### Ellipsis in the phrasal comparative: evidence from correlate constraints\*

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#### 1. Introduction

This paper contributes to the growing body of research on the syntax of phrasal comparatives. *Phrasal comparatives* are constructions in which the degree taken as the *standard of comparison (SOC)* is expressed as a single phrase, typically an NP/DP, (1). They contrast with *clausal comparatives*, wherein the SOC is instantiated by a full or reduced clause, (2-3).

- (1) John is taller than Bill.
- (2) John is taller than Bill is.
- (3) John runs faster than Bill swims.

I will refer to DPs like *Bill* as the *standard of comparison (SOC)* and to DPs they are contrasted with, *John* in (1-3), as the *target of comparison (TOC)* or *correlate. Than* is the *standard marker* and *-er/more* is the *comparative morpheme* and *quantifier* respectively. The fact that in English the same standard marker *than* is used in both phrasal and clausal comparatives, sparked the notorious debate on whether the former is to be derived from the latter via ellipsis (e.g. (1) from (2)) or whether *Bill* in (1) should receive a "direct" DP/NP-analysis.

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Both approaches have been advocated in the literature since the 1970s (cf. an excellent review in Lechner to appear). Although there still seems to be no complete consensus as far as English is concerned, the debate became much less principled as linguists began investigating phrasal comparatives in other languages. It turned out that both structures are needed to capture cross-linguistic facts and, moreover, that they may co-exist in a single language, one that has different standard-marking strategies (see e.g. Merchant 2009, comparing *apo'ti* and *apo*-comparatives of Modern Greek).

This paper is devoted to Russian, which has five different phrasal comparative constructions. In one type of phrasal comparative the standard of comparison is introduced by *čem* 'lit. what.INS' (4) or *neželi* (5), both traditionally considered conjunctions and so labelled in the Russian National Corpus (RNC).<sup>2</sup> Interestingly, in colloquial language the two may even co-occur in which case *neželi* precedes *čem* (6); such sentences are licensed in the same environments as *neželi*-comparatives. In all these comparatives the standard DP bears the same morphological case as its correlate.<sup>3</sup>

- (4) Ivan (prygaet) vyše **čem** (prygaju) ja.
  Ivan.**NOM** (jumps) higher WH (jump.1SG) 1SG.**NOM**'Ivan {is taller; jumps higher} than I.'
- (5) Ivan (prygaet) vyše **neželi** ja. Ivan.**NOM** (jumps) higher NEG-EMPH-Q 1SG.**NOM** 'Ivan {is taller; jumps higher} than I.'
- (6) Ivan (prygaet) vyše **neželi čem** ja.
  Ivan.**NOM** (jumps) higher NEG-EMPH-Q WH 1SG.**NOM**'Ivan {is taller; jumps higher} than I.'

In the other type of phrasal comparative the standard of comparison is introduced via genitive case marking, that is, the morphological case of the standard DP is fixed. I distinguish two types of this genitive of comparison, which I call the *nominal genitive* of comparison, (7), and the *adjectival genitive* of comparison, (8), respectively, based on the morphological form of the standard argument.

- (7) Ivan (prygaet) vyše *menja*.

  Ivan.NOM (jumps) higher 1SG.GEN

  'Ivan {is taller; jumps higher} than me.'
- (8) Ivan (prygaet) vyše *moego*.
  Ivan.NOM (jumps) higher 1SG.**POSS.GEN**'Ivan {is taller; jumps higher} than me.'

While sentences like (7) have been discussed in the generative literature (see e.g. Matushansky 2002; Pancheva 2006; Ionin & Matushansky 2012; Berezovskaya 2013; Berezovskaya & Hohaus 2015), sentences like (8) only appear once in Pancheva (2006)

<sup>&</sup>lt;sup>2</sup> Available at http://ruscorpora.ru/.

<sup>&</sup>lt;sup>3</sup> Abbreviations adhere to the Leipzig Glossing Rules and EMPH = emphatic enclitic particle že.

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and Matushansky (2002) respectively and are not presented as a distinct variety. Despite the genitive case-marking that unites them, there are several arguments for a separate treatment of (7) and (8) (cf. Philippova in progress). For reasons of space, in this paper I only consider the syntax behind the nominal genitive of comparison.<sup>4</sup> I provide a novel type of argument for an underlying clausal structure behind phrasal comparatives, potentially applicable to other languages.

