overlapping event in Czech vs. a non-finite verb form in Russian is found in (26).

nový

zákazník.

posadil

se

vstoupil

(26)

[...] do krámu

- to shop.ACC in-stepped.PF new.NOM customer.NOM down-sat.PF REFL za mými zády na židličku a **čékal**, až behind my.INSTR back.INSTR on stool.ACC and waited.IPF until přijde na řadu; [...] comes.PRES.PF to turn.ACC

 'A new customer entered the shop, sat down behind me on a stool and waited until it was his turn.'
 - until it was his turn.'

 (CZ Kun 14/17f.)

 b. [...] v cirjul'nuju

 vošel

 novyj

 klient

 i
 - in hairdresser-salon.ACC in-went.PF new.NOM customer.NOM and sel za moej spinoj na stul v ožidanii down-sat.PF behind my.INSTR back.INSTR on chair.ACC in expectation svoej očeredi; [...] his.GEN turn.GEN

'A new customer entered the hairdresser salon and sat down behind me on a chair, awaiting his turn.' (RU translation)

Here, the first two telic events of entering and sitting down are foregrounded and temporally follow one another, i.e., form part of a chain of events, whereas the third atelic event of waiting could be interpreted in two ways. Either the waiting starts right after the sitting-down (involving reference time movement), or entering and sitting-down are part of the bigger event of waiting. Both Russian and Czech use finite PF verb forms for the first two, but the difference lies in the description of the atelic event: Czech uses a finite IPF verb form, but Russian uses an adverbial expression with a deverbal nominalisation (lit. 'in waiting/expectation'). Thus, the Russian description is in line with treating the

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waiting event as an overarching event that temporally overlaps the sitting down, whereas the Czech description is more in line with the waiting beginning after the sitting down (with the inception of the waiting being deduced from the context, much like what we saw with the feeling event in the previous example), although both interpretations are possible in Czech.

3.1.1. Temporal Aktionsart Prefixes

Let me now turn to differences in the use of the temporal Aktionsart prefixes that I described in Section 2.2, delimitative *po*-, perdurative *pro*-, ingressive *za*-. The function of all three prefixes is to put temporal bounds on otherwise unbounded events, and they regularly appear as means to perfectivise verbs in Russian that describe atelic events (states and activities). In my corpus data I found a number of instances of delimitative *po*- and ingressive *za*- in Russian, whereas the Czech counterparts were mostly IPF verbs so that temporal boundedness and reference time movement were merely contextually induced. The perdurative prefix *pro*- was found less often, but then also only in Russian (3 times) and not in Czech. Finally, as noted in Section 2.2, there is consensus in the literature (e.g., Berger 2013; Dickey 2000; Dübbers 2015; Ivančev 1961; Petruxina 2000) that Czech lacks the ingressive Aktionsart use of *za*-, and I also did not find any such forms in Czech in my corpus data that could be interpreted ingressively, whereas I found a number of occurrences of ingressive *za*- in Russian. Let me discuss some representative examples, which show that again reference time movement (*Narration*) is signalled directly on the verb form in Russian, but is contextually induced in Czech when atelic event types are involved.

The example in (27) illustrates the use in Russian of perdurative *pro-*, which temporally bounds the atelic event of lying for a longer period of time, and this is followed by the temporal update of something happening, described by a PF verb. This temporal update is not explicitly marked by PF verb forms in Czech, where both finite verb forms are IPF and describe states (of being). Thus, the fact that what follows comes after or is the result of the event of being exposed to the ray is merely deducible from the overall context in Czech.

- (27)Blagodorja tomu, čto assistent otozval professora, thanks that.DAT that assistant.NOM away-called.PF professor.ACC ameby proležali poltora pod dejstviem časa amoebas.NOM PRO-lay.PF one and a half hour.GEN under action.INSTR luča vot čto: ėtogo i polučilos' 1...1 this.GEN ray.GEN and happened.PF there what.NOM 'Thanks to the fact that the assistant called away the professor, the amoebas lay for one and a half hours under the impact of this ray and so this happened: ...' (RU RJ393/16)
 - b. Díky tomu, profesora odvolal, že asistent thanks that.DAT that assistant.NOM professor.ACC away-called.PF měňavky byly půldruhé hodiny vystaveny amoebas.NOM were.IPF one and a half hour.GEN exposed.PART.PASS.PF účinkům toho paprsku a výsledek **byl** následující: impacts.DAT this.GEN ray.GEN and result.NOM was.IPF on [...] following.NOM

'Thanks to the fact that the assistant called away the professor, the amoebas were exposed to the impacts of this ray for one and a half hours and the result was the following: ...' (CZ translation)

The absence of temporal Aktionsart prefixes in Czech and thus also the lack of a direct translation of the Russian counterparts is particularly obvious in the example in (28), in which delimitative *po*- (in the first event) is just omitted; both the original and the translation additionally contain the adverbial 'for a while'. The last event in this chain of events is marked by ingressive *za*- in combination with a verb of saying in Russian; the Czech

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translator decided to add *pak* 'then' to mark the temporal update and to use a different lexical item ('inquire') in the PF, which is part of a regular aspectual pair in Czech.

- (28)On **pomolčal** <u>nekotoroe</u> vremja v smjatenii, vsmatrivajas' v he PO-was-silent.PF some in confusion.ACC in-watch.AP.SI in time lunu. plyvuščuju rešetkoj, i zagovoril: za moon.ACC swimming.ACC behind bars.INSTR and ZA-spoke.PF 'He stayed silent for some time in confusion, watching the moon that swam behind the bars, and (then) said: ...' (RU MM130/109)
 - b. <u>Chvíli</u> zaraženě **mlčel**, **sledoval** plující while.ACC confused.ADV was-silent.IPF followed.IPF swimming.ACC měsíc za mříží, a <u>pak</u> **se zeptal**: [...] moon.ACC behind bars.INSTR and then REFL inquired.PF

 'For a while he was silent in a confused manner, followed the swimming moon behind the bars, and then inquired: ...' (CZ translation)

There was only one use of Czech *po*- in which it could be interpreted as temporal 'for a while', whereas delimitative *po*- occurred quite frequently in Russian. Instead, I found Czech *po*- with a non-temporal (and mostly spatial) meaning of 'a bit', where it occurred attached to an already PF verb form, as in (29).

(29) a. Pak holička **po-od-stoupila** [...] then hairdresser.FEM.NOM PO-away-stepped.FEM.PF

'Then the hairdresser stepped (a bit) away ...' (CZ Kun 13/16)

b. Potom parikmaxerša oto-šla čuť [...]
then hairdresser.FEM.NOM away-went.FEM.PF a bit
'Then the hairdresser stepped a bit away ...' (RU translation)

This meaning cannot be rendered by Russian *po*- and so the translator opted for adding the adverb *čut'* 'a bit'.

Finally, the passage in (30) illustrates the fact that when Russian uses the ingressive external prefix *za*- to mark the initial temporal bound of the last event in a chain of events, Czech does not use such a prefix but employs a simple IPF instead. It also shows more of the general differences.

- když bylo (30)Když **přišlo** pozdní jaro, léto, když se when came.PF late.NOM spring.NOM when was.IPF summer.NOM when REFL setmělo byla sobota, přešel got-dark.PF and was.IPF Saturday.NOM across-went.PF AUX.1SG osvětlený most, pak **zahnul** k mlýnu a podle Staré illuminated.ACC bridge.ACC then off-bent.PF to mill.DAT and past old.ACC rybárny jsem kráčel kolem plotu farní zahrady. fisherman.ACC AUX.1SG straddled.IPF around fence.GEN churchyard.GEN When late spring arrived, when it was summer, when it got dark and it was Saturday, I crossed the illuminated bridge, then turned to the mill and past the Old Fisherman and strolled around the fence of the churchyard.' (CZ JR 109)
 - kogda bylo Kogda vesnja **približalas'** k koncu, počti wenn spring approached. SI to end. DAT, when was IPF already almost <u>sumer</u>ki leto, odnaždy <u>v</u> <u>subbotnie</u> ja **perešel** in Saturday-.PL.ACC twilights.ACC I across-went.PF summer.NOM once potom svernul osveščennyj most, k mel'nice i illuminated.ACC bridge.ACC and then off-bent.PF to mill.DAT and mimo starogo 'Rybnogo podvor'ja' vdol' ogrady ZA-straddled.PF past old.GEN 'Fisherman's-Inn'.GEN along fence.GEN cerkovnogo sada. churchyard.GEN

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'When spring came to its end, when it was already almost summer, one Saturday evening I crossed the illuminated bridge, and then turned to the mill and started straddling past the old Fisherman's Inn along the fence of the churchyard.'

(RU translation)

The first four finite verb forms in the Czech original in (30-a) describe backgrounded events that set the scene for the following passage, which contains a chain of three events that temporally follow one another (crossing the bridge, turning to the mill, straddling past the Old Fisherman along the churchyard fence). The scene setting is done in Czech alternating between PF achievements (arriving, getting dark) and IPF states (being). Russian, on the other hand, uses only two finite verb forms here, for the first two events setting the scene, and both appear in the IPF (a SI for approaching and a simple IPF for being). The other two scene-setting events (getting dark, being Saturday) are translated as non-verbal descriptions (lit. 'in Saturday twilight') that are backgrounded to the chain of the three following events, the start of which is explicitly marked by *odnaždy* 'once' in Russian, but not in Czech. Both languages use PF accomplishments for the first two telic events, but the initial temporal bound of the third atelic event of straddling around, which temporally follows the second one, is marked explicitly only in Russian, by ingressive *za-*, but remains to be deduced from the context in Czech.

3.1.2. Motion Verbs

Related to the observation that Czech lacks ingressive *za*- to mark the initial temporal bound of an atelic event is a further observation in the literature that Czech also lacks PF counterparts to simple IPF determinate verbs of motion (see also Eckert 1991, for general differences between Russian and Czech in the realm of motion verbs). In Russian and Czech, simple, unprefixed motion verbs, which usually express a particular manner of motion, come in pairs of directed (determinate) vs. non-directed (indeterminate) motion verbs; both are IPF. Some examples are given in (31) (further pairs exist for 'to fly', 'to carry', 'to lead', 'to swim', etc.).

(31) a. det. *idti* vs. indet. *xodit'* 'to go, to walk' det. *exat'* vs. indet. *ezdit'* 'to drive'

CZECH

b. det. *jít* vs. indet. *choditi* 'to go, to walk' det. *jet* vs. indet. *jezdit* 'to drive'

Russian determinate verbs of motion can be perfectivised by the external prefix *po*-, which Isačenko (1962) and others view as the ingressive Aktionsart prefix in the realm of motion verbs. In Czech, on the other hand, determinate verbs of motion with the prefix *po*- to indicate the start of a motion, are unavailable. Morphologically, it is possible to add the prefix *po*- to the Czech past tense form of what looks like the determinate motion verb for 'to go, to walk', for instance, but not to any of the others, and this results in the (e.g., masculine) form *pošel*. This form, however, does not describe the beginning of a directed walking event in the past, but represents a different lexical item, 'died a miserable death'. Furthermore, *po*- can be added to Czech present tense forms to signal a synthetic future tense with determinate motion verbs (e.g., *půjdu* 'I will go'), but this is not the ingressive Aktionsart that the Russian counterpart would express.

