Narrative Effects in Russian Indirect Reports and What They Reveal About the Meaning of the Past Tense

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1. The role of reference time in the interpretation of indirect reports

Ever since the seminal work in (Kamp 1979, Hinrichs 1981; 1986, Kamp and Rohrer 1983, and Partee 1984), it has been generally held that temporal anaphora depends in part on the aspectual distinction between events and states. For example, consider Partee's classic example in (1). Here, the times of the described events (i.e. John's getting up, going to the window, raising the blind, going back to bed) correlate with the order of appearance, i.e. a *narrative progression* is invoked. On the other hand, the states described in (1) (i.e. being light out, not being ready to face the day, being depressed) hold throughout the described events, i.e. a *narrative halt* is invoked.

(1) John got up, went to the window, and raised the blind. It was light out. He pulled the blind down and went back to bed. He wasn't ready to face the day. He was too depressed (Partee 1984: 253).

To account for the narrative effects in discourses such as (1), the following has been proposed in the literature on temporal anaphora:

(2) TEMPORAL LOCATION

Whereas the truth conditions for an eventive sentence require that the described event occur within the *reference time*—i.e. the topical interval of time previously introduced in discourse—the truth conditions for a stative sentence require that the described state hold throughout the reference time (Kamp 1979, Hinrichs 1981; 1986, Kamp and Rohrer 1983, and Partee 1984).

(3) UPDATE OF REFERENCE TIME¹

An eventive predicate updates the reference time to the duration of the consequent state of the described event (Webber 1988); a stative predicate does not update the reference time (Hinrichs 1981; 1986, and Kamp and Rohrer 1983).

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¹ It has also been proposed that eventive predicates updates the reference time to a time "immediately after" the described event and stative predicates update the reference time to the duration of the described state (Partee 1984). As far as I can tell, the generalizations made in this paper do not depend on which version of the rule is chosen.

(4) REFERENCE TIME RESOLUTION²
Unless there exists contextual justification to the contrary, a described eventuality is by default located in time relative to the most recent reference time that is made salient in discourse (after Kamp 1979, Hinrichs 1981; 1986, Kamp and Rohrer 1983, Partee 1984, and Webber 1988).

Let us see how (2)-(4) apply to the discourse in (1). Given (3), the eventive predicate *got up* updates the reference time to the consequent state of that event. Given the default condition in (4), this is the reference time relative to which the going to the window event is located in time. Finally, given (2), the going to the window event is contained within the consequent state of the getting up event. Applying the rules in this way, we also derive that the raising the blind event is contained within the consequent state of the going to the window event. On the other hand, the state of being light out contains (rather than being contained within) the consequent state of the raising the blind event given (2) and the default condition in (4). Moreover, since stative predicates do not update the reference time, the pulling the blind down event is contained within the consequent state of the raising the blind event given (2) and the default condition in (4)—and so on; see Fig. 1, where the underscore lines represent the consequent state of a described event.

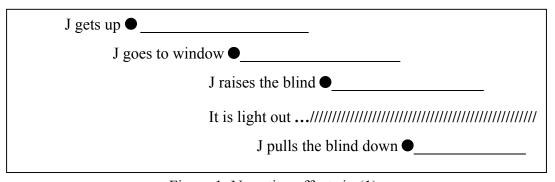


Figure 1: Narrative effects in (1)

The goal of this paper is to investigate narrative effects in indirect reports like (5b). These constructions consist of a matrix clause that contains an indirect speech or an attitude verb which describes an eventuality v_1 and a complement clause that contains a predicate which describes an eventuality v_2 .

- (5) a. *V prošlom godu v bare ja do-li-l* bakal Dudkina i In last year at bar I PFV-pour-PST.1s glass Dudkin and 'Last year, at a bar, I filled up Dudkin's glass and
 - b. skaza-l, čto ja xote-l emu sobščit' čto-to prijatnoe.

 PFV say-PST.1s that I want_{IPF}-PST.1s him announce something pleasant said that I wanted to inform him of something pleasant.'

² This rule is not meant to capture the complex nature of reference time resolution, which is intimately connected with the rhetorical structure of discourse (Kamp and Reyle 1993). It merely states a default condition that may be overridden.

These eventualities could be ordered in the following ways: v_2 overlaps/precedes/follows v_1 . I argue that (2)-(4) play a crucial role in the temporal ordering of v_1 and v_2 analogous to unembedded eventualities in discourse viz. (1). Although the core data comes from Russian, the generalizations made in this paper presumably apply to other languages as well. Russian is chosen because I would like to address the following question, which has not received a satisfactory answer in the literature: when do Russian indirect reports have a reading in which the eventualities described by the embedded and the matrix predicate overlap in time (henceforth: overlapping reading)?