In section 2 I probe the structure behind the (nominal) genitive comparative, comparing it to the *čem*-comparative. I show that standard tests and diagnostics suggest that SOC and TOC belong in the same clause in the former and are in separate clauses in the latter. Although this suggests a simple NP/DP-analysis for the genitive of comparison, the facts are also compatible with at least three existing clausal analyses, discussed in section 3. Section 4 presents a novel constraint on correlates to genitive standards which can be derived from a clausal analysis, but is unexpected under a 'direct' analysis. Section 5 concludes and presents issues for further research.

## 2. Probing the structure behind the standard DP

Genitive comparatives, in contrast to čem-comparatives, do not show overt signs of a complex structure underlying the phrasal standard: no material beyond the genitive DP is admitted in the standard, no C-like standard-marker is present and the case on the standard is not parallel to that of the correlate. In addition, genitives of comparison only admit DP-standards, whereas čem-comparatives allow other kinds of XPs, e.g. AdvP:

- (9) \*Segodnja Ivan prygaet vyše obyčno.
  Today Ivan.NOM jumps higher usually
  ''Today Ivan jumps higher than usually.'
- (10) Segodnja Ivan prygaet vyše **čem** obyčno. Today Ivan.NOM jumps higher WH usually 'Today Ivan jumps higher than (is) usual.'

Furthermore, as we shall now see, a variety of diagnostics (adapted from Merchant 2009) suggest that the genitive SOC DP and its correlate DP belong in the same clause – again as opposed to the SOC and TOC of the *čem*-comparative.

First, Russian is a negative concord language, in which clausal negation only licenses n-words in the same minimal CP. The availability of an n-word in the SOC under matrix negation may thus serve as a diagnostic for absence of a clausal boundary. Negative concord is observed in the genitive comparative but not in the *čem*-comparative, as shown in (11) and (12) respectively, suggesting that the standard DP and its correlate are in the same CP in the former case, but in two different CPs in the latter.

<sup>&</sup>lt;sup>4</sup> The standard in the čem-comparative is plausibly always clausal (cf. Ionin & Matushansky 2013). Neželicomparative should probably receive a similar analysis (single DP standards are not even always good in this construction), but notably, the licensing conditions for the two constructions differ: čem-comparatives require an element bearing a comparative morpheme, whereas neželi is also licensed in the presence of such lexemes as drugoj, inoj 'different' and predpocitat' 'to prefer' (cf. Philippova in progress).

- (11) Maša \*(ne) vyše nikogo. Masha.NOM NEG taller nobody.GEN 'Masha isn't taller than anyone.'
- (12) \*Maša ne vyše, čem nikto.

  Masha.NOM NEG taller WH nobody.NOM

  'Masha isn't taller than anyone.'

Secondly, the genitive standard DP can undergo *wh*-movement, obligatorily stranding the comparative adjective (13) and pied-piping the comparative adverb (14).<sup>5</sup>

- (13) Kogo ty vyše?
  Who.GEN you.NOM taller
  'Who(m) are you taller than?'
- (14) Vyše kogo ty segodnja prygnul? Higher who.GEN you.NOM today jumped 'Who did you jump higher than today?

By contrast, the standard DP, introduced by čem, may not undergo wh-movement, irrespectively of whether it moves alone, as in (15), or pied-pipes more material, as in (16-17).

- (15) \*Kto ty (prygnul) vyše čem? Who.NOM you.NOM (jumped) taller WH 'Who {are you taller; did you jump higher} than?'
- (16) \*Čem kto ty vyše (prygnul)? WH who.NOM you.NOM taller (jumped) '\*Than who {are you taller; did you jump higher}?'
- (17) \*Vyše čem kto ty (prygnul)? Higher WH who.NOM you.NOM (jumped) ''Higher than who {are you; did you jump}?

A natural explanation for this difference between the genitive and the  $\check{c}em$  -comparative is that the genitive standard, but not the standard introduced by  $\check{c}em$ , belongs in the same clause as the correlate and the comparative adjective/adverb. This is supported by the fact that extraction from a clausal standard introduced by  $\check{c}em$  is ungrammatical as well:

(18) \*Kto ty prygnul vyše čem {prygnul; prygaet}? Who.NOM you.NOM jumped higher WH {jumped; jumps} 'Who did you jump higher than {jumped; jumps}?