Thus, in contexts where Russian has to use the PF with determinate motion verbs, i.e., in chains of single events, it uses the prefix po-, whereas Czech regularly uses the same verbs without the prefix, as illustrated in the second sentence in (32).

(32) a. Ja ne znal, čto imenno togda **dostig** veršiny blagopolučija.

I not knew.IPF that exactly then reached.PF peak.GEN happiness.GEN

Dal'še vse **pošlo** xuže.
further everything PO-went.PF worse
'I did not know that exactly then I had reached the peak of my happiness. After that everything went worse.'

(RU Dov 35/14)

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b. Netušil jsem, že právě tato doba byla not-suspected.IPF AUX.1SG that exactly that.NOM period.NOM was.IPF vrcholem životního štěstí. Pak už šlo všechno peak.INSTR life-.GEN happiness.GEN then already went.DET.IPF all mnohem hůř. considerably worse
'I did not suspect that exactly that period was the peak of life's happiness.

(CZ translation)

What the first sentence in this example furthermore shows is the contrast between the PF description of a single event in Russian, using an achievement predicate (reaching the peak), and the corresponding IPF description with a stative predicate (being) in Czech. Such choices of non-literal translations where states are translated as achievements, and vice versa, are quite common, probably also in other languages. In the corpus data, Russian PF achievements corresponding to Czech IPF states in the description of chains of single events, as we see here, are not uncommon. In the following section, when discussing (33), we will encounter a variation of the correspondence between states and achievements.

Then everything went already considerably worse.'

3.1.3. Interrupting the Chain and Dwelling on the Process

A lot less common in Russian are IPF finite verb forms to describe foregrounded single events. We encounter this only when a chain of single events is explicitly interrupted in order to focus on the duration or process of the event in question, and then the taking up of the chain of events afterwards has to be explicitly marked (e.g., by *potom* 'then' and similar expressions). One such example is given in (33-a).

- (33)Professor dobralsja do komnaty Pankrata dolgo professor.NOM reached.PF to room.GEN Pankrat.GEN and long.ADV and bezuspešno stučal v nee. Nakonec za dver'ju unsuccessfully knocked.IPF in her.ACC finally behind door.INSTR poslyšalos' určan'e heard.REFL.PF growl.NOM 'The professor reached Pankrat's room und for a long time and unsuccessfully he knocked on it. Finally, one could hear a growl behind the door ...' (RU RJ 391/13)
 - Profesor až k Pankratovu pokojíku a dotápal professor.NOM to-toddled.PF up to Pankrat's room.DAT and long.ADV klepal na dveře. Konečně se bezúspěšně unsuccessfully knocked.IPF on doors.ACC finally REFL behind dveřmi ozvalo cosi doors.INSTR resounded.PF something.NOM 'The professor toddled up to Pankrat's room and for a long time knocked on the door unsuccessfully. Finally one could hear something behind the door ...' (RU translation)

Here, the adverbials *dolgo* 'long' and *bezuspešno* 'unsuccessfully' signal that the narrator zooms in on the duration or process of the knocking event, which most likely also consists of multiple knocks. The chain of events is picked up again explicitly by *nakonec* 'finally'. The use of the IPF in the Czech translation of the knocking event should by now not come as a surprise, and the translator also chose the literal translation for the adverbs (albeit leaving out the conjunction); the adverb picking up the chain of events is also translated literally. For the last verb form, the Czech translator departs from the literal translation in an interesting way: In Russian we find the perfect PF aspectual partner of a stative verb (hearing, with a reflexive, signalling a passive reading, 'was heard'), whereas in Czech, a different lexical item was chosen, which is more like an achievement (resounding) and therefore appears in the PF. Therefore, here, again, we have a non-literal correspondence

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between a state and an achievement, but in the other direction than what we saw in the previous example (i.e., a Czech achievement corresponds to a Russian state) and also with a different form, since in both languages, both verb forms are PF, unlike what we saw before where a Russian PF achievement corresponded to a Czech *IPF* state.

Finally, while Russian finite verb forms cannot mark a distinction between telic events of a longer gradual change vs. those of a shorter one, since it has to use PF verb forms to mark reference time movement, Czech can do so, as we see in (34).

- (34) a. [...] **přidala** jsem se proto ze všech sil k Pavlovým to-gave.PF AUX.1SG REFL therefore out all.GEN forces.GEN to Pavel's.DAT ústům a **přidávali** se <u>další</u> a <u>další</u> [...] lips.DAT and to-gave.PL.SI REFL more.NOM.PL and more.NOM.PL '... therefore I joined in with Pavel's chanting with all my force and more and more joined in ...' (CZ Kun 20/22)
 - b. [...] i potomu izo vsej moči stala podpevat' and therefore out all.GEN power.GEN began.FEM.PF along-sing.IPF k nam prisoedinilis' Pavlu, drugie, ešče i ešče [...] Pavel.DAT to us to-joined.REFL.PF others.NOM still and still '... and therefore I started to sing along with Pavel with all my force and others joined us, more and more ...' (RU translation)

In the Czech original, two events temporally following one another are described by the same lexical item 'join in', first as a PF to describe the protagonist joining in in Pavel's singing, then as an IPF describing others joining in one after the other. The IPF signals that the joining in is gradual, which is further supported by the subject 'more and more (people)'. At the same time the others joining in temporally follows the protagonist's joining in, but in Czech, this is not signalled on the verb form. The Russian translator went for a non-literal translation for the first verb form and chose a PF phase verb to indicate the inception of the protagonist's singing ('started to sing along'). The second joining in of others is translated with a PF verb because there is a chain of events and thus reference time movement; the subject is not 'more and more' anymore but just 'others'. The fact that people join in gradually and not simultaneously is not signalled on the Russian verb form itself (it is PF) but the translator added 'still and still' (~ 'more and more') to bring about this meaning.

3.1.4. Interim Summary

Let me summarise the main differences between Russian and Czech in the description of single, episodic events. In chains of single events where one temporally follows the other, and there is also no need to dwell on the duration of the event, both languages use finite PF verb forms with telic predicates; they differ with atelic predicates, for which Russian continues to use PF verb forms, either those containing Aktionsart prefixes or the PF partner of a perfect pair, whereas Czech uses IPF ones. As a result, with atelic predicates reference time movement is contextually induced in Czech, or marked by other means, such as adverbs. With backgrounded single events, which overlap the foregrounded events, Russian primarily uses non-finite verb forms (adverbial participles) or nonverbal descriptions altogether, while Czech still makes use of finite IPF or PF verb forms, usually in subordinate clauses. This means that also backgrounding is marked directly on the verb form in Russian but not in Czech, which resorts to subordination as a syntactic means to mark this discourse relation. In the following section, we turn to habitual contexts.

3.2. Event Plurality, Habitual Contexts

The literature on Russian aspect opposes the description of single, episodic events (*ediničnost'*) with *kratnost'*, which I translate as 'repeatability'.²³ The latter subsumes iterativity and habituality, but also potential repeatability, e.g., in the case of the general-factual meaning of the IPF, as claimed in Padučeva (1996); I will come back to this in Section 4.

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In this section, I will concentrate on habitual discourses. In the descriptive literature on such discourses, it is sometimes common to distinguish between a micro-level (of each repetition) and a macro-level, or the micro- vs. macro-event (see, e.g., Eckert 1984; Stunová 1993). For example while at the micro-level an event can be bounded (because it appears in a habitual chain of events), at the macro-level the overall discourse is unbounded, because we have a habitual discourse. In the following, I will sometimes use these terms, but merely as descriptions, to capture the general intuition.