Let us begin our investigation by considering the discourse in (5) more closely, where the following inferences are made: (i) the speaker's report described in (5b) follows the speaker's filling up the glass described in (5a) and (ii) the state of wanting to inform described in (5b) holds at the time of the filling up event and continues to hold throughout the speaker's report. Let us now consider what (2)-(4) predict about the temporal order of the eventualies described in (5). Given (3), the reference time in (5a) is updated to the consequent state of the filling up event. Given the default condition in (4), this is the reference time in the matrix clause of (5b). What about the reference time in the embedded clause? The default condition in (4) tells us that it is the consequent state of the saying event. Given (2), the wanting to inform state holds throughout this consequent state, while the saying event holds within the consequent state of the filling up event. As result, we account for the fact that (5b) entails that the eventualities described by the matrix and the embedded clause overlap in time; however, we do not account for the inference that the state of wanting to inform holds at the time of the filling up event:

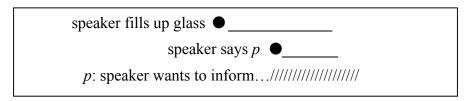


Figure 2: Narrative effects in (5) given the default condition in (4)

One could say that world knowledge about the typical duration of a wanting state accounts for this inference. Alternatively, one could say that the default condition in (4) is overridden: the embedded predicate "disregards" the reference time update of the eventive matrix verb in (5b) and "chooses" the reference time that is updated by a preceding eventive predicate in (5a). On such a view, the reference time in the embedded clause of (5b) would be the same as the reference time in the matrix clase. Given (2), the saying event would thus hold within the consequent state of the filling up event and the wanting to inform state would holds throughout it:

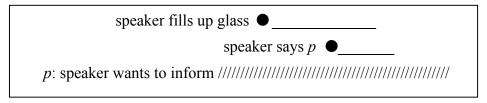


Figure 3: Narrative effects in (5) given an override of the default condition in (4)

Potential evidence that the embedded predicate in (5b) does, in fact, "disregard" the reference time update of the eventive matrix verb comes from (6) and (7).

- (6) a. *V prošlom godu Dudkin razve-l-sja s ženoj.*In last year Dudkin ^{PFV}seperate-PST.3s-REFL with wife 'Last year Dudkin divorced his wife.'
 - b. #*On by-l* sčastlivym xolostjakom. He be_{IPF}-PST.3s happy bachelor 'He was a happy bachelor.
- (7) a. *V prošlom godu Dudkin razve-l-sja s ženoj.* In last year Dudkin ^{PFV} seperate-PST.3s-REFL with wife 'Last year Dudkin divorced his wife.'
 - b. #Ja slyša-l, čto on by-l sčastlivym xolostjakom.

 I PFV hear-PST.1s that he be_{IPF}-PST.3s happy bachelor

 'I heard that he was a happy bachelor.'

The continuation in (6b) is infelicitous because asserting that Dudkin was a happy bachelor at the time of his divorce is absurd. And as illustrated in (7b), embedding (6b) under an attitude does not improve the infelicitous status of the discourse. This observation is mysterious if assume that the reference time in the embedded clause is revolved to the consequent state of the hearing event desribed by (7b). On the other hand, this observation is expected if we assume that the default condition in (4) is overridden in indirect reports: the embedded predicate "disregards" the reference time update of the eventive matrix verb in (7b) and "chooses" the reference time that is updated by a preceding eventive predicate in (7a).

A question that remains is: what is responsible for the override of the default condition in (4)? One hypothesis would be to say that the past tense on the embedded predicate is responsible for the override; it ensures that the reference time in the embedded clause precedes the time of the event described by the matrix clause. This hypothesis is addressed in §3.2. For the time being I will assume that we can identify the reference time in the embedded clause of an indirect report based on our intuitions about the temporal ordering of eventualities—e.g. we know that the consequent state of the speaker filling up Dudkin's glass is the reference time in the embedded clause of (5b) since we understand the wanting to inform state to hold before the filling up the glass event (and continuing to hold throughout this event).

Let us now consider the indirect report in (8b), which is identical to (5b) but has a different interpretation due to the surrounding discourse. Here, an overlapping reading is not entailed (though it is compatible with 8b)—e.g. the speaker's desire to inform Dudkin of something pleasant may never have ceased or this desire may have ceased shortly before the time of his report.

(8) a. Včera Lev menja sprosi-l: "Počemu ty reši-l pojti
Yesterday Lev me PFV ask-PST.3s why you decide-PST.2s PFV go.INF
v bar s Dudkinym?"
to bar with Dudkin

'Yesterday Lev asked me: "Why did you decide to go to the bar with Dudkin."

b. *Ja skaza-l, čto ja xote-l emu sobščit' čto-to prijatnoe*. I ^{PFV}say-PST.1s that I want_{IPF}-PST.1s him announce something pleasant 'I said that I wanted to inform him of something pleasant.'

Given (3), the reference time in (8a) is first updated to the consequent state of the speaker's asking, then to the consequent state of hearer's decision. However, the saying event in (8b) is understood to be located in time relative to the former consequent state, not the latter. After all, answers follow rather than precede the question to which they correspond to. For example, consider the discourse in (9). Here, Obama's reply is understood to follow the question asking rather than the havoc raising.

(9) The reporter asked a provoking question to Obama. It raised havoc all around the country. I wonder why. After all, the candidate replied as best as he could.

