Event kind formation within the VP: Comparing Russian factual imperfectives and German adjectival passives

1. Introduction

The present paper has two goals. The first is to draw attention to intriguing similarities between two apparently very different constructions. Specifically, we compare Russian factual imperfectives, i.e. imperfective (ipf) sentences used to refer to a completed event, with German adjectival passives. For example, in (1), the factual ipf is contrasted with the perfective (pf), which is the canonical way of referring to a completed event. In (2), the adjectival passive, which in German combines the past passive participle with the copula sein, is contrasted with a verbal passive, which combines it with (the auxiliary) werden.

(1) Moj otec {pisal/napisal} zaveščanie. (Ru)  
my father wrote; ipfv wrote; pfv testament  
‘My father has made his will.’

(2) Die Tür {war/wurde} geschlossen. (Ge)  
the door was became closed  
‘The door {was / has been} closed.’

The second goal is to offer an explanation for the similarities and relate them to a common core property of both constructions. Jumping ahead, we will argue that both constructions involve event kind formation at the syntactic VP-level, and that this can explain the observed data patterns. In the case of factual ipfs, the event description supplied by the VP is a kind due to a specific information structure: the existence of the event is in focus. In the case of adjectival passives the event description remains in the kind domain due to the adjectivization of the VP and the lack of further verbal functional projections on top of the VP.

The paper is structured as follows. In section 2, we outline the empirical peculiarities that are common to both constructions. Section 3 provides our analyses and section 4 the explanation for the empirical generalizations we arrived at in section 2, based on these analyses. Finally, section 5 concludes.

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1 We use the word “construction” in this paper without any theoretical implications.
2 Due to lack of space we cannot give appropriate introductions to these constructions. For factual ipf see Glovinskaja (1981, 1989); Padučeva (1996); Grønn (2004); for adjectival passives Kratzer (1994, 2000); Rapp (1997); Maienborn (2007a) (and references therein).
3 Abbreviations in glosses: ipfv=imperfective, pfv=perfective, dim= diminutive.
4 Note that throughout we will ignore presuppositional factual ipfs, being concerned exclusively with existential factual ipfs (to use Grønn’s 2004 terminology).
2. Empirical peculiarities common to both

In this section, we discuss several properties that Russian factual ipfs and German adjectival passives share: the lack of event uniqueness, the impossibility to specify temporal and spatial parameters for the event, discourse transparency, weak referentiality, the limited availability of adjectival modification for (some) event participants, and the requirement that the event is noteworthy.

2.1 No event uniqueness

It has often been noted that uniqueness of the event implies pf in Russian (e.g. Dickey 2000), and that factual ipfs are therefore incompatible with a VP-property describing a necessarily unique event token; compare:5

(3) Ty {*el/ s"el} dve konfety, kotorye ležali na stole?
you ate;ipfv ate;pfv two candies that lay;ipfv on table
‘Have you eaten the two pieces of candy that were lying on the table?’

A unique event description is also incompatible with the German adjectival passive, whereas a verbal passive construction is fine:6

(4) Der Kettenanhänger ist aus dem Bernsteinstück
the necklace pendant is out the amber piece
gemacht *(worden), das ich an der Ostsee gefunden habe.
made become;part which I at the Baltic Sea found have
‘The necklace pendant {*is/has been} made out of the amber piece that I found at the Baltic Sea.’

2.2 The time of the event culmination cannot be indicated

Under the factual interpretation of the ipf, the time of (the culmination of) the event cannot be explicated. As soon as a specific temporal adverbial is added, the completed (=factual) event reading is no longer available. With pf, the culmination point can be temporally specified without reservation:7

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5 Ex. from Grønn (2004), original from Vogeleer (1993).
6 Throughout the paper, simply for convenience, we will contrast present tense adjectival passives (with the copula sein ‘be’) with perfect tense verbal passives (with the auxiliary werden ‘become’, which takes the auxiliary sein ‘be’ in the present tense). This difference in tense, however, does not have any effect on the empirical generalizations in this section.
7 Note that throughout the * is merely meant to signal the impossibility of the factual use of the ipf sentence. Other ipf readings are possible. Note further that factual ipfs can
The same contrast can be found between German adjectival and verbal passives. Adjectival passives refer to states, but are commonly assumed to involve an underlying (prior) event. However, this event cannot be temporally located (cf. Rapp 1996, 1997). Thus, unlike what we find with verbal passives, the culmination time of the event cannot be indicated: 8

2.3 The place of the event culmination cannot be indicated
Similarly, factual ipfs do not tolerate spatial adverbials that would identify the “place of completion”. This is in clear contrast to the situation with pf:

However, note that for both constructions it holds that a spatial PP is possible if it can be viewed as a manner modifier (Maienborn’s 2003 “event-internal modifier”) that specifies a subkind of event:

combine with temporal adverbials that provide a “big and floating topic time” within which the event is vaguely placed (cf. Grønn 2004).