There is consensus in the literature on Russian that repeatability requires the IPF (e.g., Padučeva 1996; Zaliznjak and Śmelev 1997), whereas this is not the case in Czech (e.g., Dickey 2000; Dübbers 2015; Eckert 1984; Kresnin 2000; Petruxina 2000; Stunová 1993). This was confirmed by my data analysis. In a nutshell, I found the same overall discourse strategies in Russian that I found in the description of single events: Finite verb forms with internal prefixes (accomplishments, achievements) describe events that temporally follow one another, at the level of the micro-events, and the prefix marks the boundedness of each micro-event; backgrounded and (at the micro-level) temporally overlapping events are primarily described by non-finite verb forms. What is new now is that at the macroevent level an additional imperfectivising suffix (or comparable morphology) on the verb forms signals that we are not dealing with single events but that the whole passage is habitual. For atelic event types (states, activities), on the other hand, we do not encounter external (Aktionsart) prefixes anymore, which, as already stated in Section 2.2, are perfectiva tantum. In place of ingressive za- we often find an IPF phase verb (e.g., načinat' 'begin') in combination with the lexical verb that describes the type of event, or with stative predicates more generally we find a periphrastic expression using an IPF verb of becoming (e.g., stanovit'sja 'become'). Czech, again, does not mark ingressivity or the inception of a state on the verb form. As a first illustration let us look at (35).

```
(35) a. [...] býval jsem bezradný [...]

was.FREQ AUX.1SG helpless.NOM

'... I (regularly) was helpless ...'

b. [...] stanovilsja bespomoščnym [...]

became.SI helpless.INSTR

'... I (regularly) became helpless ...'

(RU translation)
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In the Czech original, we have a stative expression 'be helpless', which the Russian translator renders as 'become helpless'. Thus, we again have a non-literal correspondence between a state, described by a Czech IPF, and an achievement, now described by an SI in Russian, and not by a PF, since we are in a habitual context. What this example further illustrates is that Czech uses an IPF verb for 'to be' that is additionally marked with the so-called frequentative suffix *-va-* (IPF *bý-va-t* derived from IPF *být* 'to be'); such verb forms unambiguously signal habituality.²⁴ In general, Czech productively uses this suffix to derive frequentatives from all kinds of verbs (for discussion see Filip and Carlson 1997; Kopečný 1962; Petr 1986), whereas this is not productive anymore in Russian, apart from a few remaining lexical items (e.g., *byvat'* 'to be.FREQ'). Some researchers even consider Czech frequentatives to represent a third category of aspect, in addition to IPF and PF (see discussion in Kopečný 1962). I will come back to frequentatives in a bit.

General differences between Russian and Czech in habitual contexts are exemplified in (36); two further examples can be found in the Appendix A, uncommented.

(36) a. Ona **prixodila** ko mne každyj den', a **ždat'** ee ja she.NOM to-went.SI to me every day and wait.INF.IPF her.GEN I **načinal** s utra. Ožidanie ėto vyražalos' v began.SI from morning.GEN expectation.NOM this.NOM expressed.REFL.SI in tom, čto ja **perestavljal** na stole predmety. Za desjat' minut ja that that I rearranged.SI on table.PREP things.ACC within ten minutes I

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whether the gate clatters.'

sadilsja k okoncu i načinal prislušivat'sja, ne down-sat.SI to window.DAT and began.SI listen.INF.SI not stuknet li vetxaja kalitka. clatters.PRES.PF Q-PRT old.NOM gate.NOM 'She came to me every day, and I started waiting for her from morning onwards. This waiting consisted in me rearranging things on the table. Within ten minutes [of her arrival] I sat down next to the window and started listening

(RU MM135/112f.)

Chodila ke mně denně za poledne já na ni a went.INDET.IPF to me daily during midday.ACC and I on her Čekání spočvalo čekával už od rána. v tom, waited.FREQ.IPF already from morning.GEN waiting consisted.IPF in that že jsem **přestavoval** na stole věci. Deset minut před tím, that AUX.1SG rearranged.SI on table.PREP things ten minutes before that než měla přijít, jsem uchýlil k oknu when had.FEM.IPF to-go.INF.PF AUX.1SG REFL proceeded.PF to window and poslouchal, kdy klapne napjatě omšelá branka. attentively listened.IPF when clatters.PRES.PF moss-covered.NOM gate.NOM 'She came to me daily during midday and I used to wait for her from morning onwards. The waiting consisted in me rearranging things on the table. Ten minutes before she was supposed to come I proceeded to the window and attentively listened to when the moss-covered gate clatters.' (CZ translation)

This passage describes the habitual event of 'her' coming to the male protagonist, and the protagonist's prior habitual chain of events: starting to wait for 'her', rearranging things, sitting down next to the window, and listening to potential gate clattering. The coming-event is described in Czech by a simple IPF, an indeterminate verb of motion. In Russian, on the other hand, we find an IPF prefixed verb of motion, which is commonly classified as a SI in the aspectual pair 'to come' (recall Note 21). In this way, the temporally bounded micro-event is marked by the prefix pri- 'to', and habituality is marked by the imperfectivising (in this case suppletive) morphology. Furthermore, in the Russian original in (36-a), the following events in the chain of events of the protagonist are marked for temporal boundedness at the micro-level, by using periphrastic expressions with the IPF version of 'begin' in combination with 'wait' (first event) and with 'listen' (last event); the intermediate rearranging is expressed by a SI and so is the sitting down which precedes the listening event. With all four finite verb forms, we again see that habituality is marked by SI morphology. The Czech translation leaves out the translations of 'begin' and uses a frequentative IPF for the first atelic event of waiting, arguably to mark the whole passage as habitual (see below), and a simple IPF verb form for the second atelic predicate of listening, just like it would if it were not a habitual chain of events. The intermediate rearranging event is rendered with a SI also in Czech (I will come back to this), but Russian 'sit down next to the window' is not translated literally but with a PF 'proceed to the window'.

Let me address what the example in (36) shows more generally. In the Russian original, all the boldfaced finite verb forms are explicitly marked for both reference time movement (on a par with what would be the case in chains of single events, as we saw in Section 3.1) and for habituality (by additionally imperfectivising the verb forms, which is the main difference between chains of single events and habitual chains of events in this language). In the Czech translation, on the other hand, only two of the five verb forms make aspect use in this habitual context different from chains of single events, namely, the first two verb forms: the indeterminate motion verb *chodila* to describe the habitual event of 'her' coming to the protagonist, and the frequentative verb *čekával* to describe the habitual event of the protagonist's waiting for 'her'. Both types of verbs are common means in Czech to mark habituality (see Eckert 1991 for indeterminate motion verbs and Filip and Carlson 1997 for frequentatives). These verb forms appear at the beginning of the passage, to mark the whole passage as habitual. The rest of the passage displays the same kind of aspect use

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that was described in the previous section for single, episodic events: Ingressivity is only contextually induced in both types of contexts (the use of simple IPFs for atelic events), a telic event that temporally follows another one is described with a PF ('proceed'). In addition, Czech can focus on the duration of a telic event in a chain of events, which is how I interpret the use of the SI for the rearranging event: It marks duration at the micro-level (rearranging multiple things for a longer period of time), on a par with what we saw in (34). Therefore, the SI here is not used to explicitly mark habituality, unlike what we find in Russian.

Thus, just like with single, episodic events, the marking of reference time movement directly on the verb form is present in Russian but not in Czech. In addition, while Russian explicitly marks habituality on all verb forms, Czech rarely does so; it rather has a number of specialised IPF verb forms to indicate at the beginning of a habitual passage that the whole passage is habitual but then uses aspect in the same way as it is used in the description of single, episodic events (the same conclusion is reached in Eckert 1984). Only a small fraction of the past tense verb forms in Czech habitual contexts I found can be analysed as explicitly marking habituality: Out of about 500 past tense verb forms, these were 16 frequentatives (vs. only 3 occurrences of *by-va-t'* 'be.FREQ' in Russian), 3 indeterminate verbs of motion (e.g., (36)), 3 SI verbs of motion (which sometimes also mark habituality, according to Eckert 1991), 9 SIs that (at least formally) have the same suffix as frequentatives (*-va*), and only 3 SIs with other imperfectivising suffixes. ²⁵ The latter three forms occurred exclusively in the translation of Dovlatov, which, upon further inspection, was perceived by native speakers I consulted as not the best translation to begin with, so there could have been some transfer errors from the Russian original as well; I will come back to this in Section 3.2.1.

Let me stress that this does not mean that I claim that Czech does not use the IPF in habitual contexts, as one reviewer interpreted my generalisations. As we can see in the previous example already, this cannot be the case because the majority of the verb forms are IPF (including SIs). Rather, my claim is that *habituality* is not directly marked on the verb form in about 93% of my data, and the remaining 7% mostly occur at the beginning of a habitual passage and involve specialised IPFs, or possibly also transfer errors from Russian (see Section 3.2.1). I thus argue that the use of the IPF can be explained by the same reasoning that explains its use in the description of single, episodic events: for atelic states and activities, as well as for accomplishments of a certain duration. Furthermore, I do not claim that the verb forms we find are the only options in Czech; it might very well be that, e.g., the PF 'proceeded' in (36) could have been replaced by a SI or by some different lexical item in the IPF, since this is not a direct translation of the Russian in any case (I did not check this with native speakers). It is just that as a generalisation on the data I looked at, the conclusion is that whenever there was no need to use an IPF (for atelic events or for events of a certain duration) Czech simply used the PF; this is also in line with the intuitions reported by Czech native speakers that investigated differences between Russian and Czech, such as Eckert (1984) and Stunová (1993).

3.2.1. Potential Shortcomings of the Dovlatov Translation

Let me then illustrate potential shortcomings of the translation of Dovlatov but also further differences between Russian and Czech, by addressing (37). To provide context, I added but did not gloss the preceding sentences in the Russian original.

(37) Balodis služil povarom. Glavnoj ego zabotoj byla prodovol'stvennaja kladovaja. Tam xranilis' salo, džem, muka. Ključi Balodis celyj den' nosil v rukax. 'Balodis worked as a cook. His main task was the storage room. There they kept lard, jam, flour. As for the keys [to this room], Balodis kept them in his hands all day.'

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Zasypaja, privjazyval ix špagatom k svoemu asleep-falling.AP.SI to-tied.SI them string.INSTR to his.DAT detorodnomu organu. Ėto ne pomogalo. Nočnaja smena dvaždy childbearing.DAT organ.DAT that not helped.SI night shift twice otvjazyvvala ključi i vorovala produkty. Daže muka byla s"edena ... keys and stole.IPF foods even flour was.IPF eaten.PPP.PF 'Before going to bed he tied them to his childbearing organ. That did not help. The night shift untied the keys twice and stole the food. Even the flour was eaten ...' (RU Dov 49f./29)

b. Než šel spát, přivazoval si provázkem k je before went.DET.IPF sleep.INF.IPF to-tied.SI REFL them string.INSTR to přirození. Ne**pomáhalo** to. Noční směně se sex organ NEG-helped.SI that night-.DAT shift.DAT REFL twice podařilo potraviny si klíče **odvázat** nakrást. Dokonce a succeeded.PF keys untie.INF.PF and foods REFL steal.INF.PF even mouku sežrali ... also flour.ACC up-scoffed.3PL.PF 'Before he went to sleep he tied them with a string to his sex organ. That did not help. The night shift succeeded twice in untying the keys and stealing the food. They even scoffed up the flour ...' (CZ translation)

