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TIME REFERENCE IN INDIRECT SPEECH IN RUSSIAN
AS A NON-SOT LANGUAGE[*]

The paper deals with the interpretation of time reference in comprehension of indirect speech in Russian. The focus of the investigation is on the distinction between simultaneous and backward-shifted events in past-under-past condition. While many studies on indirect speech in Russian solely discuss tense forms, the paper is focused on the usage of verbal aspect in past-under-past condition. A sentence transformation test and a picture recognition task give first insights into aspect use, interpretation, and processing of indirect speech sentences in Russian.

Keywords: indirect speech, verbal aspect, tense, experimental methods, sentence transformation test, picture recognition task.

Introduction. Time reference in reported speech is an object of investigation especially in English linguistics. This interest has to do with the way English tenses behave in indirect speech. The following example demonstrates this peculiarity of English:

(1) *Mary said that she liked dogs.*
(1a) *Mary said: "I like dogs."*
(1b) *Mary said: "I liked dogs."*

The reported speech in (1) can refer to a report of the direct speech in (1a) or in (1b). The direct speech in (1a) has a simultaneous reading and in (1b) a backward-shifted reading. This phenomenon is known as sequence of tense (SOT). In case of a complement clause embedded under a past-marked verb, the verb tense in the complement clause agrees with the verb in the main clause, but differs from the tense used in the original direct speech (Costa & Branco, 2012, p. 87).

Other languages, like Russian, do not exhibit SOT. In (2), example (1) has been translated into Russian:

(2) *Маша сказала, что ей нравились собаки.*
   Maria say.PFV.PAST that she like.IPFV.PAST dogs.

The reading for the direct speech is only (2a):

(2a) *Маша сказала: «Мне нравились собаки.»*   *backward-shifted reading*
Maria say.PFV.PAST: "I like.IPFV.PAST dogs."
*(2b) *Маша сказала: «Мне нравятся собаки.»*   *simultaneous reading*
Maria say.PFV.PAST: "I like.IPFV.PRS dogs."

In the above-mentioned above readings, (2a) would be backward-shifted due to tense in the complement clause, but the indirect speech in (2) does not represent (2b). The correct transformation for (2b) we find in (2'):

(2') *Маша сказала, что ей нравятся собаки.*
Maria say.PFV.PAST that she like.IPFV.PRS dogs.

The complement clause embedded under a past-marked verb adopts the verb tense of direct speech but does not agree with the indirect clause as in SOT languages. The tense of direct speech is transferred into the subordinate sentence of indirect speech, regardless of the tense of the verb that introduces the complement clause. In Russian, there is a grammatical category of aspect. Simply explained, the aspect of a verb expresses how the situation described by the verb extends over time. In (2), the verb in the complement clause is in imperfective past form, but it could also be in the perfective aspect:

(2'') *Маша сказала, что ей понравились собаки.*
Maria say.PFV.PAST that she like.PFV.PAST dogs.

In the comparative research literature, Russian is often used as example of a non-SOT language (e.g., Komitsevich, 2007; Kubota et al., 2009; Minor, 2012; Altshuler, 2008). In past-under-past constructions, the authors do not mention the difference between IPF and PF past-under-past. They use examples with subordinated stative verbs or perception verbs in the main clause. Other verbs types, such as activities, accomplishments or achievements, for which verb aspect is relevant for their interpretation as backward-shifted or overlapping, are hardly or never discussed.

The aim of this paper is to answer the question of how sentences like (2') and (2'') are interpreted according to time reference, which I perceive to be a gap in the literature.

This paper is structured as follows: In the next section, I present the theoretical background and the current state of the relevant research. Then, I present my own empirical research. I introduce the data of a corpus study, as well as of two experiments, namely a sentence completion test and a picture recognition experiment. Finally, I summarize the results, discuss them, and reflect on further questions and possible future research.

Theoretical background. Most of the research on Russian reported speech concentrates on time reference in indirect speech, focusing verb tense without mentioning verbal aspect.[1] This kind of research literature compares Russian as non-

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[1] Another aspect concerning reported speech is the analysis of the time reference in sentences with perception verbs (Grønn & Stechow, 2010). In this paper, I will not go into perception but concentrate only on verbs of saying.

SOT language with English as an SOT language, demonstrating tense shift in English complement clauses by using examples like (3) and (3'):

(3) *Маша сказала, что Вова спит.*
(3') *Maria said that Vova was sleeping.*

English reported speech is ambiguous regarding the time relation between Maria's speaking and the described sleeping event. The sleeping event in (3') – the English translation of (3) – is reported as backward-shifted or simultaneous, whereas in (3), the present tense verb in the complement clause refers solely to simultaneity. The complement clause is in a present-under-past condition. A backward-shifted reading is impossible for present-tense Russian complement clauses. Instead, you get backward-shifted reading in the past-under-past condition, such as (4):

(4) *Маша сказала, что Вова спал.*

The sleeping event in reported speech (4) took place before Maria told it. In the following, I want to explain this time reference in indirect speech in Russian under the mentioned two conditions: present-under-past and past-under-past.

