

Comparing propositional attitudes*

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SUMMARY

This paper concerns non-temporal uses of comparative adverbs, such as *rather*, *plutôt*, Romanian *mai degrabă* ‘more of.hurry’ and Russian *skoree* ‘sooner’. Focusing on the Russian *skoree*, I show that such adverbs compare two propositions. More precisely, I argue that *skoree* ranges over degrees of personal probability assigned by the speaker to two propositions. This epistemic interpretation of *skoree* is contrasted with the analysis of similar constructions in Greek and Korean in terms of preference advanced in Giannakidou and Stavrou (2009) and Giannakidou and Yoon (2011). In addition, some cross-linguistic observations are presented showing that Russian is not unique in comparing propositions with respect to probability, rather than preference and a tentative analysis of this cross-linguistic variation is proposed.

1 INTRODUCTION

Some temporal comparative adverbs, such as (medieval) *rather*¹, *plutôt*, Romanian *mai degrabă* ‘more of.hurry’, and Russian *skoree* ‘sooner’ have non-temporal uses. In such uses, the adverb compares two propositions with respect to a certain attitude held by the subject of the sentence or the speaker. As illustrated in (1), *rather* conveys the idea of preference:

- (1) a. She would rather live in danger than die of loneliness and boredom.
b. Many of them went to jail rather than pay the fine.

(Huddleston and Pullum, 2002)

In this paper, I examine non-temporal uses of comparative adverbs, focussing on the properties and semantic analysis of the Russian comparative adverb *skoree* ‘sooner’. I argue that *skoree* forms

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¹ *rather* Compar. of ME. *rather*, quick, early (v.s.), orig. adv., AS. *hrathe*, corresponding to adj. *hræd*, cogn. with OHG. *hrad*, ON. *hrathr*. For sense-development cf. F. *plutôt* (*plus + tôt*, sooner). (from *An etymological dictionary of modern English*, 1921)

epistemic comparatives. More precisely, *skoree* ranges over degrees of personal probability assigned by the speaker to two propositions being compared. This treatment places *skoree* among other speaker-oriented predicates, such as predicates of personal taste (e.g. *tasty*) and epistemic modals (e.g. *might*). It also shows that the unified analysis proposed by Giannakidou and Stavrou (2009) and Giannakidou and Yoon (2011) for similar constructions in Greek and Korean cannot be maintained cross-linguistically. The next two sections discuss Russian facts. In section 2, I examine the properties of Russian *skoree*, and in section 3, I propose a semantic analysis that accounts for these properties. Section 3 also contains a brief overview of the literature on propositional comparatives in Greek and Korean and a note on metalinguistic comparatives, which I take to form a separate class of phenomena (see also Morzycki 2011).

In section 4, I look at some cross-linguistic data and show that Russian is not unique in specifying the propositional attitude as probability. More specifically, I show that Romanian *mai degrabă* patterns with Russian *skoree* in comparing two propositions with respect to Probability assigned by the speaker, whereas French *plutôt* is similar to Greek and Korean (and, probably, English) in specifying the propositional attitude as Preference. I also discuss a tentative proposal that derives the difference between Romanian and Russian on one hand and French, Greek and Korean on the other hand from properties of their modal systems and the Phase Impenetrability Condition (e.g. Chomsky 2004). Section 5 is a conclusion.

2 PROPERTIES OF *skoree*

In this section, I describe a subset of cases, in which *skoree* ‘sooner’ does not have a temporal interpretation. I will add another non-temporal (metalinguistic) use of *skoree* in section 3, when I discuss metalinguistic comparatives.

Morphologically, *skoree* is a comparative form of the temporal adverb *skoro* ‘soon’, which is related to the noun *skorost* ‘speed’. The temporal uses of *skoro* and *skoree* are shown in (2):

- (2) *temporal uses of skor(ee)*
- a. Petr skoro prijdet.
Peter soon come-FUT
‘Peter will come soon.’
 - b. Petr prišel skor + ee čem ja dumal.
Peter come-PAST soon + er than I think-PAST
‘Peter came sooner than I thought.’

In these sentences, the adverbs *skoro* and *skoree* compare two times (or time intervals). For instance, (2b) says that the time when Peter came is prior to the time when I thought Peter would come.² I will not discuss temporal uses of *skoree* in this paper (for temporal uses see, for instance, von Stechow 2010 on German *later* and *earlier*). Instead, I will focus my attention on non-temporal uses of

² This is a simplification, of course, because even in the positive form, as in (2a), *soon* compares two times (or time intervals), that is to say, (2a) says that some future time when Peter comes is prior to another salient or expected time. *Sooner*, hence, is a second level comparative.

skoree. I describe the major properties of such uses below.³

2.1 *Skoree* COMBINES WITH DIFFERENT PREDICATES

The adverb *skoree* can be used with different predicates. The observation that is important for us here is that *skoree* is equally felicitous with the stative verb *to be* and with gradable predicates, such as *want*, *like*, and *prefer*. This is illustrated in (3)-(4):

(3) *skoree* with *to like*

CONTEXT: Anna and Mary are in the kitchen. Peter is in the dining room.