<sup>&</sup>lt;sup>5</sup> This difference may have to do with the predicative vs. adjunct nature of adjectives and adverbs respectively: typically, extraction from adjuncts is blocked, hence the whole adjunct phrase should move.

In other words, both (15) and (18) are ungrammatical because finite clauses are islands for extraction in Russian.<sup>6</sup> Pied-piping of the standard marker *čem*, alone, (16), or together with the comparative adjective/adverb *vyše* as in (17), is then ungrammatical because *wh*-items typically do not pied-pipe complementizer-like elements, let alone elements from a higher clause.

Finally, the genitive of comparison licenses reflexive pronouns in the standard DP, whereas *čem*-comparatives do not always do so.

- (19) Maša ljubit sebja bol'še {√svoego; \*eë} otca.

  Maša loves self.ACC more self's.GEN her father.GEN

  'Mashaj loves herself more than herj father.'
- (20) Maša ljubit sebja bol'še čem {\*svoj; ✓eë} otec.

  Maša.NOM loves self.ACC more WH self's.NOM her father.NOM 'Mashaj loves herself more than herj father (does).'
- (21) Maša ljubit sebja bol'še čem {√svoego; \*eë} otca.

  Maša.NOM loves self.ACC more WH self's.ACC her father.ACC 'Masha¡ loves herself more than (she loves) her¡ father.

Sentence (19) is ambiguous between a subject and an object-correlate reading and can be paraphrased as either (20) or (21), with reflexive licensing not depending on the reading. In contrast, čem-comparatives only admit a reflexive in an accusative standard DP, correlating with an object. The facts fall out if the SOC DPs in (20-21) are analyzed as being underlyingly clausal. In that case, a reflexive in a NOM standard is not locally bound: Masha is not local enough – reflexive pronouns must be bound by a clause-mate subject DP in Russian – and the reflexive itself is part of the subject of the relevant clause, as suggested by its NOM-marking. The ACC-marked reflexive in (21), on the other hand, is a part of the object of the underlying clause, hence it can be bound by an unpronounced subject, co-referent with Masha. As for the reflexive in the genitive standard (19), it must be licensed by the subject DP Masha and hence belong in the same clause.

We have seen quite a few pieces of evidence for the reduced clause analysis of phrasal comparatives introduced by čem and no such evidence for the genitive of comparison. Instead, the data suggest that the standard and the correlate DPs are clause-mates in the genitive comparative. Let me note that with respect to the diagnostics employed, čem-comparative patterns with the Greek ap'oti-comparative, whereas the genitive comparative patterns with the apo-comparative (for Greek data see Merchant 2009). Interestingly, while the ap'oti-comparative receives only a reduced CP-analysis in Merchant (2009), two analytical options are entertained for the apo-comparative: the Direct Analysis, whereby apo is treated as a P with the standard as its DP-complement, and a more abstract, reduced CP-analysis, involving movement of the standard into the

<sup>&</sup>lt;sup>6</sup> This, in turn, might be due to the fact that the elements introducing indicative and comparative clauses are *wh*-words, occupying Spec, CP and thus precluding successive-cyclic movement.

apo-headed PP of the matrix clause. In addition, Pancheva (2006) proposes a uniform small clause analysis for the genitive comparative in Russian and the phrasal od/ot-comparatives in other Slavic languages and Pancheva (2010) modifies this analysis for certain Slavic languages. In other words, Merchant (2009) and Pancheva (2006, 2010) show that even when a phrasal comparative does not allow any overt material besides the standard DP and when the locality tests tell us that the standard and its correlate are clause-mates, one cannot exclude the possibility that the standard is underlyingly clausal. Although the Direct Analysis is the most natural option for the Russian genitive comparative, the facts are also compatible with at least 3 versions of a clausal analysis.

#### 3. Existing reduced clause analyses and evidence for abstract structure

In the reduced CP analysis put forward in Merchant (2009), locality facts are derived by postulating raising of the standard DP out of the comparative CP into the PP-domain of the antecedent clause, as schematized in (22).