Let us start with a direct speech example found in the Russian National Corpus (RNC):

(5) *«С биатлонной командой работает замечательный специалист», сказал профессор.*
With the biathlon team work.IPFV.PRS a famous expert, say.PFV.PST professor.

(RNC «Izvestija», 2003.02.20)

The verb in (5) is in third person present tense. Referring to time reference, we can explicate that the mentioned *specialist* is working with the team at the speaking moment S.[2] Event E coincides with reported speech moment R. Example (6) represents example (5) in reported speech:

(6) *Профессор сказал, что с биатлонной командой работает замечательный специалист.*
The professor say.PVF.PST that with biathlon team work.IPFV.PRS a famous expert.

The verb in the complement clause (or 'dependent part' according to Barentsen, 1996, p. 15) is in present tense, as in the direct speech, whereas the main clause is in past tense. This phenomenon is known as present-under-past. The embedded present tense verb «marks a situation that was present at the time that the situation in the main clause held» (Costa & Branco, 2012, p. 87). In Figure 1, I illustrate the time reference for present-under-past. The arrow represents a time axis from past to future, R marks the point in time of the original utterance on the time axis, S tags the point in time of the indirect speech, and finally, and E labels the point in time at which the narrated event took place relating to R.[3]

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[2] The time when the speaker produces the utterance.
[3] According to Reichenbachian representations.

Figure 1: Time reference for present-under-past

We paraphrase (6) according to time reference: utterance S at t_1 reports that a speaker in t_0 says by R_0 that E in t_0.[4] Whereas in English the main verb determines the verb in the complement clause (agreement of tenses), Russian maintains time reference between R and E. A complement clause does not depend on the tense of the main verb (Barentsen, 1996, p. 15).[5] Thus, Russian does not know agreement of tenses. The present tense in the complement clause is a relative present that expresses simultaneity with a superordinate past (Grønn & Stechow, 2010, p. 110).[6] In example (5), we presented a direct speech that refers to an ongoing activity. In Example (7), we see a modification of example (5), transferring it into past tense:

(7) *«С биатлонной командой работал замечательный специалист», сказал профессор.*
With the biathlon team work.PST a famous expert say.PST professor.

The proposition in (7) refers to an event in the past. This event happened before speaking moment. When we transform the past direct speech into indirect speech in (8), the verb in the complement clause has to be past tense:

(8) *Профессор сказал, что с биатлонной командой работал замечательный специалист.*
The professor say.PST that with biathlon team work.PST a famous expert.

The complement clause refers to an event that is located somewhere before R_0. The time relation in the complement clause is called past-under-past.

So far, I have brought forward arguments concerning tense relation in complement clauses of reported speech according to the original direct speech. However, there is also another perspective on the interpretation of relation in indirect speech considering verbal aspect and its aspectual functions. As A. Barentsen (1996, p. 32) mentions, the choice of IPF present or IPF past in reported speech is «not a matter of tense but of aspect». Regarding verbal aspect in past-under-past, there are two different indirect speech sentences possible:

(9) *Маша сказала, что Антон закрыл окно.*
Maria say.PST that Anton close.PFV.PST window
(10) *Маша сказала, что Антон закрывал окно.*
Maria say.PST that Anton close.IPFV.PST window

In (9), the subordinate verb is perfective; in (10) the subordinate verb is imperfective. Both indirect speeches represent the past-under-past condition.

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[4] t=time; t_0 is the time when direct speech is uttered; t_1 lies right from t_0 on the time axis, which means t_1 is posterior according to t_0, t_{0-x} is anteriority in relation to t_0.
[5] 'explanatory clauses' *(iz'jasnitel'nye pridatocnye predlozenija).*
[6] B. Comrie (1985) distinguishes between absolute and relative tense. An *absolute tense* is interpreted at the speech time whereas a *relative tense* is interpreted at a time supplied by the linguistic context and may differ from the speech time.

Nevertheless, the utterance *S* in (9) is different from *S* in (10). According to A. Barentsen (1996), the IPF past tense form in the dependent clause in (10) is an absolute tense, because it refers «directly to the utterance time» and introduces «in the semantic representation a temporal relation with the utterance time as one of its arguments» (Costa & Branco, 2012, p. 4). When we remember the aspect functions, the interpretation of (10) might be progressive, iteration, habituality, in short a non-episodic event 'closing a window'. The initial and final boundaries of the event denoted by the imperfective verb are not included in the reference time. The perspective rules out the endpoints of the narrated event. The use of IPF aspect does not focus on time reference but on the modality of the event. A non-episodic event *E* is true in t_{0+x} and t_0 and probably also in t_1, too. The PF past-under-past in (9) requires a viewpoint that establishes the perspective of an event within R_0 (see Comrie, 1976; Klein, 1994; Borik, 2006; Kazanina & Phillips, 2003). For interpretation of reported speech such as (9) or (10) it means that