Therefore, I assume that the reference time in the matrix clause of (8b) is resolved to the consequent state of the speaker's asking in (8a) due to extra-linguistic reasoning analogous to (9). What about the reference time in the embedded clause of (8b)? Since we understand the wanting state to hold during the decision to go to the bar, the reference time in the embedded clause of (8b) is the consequent state of the decision. Given (2), the saying event thus holds within the consequent state of the asking, while the wanting to inform state holds throughout the consequent state of the decision. As result, it is correctly predicted that (8b) does not entail that the eventualities described by the matrix and the embedded clause overlap in time:

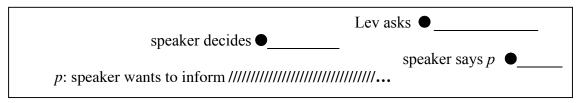


Figure 4: Narrative effects in (8) do not trigger an overlapping reading

In sum, we have seen that when an embedded clause of an indirect report is stative and the reference time overlaps the time of the matrix eventuality, an overlapping reading is entailed. This generalization automatically follows from (2). However, it is quite different from what has been proposed in the literature on (Russian) indirect reports. Previous researchers have addressed the question of what allows an embedded eventuality to overlap in time with a matrix eventuality by appealing to properties of grammatical elements such as *tense*, *aspect* and *verb*. In the next section, I attempt to show how some of the previous generalizations—although incorrect—raise some interesting questions about the temporal interpretation of indirect reports that require

further research. Subsequently, in §3, I consider what narrative effects in indirect reports reveal about the meaning of the past tense. I present novel data and argue that a standard theory which holds that the past tense requires a reference time to precede the *local evaluation time* cannot be right if by "reference time" we mean the topical interval of time previously introduced in discourse that accounts for narrative progression. Moreover, I argue that a theory of tense that assumes a richer ontology of times—such as the one in Kamp and Reyle 1993—could be extended to account for the indirect report indirect report data that the standard theory of tense cannot.

2. Previous research on Russian indirect reports

Forbes (1914) argued that Russian indirect reports allow an overlapping reading only if embedded tense is non-past. This generalization has independently resurfaced in much of the literature on this topic (e.g., Comrie 1985; 1986, Kondrashova 1998; 2006, Kusumoto 1999, Schlenker 2003; 2004, von Stechow 2003, and Babyonyshev and Matushansky 2006). While this generalization is false (see 5 and data in §5), it is surprising that so many researchers have concluded from indirect reports that are similar to those provided in the previous section—albeit without a supporting context—that an overlapping reading is not possible with the embedded past tense. The question then, is: what (if anything) does this reveal about the temporal properties of these constructions? A natural hypothesis is to say that by default, the reference time in the embedded clause of an indirect report precedes the reference time in matrix clause. This hypothesis, along with the implicative nature of the past tense, could possibly explain why past researchers have (incorrectly) generalized from out-of-the-blue indirect reports that an overlapping reading is not possible with the embedded past tense. Future research will hopefully shed light on whether such a hypothesis is correct.

In contrast to the aforementioned researchers, Khomitsevich (2008) argues that an overlapping reading is possible only if the embedded predicate is imperfective.³ However, Khomitsevich does not say why only the imperfective should allow an overlapping reading and why an overlapping reading is often not possible with this aspect (viz. 8). Moreover, as illustrated below in (11), which is an indirect report of (10c), an overlapping reading is, in fact, possible with an embedded perfective predicate when it receives a habitual interpretation; see also (12), where Alexey's habit of never giving in is understood to hold (though need not be instantiated) at the time of the knowing.

- (10) a. Akter (Krivomu Zobu): Valetom xod-i... valetom, čert!

 Actor (Crooked Goiter): Jack go.IMP jack, devil

 'Actor (to Crooked Goiter): Play your Jack...your Jack, dammit!'
 - b. Baron: A u nas—korol'.

 Baron: But to us king 'Baron: And we play the king.'

³ This conclusion is independently reached for indirect reports in Romance (see Giorgi and Pianesi 1997; 2000 for Italian and Gennari 2001 for Spanish).

c. Klešč: Oni vsegda po-b'-jut. Klesh: They always PFV-win-NPST.3p 'Klesh: They always win.'

d. Satin: *Takaja u nas privyčka*.

Satin: This to us habit

'Satin: We make it our habit...' (Gor'kij, *Na dne*; Forsyth 1970: 175)

- (11) Klešč skaza-l, čto oni vsegda po-b'-jut. Klesh PFV say-PST.3s that they always PFV-win-NPST.3p 'Klesh said that they always win.'
- (12) Ona zna-l-a, čto v situacijax, sxodnyx s segodnjašnej,
 She know_{IPF}-PST.3s-FEM that in situations prevailing from today
 Aleksej nikogda ne ustup-it.
 Alexey never not PFV give.in-NPST.3s
 'She knew that in such situations as that prevailing today, Aleksey never gave in.'
 (Aksenov, Kollegi; Forsyth 1970: 178)

That data above reveal that the imperfective is not a necessary condition for an overlapping reading. This is not surprising if we assume following Bittner 2008 that analogous to stative sentences, the truth conditions for a habitual sentence require that the described habit contain the reference time.

Finally, it is worthwhile to note that Boeck (1957; 1958) and Costello 1960/1) have argued that Russian indirect reports with an embedded past tense allow an overlapping reading as long as the matrix verb is an attitude as opposed to an indirect speech verb. These authors conclude that it is not the tense or the aspect of the embedded predicate that is responsible for an overlapping reading (or the lack thereof), but rather the semantic properties of matrix verb. While this generalization is also false (see 5 and data in §5), it is unclear at this point what it reveals about the temporal properties of indirect reports. 5

3. The role of the past tense in the interpretation of indirect reports

3.1. *Predictions of the standard theory*

In this section I would like to consider what the standard theory of tense—which says that the past tense requires a reference time to precede the *local evaluation time*—predicts about indirect reports like (13b), which crucially differ from (5b)/(8b) in

⁴ See also Forsyth 1970, Brecht 1975, Barensten 1996, Altshuler 2004, and Khomitsevich 2008.