(22) 
$$[PP than [PP SOC_1 [P] than [CP [FP t_1 [TP t_1 is tall]]]]]]$$

Pancheva (2006, 2010) proposes a small clause structure, where there is also no CP-boundary between the standard and the correlate. In Pancheva (2006) the small clause predicate is copied from the matrix clause at LF (after the degree quantifier -er/more undergoes QR and the *than-PP* undergoes late merge with it, cf. Pancheva 2006: ex. 51), i.e. there is no syntactic content in the AP, as indicated by Ø in (23). Pancheva's (2010) analysis posits actual syntactic structure in the small clause predicate which undergoes PF-deletion, shown by shading in (24). I only provide the small clause part of the latter structure as the rest of it does not differ from (23).

(23) 
$$[_{aP} \text{ TOC } [_{AP} [_{DegP} \text{ -er/more } [_{PP} \text{ than } [_{SC} \text{ SOC } [_{AP} \emptyset]]]] [_{A'} \text{ tall}]]]$$

### (24) $[PredP SOC_2 [aP wh_1 [aP t_2 [AP d_1-tall]]]]$

Analyses like (22) or (24) postulating abstract structure require some syntactic evidence, which is necessarily indirect since no overt material beyond the DP is allowed in the standard of phrasal comparatives considered. Evidence provided in Merchant (2009) and Pancheva (2010), Pancheva and Tomaszewicz (2011) concerns contrasts between two types of comparatives in Greek and Slavic respectively, which can be readily captured under a clausal analysis, but are unexpected under the direct analysis. Merchant (2009) proposes the structure in (22) to capture the fact that the standard DP introduced by *apo* 'from' may not correlate with a DP that is located within an island. However, he immediately suggests an alternative, direct DP-analysis, deriving island sensitivity from constraints on covert movement of the correlate rather than overt movement of the standard. Thus, island-sensitivity does not necessarily motivate the elaborate CP-structure behind the standard.

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The small clause analysis of Pancheva (2010), Pancheva & Tomaszewicz (2011) is motivated by the observation that in wh-fronting languages the phrasal, but not the reduced clausal, comparative exhibits an asymmetry between object and (basegenerated) subject amount comparatives: the former are fine whereas the latter are degraded. This fact is derived from an inviolable anti-locality constraint and the violable constraint on extraction from subjects. The account thus rests on constraints on whoperator movement, predicting that the asymmetry between subject and object amount comparative should parallel the contrast between overt subject and object subextraction. Pancheva & Tomaszewicz (2011) provide experimental support predictionUnfortunately, Pancheva's argument for a clausal structure does not seem to work for Russian, but not because "in Russian no nominal [that is, amount -T.P.] comparatives can be phrasal" (Pancheva 2010: fn.1). Although Russian equivalents to Polish and Bulgarian sentences examined in Pancheva (2010) turn out to be quite bad, irrespectively of the locus of comparative, a minimal pair of sentences with a synonymous verb *navestit*' 'visit', requiring both subject and object to be animate, was more readily accepted by 8 native speakers that I consulted.

- (25) Maša navestila druzej bol'še Miši.  $M=2.5 (1.4)^7$  Masha.NOM visited.F friends.GEN many-er Misha.GEN 'Masha visited more friends than Misha.'
- (26) Mašu navestilo druzej bol'še Miši. M=1.6 (0.5) Masha.ACC visited.N friends.GEN many-er Misha.GEN 'More friends visited Masha than (visited) Misha.'
- (27) Skol'ko/skol'kix Maša navestila druzej? *M=4.4* (0.5) How-many.NOM/ACC Masha.NOM visited.F friends.ACC 'How many friends did Masha visit?'
- (28) Skol'ko Mašu navestilo druzej? *M*=4.4 (0.5) How-many.NOM Masha.ACC visited.N friends.GEN 'How many friends visited Masha?'

Whereas both object and subject amount comparatives are imperfect, the latter are more degraded on average, as the mean ratings in (25-26) show. However, only 3/8 speakers rated (25) higher than (26), as 3-5 vs. 1-2, the remaining ones judging both as 1-2 (on the 1-5 scale). Importantly, no speaker reported a contrast between subject and object subextraction in sentences (27-28), parallel to (25-26). This means that the subject/object asymmetry in amount comparatives cannot be attributed to the subject-island violation, at least in Russian. An alternative reason for the contrast may be that in subject amount comparatives it is an object DP that is a correlate and objects make worse correlates (especially when inanimate). Note also that while subject/object subextraction asymmetry is generally considered to hold in Russian too, the contrast is

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<sup>&</sup>lt;sup>7</sup> *M* stands for the mean judgment value and the number in parentheses reports standard deviation. Speakers were instructed to use a discrete 1-5 scale, where 1 corresponded to 'bad, it is impossible to say so' and 5 to 'good, absolutely acceptable'.

actually present only when the subject is preverbal (cf. Philippova in progress). This suggests that the mild island-hood of subjects might require an informational structural rather than syntactic treatment, which may pose a problem for Pancheva's (2010) account, if the subject/object subextraction asymmetry disappears under different word order in Polish as well. While this is to be resolved in future research, here I merely conclude that Pancheva's (2010) argument cannot be employed for Russian.