> «(…) perfective preterit presents an event as a complete link in the chain of events, it 'moves the narration forward', whereas imperfective preterit halts the narration by concentrating on certain details or presenting a parallel situation that can be regarded as part of the background of the story». (Barentsen 1996, p. 51)

Emphasizing the characteristics of the event does not place the event in a time scheme. This may be the most important difference from SOT languages. The following figures illustrate this distinction. Figure 2 illustrates the time reference such as in (9), and Figure 3 such as in (10):
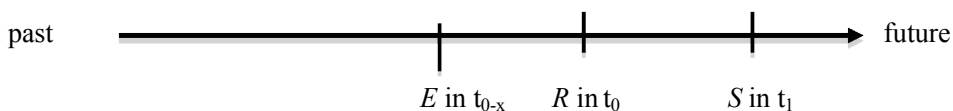

Figure 2: Time reference for PF *past-under-past*, shifted reading, anterior
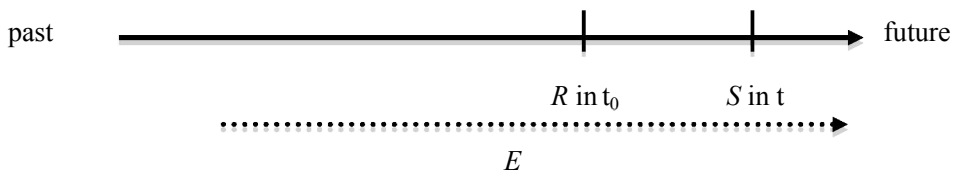

Figure 3: Time reference for IPF *past-under-past*, overlapping reading

In Figure 2, one possible point is marked on the timeline at which *E* could have taken place. All other potential points are temporally in anteriority of the reported speaking time R_0. Event E_{0-x} is completed at R_0. The interpretation is a backward-shifted reading. Starting and ending points are located before t_0. There is «an 'internal limit' […] that is encoded in the lexical meaning of a perfective verb.» (Barentsen, 1996, p. 33) The situation is different with IPF past-under-past indirect speech. The time reference for IPF past-under-past is shown in Figure 3. The beginning of the event *E* falls together with the start point of a time span in which *E* is going on. Event *E* described in the complement clause has begun before R_0 but there is no evidence about the completion of *E* at t_0. The narrated event is still in progress in t_0. There is no 'internal limit' of the action or the event.

A. Grønn & A. von Stechow (2010) assume that reported speech such as in (10) is interpreted as simultaneous reading. I argue against this because, according to their terms, there would be no difference between (10) and (11):

(11) *Маша сказала, что Антон закрывает окно.*
Maria say.PST that Anton close.IPFV.PRES window

If both complement clauses would be simultaneous to *R*, what indicates past tense in (10)? In my view, IPF past tense in (10) indicates anteriority of *E* according to *R*, whereas in (9) *E* coincides with *R*. The event started at t_{0-x} and the indirect speech corresponds to the report of this event that continues at least until t_0 (but also could continue after t_0). Whether the beginning of the event that is backward-shifted according to a speech moment *R* or the ending are emphasized. In a *past-under-past* situation, I suggest the interpretation of (11) as overlapping reading for the complement clause in relation to *R*. In Figure 4, I illustrate three types of time reference in indirect speech in Russian. Present-under-past indicates simultaneity. The complement clause expresses a progressive event, and the topical time coincides with an event that happened in a "subjective now" (Klein, 1994). Past-under-past can refer to shifted reading with perfective subordinate verb or overlapping reading with imperfective subordinate verbs. D. Altshuler (2008) argues that IPF past-under-past requires a simultaneous interpretation insofar as the event is not located in the past, but is rather a general factual statement that does not say anything about the relationship to reference time. I partly agree with him. Regardless, I would take into account the time relation expressed by verb tense in the complement clause. It localizes *E* on the time axis somewhere before *R*, even if it is understood as a valid general factual statement without a concrete localization in time.

A. Grønn (2007) agrees with D. Altshuler. He notes that the factual IPF aspect encodes the fact that an event has taken place but does not locate the event in time. In contrary to them, I assume that in reported speech, the time reference between *E* and *R* is more important than the aspectual function as a general factual statement. A past subordinated verb establishes a relative time reference even if it refers to a general factual statement. Therefore, I am of the opinion that IPF past-under-past has an overlapping meaning. Figure 4 illustrates time reference in past-under-past condition in indirect speech in Russian.
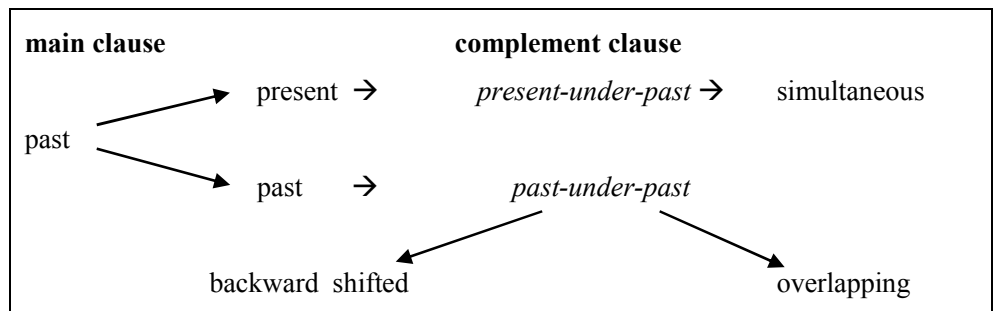