⁵ It may worthwhile to note, however, that Brasoveanu and Farkas (2007) have recently claimed that attitude and indirect speech reports have different anaphoric properties. I leave it open for further research whether the observed differences affect the temporal interpretation of these constructions.

that the embedded predicate is eventive (cf. the perfective marking on the embedded verb):

- (13) a. *Dudkin soverši-l ubijstvo v tom zdanii*.

 Dudkin ^{PFV}committ-PST.3s murder in that building 'Dudkin committed murder in that building.'
 - b. *Mne Anja skazala,* čto on u-beža-l s aktrisoj. Me Anna PFV say-PST.3s that he PFV-run-PST.3s with actress 'Anna told me that he ran away with an actress.'

Given (3), the reference time in (13a) is updated to the consequent state of the murder. Given the default condition in (4), this is the reference time in the matrix clause of (13b). This is also the reference time in the embedded clause of (13b) since we understand the running away event to *follow* the murder described in (13a). Given (2), the saying and the running away events are contained in the consequent state of the murder. But how do we account for the intuition that the running away event precedes the saying event?

In order to see what the standard theory of tense predicts, let us assume that the tenseless sentence on ubegat' ('he run away') is translated as in (14) and the past tense has the translation in (15). Note that I adopt the following conventions: (i) τ is a trace function assigning to eventualities in its domain their running time (Link 1987), (ii) t_0 refers to the speech time when free, or the attitude holder's now when bound by the complementizer (Abusch 1997, Heim 1994, and von Stechow 1995; 2003) and (iii) a free time variable t_R^n refers to a reference time r, which is a topical interval of time inherited from the context in which the sentence is interpreted.

(14) on ubegat'
$$\rightsquigarrow \lambda t_l \lambda w_l [\exists e_l [run.away(he)(e_l)(w_l) \land \tau(e_l) \subseteq t_l]]$$

(15) PST¹ $\rightsquigarrow \lambda R_{iot} \lambda w_l [t_R^{-1} < t_0 \land R(t_R^{-1})(w_l)]$

If we assume that the embedded past tense in (13b) is *deictic*, i.e. t_0 refers to the speech time, then (13b) would have the translation in (16), where the argument of *skazat*' ('say') is a set a set of worlds:

(16) PST¹ Anja skazat' čto PST² on ubegat'
$$\rightsquigarrow$$

$$\lambda w_{I}[\exists e_{I}[t_{R}^{1} \leq t_{0} \land say(\lambda w_{2}[\exists e_{2}[t_{R}^{2} \leq t_{0} \land run.away(he)(e_{2})(w_{2}) \land \tau(e_{2}) \subseteq t_{R}^{2}]])(anna)(e_{I})(w_{I}) \land \tau(e_{I}) \subseteq t_{R}^{1}]]$$

If, on the other hand, we assume that embedded past tense in (13b) is bound, i.e. t_0 refers to the attitude holder's *now* rather than the speech time, then (13b) would have the translation in (17); the propositional argument of *skazat*' ('say') is now a set of world-time pairs (rather than a set of worlds):

(17) PST¹ Anja skazat' čto PST² on ubegat'
$$\sim$$

$$\lambda w_{I} [\exists e_{I} [t_{R}^{1} \leq t_{0} \land say(\lambda w_{2} \lambda t_{0} [\exists e_{2} [t_{R}^{2} \leq t_{0} \land run.away(he)(e_{2})(w_{2}) \land \tau(e_{2}) \subseteq t_{R}^{2}]])(anna)(e_{I})(w_{I}) \land \tau(e_{I}) \subseteq t_{R}^{1}]]$$

I will now show that both (16) and (17) are problematic given the following two assumptions:

- (18) By "reference time" we mean the topical interval of time previously introduced in discourse that accounts for narrative progression.
- (19) The identity of the reference time in the matrix and the embedded clause of (13b) is necessary to account for the intuition that the saying event and the running away event follow the murder described in (13a).

I begin with (16). The reference time variables t_R^{-1} and t_R^{-2} could refer to the same or different reference times depending on the surrounding discourse. Assuming that that they get assigned the same value, a forward shifted reading⁶ and an overlapping reading⁷ are wrongly predicted to be possible; Fig. 4 illustrates the two temporal ordering of events that are compatible with (16).

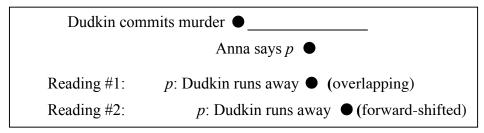


Figure 5: two possible temporal ordering of events given (16)

Let us now consider (17), where the propositional argument of *skazat*' ('say') is a set of world-time pairs (rather than a set of worlds). Since the saying event holds within the reference time denoted by t_R^1 , while the reference time denoted by t_R^2 precedes

⁶ Abusch (1997) rules a forward-shifted reading via the *Upper Limit Constraint* (Abusch 1997: 23-25).