MARY: Let's drink something. I have coffee and tea here. Let's make some coffee.

Peter likes coffee, doesn't he?

ANNA: Petr *skoree* ljubit čaj čem kofe.

Peter sooner likes tea than coffee

'Peter likes tea rather than coffee.'

= according to Anna, it is more likely that Peter likes tea rather than coffee

(4) *skoree* with *to be*

CONTEXT: Anna and Mary need to contact Peter immediately and they are discussing where they can reach him. Mary suggests to phone Peter at home.

ANNA: Petr *skoree* na rabote čem doma.

Peter sooner at work than home

'#Peter is at work rather than at home.'

= according to Anna, it is more likely that Peter is at work than at home

For reasons that will become clear below, I avoid using *want* or *prefer* in the *tea*-example in (3). The ability of *skoree* to combine with both gradable and non-gradable predicates will be important when contrasting *skoree* with its kin in other languages.⁴

2.2 *Skoree* EXPRESSES UNCERTAINTY

Skoree expresses uncertainty on the part of the speaker, as shown by the fact that Anna could continue her phrase in (3) and (4) with (5a), but not (5b):

³ All Russian examples presented in this paper are checked with at least three native speakers of Russian. I am especially grateful to Yana Fedosova for patiently sharing her native judgements and intuitions.

⁴ A note of caution: *skoree* is very sensitive to tenses and aspects. As the Russian aspectual system is complex and *skoree* has not been previously studied, I will keep my examples very simple.

(5) *skoree expresses uncertainty*

- ANNA: Petr skoree ljubiti čaj čem kofe, ...
 Peter sooner likes tea than coffee
 ‘Peter likes tea rather than coffee’
- a. ... no ja točno ne znaju.
 ‘... but I don’t know for sure.’
 - b. #... ja znaju, ja s nim tol’ko što razgovarivala.
 ‘... I know, I have just spoken to him.’

Compare this property of *skoree*-sentences to an ordinary comparative in (6), in which the speaker asserts the fact that Peter likes tea to a greater degree than the degree to which he likes coffee. The later shows the reversed pattern (under a normal interpretation that does not involve tracing back⁵).

(6) *ordinary comparatives express certainty*

- ANNA: Petr bol’še ljubiti čaj čem kofe, ...
 Peter more likes tea than coffee
 ‘Peter likes tea more than coffee ...’
- a. #... no ja točno ne znaju.
 ‘... but I don’t know for sure.’
 - b. ... ja znaju, ja s nim tol’ko što razgovarivala.
 ‘... I know, I have just spoken to him.’

On the uncertainty scale, *skoree* conveys the idea of probability or likelihood, as shown by the fact that the continuation in (7) is impossible.

(7) *skoree expresses probability*

- ANNA: Petr skoree ljubiti čaj čem kofe, ...
 Peter sooner likes tea than coffee
 ‘Peter likes tea rather than coffee ...’
 #... no eto malo verovatno.
 but this little probable
 ‘... but this is unlikely.’

These results can be replicated for the *office*-example in (4). Thus, *skoree*-sentences, unlike ordinary comparatives, express uncertainty.

2.3 *Skoree* IMPLICATES THE PROPOSITION IN THE MAIN CLAUSE

Another difference between *skoree* and ordinary comparatives comes from entailment facts. As is well-known (see, for instance, Morzycki 2011 for a recent discussion), ordinary comparatives do not have a positive entailment or implicature, i.e. they are ‘neutralized’,⁶ see (8a) for English and

⁵ By ‘tracing back’, I mean the following change of mind, which can accompany any assertion: ‘Peter likes tea more than coffee... but you know, I really don’t know... maybe, he likes coffee more than tea.’

⁶ I adopt this term from Morzycki (2011), who attributes it to Winter (2005).

(8b) for Russian. The sentences with *skoree*, however, have the positive inference that is realized as a cancellable implicature, see (9).

(8) *entailment facts with ordinary comparatives*

- a. Clarence is taller than Erma. (Morzycki, 2011)
DOES NOT ENTAIL OR IMPLICATE: Clarence is tall.
- b. Petr bol'she ljubit čaj čem kofe.
Peter more likes tea than coffee
'Peter likes tea more than coffee.'
DOES NOT ENTAIL OR IMPLICATE: Petr ljubit čaj. 'Peter likes tea.'⁷

(9) *entailment facts with skoree-sentences*

- a. Petr skoree ljubit čaj čem kofe.
Peter sooner likes tea than coffee
'Peter likes tea rather than coffee.'
IMPLICATES BUT DOES NOT ENTAIL: Petr ljubit čaj. 'Peter likes tea.'
- b. CANCELATION:
Ja ne znaju ljubiti li Petja čaj, no on skoree ljubit čaj čem kofe.
I not know likes EMPH Peter tea but he sooner likes tea than coffee
'I don't know whether Peter likes tea, but he likes tea rather than coffee.'

