

Temporal overlap in Russian past-under-past indirect reports

INTRO: According to Forbes (1914), Russian indirect reports allow *temporal overlap* between eventualities described by the embedded and the matrix predicate only if the embedded tense is non-past. This generalization has independently resurfaced in much of the literature on this topic (e.g. Comrie 1986; Kusumoto 1999; Schlenker 2003; von Stechow 2003; Kondrashova 2006; Babyonyshev & Matushansky 2006). However, (Boeck 1957; Costello 1960/61) showed that temporal overlap is sometimes available with the embedded past tense if the matrix verb describes an attitude of knowing, thinking, believing, seeing, etc. (as opposed to saying, reporting, questioning, etc.).

In this talk I propose that in Russian past-under-past indirect reports, the aspectual meaning of the embedded predicate, as well as the reference time settings in the matrix and the embedded clause determine whether temporal overlap is possible. I suggest that a satisfactory treatment of these constructions has been largely elusive despite close to a century of research because they have often been considered without a supporting context. As a result, only a small subset of the relevant cases that are considered in this talk have been accounted for. By investigating indirect reports—as they occur within a discourse—the empirical and theoretical gap can be bridged. The analysis put forth attempts to synthesize previous work on temporal anaphora (e.g. Kamp 1979, Hinrichs 1986; Partee 1984; Kamp & Reyle 1993) with previous work on indirect reports (e.g. Abusch 1988, 1997; Ogihara 1996; Kratzer 1998; von Stechow 2003).

DATA: The discourses in (1)-(2) illustrate the role of reference time settings in the interpretation of Russian indirect reports. In (1a), the reference time is updated to the consequent state of Lev's arrival (Webber 1988). This is the reference time in both the matrix and the embedded clause of (1b). As a result, (1b) allows temporal overlap. In (2a), the reference time is first updated to the consequent state of the speaker's asking, and then to the preparatory process of Lev's giving. While the consequent state is understood to be the reference time in the matrix clause of (2b), the preparatory process is understood to be the reference time in the embedded clause. Consequently, temporal overlap is not possible.

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| (1) a. | <i>V prošloe voskresen'e, Lev priexa-l ko mne domoj.</i>
In last Sunday Lev ^{PFV} arrive-PST.3s to me house |
| b. | <i>On skaza-l, čto ja vygljade-l blednym.</i>
He ^{PFV} say-PST.3s that I look _{IPF} -PST.1s pale
'Last Sunday, Lev arrived at my place. He said that I looked pale.' |
| (2) a. | <i>Včera ja sprosi-l L'va: "Počemu ty da-l mne lekarstvo?"</i>
Yesterday I ^{PFV} ask-PST.3s Lev Why you ^{PFV} give-PST.3s me medicine |
| b. | <i>On skaza-l, čto ja vygljade-l blednym.</i>
He ^{PFV} say-PST.3s that I look _{IPF} -PST.1s-FEM pale
'Yesterday I asked Lev: 'Why did you did give me medicine?' He said that I looked pale.' |

ANALYSIS OF (1b)/(2b): I assume that the imperfective imposes a relation in which a reference time is contained in the time of a state ($t_R \subseteq \tau(s)$; Kamp 1979). The tenseless imperfective predicate *Ja vygljadit' blednym* ('I look pale') in (1b)/(2b) is translated in (i), where the reference time variable t_R is co-indexed with the element that introduces it.

$$(i) \quad \text{Ja vygljadet' blednym}^1 \rightsquigarrow \lambda s_I \lambda w_I [\text{look.pale}(I)(s_I)(w_I) \wedge t_R^1 \subseteq \tau(s_I)]$$

Assuming that the reference time in the embedded clause of (1b) and (2b) is resolved to the consequent state of Lev's arrival and the preparatory state of Lev's giving respectively, (i) correctly predicts that the speaker was pale at the time of these events.

To account for the past tense interpretation of the embedded predicate in (1b)/(2b), I assume that it serves as an argument of the past tense operator in (ii). This operator differs from the one in (iii), which takes in an eventive predicate (Kamp & Reyle 1993).

- (ii) $PST_{State}^1 \rightsquigarrow \lambda R_{\sigma_{ot}} \lambda w_I [\exists s_I [t_P^1 < t_0 \wedge t_P^1 \cap \tau(s_I) \neq \emptyset \wedge R(s_I)(w_I)]]$
 (iii) $PST_{Event}^1 \rightsquigarrow \lambda P_{\sigma_{ot}} \lambda w_I [\exists e_I [t_P^1 = t_0 \wedge \tau(e_I) < t_P^1 \wedge P(e_I)(w_I)]]$

The past tense operators impose relations between the local evaluation time t_0 , the time of the modified eventuality and a *perspective time* t_P ; while the *reference time* accounts for narrative progression, the distinct notion of *perspective time* is motivated by discourses involving, e.g. *extended flashbacks* (Kamp & Reyle 1993). For stative sentences, the perspective time refers to a previously mentioned eventuality in discourse that is located in the past (i.e. before t_0 , which refers to the speech time when free, or the attitude holder's *now* when bound by the complementizer (Abusch 1997)); the described state is located in the past by virtue of overlapping this perspective time, e.g. the state of looking pale in (1b) overlaps the past event of Lev's arrival, which serves as the perspective time.

Whether a state overlaps the attitude holder's *now* depends on the reference time settings in the matrix and the embedded clause. For example, consider the translation of (1b)/(2b) below, which follow from (i)-(iii) and a standard definition of the indirect speech verb *skazat'* ('say'), which I assume to be a four-place predicate that takes in a proposition (a set of world-time pairs), an individual, an event and a world.

- (iv) $PST_{Event} Lev\ skazat'^1\ \check{c}to\ PST_{State}\ ja\ vygljadet'\ blednym^2 \rightsquigarrow$
 $\lambda w_I [\exists e_I [t_P^1 = t_0 \wedge \tau(e_I) < t_P^1 \wedge say(\lambda t_0 \lambda w_2 [\exists s_I [t_P^2 < t_0 \wedge t_P^2 \cap \tau(s_I) \neq \emptyset$
 $\wedge look.pale(I)(s_I)(w_2) \wedge t_R^2 \subseteq \tau(s_I)])](lev)(e_I)(w_I) \wedge \tau(e_I) \subseteq t_R^1]]$

The reference time variables t_R^1 and t_R^2 in (iv) could refer to the same or different reference times depending on the surrounding discourse. Assuming that they get assigned the same value (viz. (1b)), the desired results are predicted: (iv) entails that the state of looking pale overlaps Lev's *now*. Assuming that t_R^2 is assigned a value that precedes the value of t_R^1 (viz. (2b)), (iv) does not entail temporal overlap.

EXTENSION: Assuming that an imperfective predicate with a progressive interpretation describes a state which contains the reference time (Kamp 1979 *et seq.*), the proposed analysis correctly predicts that when such predicates are embedded, they allow temporal overlap if the reference time in the matrix and the embedded clause is the same. In contrast, when an imperfective predicate has a *statement of fact* interpretation (e.g. Grønn 2003), I propose that the consequent state of the described event contains the reference time. As a result, if the reference time in the matrix and the embedded clause is the same, the consequent state of the event—rather than the event itself—overlaps the attitude holder's *now*. Finally, assuming that perfective (episodic) predicates describe an event whose time is contained in the reference time (Kamp 1979 *et seq.*), temporal overlap is not possible with such predicates, regardless of the reference time settings.

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