⁷ It has been argued by Kusumoto (1999; 2005) that in English, an overlapping reading is possible when the embedded predicate is eventive. If such were the case, then presumably the fact that an overlapping reading is not rule out would be a welcomed result (though of course one would still need to explain why the overlapping reading is not possible in 13b). Kusumoto provides the example in (i) and observes that it can correspond to the direct speech report "Ichiro strikes out", as uttered by an announcer.

⁽i) The announcer said that Ichiro struck out (Kusumoto 2005: 324).

Note, however, that when an announcer reports live sporting events, he typically uses the present tense so that the sports fan perceives the described event as "ongoing" even though it has already taken place—e.g. when an announcer says "Ichiro strikes out", he says this after Ichiro's bat has gone through the strike zone—i.e. what he really means is "Ichiro has just struck out". After all, a striking out event is instantaneous and it is not clear how an announcer could report such an event while it is taking place (no matter how fast he is able to talk). To the best of my knowledge, there are no convincing cases where an overlapping reading is possible when the embedded predicate is eventive (see Gennari 2003 where this point is also made). This is especially clear in Russian, where an episodic perfective predicate in the embedded clause of an indirect report never allows an overlapping reading.

the counterpart of the saying time, namely the attitude holder's *now*, filling in the same value for t_R^{-1} and t_R^{-2} leads to a contradiction.⁸

In sum, I have presented an argument against the standard theory of tense which crucially relies on the assumptions in (18) and (19). While I take (18) to be well motivated, one could question the assumption in (19). However, in doing so, one must then be able to account for the temporal ordering of events described in (13b) relative to the event described in (13a). Instead of trying to rescue the standard theory in this way (which is a non-trivial task), I believe it is more fruitful to consider why this theory fails given the assumptions above. Its failure seems to be due to the fact that the reference is being asked to do too many things at once—not only is it being asked to account for narrative progression, but it is also being asked to locate the described eventuality relative to the local evaluation time (albeit indirectly). Based on data orthogonal to indirect reports, Kamp and Reyle (1993) reach a similar conclusion. They argue that the "reference time" encoded by the tense should not be held accountable for narrative progression. Only the "reference time" encoded by the aspect should have this function. In the next section, I briefly outline Kamp and Reyle's motivations for such a view and extend their proposed analysis to indirect reports. I show that this analysis can account for the indirect report data considered thus far.

3.2. Kamp and Reyle's analysis of the past tense extended to indirect reports

Kamp and Reyle (1993) propose that the (simple) past tense is "...ambiguous between (at least) two different relation pairs. When the past tense sentence...[is eventive]...then its tense always corresponds to the pair <TPpt coincides with utterance time; described eventuality before TPpt>. When...[the past tense sentence is stative]...the corresponding relations may be <TPpt before the utterance time; described eventuality overlaps TPpt>" (Kamp and Reyle: 597):

(20)
$$PST^{1}_{Event} \sim \lambda P_{\varepsilon \omega t} \lambda w_{I} [\exists e_{I} [t_{P}^{1} = t_{0} \wedge \tau(e_{I}) < t_{P}^{1} \wedge P(e_{I})(w_{I})]]$$

$$PST^{1}_{State} \sim \lambda R_{\sigma \omega t} \lambda w_{I} [\exists s_{I} [t_{P}^{1} < t_{0} \wedge t_{P}^{1} \cap \tau(s_{I}) \neq \emptyset \wedge R(s_{I})(w_{I})]]$$

Note that 'TPpt'—represented as t_P in the formulas above—corresponds to a *perspective time* (or *temporal perspective point*). But what is the nature of a *perspective time*? It is important to note that Kamp and Reyle's motivations for proposing such a time are quite independent of indirect reports. Due to space limitations, I will only outline one their

⁸ Here I make the standard assumption that the lexical semantics of an indirect speech (or attitude) verb ensures that time of the attitude holder's report in the actual world is identified with the attitude holder's now in some possible world. This assumption is necessary since even if the attitude holder is clueless (or wrong) about what time it is, the bound t_0 still represents his now and not his past or future. That is, the attitude holder does not believe himself to be living in the past or future of whatever time he may believe it to be (even if he has a false belief about what time it is). See Lewis 1979, and von Stechow 1995 for more discussion of this point.

⁹ This is a grossly simplified version of Kamp and Reyle's analysis of the simple past tense. It is presented as such for the sole purpose of deriving the indirect report data considered thus far. I refer the reader to Kamp and Reyle 1993, Chap. 5 for intricate details of their proposal.

motivations (see Kamp and Reyle 1993, Chap. 5 for more discussion) and then move on to consider some evidence that Kamp and Reyle provide for the view that the (simple) past tense is ambiguous viz. (20).

Ever since Reichenbach 1947, it has been generally held that temporal interpretation is determined by relating (at least) three distinct times: the *reference point* (or *reference time*), the *event time* and the *speech time*. This view is made more finegrained in Kamp and Reyle 1993, where it is argued that: "Reichenbach went astray when he wanted his notion of reference point to do too many things at once." Kamp and Reyle observe that in discourses such as (21), which involve the so-called *extended flashback*, all the past perfect clauses use the time of the arriving as their "reference point." However, these clauses also form a narrative progression and therefore each clause also provides a "reference point" for the clause following it—a time which the eventuality described by the second clause must follow or overlap.

(21) Fred arrived at 10. He had got up at 5; he had taken a long shower, had got dressed and had eaten a leisurely breakfast. He had left the house at 6:30 (Kamp and Reyle 1993: 594).