It is impossible to make a parallel observation about (4), in which *skoree* is used with the non-gradable *to be*, because we will not expect it to participate in an ordinary comparative.

This property is reported to be characteristic of metalinguistic comparatives (see below). The reason why the predicate is not 'neutralized' in (9) is that the degree operator ranges not over degrees of the predicate, i.e. degrees of liking, but rather over degrees of propositional attitude, i.e. degrees of personal probability.

2.4 *Skoree* GIVES RISE TO FAULTLESS DISAGREEMENT

The sentences with *skoree* are speaker/judge-dependent and can give rise to the so-called 'faultless disagreement'—disagreement without contradiction—characteristic of predicates of personal taste and epistemic modals (see Lasersohn, 2005; Stephenson, 2007; among others). (10) illustrates faultless disagreement cases for predicates of personal taste and epistemic modals from Stephenson (2007):

⁷ In Russian, *bol'she ljubiti* 'to like more' is an ordinary, every-day way of expressing preferences, similar to the English *prefer*. It does not have a strong connotation of 'liking'. The literal *predpočitat* 'to prefer' is very formal and has a number of syntactic constraints; one constraint that is important for us here is its inability to take a comparative *čem*-clause.

- (10) *faultless disagreement with tasty and might* (Stephenson, 2007)
- a. MARY: How's the cake?
 SAM: It's tasty.
 SUE: Nuh-uh, it isn't tasty at all!
- b. MARY: Where's Bill?
 SAM: I'm not sure. He might be in his office.
 SUE: Nuh-uh, he can't be. He never works on Fridays.

In the dialogues above, Sam expresses his own taste or mental state and Sue does not seem to contradict him; rather, she expresses her own taste or mental state, which happens to disagree with Sam's. Compare (10) with the dialogues in (11), in which the bearer of taste or mental state is syntactically present, making the negation awkward. When Sue utters *nuh-uh*, she seems to be challenging Sam's understanding of his own perceptions:

- (11) a. MARY: How's the cake? (Stephenson, 2007)
 SAM: It tastes good to me.
 SUE: #Nuh-uh, it doesn't taste good at all!
- b. MARY: Is Bill in his office?
 SAM: Well, I'm not sure, but I don't know that he isn't.
 SUE: #Nuh-uh, he's at home. He doesn't work on Fridays.

Skoree similarly gives rise to faultless disagreement. As shown in (12), if we add another participant, say Kate, to our *tea*-scenario, Kate can express her own opinion by contradicting Anna and saying that according to her (Kate), Peter likes coffee rather than tea. However, if the bearer of uncertainty expressed by *skoree* is syntactically present, the negation becomes awkward, see (13).

- (12) *faultless disagreement in skoree-sentences*
- CONTEXT: Anna, Mary and Kate are in the kitchen. Peter is in the dining room.
- MARY: Let's drink something. I have coffee and tea here. Let's make some coffee.
 Peter likes coffee, doesn't he?
- ANNA: Petr skoree ljubiti čaj čem kofe.
 Peter sooner likes tea than coffee
 'Peter likes tea rather than coffee.'
 = according to the judge (= Anna), it is more likely that Peter likes tea rather than coffee
- KATE: Net, eto ne tak! Petr skoree ljubiti kofe čem čaj.
 no this not so Peter sooner likes coffee than tea
 'No, this is not so! Peter likes coffee rather than tea.'
 = according to the judge (= Kate), it is more likely that Peter likes coffee rather than tea

specifying the judge as the speaker; as we will see below, it is not always the case that the judge is the speaker).

2.5 *Skoree* PRESUPPOSES THE PROPOSITION IN THE *than*-CLAUSE

The last characteristic property of *skoree*-sentences is that they are felicitous only in contexts in which the option given in the *than*-clause, i.e. the option that is demoted, is salient in the discourse. In the context with two exclusive options, for instance, being at home or at work in (4), this demotion is strengthened to negation. The requirement of salience does not extend to the option given in the matrix clause, that is to say, it can be either new or old information.