This passage describes the habitual foregrounded event of Balodis tying the keys to his childbearing organ, which temporally overlaps the backgrounded event of going to bed (it is part of the bedtime routine). In the Russian original, the backgrounded event is described by an adverbial participle, the same strategy we find for backgrounding with single, episodic events (recall Section 3.1). In Czech, the adverbial participle is translated as a subordinate temporal clause and a finite determinate (and thus IPF) motion verb. This is also the same we would expect in a description of a single backgrounded event in Czech (recall the discussion of motion verbs in Section 3.1.2). The tying event in Russian is described by a SI, to mark it for telicity (internal prefix) and habituality (imperfectivising suffix). In Czech, however, one would expect a PF in this context, unless the tying took particularly long and one wants to dwell on its duration (this was confirmed by two native speakers of Czech). Nevertheless, the translator chose a Czech SI as well, and I interpret this translation as a potential transfer error from Russian. The passage goes on stating that the habitual key-tying event was useless, it did not help, and this negated helping event is rendered by a SI in both Russian and Czech. Since aspect use under negation opens up yet another can of worms, I will leave this aside and will not comment on this particular verb form.²⁶

The second part of (37) consists of an iterative chain of events of the night shift untying the keys, stealing the food, and gobbling up (even) the flour, and the iteration is specified as 'twice'. Again, because this is not a chain of single events (it happened twice), and furthermore we do not really know when this happened exactly (see Section 4), Russian continues to use the IPF, a SI for the accomplishment 'untie' and a simple IPF for 'steal', vorovat'; the latter verb is lexically specified for the habitual action of stealing, 'thieving', since one-time stealing would rather be described by the aspectual pair pf. ukrast' / ipf. ukradit'. The final verb form in this chain of events is an IPF passive auxiliary and a (non-finite) PF past passive participles for the eating-up event. The Czech translation here is less literal but arguably more natural (for Czech), since this chain of events is now rendered by PF verb forms, where the first two (untying and stealing) are introduced by a PF 'succeeding' in combination with PF infinitives, and the third not as a periphrastic passive but as a synthetic active PF. This is a chain of telic events, so the use of the PF is expected in Czech, and the fact that it happens twice (and at some indefinite point in time) is not marked on the verb forms themselves, unlike in Russian, but only marked by the adverb 'twice'.

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3.2.2. The Vivid-Exemplifying PF Present

(CZ Kun 21/23)

As mentioned in Section 2.2, there is one exception to the rule that Russian requires IPFs in habitual contexts, namely, the vivid-exemplifying use of PF present tense forms. Such present tense forms occur independently of whether the habitual passage is in the past, present, or future, so the present tense forms here do not necessarily express a present tense meaning. In my data I found this use in past tense contexts just once, namely, in the Russian translation of a Czech original that does not contain such present tense forms; see (38).

- (38)[...] v poledne jsme neměli čas ani poobědvat, snědli AUX.1PL NEG-had.PF time even have-lunch.INF.PF ate.PF in noon na sekretariátě ČSM dvě suché housky a pak jsme se AUX.1PL on secretariat ČSM two dry and then AUX.1PL REFL rolls zase třeba celý den neviděli, čekávala again maybe whole.ACC day.ACC NEG-saw.IPF waited.FREQ.IPF AUX.1SG on Pavla kolem půlnoci [...] Pavel.ACC around midnight 'At noon, we did not even have time to have lunch, we ate two dry rolls at the secretariat of the ČSM [Czechoslovak Union of Youth] and then again maybe did not see each other the whole day, I used to wait for Pavel around midnight.'
 - [...] v polden' nam ne **xvatalo** vremeni daže poobedat', in noon us.DAT not sufficed.IPF time.GEN even have-lunch.INF.PF s"edim, byvalo, na sekretariate dve suxie bulki, a eat.1PL.PRES.PF was.FREQ.NEU.SG.IPF on secretariat two dry rolls and potom snova počti celyj ne vidimsja, den' then again almost whole.ACC day.ACC no see.1PL.PRES.REFL.IPF ždala ja Pavla obyčno k polunoči [...] waited.IPF I Pavel.ACC usually to midnight

'At noon we did not even have time to have lunch, it used to be/happened that we eat two dry rolls at the secretariat and then do not see each other almost the whole day, I usually waited for Pavel until midnight.' (RU translation)

This passage starts with a negated stative expression (not having time), which forms the backdrop or background to the daily routine that the female narrator had with her partner Pavel: having a quick lunch at noon, followed by not seeing each other for the rest of the day, and her waiting for Pavel around/until midnight. In the Czech original, all four verb forms are past tense forms; the one that provides the background ('not having time') is in the IPF because it describes a state. The Russian translator chose a different lexical item but also here we have an IPF past tense verb form to express this scene-setting state. In Czech, the first event of the habitual chain that starts with eating two dry rolls is described by a PF verb form, followed by an IPF negated stative description of not seeing each other. The PF verb form appears because at the micro-level two rolls were eaten (each day two different ones) and given the context this was most likely a quick lunch and it does not makes sense to dwell on the duration of these eating events. Up until here the Czech verb forms themselves do no indicate that the whole passage is habitual, and apart from the adverbs 'again maybe' the clauses containing these three verb forms could also be used in the description of single, episodic events. Only the last verb form explicitly marks habituality, since we are dealing with a frequentative čekávala, derived from the simple IPF čekala 'waited'.

Things are different in Russian when the chain starts: the translator decided to switch to two present tense forms in the vivid-exemplifying use (PF 'eat' and IPF 'see'), and this tense switch is accompanied by the addition of a habituality marker *byvalo* 'it used to be', which is absent from the Czech original. It is commonly assumed that the switch to the vivid-exemplifying use of the present tense has to be accompanied by expressions

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such as *byvalo* for the switch to be possible (see, e.g. Zaliznjak and Šmelev 1997). The vivid-exemplifying use of the PF present (and the IPF present in the second case; this is less discussed in the literature) is obviously a stylistic device; the translator could also have stayed in the past tense, in which case, however, the PF would not have been possible anymore. For the last verb form the translator switched back to the past tense and translated the frequentative Czech verb for 'waited' with a simple IPF verb 'waited', as Russian cannot derive a frequentative from this kind of verb (**žda-va-la*); however, they added the adverb 'usually' to render the habitual nature of the Czech verb form, even though there is no such adverb in the Czech original.

3.2.3. Interim Summary

In sum, aspect use in Czech in habitual discourses does not differ much from that in the description of single, episodic events in discourse: there are a few, mostly specialised verb forms, preferably in the beginning of a passage, that indicate that we are dealing with a habitual context, but for the rest we find the same aspectual marking on the verbs that we saw in Section 3.1. Since Russian cannot use PF verb forms for iterative and habitual events, aspect use is different in this context, because all finite verb forms are IPF. Nevertheless, we observe the same discourse strategies we saw in the previous section: finite, often prefixed verb forms are used for foregrounded events in chains of events, non-finite verb forms are used for backgrounding other events that temporally overlap with the events in the chains. The only difference is that in addition to the prefixes we regularly find the imperfectivising suffix, which could therefore be seen as a direct marker for habituality in these contexts. Let me conclude this section by discussing how previous descriptive literature proposed to capture the differences in aspect use between Czech and Russian.

3.3. Some Remarks on Previous Approaches to Explaining the Differences

Early approaches (e.g., Bareš 1956; Křížková 1961) to explaining the differences in aspect use between Russian and Czech are mostly formulated within the structural markedness theory, which I addressed in the beginning of Section 2.4. An explanation of the differences, then, is given by the claim that there is general aspectual competition between IPF and PF, which can be 'neutralised' in particular contexts, leading to the use of the unmarked member of the opposition, the IPF. This neutralisation is argued to be obligatory (in a given context) in Russian but optional in Czech (e.g., Bondarko 1958, 1959; Křížková 1955, 1958, 1961; Sirokova 1963, 1971). A first problem for an account of the differences in terms of markedness is that it does not capture the obligatory use of the PF in chains of single events in Russian, as opposed to its optionality in Czech, since here it is the alleged marked member of the opposition that dominates. A more general problem for these approaches is their underlying assumption that the only reason for the use of the IPF is its postulated semantic unmarkedness. In Section 2.2 we saw that when it comes to morphological markedness, IPFs can be divided into two different types, simple ones, which are morphologically unmarked and therefore possibly also semantically less marked, and SIs, which are morphologically more marked than their PF counterparts. If we take the morphology seriously, the default hypothesis should be that SIs are also semantically more marked.²⁷ The discussion of aspect use in chains of single events vs. habitual contexts in Section 3.1 vs. Section 3.2 indicates that this more differentiated view of markedness is on the right track (even if rarely entertained in the literature on Slavic aspect), at least for Russian: In habitual contexts there is an overwhelming use of SIs to semantically mark two things, temporal boundedness at the level of each repetion of the event in the chain (usually by a prefix) and habituality at the level of the overall context (usually by a suffix).

A further objection to these earlier attempts to explain the differences between Russian and Czech is that the alleged 'optional' neutralisation of the aspectual opposition suggests some kind of arbitrariness in the use of aspect in Czech. In particular, these approaches do not explain under which circumstances it is 'optional', or which factors favour one over the other aspect. In the data discussion in the previous sections we saw that the choice

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of a particular aspect in Czech is far from being optional but that it can be motivated, and that the interplay between lexical and grammatical aspect is crucial in explaining the occurrence of one or the other grammatical aspect. Something like an optional vs. obligatory neutralisation of an aspectual opposition also plays a role in some of the more recent attempts to explain the differences. For example, Petruxina (2000, pp. 63–76) argues that in Russian we find the obligatory neutralisation of the opposition atelic-telic (the 'objective circumstances' of a given situation) to favour a 'subjective interpretation of its temporal contour' by the speaker; for Czech, it is again postulated that this neutralisation is optional. Obviously, this account faces the same problem of optionality outlined above, and it does not fully capture the empirical generalisations we arrived at in this section either.

Both Stunová (1993) and Petruxina (2000) suggest that in Czech and Russian, aspect operates on different levels (see also Dübbers 2015, for a similar suggestion). In Czech, it is assumed to operate on the level of word formation, i.e., the internal structure of an event, so that Czech morphological aspect is more lexical and expresses an inner aspectual opposition. For Russian, on the other hand, it is assumed that aspect operates on the sentence level, in the more global context, and it has a higher degree of grammaticalisation. Dickey (2000) rejects this idea and claims that it relies on an inconsequent use of the notion of invariant meaning, which is commonly sought for for both aspects in the Slavistic tradition. While I would not delegate Czech grammatical aspect to the level of inner aspect, thus conflating both levels, the empirical generalisations arrived at in this section could indicate that the intuition between the idea that grammatical aspect plays a role at different levels in both languages might be worthwhile considering further. I do not have space to pursue this avenue in this paper, but a potential syntactic implementation of this could be to locate Czech Aspect lower in the tree than Russian Aspect. Another option could be to assume (semantically but maybe also syntactically) a closer connection between Tense and Aspect in Russian finite forms than in Czech, possibly resulting in the temporal intervals to account for the semantics of Tense and Aspect being specified somewhat differently. For instance, in a recent paper, Borik (2018) argues that Russian past tense forms express a relation between speech time and event time, rather than speech time and reference time, what is commonly assumed for tenses, cross-linguistically, and this could be a point in which Russian could differ from Czech.