To account for the temporal ordering in (21), Kamp and Reyle propose that Reichenbach's notion "reference point" should be broken up into two distinct notions, which play entirely different roles. They write (Kamp and Reyle 1993: 594):

"We propose to retain the term *reference point* for the type of reference time which accounts for narrative progression...For reference times that arise in two-dimensional analysis of the past perfect, we will use the term *temporal perspective point*...This term is meant to reflect our intuition that the intermediate time which Reichenbach recognized as essential to the interpretation of past perfects is the time *from which* the described eventuality is seen as past".

Thus in (21), Fred's arrival is the perspective time relative to which all the events denoted by the past perfect predicates are located in time. Moreover, the narrative progression in (21) is accounted for if we assume that the reference time of a past perfect predicate is updated to the duration of the consequent state of the described event (see Kamp and Reyle 1993: 606-609 for a detailed description of the analysis).

Let us now consider some evidence that Kamp and Reyle provide for the view that the (simple) past tense is ambiguous viz. (20). They observe that in (23) and (24) the adverb *now* refers to a past interval of time, which serves as the perspective time for and in virtue of which the described eventualities (i.e. feeling at home and writing a letter respectively) are seen as past.¹⁰

¹⁰ Some native speakers of English feel that (23) and (24) are marginal. However, when presented with more naturally occurring examples, such as (ii), these speakers have no problem accepting the fact that *now* can refer to a past interval of time.

⁽ii) The student-mistress was much younger than Sabina, and the musical composition of her life had scarcely been outlined; she was grateful to Franz for the motifs he gave her to insert. Franz's Grand March was now her creed as well. Music was now her Dionysian intoxication (*The Unbearable Lightness of Being*; Milan Kundera).

- (23) Mary had been unhappy in her environment for more than a year. But now she felt at home (Kamp and Reyle 1993: 595).
- (24) Bill had come home at seven. Now he was writing a letter (Kamp and Reyle 1993: 596).

In contrast to the examples above, (25) shows that *now* cannot modify eventive sentences in the past tense. This contrast is also evident in Russian (see 28) and in French. 11,12

- (25) #Bill had come home at seven. Now he wrote a letter (Kamp and Reyle 1993: 596).
- (26) Maša čuvstv-ova-l-a sebja nesčastnoj v ètoj srede bol'še goda.

 Masha feel-IPF-PST.3s-FEM self unhappy in this environment more year

 No teper' ona (#po-) čuvstv-ova-l-a sebja zdes' kak doma.

 But now she PFV- feel-IPF-PST.3s-FEM self here like home

 'Mary had been unhappy in her environment for more than a year. But now she felt at home.'

The data above suggests that the perspective time for an eventive past tense sentence must coincide with the utterance time, while the perspective time for a stative past tense sentence may be some past time that is determined by the context, typically the running time of an event described previously in discourse. If this is right, then the relations between the perspective time and described eventuality imposed by the past tense must be the ones in (20): for eventive sentences, the described eventuality precedes the perspective time (i.e. since the perspective time coincides with the utterance time), while for stative sentences, the described eventuality overlaps the perspective time (i.e. since the perspective time precedes the utterance time).¹³

Let us now apply Kamp and Reyle's analysis of tense to indirect reports. In doing so, I would like to make the following assumption: an embedded past tense is always bound. Given this assumption, let us reconsider the discourse in (13), repeated below in (27):

¹¹ Note that the Russian adverb *sečas* is also translated as 'now'. When this adverb refers to the present moment, it typically co-occurs with perfective predicates (Padučeva 1996). When occurring with an imperfective predicate, this adverb is not deictic (see 38, where it refers to the attitude holder's *now*) or it has the meaning of "just now" (as in *Ja sečas razgovarival s direktorom* 'I talked to the director just now'). See Mel'čuk 1985 for an extensive discussion of the difference between *sečas* and *teper*'.

¹² Kamp and Reyle point claim that difference between the Passé Simple and the Imparfait in French "roughly corresponds to that between -STAT and +STAT [i.e. eventive vs. stative]. The word *maintenant* ('now') goes with Imparfait but not with Passé Simple" (Kamp and Reyle 1993: 595).

¹³ The view that tense is sensitive to the lexical properties of verbs has some cross-linguistic appeal (in addition to the English, Russian and French facts noted above). As argued in Baker and Travis 1998, the Mohawk past tense morpheme *hne* 'can only attach to stative predicates. Future research will hopefully reveal other languages where similar restrictions are found.

- (27) a. *Dudkin soverši-l ubijstvo v tom zdanii*.

 Dudkin ^{PFV}committ-PST.3s murder in that building 'Dudkin committed murder in that building.'
 - b. *Mne Anja skazala, čto on u-beža-l s aktrisoj.* Me Anna ^{PFV}say-PST.3s that he PFV-run-PST.3s with actress 'Anna told me that he ran away with an actress.'

Recall that (27) is a problem for the standard theory of tense because either it does not rule out non-existing readings or it derives a contradiction when the reference times in the matrix and the embedded clause are identified. On the other hand, as illustrated by (28), which is a translation of (27b), assuming Kamp and Reyle's meaning for the "eventive" past tense allows us to rule out an overlapping reading even if the reference time in the matrix and the embedded clause is identical. Such is the case because the embedded "eventive" past tense ensures that the running away event precedes the attitude holder's now; see Fig. 6.

