

Information structure and aspectual competition

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Abstract

In this paper, I argue that phenomena pertaining to information structure can explain various cases of ‘aspectual competition’ in Russian. More specifically, while the perfective aspect typically prefers to locate the event argument and aspectual relation in the assertoric part, I show that the imperfective aspect with complete event interpretations can be used either to *assert* or *presuppose* the existence of a complete event of the type described by the VP. In a compositional framework, this implies a <Background, Focus>-partitioning already at the VP-level, which is input to the aspectual operator.

The grammatical category of aspect in Russian is formally expressed through a systematic opposition between perfective (Pf) and imperfective (Ipf) verb forms. Pf is invariably associated with complete event readings, while the progressive, i.e. an incomplete event reading, is the ‘Hauptbedeutung’ of Ipf. However, the unmarked imperfective is also compatible with complete event interpretations in competition with the perfective. This particular use of Ipf is in Slavic linguistics known as the ‘factual Ipf’ (Grønning 2004).

A standard, compositional DRT-analysis of aspectual operators gives us the following semantics for both Pf and the factual Ipf:

- Pf (or Ipf on its complete event interpretation) $\Rightarrow \lambda P \lambda t [e \mid P(e), e \subseteq t]$

Both Pf and the factual Ipf convey the information that the event e described by the VP is included in the assertion time t . The value of the Reichenbachian assertion time t is provided by the ‘tense branch’, which contains tenses and temporal adverbials. Hence, it is assumed that tense has scope over aspect, such that aspects convert predicates of events into predicates of times.

In this paper, the question of whether the imperfective in Russian is genuinely ambiguous between incomplete ($t \subseteq e$) and complete ($e \subseteq t$) event interpretations, or whether its meaning is underspecified/general/vague, will be left open. Instead, my point of departure is the observation that what is commonly referred to as the factual Ipf, on closer inspection seems to subsume at least *two* quite different ways of referring to complete events located in the past:

- (1) Vanja **čital**^{ipf} ‘Vojnu i mir’.
Vanja **has read** ‘War and Peace’.
- (2) Krasivo ukrasili^{pf} elku.
[Kto]_F **ukrašal**^{ipf?}
They decorated the Christmas tree beautifully.
[Who]_F **decorated** it?

These readings of IpF can intuitively be labelled the *existential* IpF (1) and the *presuppositional* IpF (2), respectively.

The goal of this paper is twofold: to implement this information structure component into a compositional analysis of aspectual operators and to show how the complete event interpretation of the presuppositional IpF emerges from competition with Pf. In Russian, IpF is the default, unmarked aspect, and the competition perspective is also crucial for explaining in what contexts the existential IpF outranks Pf. However, information structure is not relevant for explaining this instance of competition, and the existential IpF will thus not be discussed in this paper. On the contrary, information structure is argued to be the decisive factor in explaining the competition between the presuppositional IpF and Pf.

We claim that there is a *division of labor* between Pf and IpF w.r.t. information structure, which can be formulated informally as follows:

- **The Information Structure Principle of Russian Aspect**

Pf is drawn toward the *assertoric content* and prefers to see the event argument and aspectual configuration in the assertoric part, while IpF is *neutral* w.r.t. the assertion/presupposition division.

The following text illustrates the differences between the assertoric Pf and the presuppositional IpF in reporting complete events:

- (3) Vnezapno ej stalo^{pf} plocho, skazala^{pf}: “Ėto konec.” Vyzvali^{pf} neotložnuju, otvezli^{pf} v bol’nicu, no pozdno – umerla^{pf} na drugoj den’. ... Tut v vospominanijach probel [...] Kto **zvonil**^{ipf}, **rasporjažalsja**^{ipf}, **zakazyval**^{ipf} mašinu? (Uppsala Corpus)

Suddenly she fell ill, and said: “It’s the end”. Somebody called for an ambulance, they took her to the hospital, but it was too late – she died the next day. ... Here there was a hole in his memory [...] Who **phoned**, **gave orders**, **ordered** the ambulance?

Pf is used at the assertoric level to introduce ‘new events’ in the story: ‘stalo^{pf} plocho – fell ill’, ‘skazala^{pf} – said’, ‘vyzvali^{pf} neotložnuju – called the ambulance’, ‘otvezli^{pf} v bol’nicu – brought to the hospital’, ‘umerla^{pf} – died’. Then follow three verbs marked with imperfective aspect having a presuppositional interpretation, where the events refer anaphorically to the previously introduced events denoted by perfective verbs.