I illustrate this property using the familiar *tea*-example, in which ‘tea’ is the option given in the matrix clause and ‘coffee’ is the option of the *than*-clause. We expect to find the following picture:

(14) *summary of possibilities for skoree tea ... than coffee*

	‘tea’	‘coffee’	example
#	new	new	(15)
✓	new	old	(16)
#	old	new	(17)
✓	old	old	(18)

This expectation is fulfilled. I start with a context in which both options are new. As shown in (15), in such a context, the *skoree*-sentence is not felicitous. (15) is an odd dialogue even with the accommodation provided within parentheses.

(15) *unsuccessful dialogue: new ... new*

CONTEXT: Anna and Mary are in the kitchen. Peter is in the dining room.

MARY: Let’s drink something.

ANNA: #Petr skoree ljubiti čaj čem kofe.

Peter sooner likes tea than coffee

‘Peter likes tea rather than coffee.’

= according to the judge, it is more likely that Peter likes tea rather than coffee

(If we want to please Peter, let’s make tea, but not coffee.)

The example in (16) shows that Anna can volunteer tea as a new option as soon as Mary mentions the possibility of (or the inclination to) preparing coffee.

(16) *successful dialogue: new ... old*

CONTEXT: Anna and Mary are in the kitchen. Peter is in the dining room.

MARY: Let’s drink something. Let’s make some coffee.

ANNA: Petr skoree ljubiti čaj čem kofe.

Peter sooner likes tea than coffee

‘Peter likes tea rather than coffee.’

= according to the judge, it is more likely that Peter likes tea rather than coffee

(If we want to please Peter, let’s make tea but not coffee.)

‘Tea’ cannot be the only salient option. As shown in (17), if Mary suggests that Peter might like tea, Anna’s *skoree*-reply is infelicitous. (I am abstracting away from a reading of (17), in which Anna herself first had an idea that Peter might prefer coffee, but then, on a second thought, decided that it is more probable that Peter likes tea rather than coffee. In this case, *skoree* would reflect the fact that coffee was a salient option in Anna’s internal conversation.)

(17) *unsuccessful dialogue: old ... new*

CONTEXT: Anna and Mary are in the kitchen. Peter is in the dining room.

MARY: Let’s drink something. Let’s make some tea. Peter likes tea, doesn’t he?

ANNA: #Petr skoree ljubit čaj čem kofe.

Peter sooner likes tea than coffee

‘Peter likes tea rather than coffee.’

= according to the judge, it is more likely that Peter likes tea rather than coffee

Finally, to make the picture complete, I repeat the original example from (3), in which the context introduces both options:

(18) *successful dialogue: old ... old*

CONTEXT: Anna and Mary are in the kitchen. Peter is in the dining room.

MARY: Let’s drink something. I have coffee and tea here. Let’s make some coffee.

Peter likes coffee, doesn’t he?

ANNA: Petr skoree ljubit čaj čem kofe.

Peter sooner likes tea than coffee

‘Peter likes tea rather than coffee.’

= according to the judge, it is more likely that Peter likes tea rather than coffee

These data shows that *skoree* presupposes the option given in the *than*-clause.

To summarize, in this section, I presented the basic facts about Russian *skoree*-sentences. The main observations are that *skoree* expresses the idea of uncertainty or likelihood, can be used with different predicates (including non-gradable) and presupposes the option expressed by the *than*-clause. Furthermore, *skoree* gives rise to faultless disagreement and implicates the proposition expressed by the main clause. The latter two properties are also characteristic of metalinguistic comparatives, which I will briefly discuss in the next section.

3 ANALYSIS OF *skoree*

To the best of my knowledge, the phenomenon described in the preceding section has not been directly studied in the literature. The two studies that come closest are Giannakidou and Stavrou (2009) and Giannakidou and Yoon (2011). They examine the so-called ‘metalinguistic’ comparatives (MC) in Greek and Korean and propose to treat sentences expressing preference, which are similar to my *tea*-example in (3) as a subtype of metalinguistic comparatives.

In this section, I briefly review their proposal and show that it does not account for the Russian data. I then propose two modifications of their account to explain Russian facts. These modifications undermine the idea that propositional comparatives have uniform semantics across languages

advanced in Giannakidou and Yoon (2011). I start this section with a note on metalinguistic comparatives. In agreement with Morzycki (2011), but contrary to the proposal in Giannakidou and Yoon (2011), I assume that MC is a separate class of propositional comparatives, which does not need to be unified with preference-comparatives.

3.1 A NOTE ON METALINGUISTIC COMPARATIVES

(19a) is a classical example of MC in English from McCawley (1988) with his paraphrase and (19b) is its Greek equivalent from Giannakidou and Stavrou (2009).