Dickey (2000), in turn, proposes the notion of a west-east isogloss, investigating the aspect use in several contexts in ten different Slavic languages. He identifies an Eastern aspect system, whose prototype is Russian (other languages include Belarusian, Ukrainian, and Bulgarian), and a Western aspect system with the prototype Czech (other languages are Sorbian, Slovak, and Slovenian). Polish and Serbo-Croatian are argued to constitute peripheral types, with the former being closer to the Western type and the latter closer to the Eastern one. He proposes that the invariant meaning of the Eastern PF is temporal definiteness (in the sense of Leinonen 1982) and of the Eastern IPF qualitative temporal indefiniteness ("the non-assignment of a situation to a unique location relative to other states of affairs"). The Western PF, in turn, is argued to express totality, and the IPF quantitative temporal indefiniteness ("the assignability of a situation to several points in time").²⁸ The discussion of the data in this section, but also discussion to come in Section 4, when we turn to general-factual contexts, could indicate that something like temporal definiteness indeed plays a role for the presence or absence of the PF in Russian, in a way that it does not play a role in Czech. A theoretical option one could pursue in the future, then, is to propose that Russian and Czech differ in the formal semantics of the PF (as, for instance, proposed by Mueller-Reichau 2018, for the differences between the two languages in existential contexts).

The main problem that all accounts discussed here face, however, is that they do not take into account sufficiently the interplay between different verb classes/event types (inner aspect) and grammatical aspect markers, and none of these descriptions or accounts are fully compositional. While some of these authors at least discuss different event types, these are often merely described somewhere in the beginning of the works but do not play

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a role in the attempts to actually *explain* the differences between Russian and Czech (e.g., Stunová 1993). Furthermore, the interaction with morphology (e.g., the distinction between simple IPFs and SIs) usually does not play a role either, even if the authors in question mention differences in event types (e.g., Dickey 2000; Dübbers 2015). An exception to this is the work by Eckert (1984, 1985, 1991), who explicitly takes into account the interaction between lexical and grammatical aspect in her analysis. Yet, her proposal faces the opposite criticism, namely, that her classification of verbs (which I count under lexical aspect) is too intertwined with grammatical aspect, and she does not keep both levels apart clearly enough. However, then we still do not arrive at the right foundation for a compositional analysis. Finally, none of the descriptions take into account the discourse relations.

Let us now turn to differences in aspect use between Russian and Czech in general-factual contexts.

4. General-Factual Contexts

In the previous section, I concluded that Russian regularly marks reference time movement (temporal boundedness) and habituality (or repeatability) on the verb forms, independently of the event types involved, whereas in Czech these two meaning components can remain contextually induced, in particular in the description of atelic events (states and activities) or in the description of events of a particular duration. More generally, iteration in the broadest sense (*kratnost'* 'repeatability'; recall the discussion at the beginning of Section 3.2) requires the IPF in Russian but not in Czech, where in the majority of cases only the context tells us whether we are dealing with a single or a repeated (in our case habitual) event. If my conclusions are correct, and furthermore if my assumptions about general-factual contexts, addressed in Section 2.4, are correct, this leads to particular predictions for Czech, which, however, are not in line with general assumptions found in the literature on the topic.

In Section 2.3, I described two main general-factual readings, the existential and the presuppositional one. In this section, I first outline the predictions for differences between Russian and Czech in the use of the general-factual, given what I concluded about their aspect use for chains of single events and in habitual contexts (as described in Section 3). Then I address examples from the literature and from the corpus data I examined, to support these expectations. Since my parallel corpus did not contain many examples that could fall under the general-factual category, I also rely on data discussed in the literature, mostly from Dickey (2000); Eckert (1984); Kopečný (1962). Empirical differences between Russian and Czech in this context have been explicitly discussed in Dickey (2000) (without distinguishing further between existential and presuppositional IPFs) and Dübbers (2015) (who makes a further division into event type and token reference, building on Mehlig 2001, 2013). Mueller-Reichau (2018) picks up on some of the data discussed in the literature to provide a theoretical account for the differences with respect to existential IPFs (leaving presuppositional IPFs aside) (see also Klimek-Jankowska 2022, this volume, for additional corpus data). These works generally assume that general-factual IPFs, and therefore both presuppositional and existential IPFs, also exist in Czech. Instead, I will argue that Czech only has presuppositional IPFs but not existential ones.

4.1. Differences between Russian and Czech in Factual Contexts: The Expectations

Recall from Section 3.2 that Russian obligatorily marks habituality by the IPF, whereas Czech does not mark it, apart from specialised lexical items, e.g., frequentatives and indeterminate verbs of motion, to flag a particular passage as habitual once. Generalising over this, we can assume that Russian obligatorily marks repeatability (*kratnost'*; recall the discussion at the beginning of Section 3.2) by the IPF on the verb form itself whereas Czech does not; alternatively, one could propose that the Russian PF (but not the Czech PF) requires the event described to be single and episodic. This would be in line with the idea presented in Leinonen (1982) that the Russian PF requires temporal definiteness (see also the discussion of Dickey 2000, in §3.3), meaning that the time at which the event takes

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place has to be definite, or at least specific (depending on what we mean by definiteness and specificity). When such conditions (singlehood or temporal definiteness) are not met, a PF cannot be used in Russian. If we assume now that the existential IPF arises in situations where it is not guaranteed that we are dealing with a single event taking place at a specific/definite point in time but rather we are dealing with repeatability (see, e.g., Padučeva 1996), we have an explanation for the occurrence of the IPF in these contexts in Russian. On the other hand, we should not expect the occurrence of the Czech IPF for the sole purpose to mark an existential reading in such contexts. Obviously, just like in other contexts, we do expect Czech to make use of the IPF to describe atelic events (states, activities) or events in progress and events of a longer duration. However, this use of the IPF is rather independent of whether or not the context is such that it would require an existential IPF in Russian. In essence, this means that the primary motivation for the IPF is not that the context is one that would call for the existential IPF in Russian, but rather the use of the Czech IPFin such contexts is motivated by the same considerations that motivate it in other, non-existential contexts (single/episodic and habitual). This leads to the conclusion that there is no specialised existential IPF in Czech, unlike what we find in Russian.

Turning to the presuppositional IPF, I assume that the event itself is backgrounded and other aspects of the event are in the foreground, usually with focus on some quasiobligatory event modifier, as outlined in Section 2.4. In particular, the presuppositional IPF involves the discourse relation *Elaboration*: The event described is part of a previously introduced or accommodatable event. In some cases, it could also be that focus on some additional modifier involves focus on the process, rather than on the result of a given event. This previously introduced/accommodatable event can be a 'completed' event (e.g., when it was introduced by a PF in the previous context), but as we know from the descriptive literature on the topic (e.g., Glovinskaja 1981; Padučeva 1996) there are also non-resultative subtypes of the general-factual (and thus also of the presuppositional) IPF, as already noted in Section 2.3. Thus the presupposition of a 'completed' event is only relevant in a subset of the cases that the literature calls general-factual (and of which we still have to filter out the existential ones). In the dynamic semantic account addressed in Section 2.4, this amounts to a 'true' imperfective partitive semantics, because we elaborate on part of an event, not on the event as a whole, and I assume that this is what is responsible for the use of IPF forms in these contexts. Given these considerations, I predict both Russian and Czech to make use of presuppositional IPFs.

The older literature on Czech aspect (e.g., Eckert 1984; Kopečný 1962) does not discuss the 'general-factual' use of the IPF for Czech (or existential/presuppositional/actional IPF for that matter), since this is a phenomenon discussed mainly for Russian, and for Bulgarian by Maslov (1959), who introduced this term. Nevertheless, there are some examples in this literature on Czech that can be interpreted as presuppositional IPFs, based on the descriptions of these examples in that literature. Let me start the next section with such examples.

4.2. The Presuppositional IPF

Kopečný (1962) argues that the Czech IPF, in addition to the meaning of process/duration, can also express the 'quality' of a verbal action, and he illustrates this with the examples in (39) (from Kopečný 1962, p. 53).

- (39) a. Jagić **studoval** <u>u</u> <u>Miklošiče</u>. Jagić studied.IPF at Miklošič.GEN 'Jagić studied with Miklošič.'
 - b. <u>Jak</u> jsi **spal**? how AUX.2SG slept.IPF 'How did you sleep?'

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These two examples look very much like the Russian examples discussed as actional in, e.g., Padučeva (1996) (when we are interested in the where, when, and why, but not so much in the result of a given event), and these are the types of examples that fit the description of Grønn's (2004) presuppositional IPF. In both cases the events in question (studying and sleeping) are presupposed and focus is on some aspect of this event, in (39-a) on 'with Miklošič', and in (39-b) on 'how'. On the other hand, Grønn (2004) would not discuss such examples because he is only interested in examples that involve intuitively 'completed' events, and studying and sleeping are not such events.

A further example discussed by Kopečný, which does involve an intuitively 'completed' event, is the one in (40) (from Kopečný 1962, p. 54).

(40) To je ten chléb, který jsem {kupovala / koupila} na náměstí. that is that bread which AUX.1SG bought.SI bought.PF on market 'This is that bread that I bought at the market.'

Kopečný (1962) argues that with the use of the IPF instead of the PF in this example we are concerned with the fact that there was a buying event but not with its result. I suggest that here we are most likely dealing with the presuppositional IPF again, though we would have to investigate the broader context in which such example could occur. The impression is that people have previously talked about a particular bread that has been bought at the market, and the sentence in (40) is used to anaphorically refer back to that bread involved in that buying event.

Eckert (1984) does not use the label 'general-factual' either but some of the examples she discusses could be seen as falling under this category. According to Eckert, both Russian and Czech use the PF with achievements in cases we are dealing with single events whose result is relevant for the time of utterance. When both aspects are possible in both languages, Eckert argues, the IPF expresses the process/duration of the event in both languages, whereas the PF expresses its result, and she illustrates this with the examples in (41) (from Eckert 1984, p. 110).

- (41) a. Ten dotazník jsem už {vyplňoval / vyplnil}. this.ACC questionnaire.ACC AUX.1SG already out-filled.SI out-filled.PF 'This questionnaire—I already filled it in.'
 - b. Ja uže {zapolnjal / zapolnil} anketu.
 I already in-filled.SI in-filled.PF questionnaire.ACC
 'I already filled in this questionnaire.' (RU)

I believe that in this context, Eckert might be influenced by her Czech judgment in interpreting the IPF in both languages alike. For Czech, it might indeed be the case that the IPF is used to mark an event in process. On the other hand, the Czech sentence has a particular information structure, with focus/stress on the sentence-initial object *ten dotazník* 'this questionnaire' and backgrounding of the event itself, which could therefore also be analysed as a case of the presuppositional IPF. In contrast, the Russian translation in (41-b) is not a direct translation, since it has the canonical SVO order, with stress on the verb form. Therefore, I argue that we are dealing with an existential IPF in the Russian example, not with the IPF in its process or durative reading.

Furthermore, Eckert (1984) informally describes aspect use in contexts that focus on some circumstance of an event, which I assume to involve the presuppositional IPF as well. According to her, such examples are possible in Czech only with what she labels 'psát-verbs', which are basically verbs of creation (like psát 'to write'), as in (42) (from Eckert 1984, p. 104).