In the next section I present a different kind of indirect syntactic evidence in favor of a clausal analysis. It comes from a morphological constraint on correlates to the genitive standard and falls out from a clausal analysis but is unexpected under the DP-analysis.

# 4. Constraints on the correlate to the phrasal standard: evidence for ellipsis?

Nominative and accusative DPs constitute freely available correlates to a nominal genitive standard in Russian:

(29) Ja uvažaju Petrovu bol'še {Ivanova; Ivanovoj}.

I.NOM respect Petrova.ACC more Ivanov.GEN=ACC Ivanova.GEN=DAT=INS=LOC
'I respect Petrova more than Ivanov/Ivanova.'

'I respect Petrova more than {\sqrapet (\sqrapet \text{Vivanova}) \does.' \quad NOM-reading \frac{1}{2} \text{Vivanova} \frac{1}{2} \text{Viva

'I respect Petrova more than I respect {√Ivanov; √Ivanova}.' ACC-reading

By contrast, DPs that are neither nominative nor accusative do not always qualify:

(30) Ja goržus' Petrovym bol'še {Ivanova; Ivanovoj}.

I.NOM proud Petrov.INS more Ivanov.GEN=ACC Ivanova.GEN=INS
'I am proud of Petrov more than Ivanov/Ivanova.'

'I am proud of Petrov more than {\sqrt{Ivanov}; \sqrt{Ivanova}} is.' NOM-reading

'I am proud of Petrov more than of {\*Ivanov; √Ivanova}.' INS-reading

Furthermore, PPs cannot be correlates to a nominal genitive standard:

(31) Ja verju v Petrova bol'še {Ivanova Ivanovoj}.

I.NOM believe in Petrov.ACC more Ivanov.GEN=ACC Ivanova.GEN=INS=DAT=LOC
'I believe in Petrov more than Ivanov/Ivanova.'

'I believe in Petrov more than  $\{\sqrt{\text{Ivanov}}, \sqrt{\text{Ivanova}}\}\$  does. NOM-reading

'I believe in Petrov more than I believe in {\*Ivanov; \*Ivanova}.' PP-reading

Thus, correlates to nominal genitive standards obey the following constraint:

- (32) The Oblique Correlate Constraint (OCC)
  - a. A nominal genitive standard DP may have an oblique correlate iff its morphological form is the same for genitive and the relevant oblique case.
  - b. A nominal genitive standard DP may not have a P-object or a PP-correlate.

The OCC can be rather straightforwardly derived from either the reduced CP-structure of Merchant's (2009) or from the elliptical small clause structure developed in Pancheva

(2010), Pancheva & Tomaszewicz (2011). Under the direct and LF-copying analyses (Pancheva 2006) the facts remain unexpected.

To derive (32) from clausal structure we should make two assumptions. First, a DP may receive multiple case values in the course of the derivation. Such an approach to case is advocated in Béjar and Massam (1999), Merchant (2006) and Richards (2013) and is also taken in Merchant's (2009) reduced CP analysis of the Greek *apo*-comparative. The second assumption is that structural, but not inherent/lexical case values may be "overwritten", that is, not realized morphologically. The tendency for preservation of inherent/lexical case morphology has been observed at least for Norwegian in Béjar & Massam (1999) and for Lardil in Richards (2013). The former capture the inherent/structural case contrast by proposing that inherent case is more marked, while Richards conceives of it as a distinction between semantically interpretable and uninterpretable Case. I will assume that inherent case must be morphologically realized because, unlike structural case, it encodes information that cannot be retrieved otherwise.

I will further assume that there are two mechanisms responsible for multiple case value resolution in Russian: Overwrite and Match (equivalent to Attraction and Matching in Assmann et al 2014. The former instructs the morphology to realize the last assigned case and the latter resolves the conflict via insertion of a syncretic morpheme. Both can freely apply to all case value combinations, but the former will yield an ungrammatical result if the Case to be overwritten is inherent/lexical.