(19) *metalinguistic comparatives*

- a. Your problems are more financial than legal. (McCawley, 1988)
= it is more appropriate to call your problems financial than it is appropriate to call them legal
- b. Ta provlimata sou ine perissotero ikonomika para nomika.
the problems yours are more financial than legal
'Your problems are financial more than legal.' (Giannakidou and Stavrou, 2009)

MC constructions have received some attention in the generative literature (e.g. Bresnan, 1973; Di Sciullo and Williams, 1987; McCawley, 1988; Embick, 2007; Sawada, 2007; Giannakidou and Stavrou, 2009; Giannakidou and Yoon, 2011; Morzycki, 2011). At the end of the last century, metalinguistic comparatives were primarily studied from a morphological point of view, because they have some peculiar morphological properties, such as preclusion of the formation of synthetic comparatives. At the beginning of this century, the interest of researchers shifted from the morphology to the semantics of MCs, now focussing on other intriguing properties, such as the restriction on having a measure phrase, *more*-float and the ability to modify non-gradable predicates. All these properties demonstrate that MCs differ from ordinary comparatives in that MCs do not range over degrees of the predicates.

As mentioned above, there are two properties that Russian *skoree*-sentences share with MCs. These properties also point to the fact that *skoree*-sentences and MCs do not operate over degrees of the gradable predicate and are distinct from ordinary comparatives. First, MCs, as opposed to ordinary comparatives, give rise to a cancellable implicature of the sort we observed in section 2.3 for *skoree*-sentences, see (20). For convenience, in (20a), I repeat the facts about ordinary comparatives from (8a).

(20) *entailment facts with ordinary vs. metalinguistic comparatives* (Morzycki, 2011)

- a. Clarence is taller than Erma.
DOES NOT ENTAIL OR IMPLICATE: Clarence is tall.
- b. Clarence is more tall than ugly.
IMPLICATES, BUT DOES NOT ENTAIL: Clarence is tall.
CANCELATION: Clarence is more tall than ugly, but he's not (really) tall either.

3.2 PREVIOUS ACCOUNTS

Giannakidou and Stavrou (2009) and more explicitly Giannakidou and Yoon (2011) argue for a uniform treatment of propositional comparatives. They identify two varieties of propositional comparatives: i) MCs that report judgements of appropriateness, as in (19) above and ii) MCs that report judgements of preference, as illustrated in (23). Both appropriateness-MC and preference-MC are signalled in Greek by the comparative clause introducer *para* (as opposed to *apo* and *apoti*, which introduce ordinary comparatives) and are characterized by similar properties.¹⁰

- (23) *preference-MC in Greek* (Giannakidou and Yoon, 2011)
- a. M' aresi kalitera na pijeno ekdhromes para na kathome brosta stin tileorasi.
me likes better to go excursions than to sit in front to-the TV
'I prefer going on trips rather than sitting and watching TV.'
- b. Protimo ton kafe para to tsai.
Prefer.1s the coffee than the tea
'I prefer drinking coffee rather than tea.'

Giannakidou and Stavrou (2009) capitalize on the observation that MCs are distinct from ordinary comparatives and argue that MCs do not contain abstraction over degrees. They propose that instead of comparing two (sets of) degrees, the metalinguistic *more_{ml}* takes two propositional arguments and compares these propositions with respect to a gradable propositional attitude R specified by the context and the judge *j*, which they represent as the individual anchor α , 'typically' the speaker. The authors mention that the individual anchor is akin to the Lasnik's (2005) judge parameter, so for simplicity, I will use *j* for 'judge'. Their semantics of *more_{ml}* is given in (24):¹¹

- (24) *Giannakidou and Stavrou's (2009) proposal*

$$\llbracket more_{ml} \rrbracket^{j,g} = \lambda q \lambda p. \exists d [R(j)(p)(d) \wedge d > \max(\lambda d'. R(j)(q)(d'))]$$

Giannakidou and Stavrou (2009) propose that the gradable propositional attitude R in (24) is either epistemic: 'according to the judge, it is more appropriate to say p than q', or volitional: 'according to the judge, p is more preferable than q'. Thus, according to this analysis, depending on the context, (24) will give us either an appropriateness-MC or a preference-MC.

In a more recent work, Giannakidou and Yoon (2011) modify the analysis advocated by Giannakidou and Stavrou (2009), making the uniformity more transparent. They refine the definition of the propositional attitude R by proposing that the appropriateness relation is derived from the preference relation, using Potts' (2007) 'rule of quotation'. This rule, roughly, converts a proposition into a quote, which becomes a linguistic expression itself and as such, can be operated on (for instance,

¹⁰In this section, I present Giannakidou and Stavrou (2009) and Giannakidou and Yoon's (2011) analyses faithfully using their labelling of examples such as in (22) as 'metalinguistic' comparatives of preference, although I believe that the term 'metalinguistic' is misused in these cases.