Ex. from von Stechow (1998). Note that the ungrammaticality is also not due to the present tense of the adjectival passive construction: such a construction refers to the consequent state of an event that is prior to the consequent state, hence in the past; in principle this past time point could be three days ago.

Ex. from Gehrke (2011); the hash mark indicates (marginal) acceptability if the PP modifies the state (see Maienborn 2007b).
'At their age, I have long since spent the night in the woods.'

(10) **Die Pizza war in einem Steinofen gebacken.**
    the pizza was in a stone oven baked
    ‘The pizza was baked in a stone oven.’

2.4 **Discourse transparency**

Furthermore, it can be observed that, in comparison to the bare singular object of a pf sentence, the bare singular object of a factual ipf is degraded as an antecedent for a subsequent pronoun:

(11) Ja {\*el/ s’el} tarakana. A teper’ mne ego žalko.
    I ate;pfv ate;pfv cockroach and now me him sorry
    ‘I have eaten a/the cockroach. And now I feel sorry for it.’

Similarly, in adjectival passives, an indefinite NP in a *by*- or *with*-phrase cannot easily be picked up by a pronominal anaphora. This is unlike the situation with a verbal passive.\(^{10}\)

(12) Das Bild ist von einem Kind angefertigt *(worden).* Es hat rote Haare.
    the drawing is by a child produced become;prt it has red hairs
    ‘The drawing \{\*is / has been\} produced by a child. He/She has red hair.’

2.5 **Adjectival modification**

Not any adjectival modification of the internal argument yields an (easily) acceptable factual ipf. This “sensivity to lexical meaning” is not found with pf. Compare (13) with (14).

(13) Ja {\*pil/ vypil} berezevyj sok.
    I drank;pfv drank;pfv birch;adj juice
    ‘I have drunk (the) birch sap.’

(14) Ja {\*pil/ vypil} želtýj sok.
    I drank;pfv drank;pfv yellow juice
    ‘I have drunk (the) yellow juice.’

Similar restrictions on adjectival modification are found with the complements of event-related *by*- or *with*-phrase in German adjectival passives.\(^{11}\)

(15) **Das Bild ist von einem blonden Kind gemalt *(worden).*

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\(^{10}\) Ex. from Gehrke (2013).

\(^{11}\) Ex. (15) from Gehrke (to appear). We wish to point out that the factual ipf in (14) and the adjectival passive in (15) *are* possible, but only, and this is what sets them apart from the pf and the verbal passive, with strong contextual support.
the drawing is by a blond child painted become;prt
‘The drawing {"is / has been} painted by a blond child.’

2.6 Referentiality effects on VP-internal nominals
The objects of factually used ipf verbs, but not of pf verbs, lacks a strongly referential reading (cf. Grønn 2004:240ff.):

(16) Ja {*razbival/ razbil} cennuju vazu.
   I broke;ipfv broke;pfv valuable vase
   ‘I have shattered the valuable vase’

Similarly, with NPs in event-related modifiers of German adjectival passives we find a large number of bare nominals weak (in)definites, whereas (strongly interpreted) nominals are usually unacceptable. Again, this effect is absent in the case of verbal passives:

(17) Der Brief ist mit dieser Tinte geschrieben *(worden).
   the letter is with this ink written become;prt
   ‘The letter {*is / has been} written with the ink.’

2.7 Noteworthiness requirement
Nevertheless, a strongly referential object NP is possible with factual ipf, but then it will always be subject to very specific conditions coming from the overall context or world knowledge. In (18), for instance, the availability of a factual use correlates with the requirement that there is something noteworthy about the action involved; in this case it is clear that the action of ‘shaving Putin’ or ‘shaving the president’ is noteworthy, whereas ‘shaving the client’ is not.

(18) Parikmaxer bril {Putina/ prezidenta/ klienta}.
   hairdresser shaved;ipfv Putin president client
   ‘The hairdresser has shaved {Putin / the president / the client}.’

This “noteworthiness effect” is also found in German adjectival passives:

(19) Das Deckchen ist von {Merkel / der Kanzlerin/ der Hausfrau} gehäkelt.
   the blanket;dim is by Merkel the chancellor;fem the housewife crocheted
   ‘The blanket is crocheted by {Merkel / the chancellor / the housewife}.’