I adopt and adapt the small clause analysis à la Pancheva (2010), Pancheva & Tomaszewicz (2011), rather than Merchant's (2009) reduced CP option since the latter requires postulating more silent structure and presupposes availability of DP-raising to the matrix clause Spec, PP out of an embedded CP. Although there is some independent evidence for this kind of raising in Modern Greek (see Merchant 2009 and references there), nothing of the kind has been proposed for Russian, to the best of my knowledge.

Let us now derive the OCC. The object reading of sentence (29) is derived as follows:

(33) 
$$\left[\text{DegP -er }\left[\text{PP }\emptyset_{\text{ot}}\left[\text{FP I-va}_{1}\left[\text{vP }\left[\text{AdvP }wh\text{ much}\right]\left[\text{vP I}\left[\text{v' respect }\left[\text{vP }\left[\text{VP tv }t_{1}\right]t_{\text{AdvP}}\right]\right]\right]\right]\right]\right]\right]$$

The scheme above presents the crucial part of the structure. The phrase behind the genitive standard of comparison, i.e. *Ivanovoj*, is an FP (as in Pancheva & Tomaszewicz 2011). F takes a vP as its complement; there is no TP or CP layer in the structure. The vP behind the standard is identical to the vP of the matrix clause except for the standard-to-be DP. There is a wh-operator in the small clause, originating in the position parallel to that of the degree head in the matrix and moving to the most peripheral position of type <t> available, i.e. the edge of the vP, thereby creating a degree predicate. The SOC-to-be moves from inside the vP to Spec, FP. At PF, the maximal vP undergoes ellipsis. The SOC DP in (33) originating as the direct object of the verb uvažat 'to respect', gets an [ACC] value from the v+V combination. Moving to Spec, FP it receives [GEN] from the

<sup>&</sup>lt;sup>8</sup> Pancheva & Tomaszevicz (2011) suggest that FP is equivalent to a focus phrase, but do not commit to it.

<sup>&</sup>lt;sup>9</sup> The *wh*-operator may move on its own if the phrase it is contained in allows subextraction. In our case, however, the *wh* is within an AdvP, commonly considered an adjunct. Since adjuncts are islands for extraction, I assume that the entire AdvP moves.

null preposition *ot* 'from' via Exceptional Case Marking.<sup>10</sup> Under standard assumptions both these cases are structural. Thus, the SOC DP gets a structural genitive on top of a structural accusative. The morphological case we see on the SOC must be genitive, meaning that the structural genitive 'overwrites' the structural accusative. Or, in more general terms, the structural case that is assigned last in the derivation is the one that gets morphologically realized. Overwriting the 'original' structural accusative by structural genitive incurs no penalty and this is why accusative direct objects are typically allowed as correlates to the genitive standards.

Now let us see what happens if the first Case that the SOC DP receives is inherent/lexical. A morphologically reflexive verb *gordit'sja* 'to be proud of' requires its internal argument to bear instrumental case morphology. Following Bailyn (2012), I assume that the assignment of INS is a lexical property of such verbs and they assign it upon Merge with their internal argument.<sup>11</sup>

(34) 
$$[\text{DegP -er }[\text{PP }\emptyset_{\text{ot}}[\text{FP I-va}_{\text{IVP }}[\text{VP }[\text{AdvP }wh \text{ much}][\text{VP I }[\text{V' proud }[\text{VP }[\text{VP tv }t_1]t_{\text{AdvP}}]]]]]]]$$

GEN

INS

The SOC DP bearing lexical [INS] and structural [GEN] must be both instrumental and genitive from the morphological point of view. This is so because on the one hand, morphology must be faithful to lexical case and on the other hand, the derivation of the genitive comparative is impossible when SOC is not morphologically genitive. Given the morphological resources of Russian, which lacks overt case-stacking, these conflicting requirements can only be satisfied if the morphological form of the SOC displays genitive-oblique syncretism, i.e. under Case Matching. This derives Part (a) of the Oblique Correlate Constraint.