(42) a. {Psal / napsal} to tužkou.

wrote.IPF wrote.PF that pencil.INSTR

'He wrote it in pencil.'

b. On {pisal / napisal} ėto karandašom.

he.NOM wrote.IPF wrote.PF that pencil.INSTR

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'He wrote it in pencil.'

(RU)

In these examples, we again have the typical information structure of the presuppositional IPF: unstressed verb forms and other presupposed/anaphoric elements in the beginning of the sentence (personal and demonstrative pronouns), as opposed to a sentence-final stressed modifier in focus. As noted by Grønn (2004), the (Russian) presuppositional IPF is most common with verbs of creation and verbs of saying (see Borik and Gehrke 2018, for some speculations why this might be the case), so this also fits Eckert's (1984) claim that such cases (in Czech) are possible with 'psát-verbs' only.

Finally, an example from the corpus, in which Russian uses an IPF that could be interpreted as presuppositional, whereas Czech uses a PF, is given in (43).

- (43) a. Ėtot pidžak Kal'ju **nadeval** tol'ko raz v magazine this.ACC jacket.ACC Kal'ju on-put.SI only once in shop.PREP Lansmana.
 - Lansman.GEN

'Kal'ju put this jacket on only once – in the shop of Lansman.' (RU Dov 29/8)

b. Tohle sakosi Pahapil zatím **oblékl** jen jednou v životě, this.ACC jacket.ACC Pahapil meanwhile on-put.PF only once in life.PREP totiž v Lansmanově obchodě, když ho kupoval. namely in Lansman's shop.PREP when it bought.IPF 'Meanwhile Pahapil put this jacket on only once in his life, namely in Lanman's shop when he bought it.' (CZ translation)

In the Russian original in (43-a), we have the accomplishment predicate 'put on' and the indication that this event happened just once (tol'ko raz), so we are not necessarily dealing with repeatability and this should not count as the existential use. On the other hand, we could still be dealing with temporal indefiniteness, but my analysis of the Russian example tends to a presuppositional IPF analysis because of the information structure: the putting on of 'this' jacket is backgrounded (presupposed), and the fact that this happened 'only once—in the shop of Lansman' is in focus. The Czech translator keeps the same information structure but uses the PF instead. This does not mean, though, that Czech lacks the presuppositional IPF—it is generally acknowledged that in presuppositional contexts there is some optionality as to whether one uses the IPF or the PF (at least with 'completed' events), and this is the case for both languages.

Let me then turn to instances of the existential IPF and my arguments against assuming that Czech also has this use of the IPF to explicitly mark an existential context by the verb form.

4.3. The Existential IPF and Its Absence in Czech

In the corpus example in (44) we have an example from Czech that could be analysed as an existential IPF context and which is also translated by an IPF into Russian.

- (44) a. [...] ale vždyt' je to patnáct let, co jsem ji naposledy but after all is that fifteen years that AUX.1SG her.ACC last time viděl!
 - seen.IPF
 - '... but after all it has been 15 years that I last saw her!' (CZ Kun 14/17)
 - b. [...] no ved' prošlo pjatnadcat' let s tex por, kak ja v but after all through-went.PF fifteen years since that time how I in poslednij raz videl ee!

last time saw.IPF her.ACC

'... but after all 15 years have passed since I saw her the last time!' (RU translation)

In Russian, the use of the IPF is likely conditioned by repeatability and temporal indefiniteness (there was a meeting at some time in the past)—if we were dealing with the

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description of a single, episodic event where we knew the time this event happened and we would want to stress that the event was completed, we would expect the use of the PF *uvidel* (see Section 3.1). Therefore, we can attribute the occurrence of the IPF to the fact that the context is an existential one. For Czech, on the other hand, it is not convincing that the IPF appears because the context is existential. Rather, as we saw in Section 3, with the atelic stative predicate 'to see', Czech regularly uses the IPF, both for single, episodic and for habitual events of seeing. Hence, I argue that while the Russian IPF here is conditioned by repeatability and is thus an instance of the existential IPF, we cannot conclude this for Czech since the IPF could also just appear because we are dealing with an atelic event. Therefore, this is not a good example for the use of an IPF in Czech to signal an existential context, even though the form itself is IPF and the context itself is existential.

To check whether Czech has true existential IPFs we have to look at event types that are described by PF forms in non-existential contexts in this language (i.e., in single, episodic and habitual contexts such as the ones discussed in Section 3), namely, achievements as well as accomplishments for which it is not relevant to dwell on their duration. If we find the use of an IPF in Czech with these, we can conclude that Czech has existential IPFs (i.e., IPF verb forms that signal that we are in an existential context). If not, it is less clear that it makes sense to assume something like an existential IPF in Czech.

Let us then look at the corpus example in (45).

- (45)k ní **přidala** výhrada anebo kdy [...] kdy se další when REFL to her to-gave.PF further.NOM reservation.NOM or when dostal do nějakého konfliktu REFL person.NOM in-became.PF in some.GEN conflict.GEN or obětí podezření i útoku, became.PF victim suspicion.GEN and attack.GEN '... when another reservation was added to the first one or when a person got into some conflict or became victim of suspicion and attack ...' 33/37f.)
 - [...] esli k odnoj ogovorke dobavljalas' ešče i drugaja, if to one.DAT reservation.DAT to-added.REFL.SI still also other.NOM okazyvalsja zamešannym v kakom-libo konflikte if person.NOM up-turned.SI entangled.INSTR in some.PREP conflict.PREP ili **stanovilsja** žertvoj podozrenij napadok, or became.SI victim.INSTR suspicions.GEN and attacks.GEN '... If to one reservation yet another one is added, if a person turns up entangled in some conflict or becomes victim of suspicions and attacks ...' (RU translation)

In (45), we have three telic events (adding, becoming (victim), getting (into conflict)), which in Czech are described by PF verb forms, but for which the Russian translator used SIs. Arguably, this could be an instance of the existential IPF, which is explicitly marked by the IPF in Russian but not by the IPF in Czech. Alternatively the context in which this example occurs could be analysed as a habitual one, in which case the same difference in aspect use would be observed. I conclude that this example does not support the assumption that Czech makes use of existential IPFs.

However, according to Dickey (2000), Czech does have general-factual IPFs, even if he does not distinguish between the existential and the presuppositional subtypes. Nevertheless, many of his examples fall under the existential type. Dickey argues that even though Czech has general-factual IPFs, there are no general-factuals with achievements.²⁹ He illustrates this with the contrasts in (46) (from Dickey 2000, pp. 99, 101) and in (47) (from Dickey 2000, pp. 98, 101; the Russian example is attributed to Rassudova 1968).

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(46) a. Ja pomnju, v detstve <u>odnaždy</u> ja {**upal** / **padal**} s ėtogo I remember in childhood.PREP once I fell.PF fell.SI from this dereva.

'I remember, as a child I once fell from that tree.' (RU)

o. Jako dítě jsem <u>jednou</u> {spadl / *padal} z toho stromu. as child AUX.1SG <u>once</u> fell.PF fell.SI out this tree 'As a child, I once fell from that tree.' (CZ)

(47) a. Odnaždy on <u>uže</u> **polučal** vygovor za opozdanie.

once he already received.SI reprimand for lateness

'Already once has he received a reprimand for being late.' (RU)

b. <u>Jednou už</u> {dostal / *dostával} napomenutí za spoždení. once already received.PF received.SI reprimand for lateness 'Already once has he received a reprimand for being late.' (CZ)

The adverb *odnaždy/jednou* 'once' in (46) can be read as 'exactly once', in which case we are dealing with a single, episodic event, and this licenses the PF in Russian. However, it can also be read as 'at least once' (in particular in combination with *uže/už* 'already', as in (47)), which is an indicator of repeatability, and this is why in Russian the existential IPF appears. In Czech, the IPF is not possible in these examples, and Dickey claims that this is so because Czech does not use the general-factual IPF with achievements. I propose instead that the IPF does not appear because Czech lacks the existential IPF use altogether.

Dickey (2000) furthermore argues that when the result of an event is mentioned explicitly, the use of the general-factual IPF is not possible in Czech, whereas it is possible in Russian, see (48) (from Dickey 2000, p. 117) (a similar claim is already found in Eckert 1984, albeit not under the label 'general-factual').

(48)Ty kogda-nibud' {*pročital / čital / dočityval} ėtu through-read.PF read.IPF to-read.SI this.ACC you.NOM ever knigu ot načala do konca? book.ACC from beginning to end 'Have you ever read this book from beginning to end?' (RU) / *Četl} jsi někdy vůbec tu through-read.PF read.IPF AUX.2SG at some time at all this.ACC celou knihu? whole.ACC book.ACC 'Have you ever (at all) read this whole book?' (CZ)

This example illustrates several things. First, the temporal adverb *kogda-nibud'* 'at some/any time, ever' in Russian (48-a) signals temporal non-specificity,³⁰ and such adverbs are incompatible with the PF and require the use of the (existential) IPF. This is different in Czech, because the PF is possible with *někdy* 'at some time'. Second, the explicit indication of completion ('this whole book' / 'from beginning to end') is incompatible with the IPF in Czech, whereas in Russian the SI might indicate both event completion (prefix) and temporal indefiniteness (suffix), although according to Dickey's informants a simple IPF would also be possible. However, a similar Russian example is discussed by Grønn (2004, p. 73), namely, (49), for which he reports that his informants actually prefer the more complex SI in case event completion is explicitly referred to.

(49) Ty kogda-nibud' {pročityval / #pročital / (?)čital} roman Prusta do you ever read.SI read.PF read.IPF novel Proust.GEN until konca? end 'Have you ever read a novel by Proust to the end?'

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I conclude from this that just like in the description of habitual events (recall Section 3.2), Russian SIs fulfil a double duty: The prefix marks event completion (at some micro-level, or independent of absolute time), whereas the suffix marks repeatability (or temporal indefiniteness). More generally, these examples can be taken as a piece of evidence against the assumption that Czech has existential IPFs, i.e., the use of an IPF to explicitly mark an existential context.

4.4. Annulled Results

The literature on the general-factual IPF usually counts a further use of the IPF among the general-factual uses, as a subtype of the existential IPF, namely, one under which the result has been 'annulled'. For example, in contexts where there has been a window opening in the past but the window is closed at the time of utterance, Russian has to use the IPF, as illustrated in (50) (from Rassudova 1984, p. 68, as discussed in Dickey 2000).

(50) Ty **otkryval** okno? you opened.SI window.ACC 'Did you open the window?' (It is closed now.)

According to Dickey (2000), Czech does not have to use the IPF in such a scenario but still both aspects are possible, as illustrated in (51) (from Dickey 2000, p. 112).

(51) {Otevřel / Otvíral} jsi okno? opened.PF opened.IPF AUX.2SG window.ACC 'Did you open the window?'

From the discussion in Dickey (2000), it remains unclear what motivates the use of the IPF in (51), so I consulted Czech native speakers. They all agreed that the PF was the natural choice in this example, and that the IPF needed more context. Their judgments indicated that the use of the IPF can give rise to several readings, none of which could be classified as existential or as signalling an annulled result, though. Apart from the process reading, it was mentioned that the IPF can be used when it has already been talked about that the window was supposed to be opened, or when the room is expected to be aired (possibly regularly). It is a question "about whether the window-opening event happened" (Lucie Taraldsen Medová, p.c.), about the "airing automatism" (Denisa Lenertová, p.c.). According to Hana Strachoňová (p.c.), the question with the IPF is more natural with a demonstrative in front of 'window' (*A otevíral jsi to okno?* 'And did you open that/the window?'), as in "you know, we talked about opening the window, did you do it?" Finally, Radek Šimík (p.c.) notes that the IPF is not possible in a declarative sentence, but it is acceptable in a yes/no-question (like the one above) and also in a why-question.

I interpret the native speakers' intuitions about (51) such that the IPF is either motivated because we are dealing with the process reading (e.g., 'Were you opening the window when the phone rang?'), or it is an instance of the presuppositional IPF: in the yes/no-question, it is about *the* airing that was expected, ³² and in a why-question, it is about some circumstance of the opening-event, not about the completed event per se. However, this has nothing to do with the existential IPF or with the use of the IPF in Russian to indicate an annulled result. Therefore, again, we do not have any evidence for the claim that Czech uses the IPF in such cases (solely for the purpose to signal this use).