¹¹Giannakidou and Stavrou (2009) assume a slightly different LF, in which the *para*-clause is the second (and not the first, as in Heim's (2001) account of comparatives) argument of *more*. I altered the semantics of *more_{ml}*, according to my assumptions. I also added *j* as a superscript and the assignment function *g* which takes care of R to ensure that the semantics of *more_{ml}* is computable in Heim and Kratzer's (1998) framework, which I assume in this paper. I made similar changes in (25). Nothing hinges on these changes.

compared to another linguistic expression). As the focus of this paper is on preference-MC, this change amounts to specifying R directly in the semantics of $more_{ml}$ as a Des(ire) relation, allowing additional mechanisms to take care of other subcases of MC. The new semantics of $more_{ml}$ is illustrated in (25):

- (25) *Giannakidou and Yoon's (2011) analysis*
 $\llbracket more_{ml} \rrbracket^{j,g} = \lambda q \lambda p . p >_{Des(j)(c)} q$
 where $>_{Des(j)(c)}$ is an ordering function such that for propositions p and q and degrees d and d' , the degree d to which the judge j desires p in the context c is greater than the degree d' to which j desires q in c

The important insight of this development is the authors' suggestion that the Des-relation is akin to 'volitional predicates such as *want*' (p. 638) or *desire more* as treated by Stalnaker 1984, Heim 1992, and Villalta 2008. Unfortunately, the authors stop at this observation and do not provide a formal definition of Des or a spell-out analysis of an example of preference-MC. However, from the spirit of their discussion (p. 638-641) and the paraphrase in their example (56), it seems that the proposal is to adopt Villalta's (2008) degree semantics for *want*, see (26),¹² which combined with the semantics for $more_{ml}$ in (25) should give (27) (their (56)):

- (26) $\llbracket want \rrbracket = \lambda d \lambda x \lambda p \lambda w . x \text{ wants } p \text{ to a degree } d \text{ in } w$
- (27) a. Kalitera na pijeno ekdhromes para na kathome brosta stin tileorasi.
 better SUBJ go-1S excursions than SUBJ sit-1S in front to-the TV
 'I would rather go on trips than sit in front of TV.'
- b. = the degree d to which the speaker desires 'to go on trips' is greater than the degree d' to which he desires 'to sit in front of the TV'

At this point, I would like to return to the question of why the sentences such as the one in (27) above are (mis-)labelled 'metalinguistic'. Giannakidou and Stavrou (2009) and Giannakidou and Yoon (2011) argue for uniform analyses of appropriateness-comparatives and preference-comparatives based on the observation that the two classes of comparatives share similar properties, such as precluding synthetic comparative forms, *more*-float, the impossibility of a measure phrase in the *than*-clause and the freedom to combine with non-gradable and incommensurable predicates. In addition, Greek uses a specialized morpheme – *para* – to signal both appropriateness- and preference-comparatives. However, all these observations can be accounted for by the first part of their proposal, namely, that the comparison in the two classes is performed at the propositional, rather than predicative, level (and *para* may be viewed as signalling the propositional level of comparison). There is no need to conflate the two classes, especially, under the umbrella of 'metalinguistic' comparatives. If they are conflated, we will end up labelling any embedding predicate as 'metalinguistic'. In addition, there is one observation that the authors do not discuss. All their examples of preference-comparatives in Greek either have the overt verb *prefer* or a subjunctive marker, and use *better* as a degree head, rather than *more*. Of course, a thorough empirical

¹²In Villalta's (2008) analysis, *want* is treated as a primitive, as opposed to, for instance, Heim's (1992) treatment of *want* in terms of possible worlds.

study is required in order to decide the semantic contribution of these elements, but their presence clearly separates appropriateness-comparatives from preference-comparatives. Finally, Giannakidou and Stavrou (2009) and Giannakidou and Yoon (2011) point out that *para*-sentences are ‘attitudinal in nature and that the attitude is typically anchored to the speaker’ (Giannakidou and Yoon, 2011: 635). This description, however, cannot be used to single out appropriateness- and preference-comparatives as a natural class. As we saw above, judge-dependency is also characteristic of predicates of personal taste, epistemic modals and Russian *skoree*-sentences, which have neither metalinguistic nor preference flavour. For these reasons, I believe that ‘metalinguistic’ is not an appropriate term for the preference-comparatives discussed in this section. In the rest of this paper, I will replace this term with the more neutral ‘preference-comparatives’ and use *kalitera* ... *para* instead of *more_{ml}*.