(28) PST¹_{event} Anja skazat' čto PST²_{event} on ubegat'
$$\rightarrow$$
 $\lambda w_I [\exists e_I [t_P^1 = t_0 \land \tau(e_I) < t_P^1 \land say(\lambda w_2 \lambda t_0 [\exists e_2 [t_P^2 = t_0 \land \tau(e_2) < t_P^2 \land run.away(he)(e_2)(w_2) \land \tau(e_2) \subseteq t_R^2]])(anna)(e_I)(w_I) \land \tau(e_I) \subseteq t_R^1]]$

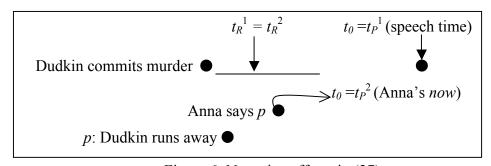


Figure 6: Narrative effects in (27)

By requiring the described event to precede the attitude holder's *now*, the embedded "eventive" past tense not only accounts for the fact that (27b) entails an non-overlapping reading, but it also prevents the described event from being located in time relative to a reference time that is updated by an indirect speech (or attitude) verb. In this way, the observation that the "eventive" past tense overrides the default condition in (4) is not surprising, i.e. we account for the observation that the embedded predicate "disregards" the reference time update of the eventive matrix verb in (27b) and "chooses" the reference time that is updated by a preceding eventive predicate in (27a).

I conclude this section by showing that the "stative" past tense is compatible with the temporal ordering of events in (5) and (8), repeated below in (29) and (30) respectively; the translation of the indirect report in (29b)/(30b) is given in (31).

(29) a. *V prošlom godu v bare ja do-li-l* bakal Dudkina i In last year at bar I PFV-pour-PST.1s glass Dudkin and 'Last year, at a bar, I filled up Dudkin's glass and

- b. *skaza-l*, *čto ja xote-l emu sobščit' čto-to prijatnoe*.

 PFV say-PST.1s that I want_{IPF}-PST.1s him announce something pleasant said that I wanted to inform him of something pleasant.'
- (30) a. *Včera Lev menja sprosi-l*: "Počemu ty reši-l pojti
 Yesterday Lev me PFV ask-PST.3s why you decide-PST.2s PFV go.INF
 v bar s Dudkinym?"
 to bar with Dudkin
 - 'Yesterday Lev asked me: "Why did you decide to go to the bar with Dudkin."
 - b. *Ja skaza-l, čto ja xote-l emu sobščit' čto-to prijatnoe.* I PFV say-PST.1s that I want_{IPF}-PST.1s him announce something pleasant 'I said that I wanted to inform him of something pleasant.'
- (31) PST¹_{Event} Dudkin skazat² čto PST²_{State} on xočit sobščit² \rightsquigarrow $\lambda w_I[\exists e_I[t_P^1 = t_0 \land \tau(e_I) < t_P^1 \land say(\lambda w_2 \lambda t_0[\exists e_2[t_P^2 < t_0 \land t_P^2 \cap \tau(s_I) \neq \emptyset \land want.to.inform(he)(e_2)(w_2) \land t_R^2 \subseteq \tau(s_I)]])(dudkin)(e_I)(w_I) \land \tau(e_I) \subseteq t_R^1]]$

Fig. 6 and Fig. 7 illustrate the contribution of the embedded "stative" past tense in (29b) and (30b) respectively. Note that I assume that I assume that the reference time in the matrix and the embedded clause of (29b) is the same (namely the consequent state of the filling up event) and the perspective time in the embedded clause is the time of filling up event; the perspective time in the matrix clause is the speech time. In (30b), I assume that the reference time in the matrix clause is the consequent state of the asking, while the reference time in the embedded clause is the consequent state of the deciding; the perspective time in the embedded clause is the time of the decision; the perspective time in the matrix clause is the speech time.

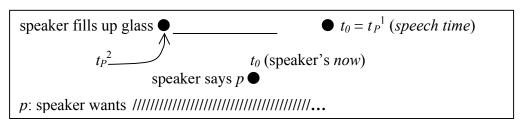


Figure 6: Narrative effects in (29)

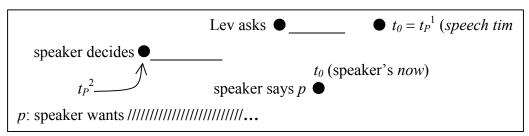


Figure 7: Narrative effects in (30)

Fig. 6 illustrates that a situation in which the state described by the embedded predicate contains the attitude holder's *now* is compatible with the requirement imposed by the "stative" past tense. Therefore, unlike the "eventive" past tense, the "stative" past tense does not override the default condition in (4). However, we should not conclude from this that the meaning of the "stative" past tense is inadequate. After all, it allows us to derive the overlapping and the non-overlapping reading in (29b) and (30b) respectively without any additional stipulations. After all, it could very well be the case that an embedded past tense overrides the default condition in (4) only when the embedded predicate is eventive; in cases where the embedded predicate is stative, the default condition in (4) is overriden by some other means. Potential evidence for such a view comes from (32b), where the embedded stative predicate does not have past tense morphology (which, in Russian, signals the use of the non-past tense) yet we understand the state of Krylov's house being on fire to hold at the time of Dudkin's arrival.