Figure 4: Time reference in indirect speech

In the next section, I present some empirical data. First, I present a corpus investigation in the Russian National Corpus (RNK) on the distribution of tense and aspect in reported speech in Russian. Second, I present the data of a sentence transformation test. Finally, I will set out a picture recognition experiment on the

interpretation of time relation in IPF past-under-past and PF past-under-past conditions.

Methods and results

a. Corpus investigation. With the corpus investigation, I checked the potential frequency of indirect speech regarding the choice of tense and verbal aspect for subordinate verbs in indirect speech. For the investigation, I used the main corpus of the RNK. In the search query, I concentrated on the indirect speech introduced by the speech verb *сказать* 'to say' in the main sentence:

1. *сказать* [indic, praet] *что* [S, nom] [V,indic,praes]
    to say   that
2. *сказать* [[indic, praet] *что* [S, nom] [V,indic,praet,pf]
3. *сказать* [[indic, praet] *что* [S, nom] [V,indic,praet,IPF]

In all three queries, the main clause is built with the verb *сказать* 'to say' in past tense, followed by the conjunction *что* 'that', one noun in nominative and one verb in indicative mood in present or past tense. There are no other words in between the tags. In past tense, I distinguish between imperfective and perfective verbs. For present tense, only imperfective verbs are possible.

Using the three queries I received a total of 1386 hits for indirect speech sentences with *сказать* 'to say' in the main sentence. The hits are distributed as 57% past-under-past and 43% are present-under-past indirect speech sentences. Regarding only past-under-past, there are 733 hits: 69% of the hits are PF past-under-past and 31% IPF past-under-past. From the hits for imperfective I had to eliminate 48% because they express reported states. The aspect for state verbs is always imperfective. The remaining 52% are expressions for events. The event verb could appear either as an imperfective or perfective verb, expressing an unlimited or limited event.

Example (12) represents one of the hits for a subordinated IPF verb, here *отдавать*, in indirect speech, whereas in example (13), found in the internet, there is the same 'to give sth to so' event explicated by the PF subordinated verb *отдать*:

(12) *Привез ее Вене Валера Котов. Сказал, что Седакова отдавала*.IPFV.PST *ее читать университетским профессорам. Так и затерялась.* [RNK; Наталья Шмелькова. Последние дни Венедикта Ерофеева (2002)]
He said that Sedakova gave it to university professors to read. So it got lost.
Valera Kotov brought it [a book] to Vienna. He said that Sedakova gave it to university professors to read. So it got lost.

(13) *Муж сказал жене, что отдал*.PFV.PST *все деньги беременной официантке. Она поддержала его, когда узнала имя ребенка.* [https://medialeaks.ru/0910lfc-str-good-waitress/; 05.11.2020]
The husband told his wife that he gave all the money to the pregnant waitress. She supported him when she found out the name of the child.

Considering the relation to speaking time in past-under-past, example (12) represents an overlapping, whereas example (13) stands for backward-shifted reading.

To sum up, we observe a majority for PF past-under-past indirect speech. IPF past-under-past is in nearly half of the IPF hits used to report states. That means that the IPF aspect is used significantly less in past-under-past reported speech than PF aspect.

In the following section, I present the data of a sentence transformation task that gives evidence of speaker competence in transforming direct speech into indirect speech.

b. Sentence transformation test. The sentence transformation test yields knowledge from language production. Behind this is the question of how Russian native speaker transfer direct speech into reported speech according to tense and verbal aspect use. Russian is known as non-SOT language; therefore, I assume that Russian native speakers adopt the verb tense of the direct speech and purely transfer it into indirect speech (see examples (1) to (3)). For the present tense, I assume that all participants choose present IPF verbs for present tense direct speech. In terms of past tense, I expect PF past subordinate verb for PF past verbs of direct speech.

In two lists, 16 target direct speech sentences are presented together with 32 filler sentences in two conditions, either with an IPF present or a PF past predicate. On the screen, a direct speech sentence appears for six seconds:

> (14) *Медсестра говорит: «Полицейский избивает женщину после нашумевшей уличной демонстрации».*
> The nurse says, "A police officer beats a woman after a sensational street demonstration."