The contrast reported in (52) by Eckert (1984, p. 105) furthermore shows that in a context where Russian employs the IPF for an annulled result in a declarative sentence, Czech uses the PF.

(52) a. On se ještě neprobudil? Ne, on se probudil, ale pak zas he REFL still NEG-up-woke.PF no he REFL up-wake.PF but then again usnul. fell-asleep.PF Languages **2022**, 7, 155 39 of 48

'He hasn't woken up yet? No, he did wake up, but he has fallen asleep again.' (CZ)

b. On ešče ne prosnulsja? Net, on prosypalsja, a potom opjat'
he still not up-wake.REFL.PF no he up-woke.REFL.SI but then again
zasnul.
fell-asleep.PF
'He hasn't woken up yet? No, he did wake up, but he has fallen asleep again.'

We find a special instance of the use of the IPF for annulled results in the realm of motion events, namely, the fact that Russian indeterminate verbs of motion as well as their lexically prefixed variants (SIs) can describe a motion there and back; also here, the SI equally signals that the result has been annulled because the person involved in the movement is not in the final location anymore. According to Bareš (1956), Czech lacks this use of indeterminate motion verbs to refer to a motion there and back; this is illustrated by the contrast in (53) (from Dickey 2000, p. 116) (see also discussion in Eckert 1984, 1991).

- (53) a. On včera k vam **zaezžal**, no ne zastal vas doma. he yesterday to you by-drove.SI but not found.PF you home 'Yesterday he drove by your place but did not find you home.' (RU)
 - b. Včera k vám **zajel**, avšak nezastihl vás doma. yesterday to you by-drove.PF but NEG-found.PF you home 'Yesterday he drove by your place but did not find you home.' (CZ)

More generally, Grønn (2004) and following him Mueller-Reichau (2018) assume that a lack of target state relevance or validity is responsible for the impossibility of using a PF in Russian in contexts with 'annulled' results.³³ We could also assume that there is a lack of temporal definiteness, since for (50), for example, we do not know when exactly the window was opened (there was a window opening at some undetermined point in the past). Either way, if the Czech PF does not require temporal definiteness (and even if it does not require target state validity, as argued by Mueller-Reichau 2018), this captures the fact that it regularly employs the PF in these examples.

4.5. Interim Summary

To conclude, while we do find IPFs in existential contexts (including annulled results) in Czech, it is doubtful that their use is conditioned by the context itself, rather than by general considerations about the use of the IPF also in other contexts. Thus, there is no reason to treat Czech IPFs in existential contexts as instances of existential IPFs or to even postulate the existence of existential IPFs in Czech, in contrast to what previous accounts assume. The presuppositional IPF, on the other hand, is present in both languages, precisely because, as I argue in previous work, its semantics involves a 'proper' imperfective (i.e., partitive) semantics, if we take the general discourse into account, and this is what motivates the use of IPFs.

5. Summary and Conclusions

This paper had two main goals. The first was to provide a detailed qualitative analysis of data from a parallel corpus that show differences between Russian and Czech in aspect use in narrative discourse in two contexts: chains of single, episodic events, as well as habitual contexts. The analysis took into account the role of event types, aspectual affixes, and other means (e.g., finiteness, subordination, adverbs) to explore the way in which they are employed in different strategies for composing the overall aspectual interpretation and in bringing about the interpretation of the events in question as temporally following or overlapping each other, or as signalling that the overall context is habitual. The second goal was to use the empirical findings of the parallel corpus study as a background against which to re-evaluate differences in aspect use between Czech and Russian in general-factual contexts, i.e., presuppositional and existential contexts, as described in the literature, in

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order to argue against the general assumption that both languages have a use of the IPF to signal that the context is existential. Let me first summarise the empirical findings before motivating the claim about the absence of existential IPFs in Czech.

In chains of single, episodic events Russian uses finite PF forms to create reference time movement, i.e., for the discourse relation Narration, whereas non-finite verb forms (mostly adverbial participles) are found with backgrounded events that temporally overlap the foregrounded ones. Czech, on the other hand, employs finite verb forms across the board, and the choice for an IPF or a PF form mostly depends on the underlying verb class: states and activities appear in the IPF, accomplishments and achievements in the PF, unless the narrator dwells on the duration of a particular accomplishment. The aspect use in habitual contexts in Czech does not differ much from this: there are only few, mostly specialised IPFs (frequentatives, indeterminate motion verbs) at the beginning of a habitual passage, which mark the whole habitual passage as such, but otherwise we find the same distribution of IPF and PF verb forms as we found in single, episodic contexts. In Russian, on the other hand, iterativity and habituality is incompatible with PFs so that in habitual contexts, only IPFs are used. Nevertheless, we find the same discourse strategies in employing mostly prefixed finite verbs for Narration but non-finite verb forms for Background; the additional imperfectivising suffix on the finite verb forms can therefore be interpreted as a marker for habituality.

The literature on Slavic aspect is highly influenced by what has been said about Russian, and this has often led to assumptions made about the aspect system of other Slavic languages, which are not always as well-founded as one might hope. For Russian, it is generally assumed that the occurrence of an IPF form in a given context can be attributed to four different readings: (i) process/durative (e.g., what we find with the English Progressive), (ii) repetitive (including habituality), (iii) presuppositional, and (iv) existential. I argued that from a theoretical point of view, the readings in (ii) and (iv) have in common that the IPF is conditioned by repeatability, whereas the readings in (i) and (iii) have in common that they zoom in on parts of events, which can be captured by a partitive semantics for IPFs. The findings from the parallel corpus study suggest that Czech uses the IPF primarily for the reading in (i) but not for the reading in (ii). These findings, coupled with my assumptions about the factual readings in (iii) and (iv) being related to the canonical readings in (i) and (ii), led to the prediction that Czech makes use of the IPF to signal that we are in a presuppositional context but that we should not find IPFs in existential contexts for the sole purpose to signal that the context is existential. Indeed, I did not find examples discussed in the literature (or from the parallel corpus) that could be taken as instances where the IPF signals the existential context alone, and is not just conditioned by a durative or presuppositional meaning. This led me to the conclusion that Czech lacks existential IPFs altogether.

The following issues are left for future research. What do the findings imply for formal accounts of the semantics of aspect and the composition of aspectual meanings in general, in either of the two languages? What do they mean for formal accounts of the differences we find between both languages, of which there are hardly any, other than two on the differences in factual contexts (Alvestad 2013; Mueller-Reichau 2018)? Should the differences lead to a different perfective semantics in these languages, as suggested by Mueller-Reichau (2018), or can they be delegated to the pragmatic level, as suggested by Alvestad (2013) (but then how does that work exactly)? The rather strict ban on IPFs in contexts involving repeatability could suggest that the Russian PF semantics additionally requires single events with a specific location time, which is not the case in Czech. A further question that the data raise is the role of finiteness in Russian, as opposed to Czech. While we find the quasi-obligatory use of PFs in chains of single events and of IPFs in habitual contexts with Russian finite verb forms, non-finite verb forms in these contexts can be either IPF or PF. Does that mean that Aspect in Russian is more closely tied to Tense than in Czech? But then what is the role of (I)PF in non-finite verb forms? Whatever account we ultimately end up with, it will have to be put to the test also in other contexts that have been Languages **2022**, 7, 155 41 of 48

shown in the literature to display differences in aspect use between Russian and Czech. Finally, differences in aspect use have also been described for other Slavic languages, so it is important to take a closer look also at these to see which general patterns emerge.

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Abbreviations

1, 2, 3 1st, 2nd, 3rd person ACC accusative case

ADV adverb

AP adverbial participle

AUX auxiliary CZ Czech DAT dative case

DET determinate (verb of motion)

disc discourse
FEM feminine
FREQ frequentative
GEN genitive case

INDET indeterminate (verb of motion)

INF infinitive
INSTR instrumental case
IPF imperfective
MASC masculine
NEG negation
NEU neuter

NOM nominative case PAP past active participle

PF perfective PL plural

PPP past passive participle
PREP prepositional case
PRES present tense
PRT particle

Q-PRT question particle

REFL reflexive RU Russian SG singular

SI secondary imperfective

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Appendix A. Further Parallel Corpus Examples from Habitual Contexts

- (54)Mnogie iz 30 tysjač mexaničeskix ėkipažej, begavšie many.PL.NOM of 30 thousand mechanical wagons run.PAP.DET.IPF in proskakivali 28-m godu po Moskve, po 28th year along Moscow.PREP through-jumped.SI along street.PREP Gercena, šurša po gladkim torcam, i čerez Gercen.GEN rustle.AP.IPF over smooth pavement and through every minutu s gulom i skrežetom skatyvalsja Gercena minute with roaring and crunching down-rolled.REFL.SI from Gercen.GEN 16, 22, 48 ili 53-go k Moxovoj tramvaj maršruta. to Moxovaja.DAT tram.NOM 16, 22, 48 or 53th-GEN line.GEN 'Many of the 30.000 mechanical wagons that operated around Moscow in 1928 rustled over smooth pavement along Gercen street, and every minute Tram lines 16, 22, 48 or 53 rolled down from Gercen street to Moxovaja street roaring and crunching.' (RU RJ389/10)
 - Mnohé z třiceti tisíc drožek, které v many.PL.NOM out thirty.GEN thousand.GEN carriages.GEN which in osmadvacátém jezdily Moskvě, proklouzly Gercenovou po 28th drove.INDET.IPF along Moscow through-slid.PF Gercen zasvištěly na hladkém dřevěném dláždění; každou street and buzzed.PF on smooth wooden pavement every.ACC minutu řinkotem a skřípěním přehnala minute.ACC REFL with rattling and crunching past-chased.PF from Gercenovy ulice k Mechové tramvaj číslo 16, 22, 48 nebo 53. street to Mechová tram.NOM number 16, 22, 48 or 'Many of the 30.000 carriages that drove around Moscow in 1928 slid through Gercen street and buzzed on the smooth pavement. Every minute Tram no. 16, 22, 48 or 53 chased by from Gercen street to Mechová street, rattling and crunching.' (CZ translation)
- (55)přišli nejen matka, ale to už ostatní and NEG-only mother.NOM but there already to-went.PF other.PL.NOM všechny jsem je znal, protože jsem herci. actors.NOM all.PL.ACC AUX.1SG I knew.IPF because AUX.1SG them.DAT chleba sádlem podával láhve mazal a piva, smeared.IPF bread.ACC with lard.INSTR and passed.SI bottles.ACC beer.GEN taky přišli v pěkných šatech, každý pod also to-went.PF in pretty.PL.PREP dresses.PREP every.NOM had.IPF under srolovanou úlohu, když se stmívalo, arm.INSTR rolled-up.ACC roll.ACC when REFL darkened.NEUTR.IPF then náměstím chodilo sem a tam deset bílých square.INSTR went.NEUTR.INDET.IPF here and there ten.NOM white srolovaných divadelních knížek [...] rolled-up theatrebooklets 'And not only (the) mother, but quickly also other actors came/arrived, I knew them all, because I made them lard breads and passed them beer bottles, they also came in pretty clothes/costumes, everyone had a rolled-up text under their arm, and when it turned dark, ten white rolled-up theatre texts flew here and there across the square.' (CZ, Sext 147)
 - b. tak vela sebja ne toľko matuška, drugie no i and so led.IND.IPF REFL not only mother.NOM but also other.PL.NOM potomu čto namazyval aktery; ia vsex ix znal, actors.NOM I all.PL.ACC them.ACC knew.IPF because smeared.SI smalec na xleb podaval butylki i S pivom, them.DAT lard.ACC on bread.ACC and passed.SI bottles.ACC with beer.INSTR

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oni tože **prixodili** prinarjažennye, i u každogo iz they also to-went.SI dressed-up.NOM and at every.GEN out-of them.GEN pod myškoj torčala svernutaja v trubku under armpit.INSTR stuck-out.IPF rolled.NOM in little-tube.ACC tak čto v sumerkax po ploščadi rasxaživalo roll/part.NOM so that in dusk.PREP across square.DAT apart-went.SI tuda-sjuda desjat' belyx truboček [...] here-there ten white little-tubes 'And not only (the) mother behaved like that, but also other actors; I knew them all because I smeared them lard on bread and passed them bottles with beer, they also came dressed up, and everyone of them had their part rolled