- (32) a. *Dudkin pri-exa-l domoj*. Dudkin PFV-go-PST.3s home 'Dudkin came home.'
 - b. *On skaza-l* Anne, čto požar v dome Krylova. He PFV say-PST.1s Anna that fire in house Krylov 'He told Anna that Krylov's house was on fire.'

Since it is highly unlikely that the non-past tense could override the default condition in (4), (32) suggests that this condition is overriden by some other means. If this is right, then a reasonable hypothesis would be to say that whatever overrides the default condition in (32) is also responsible for the override in (29b) and (30b). I leave this issue open for further research.

4. Conclusion

In this paper, I have argued that the rules that have been proposed to predict narrative progression in matrix sentences play a crucial role in the temporal ordering of eventualities described by an indirect report. I showed that it automatically follows from (2) that an overlapping reading is entailed by an indirect report with an embedded stative predicate if the reference time in the embedded clause overlaps the time of the matrix eventuality. This generalization is quite different from what has been proposed in the literature on (Russian) indirect reports. Previous researchers have addressed the question of what allows an embedded eventuality to overlap in time with a matrix eventuality by appealing to properties of grammatical elements such as *tense*, *aspect* and *verb*. I attempted to show how previous generalizations—although incorrect—raise some interesting questions about the temporal interpretation of indirect reports that require further research.

¹⁴ Note that Abusch (1997) showed that an overlapping reading could be derived without invoking a sequence of tense rule as long as the embedded past tense is interpreted deictically. The analysis advocated here shows that this reading could be derived without a sequence of tense rule even if the embedded past tense is bound.

Moreover, I considered what narrative effects in indirect reports reveal about the meaning of the past tense. I presented novel data and argued that a theory which holds that the past tense requires a reference time to precede the local evaluation time (Standard Theory) cannot be right if by "reference time" we mean the topical interval of time previously introduced in discourse that accounts for narrative progression. I argued that a theory of tense that assumes a richer ontology of times—such as the one in Kamp and Reyle 1993—could be extended to account for the indirect report data that the Standard Theory cannot. Many more examples of indirect reports—as they occur within a discourse—need to be considered to see if and how such a theory needs to be refined. The hope is that this paper provides a starting point in this regard.

5. Appendix: Russian past-under-past indirect reports with an overlapping reading

- (33) Anja zameti-l-a ne bez udivlen'ja, čto kamuški, ležaščie Anna PFV notice-PST.3s-FEM not without surprise that pebbles lying na polu, odin za drugim prevrašča-l-i-s' v kroxotnye pirožki. on floor one after other change_{IPF}-PST.3p-RFL into small pies "Alice noticed, with some surprise, that the pebbles were all turning into little cakes as they lay on the floor" (Nabakov, Alice in Wonderland; Barensten 1996).
- (34) Ona duma-l-a, čto Aleksej Aleksandrovič xote-l
 She think_{IPF}-PST.3p-FEM that Alex Alexandrovich want_{IPF}-PST.3p

 čto-to soobščit' ej prijatnoe dlja sebja ob etom dele i ona
 something announce her pleasant for self about this matter and she
 voprosami nave-l-a ego na rasskaz.
 questions PFV point-PST.3p-FEM him to story

 'She thought that Alex Alexandrovich wanted to inform her of something about this matter that pleased him, and through questions, she lead him to tell her the story' (Tolstoj, Anna Karenina).
- (35)Egoruška, kogda ešče ne gore-l koster i možno by-l-o Egorushka when still not burn_{IPF}-PST.3s fire and possible be_{IPF}-PST.3s-AGR videt' daleko, zameti-l, čto točno takoj-že staryj, pokosivšijsja PFV notice-PST.3s that exactly same old see_{IPF}-INF far na drugoj storone bol'šoj dorogi. krest stoja-l cross stand_{IPF}-PST.3s on other side big 'When the fire was still not burning and it was possible to see afar, Egorushka noticed that the very same, old, tilted cross stood on the other side of the big road' (Chexov, Step'; Costello 1961/62).

- (36) V 1915 gody A.C. Buturlin sta-l bolet'. On, kak vrač, In 1915 year A.C. Buturlin PFV become-PST.3s sick.INF he how doctor ne bez osnovanija predpolaga-l, čto u nego by-l rak. not without basis suspect_{IPF}-PST.3s that to him be_{IPF}-PST.3s cancer "In 1915, A.C. Buturlin became sick. Being a doctor, he suspected, not without basis for doing so, that he had cancer" (Tolstoy, Očerki bylogo; Costello 1961/62).
- (37) On skaza-l, čto ona žy-l-a blagodarja emu, i èto He PFV say-PST.3s that she live_{IPF}-PST.3s-FEM thanks him and this otnima-l-o počti vsju ego ežednevnuju energiju. take.away_{IPF}-PST-3s almost all his daily energy. "He said that she was living thanks to him, and that this was taking away almost all of his daily energy" (Mirzuitova, *Detstvo s Gurdžievym*).
- (38) On jasno poni-l, čto sejčas ot nego treb-ova-l-os'
 He clearly PFV understand-PST.3s that now from him expect-IPF-PST.3s-RFL tol'ko odno.
 only one
 "He clearly understood that there was only one thing expected from him now."
 (Mel'čuk 1985: 264)

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