It disappears, and the beginning of an indirect speech sentence emerges:

> (15) *Она сказала, что*_____
> She said that_____

The participants were asked to complete the indirect speech sentence into the free space according to the direct speech that they have read before. It is important that the direct speech sentence disappears and the participants transform the sentence from memory. This prevents the participants from simply copying the original verb form.

We implemented the experiment with the experimental software OnExp[7]. In the experiment participated 27 graduated students (21 female, 9 male, Russian native speaker). In 87% of the transferred sentences, the tense of the verb in direct speech was adopted. Only in 13% of cases was the verb tense changed[8], namely present tense to past. Considering the aspect choice in case of the tense switch, the participants transferred 53% into IPF past and 47% into PF past.

The result confirms my assumptions concerning the verb tense transfer from direct into indirect speech. One can state at this point that Russian native speaker actively know the difference between present-under-past and past-under-past. The distribution of verbal aspect in the cases when they transferred present into past was interesting. For this case, I would rather have expected the participants to prefer PF past verbs.

In the next step, I engaged in the different interpretation of time reference in past-under-past for IPF and PF subordinate verb conditions. I conducted a picture recognition task to collect more evidence on this research question.

c. Picture recognition experiment. The picture recognition experiment enables us to achieve clarity about the interpretation of time reference in reported

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[7] https://onexp.textstrukturen.uni-goettingen.de/
[8] Altogether, 15 participants did not change tense, eight participants changed tense more than twice, one participant changed tense in eight cases, equally split in both aspects.

speech. With pictures that illustrate either ongoing events or completed events, I found a possibility to make speaker interpretation visible and reproducible.

As I have explained before, IPF past-under-past is interpreted as simultaneous or overlapping to *R*, and PF past-under-past is interpreted as backward-shifted referring to *R*. For the interpretation behavior of the participants, I assume that present-under-past solely evokes the recognition of the IPF event picture. In contrast, past-under-past with PF subordinated verb solely elicits the recognition of the PF event picture (result). For IPF subordinated verb in past-under-past condition, I suppose recognition for the IPF event picture (process) by the majority of answers. Besides the picture recognition itself, it is also possible to elicit the effort for picture recognition by measuring the response times (RTs). Concerning the attended RTs, I predict that picture recognition under the IPF past-under-past condition leads to higher RTs than picture recognition under IPF present-under-past. While the latter refers solely to simultaneity with *R*, IPF past-under-past includes a more difficult time reference. The indirect speech refers to an event whose beginning lies before *R* but is also true at *R* and even after *R*. The interpretation is more complicated because it combines backward-shifted and simultaneous and overlapping interpretation. This results in longer processing times and higher RTs. I expect the lowest RTs for PF past-under-past, because the matrix speech verb and the subordinated verb have PF past form. In present-under-past, the tenses in the matrix and in the subordinated sentences differ. This might evoke higher RTs for present-under-past than in PF past-under-past condition.

The picture recognition experiment consisted of 52 selected event pictures that originated from the *Biblioteka stimulov* 'Stimuli database' by Y. Akinina et al. (2015).[9] These event pictures illustrate ongoing events. For each of the selected event pictures, we produced a picture version that shows the completion of the original event. In this way, we built 52 event picture pairs consisting of one picture for the ongoing event and a second for the completion of the respective event. Altogether, 16 target indirect speech sentences together with 16 target picture pairs are presented in a randomized setting mixed with 36 filler sentences and their proper picture pairs. The pictures illustrate the event reported in the indirect speech sentence or refer to the filler sentences. The target items appear in three conditions: subordinate verb in present, past PF or past IPF. The items are split into three lists. The experiment was run on the software E-prime and was conducted in the linguistic experimental lab at University of Tübingen.[10]

In total, 25 students participated[11]. They all are undergraduated or graduated Russian native speakers. During the experiment, first, the target item appears on the screen. After reading, the participants press the space key. Then, a fixation cross turns up. After pressing the space key again, two pictures appear, one representing an ongoing event and the other a completed event. The task was to select the picture that fits with the reported event by pressing on the keyboard letter key 'w' for the picture on the left, and letter key 'p' for the picture on the right. The position of the pictures changes randomly. Additionally, I measured the reaction time for pressing a letter key. Figure 5 demonstrates a complete item with indirect speech and associated picture doubles:

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[9] For more information about this excellent event picture stimuli data base see http://stim-database.ru/database/

[10] I would like to thank Pavel Glusko who produced the PF pictures, acquired the participants and organized the experiment.

[11] All participants were students of the Language Summer School at the University of Tübingen in 2019.