3.3 ANALYSIS OF *skoree*

In order to extend the analyses discussed in section 3.2 to the Russian data, two modifications are required. First, as we saw in section 2.2, Russian *skoree*-sentences convey the idea of uncertainty rather than preference. This fact is re-emphasized by the examples below. Consider (28):

- (28) #Ja skoree ljublju čaj čem kofe.
 I sooner like tea than coffee
 ‘I like tea rather than coffee.’
 = according to the judge, it is more probable that I like tea rather than coffee

Under the assumption that the speaker is a rational agent, i.e. he knows what he likes and what he does not, the sentence is odd, cf. with the well-formed Greek examples in (23). However, if we embed (28) as in (29), the *skoree*-sentence becomes felicitous. This is because the judge of the propositional attitude in (29) is Peter rather than the speaker (see Stephenson 2007 for a similar observation about the behaviour of the judge-parameter with epistemic modals).

- (29) Petr sčitaet čto ja skoree ljublju čaj čem kofe.
 Peter counts that I sooner like tea than coffee
 ‘Peter thinks that I like tea rather than coffee.’
 = according to Peter, it is more probable that I like tea rather than coffee

Based on these facts, the first modification I propose is that languages differ with respect to the kind of propositional attitude present in the propositional *more*.¹³ To formalize my proposal, I will use the semantics of *more_{ml}* proposed in Giannakidou and Stavrou (2009), see (24), as more transparent. I propose that R, instead of being contextually specified, is given in the semantics of *more*. Some languages, such as Greek, Korean (and, probably, English), lexically specify R as Desire, whereas others, such as Russian, identify R as Probable. The lexical entries for the Greek *kalitera* ... *para* and Russian *skoree* ... *čem* are given in (30) and (31) respectively.

¹³In Giannakidou and Stavrou (2009) and especially in Giannakidou and Yoon (2011), there is an implicit assumption that a flavour of the propositional attitude in *more_{ml}* is a subject to contextual, rather than cross-linguistic, variation.

$$(30) \quad \llbracket \textit{kalitera} \dots \textit{para} \rrbracket^j = \lambda q \lambda p. \exists d [\text{Desire}(j)(p)(d) \wedge d > \max(\lambda d'. \text{Desire}(j)(q)(d'))]$$

$$(31) \quad \llbracket \textit{skoree} \dots \textit{čem} \rrbracket^j = \lambda q \lambda p. \exists d [\text{Probable}(j)(p)(d) \wedge d > \max(\lambda d'. \text{Probable}(j)(q)(d'))]$$

The semantics in (30) is equivalent to the analysis in Giannakidou and Yoon (2011), see (25); so, nothing is added or lost for Greek.

In the case of Russian, the propositional attitude that I present as Probable in (31) can be regarded as a belief-type probability, which expresses the judge's personal confidence or degree of belief. I treat Probable as a gradable predicate, a primitive that has the degree semantics similar to Villalta's (2008) proposal for *want*, see (32):

$$(32) \quad \text{Probable}(j)(p)(d) = 1 \text{ iff} \\ \text{according to the judge } j, \text{ the proposition } p \text{ is probable to the degree } d$$

The second modification I would like to propose concerns the property of *skoree*-sentences discussed in section 2.5. In section 2.5, I showed that *skoree* is felicitous only in contexts in which the option given in the *than*-clause is salient in the discourse. I provide the relevant example below (repeated from (15)):¹⁴

- (33) *unsuccessful dialogue: new ... new*
 CONTEXT: Anna and Mary are in the kitchen. Peter is in the dining room.
 MARY: Let's drink something.
 ANNA: #Petr skoree ljubit čaj čem kofe.
 Peter sooner likes tea than coffee
 'Peter likes tea rather than coffee.'
 = according to the judge, it is more likely that Peter likes tea rather than coffee
 (If we want to please Peter, let's make tea, but not coffee.)

This requirement on *skoree* can be captured by including the presupposition that *q* is a salient alternative of *p* in the context *c*. This addition is illustrated in (34):

$$(34) \quad \llbracket \textit{skoree} \dots \textit{čem} \rrbracket^{j,c} = \\ \lambda q \lambda p: q \in \text{Alt}(p)(c). \exists d [\text{Probable}(j)(p)(d) \wedge d > \max(\lambda d'. \text{Probable}(j)(q)(d'))]$$

For the purpose of this paper, I will assume a simple Alt-function, as defined below:

$$(35) \quad \text{Alt}(p)(c) = \lambda q. q \text{ is an alternative for } p \text{ in } c$$

In the *tea*-example above, Alt will return a set of propositions such as {Peter likes juice, Peter likes milk, etc.}. In a more technical way, this function can be captured through the focus mechanism (e.g. Rooth, 1992, 1997). For reasons of space, I do not spell out the details of such an approach. However, I would like to mention two facts that indicate that this idea is on the right track. First, it has been discussed in the literature that predicates of desire and uncertainty are focus sensitive (e.g. Villalta, 2008). And these are exactly the two propositional attitudes used in *kalitera ... para* and *skoree ... čem*. Second, MCs are shown to be focus sensitive as well (see Embick 2007).

¹⁴In a context such as in (15), an ordinary comparative is felicitous.