Let us then turn to the analyses of these two constructions, which will then serve as a basis for explaining our empirical generalizations from this section.

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12 Ex. after Padučeva (1996). Note, again, that the * is in place only if we take for granted a strongly referential interpretation of the object NP.
13 Ex. from Gehrke (to appear).
3. Analyses for the two constructions

In this section, we outline our analyses for the two constructions under discussion. What both have in common, we argue, is event kind formation at the level of the VP.

3.1 The Russian case: Focus on event realization

To account for the Russian data discussed above, we exploit the idea that factual ipfs (of the existential sort) have a special information structure. They focus on the event’s realization, everything else being backgrounded (see Padučeva 1996; Šatunovskij 2009:141). Let us see how to make use of that.

A standard (DRT-)semantics of the VP underlying the sentences in (1) would be as follows:

\[(20) \quad \text{VP} \Rightarrow \lambda e [x | \text{write}(e), \text{THEME}(e,x), \text{testament}(x)]\]

Chierchia (1998) has proposed that any property, “to the extent that we can impute to [it] a sufficiently regular behavior”, corresponds to a kind:

\[(21) \quad \text{For any property } P \text{ and world } s, \quad \cap P = \lambda s \ i \ P_s \text{ is in the set of kinds (undefined, otherwise)}\]

We assume that kinds play a role not just in the domain of individuals (for which they have initially been proposed, going back to Carlson 1977), but also in the domain of events. The hypothesis, then, is that the event property denoted by the VP in (20) corresponds to a kind, and we can apply Chierchia’s cap-operator from (21):

\[(22) \quad \cap P_{(20)} = \lambda s [x | \text{write}(e), \text{THEME}(e,x), \text{testament}(x), e \text{ in } s] = \cap \text{testamentwriting}\]

Given this, we can restate (20) by making use of Carlson’s (1977) realization relation R. What we need to do is declaring a discourse marker \(e_k\) standing for an event kind:

\[(23) \quad \text{VP} \Rightarrow \lambda e [e_k | R(e,e_k), e_k = \cap \text{testamentwriting}]\]

Grønn (2004) has proposed that what is in focus at VP goes to the assertoric part of the DRS under construction, whereas what is backgrounded goes to the presupposition part (which he indicates by subscript notation). The advantage of (23) over (20) is that we can easily single out the semantic condition which is
arguably in narrow focus in factual ipfs, i.e. “\(R(e,e_k)\)”. This enables a straightforward treatment of the VP of a factual ipf within Grønn’s formal framework:

\[
(24) \quad \text{VP} \Rightarrow \lambda e [ \quad | \quad R(e,e_k) \quad ] \quad [e_k | \quad e_k = \text{testamentwriting}] 
\]

Accordingly, as can be seen from (24), factual ipfs are characterized by a presupposed discourse marker, standing for an event kind, which is derived from the ordinary event property (20) via “\(\cap\)” . This, we will argue below, can explain the above noted empirical properties of factual ipfs.

3.2 The German case: event kind reference due to adjectivization

In adjectival passives, the verb syntactically projects up to the level of VP, which undergoes (phrasal) adjectivization (Kratzer 1994, 2000). We assume that as a result of this category change from VP to AP, the underlying event information does not get instantiated but remains in the kind domain.\(^{14}\) What gets instantiated instead is the state associated with the resulting AP. In essence, then, we assume that the utterance of an adjectival passive refers to the realization of a consequent state kind of an event kind, modeled with a (non-temporal version of) Dowty’s (1979) BECOME-operator (see also Gehrke 2011, and subsequent work for further motivation of this analysis):\(^{15}\)

\[
(25) \quad \begin{align*}
(a) \quad & \text{Die Tür ist geschlossen.} \\
& \quad \text{the door is closed} \\
& \quad \text{‘The door is closed’}
(b) \quad & \exists s_o, e_k, x_k [\text{close}(e_k) \ \& \ \text{BECOME}(s_o)(e_k) \ \& \ \text{closed} \ (\text{THE DOOR}, s_o)]
\end{align*}
\]

In Gehrke (to appear), it is suggested that event-related modifiers pseudo-incorporate into the participle before adjectivization takes place, deriving a simple property denotation for the resulting adjective.\(^{16}\) A pseudo-incorporation account is supported by the fact that the nominals in such PPs display the semantic properties that (pseudo-)incorporated nominal are known to have (see Dayal 2011; Espinal & McNally 2011). These include obligatory narrow scope with respect to quantificational elements in the clause, discourse opacity (e.g. no sup-
port of pronominal anaphora), the unacceptibility of (ordinary restrictive token) modification, incl. relative clauses, and the fact that the event subkind derived by the modifier has to be a stereotypical activity (see Gehrke to appear for detailed discussion).