Анна сказала, что в своём гараже мужчина ремонтировал, по-видимому, свой сломавшийся автомобиль.
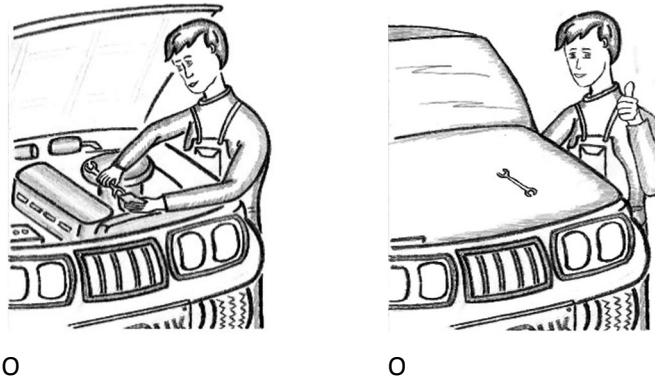Anna said that in her garage a man was fixing her broken car.

Figure 5: Picture recognition task, experimental design

After the data analysis, the result is as follows: more than 80% of the picture recognitions comply with my assumptions concerning the interpretation of time reference in the reported speech. As to present-under-past in 82% of the IPF items, the participants selected the IPF picture. As for IPF past-under-past, in 86% of the IPF past items, the participants selected the IPF picture, and, finally, in the case of PF past-under-past, 86% led to the recognition of the PF picture. There is no significant difference between the recognition rates for the three sentence conditions. Table 1 presents the mean RTs for picture recognition by pressing one of the letter keys:

Table 1: Mean reaction times for picture recognition.

	Present	**Past_IPF**	**Past PF**
RT in ms	2582,47	2607,2	2296,98

The RTs for present-under-past and IPF past-under-past are nearly the same, whereas PF past-under-past leads to significantly lower RTs. The result suggests that the interpretation of time reference for present-under-past und IPF past-under-past is more complicated than for PF past-under-past. The result does not reflect my predictions for IPF present-under-past. Recognition after PF past-under-past seems to be easier than under the IPF condition.

Discussion and conclusions. The corpus research has confirmed that present-under-past in reported speech in Russian is quite common. In case of past-under-past, PF subordinated verbs are preferred except in contexts that refer to states. Thus, only IPF aspect is correct due to aspectual functions and meaning. Aspect choice depends on the nature of the event (stative or non-stative), and time reference corresponds to relative time *R*.

The sentence transformation task was based on the question of how Russian native speaker transfer direct speech into reported speech according to tense and verbal aspect use. The data confirms my assumptions that Russian native speakers simply adopt the verb tense of the direct speech to perform an indirect speech sentence. According to present, all participants choose present IPF verbs for present tense direct speech. In terms of past tense, PF past subordinate verb is preferred. The distinction between present-under-past and past-under-past is common language knowledge. The change from IPF present to IPF past in a few cases could be an indication that the situation in the direct speech has been interpreted as past event that is not completed but still ongoing. The data is too limited; I would only very cautiously claim that these are not "mistakes" but signs of possible overlapping reading.

The result of the picture recognition test proves that IPF past-under-past strengthens an overlapping interpretation; otherwise, the result pictures would have been chosen. In my view, higher RTs for present-under-past can be explained by the temporal localization of *S*, *R* and *E* on the time axis. At *S,* an utterance took place in the past that reports a speaking event *R* that happened at a time before *S*. If the reported event *E* happened simultaneously with *R*, the time relation is past *S* and present *R*. Main clause and subordinate clause refer to different points on the time axis. The time reference in such an indirect speech is more complex, slowing down processing and leading to higher RTs. I would explain the result for IPF past-under-past concerning RTs in respect to aspect differences in main clause and subordinated indirect speech. The time relation for *S* and *R* is past for both, but while *S* expresses a completed speech event, the reported event *E* is in progress at least at *R*. This aspectual difference leads to higher RTs compared to PF past-under-past. The RTs reflect the processing of different time relations in present-under-past, IPF past-under-past and finally, PF past-under-past. Aspect use in past-under-past indirect speech reports to different types of event; therefore, aspect is an important signifier for the interpretation of the time reference in indirect speech. With regard to the data, I conclude that in Russian, indirect speech time reference in past-under-past condition coheres with verbal aspect.

It would be worthwhile to conduct further language experiments to better understand the different time reference in simultaneous and overlapping reported speech. To address the issue of interpretation, short film sequences that visualize a simultaneous or overlapping situation would be suitable. To learn more about the processing of these two types of indirect speech, the results of self-paced reading or eye-tracking experiments would be instructive. The present work is only a beginning of understanding the connection between time reference and aspect in Russian indirect speech.

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Резюме

Anja Gattnar

РЕФЕРЕНЦІЯ ЧАСУ В НЕПРЯМІЙ МОВІ У РОСІЙСЬКІЙ ЯК МОВІ БЕЗ УЗГОДЖЕННЯ ЧАСІВ

Теоретичне підґрунтя. На відміну від англійської, російська мова не має узгодження часів (Sequence of Tense, SOT) у непрямій мові. У SOT-мовах час у залежному підрядному реченні змінюється відповідно до часу у головному реченні. У російській мові час дієслова у підрядному реченні залишається незмінним згідно з відповідною частиною прямої мови. На противагу багатьом дослідженням, в яких розглянуто лише часові форми у непрямій мові, у цій

статті досліджено вживання виду російського дієслова за умови часу «минулого у минулому» (past under past).