The semantic derivation of the *tea*-example is as follows:

- (36) a. Petr skoree ljubit čaj čem kofe.
Peter sooner likes tea than coffee
'Peter likes tea rather than coffee.'
= according to the judge, it is more likely that Peter likes tea rather than coffee
- b. $\llbracket [skoree [than Peter likes coffee] Peter likes tea] \rrbracket^{j,c} =$
 $\llbracket skoree \rrbracket^{j,c} (\llbracket Peter likes coffee \rrbracket) (\llbracket Peter likes tea \rrbracket) =$
 $\llbracket skoree \rrbracket^{j,c} ('Peter likes coffee') ('Peter likes tea')$
 is defined iff
 'Peter likes coffee' is salient in *c*
 where defined
 $\llbracket skoree \rrbracket^j ('Peter likes coffee') ('Peter likes tea') = 1$ iff
 $\exists d [\text{Probable}(j)('Peter likes tea')(d)$
 $\quad \wedge d > \max(\lambda d'. \text{Probable}(j)('Peter likes coffee')(d'))]$
 = according to the judge, it is more probable that Peter likes tea than it is probable that Peter likes coffee

This semantics is straightforwardly applicable to the other example presented in section 2.1; the result is shown below.

- (37) a. Petr skoree na rabote čem doma.
P. sooner at work than home
'#Peter is at work rather than at home.'
= according to the judge, it is more likely that Peter is at work than at home
- b. $\llbracket (37a) \rrbracket^{j,c}$ is defined iff
 'Peter is at home' is salient in *c*
 where defined
 $\llbracket (37a) \rrbracket^{j,c} = 1$ iff
 $\exists d [\text{Probable}(j)('Peter is at work')(d)$
 $\quad \wedge d > \max(\lambda d'. \text{Probable}(j)('Peter is at home')(d'))]$
 = according to the judge, it is more probable that Peter is at work than it is probable that Peter is at home

To summarize, in this section, I proposed two modifications that allowed to extend the analyses proposed for preference-comparatives in Giannakidou and Stavrou (2009) and Giannakidou and Yoon (2011) to epistemic comparatives with *skoree* in Russian. In essence, the semantics of *skoree* is shown to involve the comparison of degrees of personal probability assigned by the judge to two propositions. These modifications undermine the idea that different types of propositional comparative can be treated uniformly advocated by the authors mentioned above.

4 OTHER LANGUAGES

We saw above that both Greek and Russian allow propositional comparatives with gradable predicates, such as *like* and *prefer*. Consider the following sentence from Greek, which expectedly, has only the preference reading, as opposed to the Russian example in (4)/(37).

- (38) Kalitera na ine spiti para sto grafio. (Greek)
 better SUBJ be-3S home than in.the office
 ‘He better be at home than in the office.’ (speaker’s preference)
 ≠ he is more likely at home than in the office

Let us consider now two closely related Romance languages: Romanian and French. French patterns with Greek in allowing *plutôt* with gradable predicates, but not with *to be*. Romanian, on the other hand, patterns with Russian in specifying the attitude of a propositional adverb as likelihood or probability.¹⁵

- (39) a. Paul aime le café plutôt que le thé. (French)
 ‘P. likes coffee rather than tea.’
 b. #Paul est chez lui plutôt qu’à l’université.
 ‘Peter is at home rather than at the university.’
- (40) a. Lui Ion mai de+grabă îi place cafeaua (Romanian)
 Dat.the John more ADV+rush CLT.3S like-3S.IND.PRES coffee.the
 decât ceaiul.
 than tea.the
 ‘John likes tea rather than coffee.’
 b. Ion este mai de+grabă acasă decât la birou.
 Ion be-3S.PRES.IND more ADV+rush home than at office
 ‘#John is at home rather than in the office.’
 = based on the information the speaker has, it is more plausible that John is at home than in the office

These data are interesting not only from the perspective of providing more linguistic variation, but also as an inspiration to seek a more systematic explanation for the fact that in similar constructions, some languages specify the propositional attitude as Desire, whereas others as Probability. In what follows, I suggest a beginning of such a systematic explanation.

The core idea is that the difference between French and Romanian/Russian is that *plutôt* merges below the phase level, whereas the propositional adverbs in Romanian and Russian merge above a phase. The Phase Impenetrability Condition (e.g. Chomsky 2004) makes Romanian and Russian propositional adverbs indifferent to the nature of the predicate. French *plutôt*, on the other hand ‘sees through’ and requires a gradable predicate. This is illustrated in (41):

¹⁵I thank Monica Alexandrina Irimia for supplying the Romanian examples and Amal Zgati for the examples in French.

comparative semantics. An interesting question is why some languages allow the epistemic attitude in such cases, whereas others do not.

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