The factual IpF locates a complete event into the assertion time either by linking it anaphorically to a given event or by introducing the event. Which of

the two options actually obtains is derived from the focus-background structure of the underlying VP. A special principle – the bold face convention (see below) – is invoked to ensure that *Ipf* operates on the background if the latter is non-empty. Otherwise it operates on the focus. Thus, the information structure of the input determines whether the factual *Ipf* has a presuppositional or an assertive interpretation.

I represent the VP being input to an aspectual operator as an ordered pair $\langle B(\text{ackground}), F(\text{ocus}) \rangle$ along the lines of the structured meaning approach. In accordance with neo-Davidsonian event semantics, the main event is decomposed into several event predicates (the agent x is here assumed to be bound from outside by a question-operator):

- (cf. (2) above) $\langle \lambda e[| \text{decorate}(e)], \lambda e[| \text{Agent}(e, x)] \rangle$

The background part is considered to contain presupposed material, and the $\langle B, F \rangle$ -partition is therefore transformed into a complex DRS as follows, where the subscript DRS represents the presupposed/given material:

- $\lambda e[| \text{Agent}(e, x)][| \text{decorate}(e)]$

This structured meaning/complex DRS is input to the *Ipf*-operator in (2). Since a $\langle B, F \rangle$ structure is formed already at the VP-level, we can maintain a uniformed treatment of different aspectual operators, which all have the same logical type and convert predicates of events into predicates of times.

The factual *Ipf* is treated as a function defined over different cases:

- $\text{Ipf}_{\text{factual}} \Rightarrow \lambda P \lambda t[\mathbf{e} | P(e), \mathbf{e} \subseteq \mathbf{t}]$

Note the use of *bold face* discourse referents and conditions, which only occur in the translation of the operator and disappear at the next stage of the derivation, in accordance with the following principle:

- **The bold face convention**

Bold face discourse referents $\mathbf{x} \in U_{Fun}$ and conditions $\mathbf{Con} \in Con_{Fun}$ occurring in the translation of an operator $Fun_{\langle a, b \rangle}$, are ‘rewritten’ in the process of applying Fun to an argument $Arg_{\langle a \rangle}$. In the resulting DRS $K_{\langle b \rangle}$,

- (i) if K ’s presupposition part P is empty, \mathbf{x} and \mathbf{Con} are rewritten as $x \in U_K$ and $Con \in Con_K$, respectively.
- (ii) if K ’s presupposition part P is non-empty, \mathbf{x} and \mathbf{Con} are rewritten as $x \in U_P$ and $Con \in Con_P$, respectively.

The idea is that the bold face discourse referent ‘ \mathbf{e} ’ and the bold face aspectual configuration ‘ $\mathbf{e} \subseteq \mathbf{t}$ ’ in the translation of *Ipf* will be drawn to the presuppositional DRS iff the latter is non-empty. In the case of presuppositional *Ipf*, the ‘bold face convention’ ensures that the eventive discourse referent is eventually declared in the presupposition part.

By applying the factual *Ipf* to its argument in (2), we end up with the following complex DRS:

- [AspP]: $\lambda t[\lambda x[\text{Agent}(e, x)]]_e[\text{decorate}(e), e \subseteq t]$

Following (van der Sandt 1992), presuppositions are considered as a kind of anaphora. The event argument and aspectual relation in the presuppositional DRS therefore require an explicit or implicit antecedent in the input context. In our example (2), suitable antecedents for the variables in the presupposition are straightforwardly found in the event and time referents provided by the perfective verb ‘ukrasili^{pf}’ in the preceding utterance.

Given the notion of *accessibility* in dynamic semantics and DRT, the analysis presented here can provide a principled explanation for some puzzling cases of aspectual competition noted in the literature:

- (4) A: Nado vyklučit^{pf} svet.
 B: Ja ego uže **vyklučil^{pf}** (**#vyklučal^{ipf}**). (Mehlig 1997, 169)
 A: You must turn off the light.
 B: I **have** already **turned** it off.

Russian aspectologists have not been able to explain why Pf must be used and why the presuppositional IpF is ruled out and cannot have an anaphoric reading in this example.

However, the restriction on the presuppositional IpF in (4) follows straightforwardly from DRT’s binding theory inasmuch as the eventive discourse referent of ‘vyklučit^{pf} – turn off’ is embedded under a modal operator ‘nado – must’, and is therefore not accessible as an antecedent for cross-sentential anaphora.

In the paper, I will show that many of the puzzling examples of aspectual competition in Russian (Pf vs. IpF) can be explained along similar lines, that is, with respect to the Assertion/Presupposition distinction. At the same time, there is a large number of borderline cases where both aspects are felicitous. This is to be expected since the speaker can, in general, choose to reintroduce the event at the assertoric level through a perfective verb, even if the conditions hold which would allow a presupposition to be satisfied.

References

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