4. Explanation of the empirical generalizations

In this section, we show how the observed properties collected in section 2 follow from the analyses we proposed.

4.1 No event uniqueness

To account for (3) and (4), we recall that it has often been noted that ordinary kinds must allow for potentially many object realizations, e.g.: “kinds […] will generally have a plurality of instances (even though sometimes they may have just one or none). But something that is necessarily instantiated by just one individual […] would not qualify as a kind” (Chierchia 1998:350). There is no principled reason why this should not hold for event kinds as well. Therefore, if the two constructions examined in this paper involve event kind formation at the VP, which we argue they do, the ban on event properties that necessarily describe a unique event token follows naturally.17

4.2 No spatiotemporal localization of the event

As for factual ipfs in Russian, we have proposed an analysis according to which the spatiotemporal circumstances of the denoted event are out of focus (remember: focus rests exclusively on the event’s realization). Explicating the precise time or place at which the event occurred, as in (5) and (7), is therefore mistaken. The analysis that we proposed for adjectival passives in German does not even have a denoted event that could be spatiotemporally localized (remember: adjectival passives denote a state token which is the realization of a consequent state kind of an event kind). In lack of a target, spatiotemporal event localization must fail (6), (8). Importantly, we do not say that spatial or temporal adverbials are generally out. We do find such modifiers in the respective constructions, see (9), (10). But then, and this is crucial, they do not function as event localizers, but rather as event-internal modifiers (in the sense of Maienborn 2003). The following shows a factual ipf with a temporal event-internal modifier:18

(26) Ty ran’še vstaval v pjat’ časov?

17 For factual ipfs, this argument has been put forward by Mehlig (2001, 2013), Šatunovskij (2009), and Mueller-Reichau (2013).
18 Ex. from Mehlig (2011).
you earlier got_up;ipf in five hours
‘Did you in the past ever get up at five?’

4.2 Discourse opacity and non-referentiality

The proposal defended here is that modifiers and arguments (that remain) inside the VP are subject to event kind formation. That is to say, only those modifiers and arguments are possible in the two respective constructions that contribute to the forming of a plausible event kind. Given this, we argue that the internal argument NPs in (11) and (16) take on a weak reference in order to avoid a unique event property, because that would render an event kind impossible (recall 4.1). To account for the German data (12) and (17), we assume a more fundamental story, which we have already outlined above: event participants (other than the theme) are pseudo-incorporated prior to adjectivization. Pseudo-incorporated nominals are generally discourse opaque and non- (or at least weakly) referential (see Dayal 2011; Espinal & McNally 2011).

4.3 Taxonomy effects (adjectival modification)

The existence of a kind implies that there is at least one property inferable for an object from its membership in the kind which is not inherited from the superkind (membership in the superkind must not invite the same inference). Therefore, to invoke a kind-specific property, the correct taxonomic level must be taken care of. For instance, imagine that you see a friend who is about to eat a death cap mushroom. You want to warn her. Which of the following utterances will you choose (note that all of them are true)?

(27) (a) It is a mushroom.
      (b) It is a toxic mushroom.
      (c) It is a toxic gilled mushroom.

Since you want the hearer to infer that the mushroom is inedible, a pragmatically adequate utterance would be (27b). (27a) is odd because membership in the kind \( \cap \)mushroom does not imply the relevant information. Membership in a kind \( \cap \)toxic_gilled_mushroom would imply inedibility, but this information is inherited from the superkind \( \cap \)toxic_mushroom. So (27b) is preferred over (27c). Let us now look at it from the hearer’s perspective, abstracting a bit. Imagine the hearer encounters an utterance of the form (28):

(28) It is a NP.

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19 This follows from the fact that kinds come in taxonomies (Krifka et al. 1995; Dayal 2004), and that taxonomies are default-inheritance structures (Corbett & Fraser 1993); see Mueller-Reichau (2011) for discussion.
Here, something ("it") is being classified as belonging to the kind $\cap \text{NP}$. The hearer will understand that the speaker wants her to infer a property from the kind membership. Since the hearer can be sure that the taxonomic level of the kind is chosen by the speaker in accordance with her communicative goals, she knows that the inference intended by the speaker cannot be drawn from an utterance where the NP is replaced by a nominal identifying a superkind of $\cap \text{NP}$. Thus, only if the hearer can determine in her background knowledge a property fitting these requirements, she will perceive (28) as a plausible utterance.