up in a little tube sticking out out from under their armpits, so that when it turned dark ten white little tubes went here and there across the square.' (RU

Notes

I say here 'almost exclusively' due to the occasional use of PF present tense forms in such contexts, which I briefly address in Section 3.2.2 and in Note 10.

translation)

- Further differences between Russian and Czech (and sometimes also other Slavic languages) have been described for imperatives (Alvestad 2013, 2014; Benacchio 2010; Dokulil 1948; Eckert 1984; von Waldenfels 2014), as well as coincidence, instructions, commentaries (Dickey 2000).
- For the most recent discussion of variation in the use of the IPF in general-factual contexts in Czech, Polish, and Russian, see Klimek-Jankowska (2022), this volume.
- The prefixes involved vary from lexeme to lexeme, and they have been labeled 'empty' because intuitively they double some meaning component already present in the simple IPF (e.g., vy-, na-, and s- in (2) and (3) mean 'out', 'on', and 'away', respectively). Isačenko (1962) treats such prefixes (in Russian) as resultative Aktionsart prefixes, whereas the mainstream view (also for Czech) is that such prefixes derive an aspectual partner to simple IPFs.
- There are other types of aspectual pairs, which I set aside for now, namely, suppletive pairs, which—at least from a synchronic point of view—are not morphologically transparent (e.g., Ru. ipf. brat' / pf. vzjat' and Cz. ipf. brat / pf. vzít, which all mean 'to take'). I will also set aside so-called biaspectual verbs, for which the aspectual semantics is contextually determined (see, e.g., Janda 2007, on Russian). Most of these are loan words (e.g., Ru. demaskirovat' 'to unmask', Cz. skórovat 'to score'), which sometimes get integrated into the morphological aspectual system (e.g., Ru. (u)regulirovat' 'to regulate', (po)guglit' 'to google'); some are Old Church Slavonic remnants.
- As noted by one of the reviewers, the lack of argument structure effects of external prefixes mentioned here is an oversimplification, since it only applies to the temporal Aktionsart prefixes I discussed here (and maybe to some others). Some Aktionsart prefixes, in particular those that express a quantitative Aktionsart (in the sense of Isačenko 1962), for example the distributive and the cumulative Aktionsart (for discussion of these in Czech see Součková 2004a), require a plural theme argument. This requirement could be seen as an argument structure effect, even if the thematic relations remain unaffected by the addition of such prefixes. This could mean that either the definition of what counts as an external prefix has to be changed, or such prefixes are not external. Furthermore, Tatevosov (n.d.) makes a three-way distinction of prefixes into internal/lexical, intermediate, and external/superlexical ones, and one could group the quantitative Aktionsart prefixes (and maybe also the disputed 'empty' prefixes) with the intermediate ones. Since my goal is not to provide an extensive list of prefixes but to only concentrate on some, which clearly fall into either the internal or the external class, I will not discuss this additional distinction further.
- Russian and Czech have synthetic present and past tense forms for both IPFs and PFs, and a periphrastic future tense form for IPFs only. Future reference with PFs is generally achieved by PF present tense forms. The past tense in Czech is a periphrastic form consisting of a present tense form of 'to be' (which I gloss as AUX and which is dropped/null in the third person) and the so-called *l*-participle, which originates from a perfect participle. Therefore the Czech past tense formally looks like a perfect, but it is the only past tense in the language so that it is regularly labeled as such. In Russian the past tense is the standalone *l*-participle that never appears with an auxiliary (e.g., *uexal*, *postupil* in (8)).
- Throughout the paper when I provide original examples from the literature, I regularly add glosses and in some cases also translations, even when they are absent in the original literature (e.g., because the original literature is in Russian). I also sometimes add boldface and underlining for highlighting certain aspects of the examples, which could have been absent in the literature.

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Generic statement most likely also involve a modal component, which statements involving iteratives and habituals do not necessarily do. Generic statements do not necessarily require the IPF in Czech (see also discussion in Filip and Carlson 1997), and even in Russian, where there is a strong link with IPFs, the PF can sometimes be used, as we have seen in the use of PF present tense forms under the potential reading, illustrated in (9).

- In iterative contexts, the PF can be used if the number of repetitions is known and the stretch of repetitions is presented as one whole, as in (i). The Russian descriptive literature labels this the 'summation' (*summarnoe*) reading of the PF (cf. Zaliznjak and Šmelev 1997).
- (i) Ona dva raza **postučala** v dver'. she two times knocked.PF in door.ACC 'She knocked on the door twice.'
- In both Czech and Russian past tense forms, the verb form signals masculine $(-\emptyset)$, feminine (-a), or neuter (-o) agreement (in the singular), because it originates from a participle (see Note 7). Where relevant, I add this to the glosses, but when it is not directly relevant I leave it out.
- Russian is a 'free word order' language with canonical SVO order (see Jasinskaja and Šimík n.d., for discussion).
- Klein (1995)'s proposal, however, takes into account the interaction of grammatical aspect and lexical aspect by explicitly addressing the input to the aspects as well as the effect of the aspects on this input; this is not done in Grønn (2004)'s work.
- More information about Discourse Representation Theory (Kamp and Reyle 1993) is given in Section 2.5. I employ a linear notation for discourse representation structures (DRSs), where discourse referents are written on the left-hand side, before | (in a traditional DRS they appear at the top of the DRS), and the conditions on these discourse referents are listed to the right of |, separated by commas (which in a different notation can be translated as conjunctions).
- I use the subscript disc(ourse) to indicate that we are not necessarily dealing with event types at the level of lexical aspect, since one commonly arrives at the meaning of an event_{disc} or a state_{disc} at the discourse level through composition of various components, not just event types but also grammatical aspect, adverbs, and other means at higher levels; the use of the terms 'event' and 'state' at the discourse level makes DRT a one-component approach to aspect.
- Note, however, that SDRT does away with reference time.
- Altshuler (2012) spells out a more detailed dynamic account of Russian aspect forms in discourse, in particular of imperfective forms, where he argues that these can also be used to signal backward shifts in discourse, much like the pluperfect in languages with perfects (see also Borik 2018, for a comparison of the English perfect and the Russian (im)perfective).
- See also Le Bruyn et al. (2022) for a general defence of using parallel corpus data as a tool for linguistic analyses.
- In the corpus examples, I put the original in a. and the translation in b., which leads to different orders of Russian and Czech, depending on the source that the examples are taken from. The sources are given in brackets behind the English translation of the a. example, with original/translation page numbers for the texts in book format; the abbreviations of the sources can be found in (23) and (24).
- See, for instance, Weiss (1995). The term is also generally used in the instruction of Russian as a foreign language, see, for instance, https://learnrussian.rt.com/grammar-tables/forming-adverbial-participles-using-perfective-and-imperfective-verbs/(accessed on 30 October 2021), https://www.youtube.com/watch?v=fOdfQ7bE8qU (accessed on 30 October 2021), and https://duolingo.fandom.com/wiki/Russian_Skill:Adverbial_Participles (accessed on 30 October 2021).
- Generally, in both languages, various (internal) prefixes can be added to the determinate stem to derive different kinds of directed motion verbs, new lexical items, which are always PF; the IPF aspectual partner contains the same prefix and the stem without the prefix is often but not always homophonous to the indeterminate simple verb; cf. the Russian examples in (ii).
- (ii) a. PF *pere-jti* vs. IPF *pere-xodit'* 'cross (walking)' (lit. across-walk) PF *vy-jti* vs. IPF *vy-xodit'* 'exit (walking)' (lit. out-walk)
 - b. PF *pere-exat'* vs. IPF *pere-ezžat'* 'cross (driving)' (lit. across-drive) PF *vy-exat'* vs. IPF *vy-ezžat'* 'exit (driving)' (lit. out-drive)

A full discussion of Russian and Czech motion verbs is beyond the scope of this paper, but see Gehrke (2008) (and for Russian, see also Romanova 2007).

- Alternative means to express a directed motion of walking/going in a prefixed and thus PF manner in Czech is to use a different lexical root, that of *-stoupit* 'to step' (see also Eckert 1991). In my data, in particular Kundera made ample use of such verb forms, e.g., Czech *v-stoupil* 'in-stepped.PF' vs. Russian *vo-šel* 'in-walked.PF' in (26).
- The Russian terms are abstract nominalisations related to the adjectives for 'single' and 'multiple', respectively.
- This suffix is commonly treated as homophonous to one of the imperfectivising suffixes Czech employs in SIs, and the fact that it attaches to an already IPF verb form is taken as an argument in favour of the homophony analysis. Diachronically, the imperfectivising suffix derives from the frequentative suffix, also in Russian.
- While the suffix -(y)va is the only productive imperfectivising suffix in Russian, Czech has several productive SI suffixes, -va being just one of them.

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- See Dickey and Kresnin (2009) for differences between Russian and Czech in aspect use with negation.
- In fact, in Jakobson's (1932) original treatment of markedness in the Russian aspect system, this is precisely what he argues for: SIs are more marked than their PF counterparts (see also Bareš 1956; Jakobson 1956).
- Dickey (2015) makes some adjustments to this division, particularly focusing on the peripheral types. Since this paper is mainly concerned with Russian vs. Czech, I will not comment further on these refinements. Furthermore, Dickey's (2000) typology has been criticised in Fortuin and Kamphuis (2015), which led to further scientific exchanges between the authors in Dickey (2018) and Fortuin and Kamphuis (2018).
- Dübbers (2015); Fortuin and Kamphuis (2015); Mueller-Reichau (2018) argue that a more fine-grained distinction has to be made between volitional achievements (e.g., 'jump from the bridge') vs. non-volitional achievements and that possibly other factors play a role as well. I agree in this point, but this does not pose a problem for my overall claim and therefore differs from the conclusions drawn by these authors: These authors maintain (at least implicitly) that there are instances where the IPF is directly motivated by the existential context it appears in, also in Czech, whereas my conclusion is that the Czech IPF in these contexts occurs for the same reasons why it occurs in single/episodic and habitual contexts.
- Note that -nibud' generally signals (scopally) non-specific indefiniteness, also in the nominal domain; see discussion in, e.g., Geist (2010). The distribution of the Czech counterpart, někdy 'at some time', as well as its nominal counterpart nějaký (on which see Šimík 2021) is broader, not restricted to non-specificity, but still connected to indefiniteness.
- According to Dickey's informants, the IPF can only be chosen when the window is shut, but that even in that context the PF is acceptable. In the scenario of a shut window, the PF is reported to be "more likely to occur [...] if the speaker is operating under the expectation that the speaker [sic] should have opened the window, but [the informants] do not indicate that this is the only context in which the [PF] is appropriate." (Dickey 2000, p. 113). It seems, then, that Dickey had a Russian perspective on aspect use in mind and was only concerned with annulled results (closed windows vs. windows that are still open) when consulting his informants. However, I am interested in what kinds of IPF readings we get, independently of whether or not the result has been annulled. For Russian, there is general agreement that in a context where the result has been annulled, the IPF has to be used. However, if we find an IPF in Czech, there is no guarantee that this signals that the window is shut again. As Jakub Dotlačil (p.c.), a Czech native speaker, put it: "I don't think considering whether the window is closed or open is useful in the aspect distinction. Even if the window is closed, using IPF is absolutely weird. [...] I remember from studies on aspect that this 'did you open the window?' example was endlessly discussed because of Russian. I never saw the point, it seemed like people knowing only Russian try to push the distinction onto Czech that does not exist there."
- See also Mehlig (2011) on aspect in Russian yes/no-questions.
- Note that the intuition of target state relevance also plays a crucial role in Borik's (2002) proposal for the semantics of the Russian PF, which was briefly discussed in Section 2.4.

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