Мета дослідження. Ця стаття – спроба продемонструвати за допомогою експериментів те, як категорії часу і виду російського дієслова впливають на розуміння часової референції у непрямій мові. Дослідження зосереджене на розпізнаванні одночасних подій та подій, розділених часом, за умови «минулого в минулому». За такої умови у непрямій мові підрядне речення, яке залежить від дієслова в минулому часі, переймає категорію часу з прямої мови, але не узгоджується з реченням непрямої мови, що було б характерним для SOT-мов. У випадку подій, що перетинаються у часі, за умов «минулого в минулому» з недоконаним видом дієслова, описана подія ще не є завершеною, вона поширюється і на час після первісного мовленнєвого акту. Дієслова доконаного виду описують за умови «минулого в минулому» події, що завершилися вже до початку первісного мовленнєвого акту. Вид підпорядкованого дієслова у непрямій мові є ключовим фактором для визначення перенесеної в минуле чи одночасної референції.

Методи дослідження. Тест з трансформації речень допомагає здобути інформацію щодо активного використання мови. Як російськомовні учасники перетворюють пряму мову на непряму залежно від часу та виду дієслова? Вважаємо, що вони переймають час дієслова з прямої мови і переносять його безпосередньо до непрямої мови. Імовірно, що за умов «теперішнього часу у минулому» (present under past) учасники мають використовувати для прямої мови дієслова теперішнього часу. За умов «минулого в минулому» для підрядних дієслів очікуємо використання дієслів минулого часу там, де у завданні є дієслова доконаного виду минулого часу.

Тест з розпізнавання зображень дозволяє нам досягти ясності щодо інтерпретації часової референції у непрямій мові. Припускаємо, що теперішній час у минулому учасники тесту мають пов'язувати виключно з зображенням недоконаної дії. Натомість «минуле в минулому» з дієсловом доконаного виду викликає реакцію на зображення доконаної дії (результату). Для дієслова недоконаного виду за такої умови є імовірним вибір зображення недоконаної дії (процесу) у більшості відповідей. Розпізнавання зображень оцінюється за допомогою виміру часу реакції. Прогнозуємо, що розпізнавання зображень у випадку дієслів недоконаного виду «минулого в минулому» має призводити до довшого часу реакції, ніж у випадку з дієсловами недоконаного виду «теперішнього в минулому».

Результати. Тест з доповнення речень мав наступні результати: тільки у 13% випадків час дієслова було змінено – з теперішнього на минулий. З погляду на вибір виду дієслова за умови змінення часу в минулому часі у 53% випадків учасники використали недоконаний, а у 47% доконаний вид дієслова. Аналіз даних із завдання з розпізнавання зображень надав наступну картину: понад 80% розпізнаних зображень відповідають нашим припущенням щодо інтерпретації часу в непрямій мові. Статистично значущої різниці між часами реакції для окремих завдань, що складалися з трьох речень, виявлено не було. Час реакції у процесі розпізнавання зображень для «теперішнього часу в минулому» та «минулого в минулому» з доконаним видом дієслова був майже однаковим, натомість «минуле в минулому» з доконаним видом дієслова приводить до статистично значущої різниці; учасники тесту реагували у цих випадках швидше.

Обговорення та перспективи. Завдання з трансформування речень підтверджують мої припущення, що носії російської мови переймають час дієслова з прямої мови і використовують його у реченні з непрямою мовою. Відмінність між «теперішнім часом у минулому» і «минулим часом у минулому» сприймається як загальновідоме знання. Заміщення теперішнього часу минулим для підпорядкованих дієслів недоконаного виду приводить до висновку, що дієслова минулого часу недоконаного виду у минулому сприймаються як подія, що перетинається у часі з непрямою мовою і є незавершеною. Результат тесту з розпізнавання зображень доводить, що недоконаний вид за умови «минулого у минулому» посилює образ пересічення подій у головному реченні та підрядному реченні в непрямій мові. Довші часи реакції для «теперішнього часу у минулому» можна, на мою думку, пояснити темпоральною локалізацією різних розмовних подій. Головне і підрядне речення належать до різних часів. Взаємозв'язок часів у такій непрямій мові є більш складним, когнітивні процеси тривають довше, час реакції збільшується. Результати для дієслів недоконаного виду у «минулому в минулому» відносно часу реакції можна пояснити різницею дієслівного виду між головним реченням та підпорядкованою непрямою мовою. Результат недоконаного виду щодо часу реакції може бути пояснений різницею у виді дієслів головного речення та підпорядкованої непрямої мови. Дієслова мають форму минулого часу, але головне речення виражає завершений мовний акт, тоді як у непрямій мові подія ще триває. Ця різниця у виді дієслів призводить до довшого часу реакції у порівнянні з дієсловами доконаного виду у минулому в минулому. Час реакції відображає обробку інформації щодо часу події. Вживання того чи іншого виду дієслова в непрямій мові за умови минулого в минулому відповідає різним типам подій, тому вид дієслова є важливим для розуміння співвідношення часів у непрямій мові. Подальші експерименти можуть бути сконцентровані на різниці в обробці інформації та в інтерпретації між «теперішнім часом в минулому» та недоконаному виду дієслова «минулого часу в минулому». Додаткові дослідження мають роз'яснити різницю між одночасним та зміщеним у часі розумінням подій.