What is said here about nominal kinds should hold for event kinds as well. Thus, upon encountering a Russian factual ipf or a German adjectival passive, the hearer will look for a property following from membership in the event kind $\cap \text{VP}$, but not following from membership in an event kind which is subordinate to $\cap \text{VP}$. Given this, why is the factual ipf (14) odd? Because any property inferable from being a token of the kind given in (29a) (if there was such a kind) is also inferable from being a token of the kind in (29b):

(29) (a) $\lambda s \, t e \, [x \mid \text{drink}(e), \text{THEME}(e,x), \text{yellow\_juice}(x), e \text{ in } s]$  
     (b) $\lambda s \, t e \, [x \mid \text{drink}(e), \text{THEME}(e,x), \text{juice}(x), e \text{ in } s]$

This is different from the factual ipf in (13). Here there is a property that one can infer for an event token of the kind given in (30a), which does not follow from being of the kind in (30b): such an event token is extraordinary.

(30) (a) $\lambda s \, t e \, [x \mid \text{drink}(e), \text{THEME}(e,x), \text{birch\_juice}(x), e \text{ in } s]$  
     (b) $\lambda s \, t e \, [x \mid \text{drink}(e), \text{THEME}(e,x), \text{juice}(x), e \text{ in } s]$

Similarly, nothing follows from membership in the event kind in (31a) that would not also follow from membership in (31b). Therefore, the German adjectival passive in (15) is pragmatically dispreferred.

(31) (a) $\lambda s \, t e \, [x \mid \text{paint}(e), \text{AGENT}(e,x), \text{blond\_child}(x), e \text{ in } s]$  
     (b) $\lambda s \, t e \, [x \mid \text{paint}(e), \text{AGENT}(e,x), \text{child}(x), e \text{ in } s]$

In sum, to successfully utter a Russian factual ipf or a German adjectival passive, the VP must be well chosen to match the appropriate taxonomic level of the event kind. The insertion of an additional adjective or the replacement of an adjective by another one can lead to a VP that violates this constraint. Since pf sentences and verbal passives do not involve event kind formation, we do not expect such taxonomic effects to show up with these – in line with the facts.
4.4 Noteworthiness effects

In the previous section we argued that the “adjective effects” follow from a more general principle according to which the event kind identified by the VP must be of the appropriate taxonomic level to license the inference of a property assignment. This principle is also responsible for the noteworthiness effects observed in connection with (18) and (19). If an event is a realization of the event kinds (32a) or (32b), it can well be counted as an extraordinary event. If an event is a realization of the superordinate event kind (32c), it cannot. There is thus a non-inherited property which is inferable from membership in (32a) and (32b). Accordingly, the first two versions of (18) are pragmatically licensed.

\[(32) \quad \begin{align*}
(a) \ & \lambda s \ i.e. [\text{shave}(e), \text{PATIENT}(e,\text{Putin}), e \ in \ s] \\
(b) \ & \lambda s \ i.e. [x \ \text{shave}(e), \text{PATIENT}(e,x), \text{president}(x), e \ in \ s] \\
(c) \ & \lambda s \ i.e. [\text{shave}(e), e \ in \ s]
\end{align*}\]

On the other hand, anything that follows from being a realization of the event kind (33a) also follows from being a realization of (33b). In other words, there is a superkind to the event kind identified by the third version of (18) harboring all of the properties that would be inferable from membership in that event kind. Therefore, the utterance is felt to be pragmatically odd.

\[(33) \quad \begin{align*}
(a) \ & \lambda s \ i.e. [x \ \text{shave}(e), \text{PATIENT}(e,x), \text{client}(x), e \ in \ s] \\
(b) \ & \lambda s \ i.e. [\text{shave}(e), e \ in \ s]
\end{align*}\]

This way the different judgements for the utterances in (18) are accounted for. The judgements for the German adjectival passive sentences in (19) can be explained along the same lines.

5. Summary

In this paper, we showed that two seemingly very different constructions, Russian factual ipfs and German adjectival passives, share a number of properties. These were explained by analyses of these constructions that crucially build on the idea of event kind formation at the level of VP. For Russian factual ipfs, we have argued that the event kind is part of the presupposed background and focus is merely on event realization, while for German adjectival passives, we proposed that the event remains in the kind domain because no further verbal functional structure is added on top of the VP but instead the VP is adjectivized.

Bibliography