Ключові слова: непряма мова, вид дієслова, аспект, час, експериментальні методи, тест з трансформації речень, тест з розпізнавання зображень

Abstract

Anja Gattnar

TIME REFERENCE IN INDIRECT SPEECH IN RUSSIAN AS A NON-SOT LANGUAGE

Background. In contrast to English, Russian does not know sequence of tense (SOT) in reported speech. In SOT languages, the tense in a complement clause changes according to the verb tense in the main clause. In Russian, the verb tense in the complement clause remains the same as in corresponding direct speech. There is no agreement of tenses in indirect speech. While many studies on indirect speech in Russian solely discusses tense forms, this paper focuses on usage of verbal aspect in past-under-past condition.

Purpose. The aim of the paper is to show experimentally how tense and aspect influence the comprehension of temporal reference in indirect speech in Russian.

The focus of my investigation is based on the distinction between overlapping and backward-shifted events in past-under-past condition. In past-under-past reported speech, the complement clause embedded under a past-marked verb adopts the verb tense of direct speech but does not agree with the indirect clause as it would be in SOT languages. In an overlapping context with imperfective (IPF) past-under-past, the narrated event is not yet completed but extended until after the original speaking event. In perfective (PF) past-under-past, the narrated event took place before the original speaking event. The aspect of the subordinated verb in indirect speech is the crucial factor for backward-shifted or overlapping reference.

Methods. A sentence transformation test serves to yield knowledge from language production. How do Russian native speaker transfer direct speech into reported speech according to tense and verbal aspect use. I hypothesize that they adopt the verb tense of the direct speech and purely transfer it into indirect speech. According to present-under-past, I assume that they choose present verbs for present tense direct speech. In terms of past-under-past, I expect past subordinate verb for PF past verbs.

A picture recognition task enables us to achieve clarity about the interpretation of time reference in reported speech. For the interpretation behavior of the participants, I assume that present-under-past solely evokes the recognition of the IPF event picture. In contrast, past-under-past with PF subordinated verb solely elicits the recognition of the PF event picture (result). For an IPF subordinated verb in past-under-past condition, I suppose recognition for the IPF event picture (process) by the majority of answers. The effort for picture recognition is elicited by measuring the response times (RTs). I predict that picture recognition under IPF past-under-past condition leads to higher RTs than picture recognition under IPF present-under-past.

Results. The result for the sentence completion test is as follows: In only 13% of the answers was the verb tense changed, namely present tense to past. Regarding the aspect choice in case of tense switch, the participants transferred 53% into IPF past and 47% into PF past. The data analysis of the picture recognition task shows following picture: more than 80% of the picture recognitions comply with my assumptions concerning the interpretation of time reference in the reported speech. There is no significant difference between the recognition rates for the three sentence conditions. The RTs for picture recognition in present-under-past condition and IPF past-under-past condition are nearly the same, whereas PF past-under-past condition leads to significantly lower RTs.

Discussion. The sentence transformation task confirms my assumptions that Russian native speakers simply adopt the verb tense of the direct speech to perform an indirect speech sentence. The distinction between present-under-past and past-under-past is common knowledge. The change from IPF present to IPF past for the subordinated verb leads to the conclusion that IPF past-under-past is interpreted as simultaneous to the original speech and consequently transfer the event as not completed. The result of the picture recognition test proves that IPF past-under-past strengthens an overlapping interpretation of the time reference expressed in the reported speech by main clause and complement clause. The higher RTs for present-under-past, in my view, can be explained by the temporal localization of the different speaking events. The main clause and complement clause refer to different times. The time relation in such indirect speech is more complex, slowing down processing and leading to higher RTs. I would explain the result for IPF past-under-past concerning RTs in respect to aspect differences in main clause and subordinated

indirect speech. The time reference is past, but while the main clause expresses a completed speech event, in the reported event is still in progress. This aspectual difference leads to higher RTs compared to PF past-under-past. The RTs reflect the processing of different times. Aspect use in past-under-past indirect speech reports to different event types; therefore, aspect is important for the interpretation of the time reference in indirect speech. Further experiments should concentrate on the processing and interpretation differences between present under present and IPF past-under-past. Further experiments should focus on clarifying the differences between simultaneous and overlapping reading.

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