What about part (b), namely, the impossibility of PP-/P-complement correlates? Let us look at how sentences like (31) are derived under the small clause analysis.

$$(35) \quad [\text{DegP -er }[\text{PP } \emptyset_{\text{ot}} \text{ [FP } \text{I-v}_1 \text{ [vP } [\text{AdvP } wh \text{ much}] [\text{vP } \text{I }[\text{v'} \text{ believe } [\text{vP}[\text{VP } \text{tv } [\text{PP } \text{in } \text{t}_1]]}]]]])$$

I assume that the whole PP *v Ivanova* 'in Ivanov' may not move from inside the VP to Spec, FP because PPs are not licit subjects of a small clause predicate (perhaps their semantic type is not right). Thus, the only way to derive the desired interpretation is to move the DP *Ivanov* out of the PP. This, however, must be blocked in a non-P-stranding language like Russian: unlike certain island violations, preposition-stranding is not ameliorated by ellipsis (cf. Abels 2003). Thus, there is no licit derivation in Russian that would lead to the PP/P-complement correlate interpretation of the nominal genitive comparative. We have thus derived OCC (b) as well.

The most salient, nominative readings of sentences (29-31) are derived via movement of the small clause subject from Spec, vP to Spec, FP. Since there is no NOM-assigning

<sup>&</sup>lt;sup>10</sup> Positing a null P in the structure is in line with Pancheva's (2006) proposal for Russian, additional arguments for which are presented in Philippova (in progress).

<sup>&</sup>lt;sup>11</sup> For a slightly different approach to the Russian instrumental case see Pereltsvaig (2007).

T-head in the small clause, these standard DPs receive only one case value, namely, [GEN] from the null preposition *ot* 'from'. NOM-readings are then always available because there is no need to resolve a multiple case value conflict.

#### 4.1. A finer-grained picture of correlate constraints

#### 4.1.1. Is OCC too weak?

It turns out that Russian speakers vary as to which readings of the sentences in (29-31) they find available. The speakers I initially asked (4 including myself) for whom the range of readings is constrained by the OCC can be considered the most liberal ones. Another group of speakers don't accept the oblique readings irrespectively of syncretism, allowing only NOM- and ACC-correlates. Still others accepted only the NOM-correlate interpretations of (29-31). These correspond respectively to Group 1, 2 and 3 in (36).

How can we model this variation under the small clause analysis proposed above? I have suggested above that there exist two mechanisms for multiple case value resolution in the morphological component — Overwrite and Match. Since in our system morphology must be faithful to lexical/inherent case values, only Match will produce a grammatical result for multiple case derivations involving case values of this type, whereas derivations involving multiple case values of structural type can be resolved by either Match or Overwrite. The speakers then differ in which mechanisms for case value resolution they have in their grammars, as illustrated in (36).

Since the derivation of NOM-readings does not involve multiple case checking, they would be available for any speaker and would be the only possible ones for speakers lacking both Overwrite and Match (Group 3). Group 2 speakers only have Overwrite and hence will only allow structurally case-marked correlates. Group 1 speakers have both Overwrite and Match and thus admit all structurally case-marked correlates and inherent case-marked correlates, in case the SOC obeys the syncretism constraint. Finally, the system provides an additional logically possible grammar (Group 4), which only has Match. Such speakers (if they exist) would require all non-NOM-construals to have SOCs that are syncretic between genitive and the relevant non-NOM case.

#### (36) *Modelling inter-speaker variation*

	Group 1	Group 2	Group 3	Group 4
OVERWRITE	+	+	-	-
MATCH	+	-	-	+
Readings	NOM, ACC,	NOM & ACC	NOM	NOM,
allowed	syncretic			syncretic non-
	obliques			NOM

An important question that arises is how categorical the judgements of Group 2 and Group 3 speakers are. Since I only informally asked a small set of speakers about isolated

<sup>&</sup>lt;sup>12</sup> Note that it would be much harder to account for such speakers had we adopted Merchant's reduced CP-analysis: in Merchant's structure we would get multiple case values on the NOM-correlating SOC as well (the T-head is present), so no contrast between NOM- and ACC-readings would be predicted.

sentences, it may be premature to conclude that the readings they did not accept are necessarily ruled out by the morpho-syntactic properties of their grammar. An alternative explanation would be that these speakers simply have failed to assign the information structure that would be appropriate for the missing interpretation.

## 4.1.2. Is OCC too strong?

While the previous subsection shows that the OCC may be too weak, here I present cases that violate the OCC and thus suggest that the proposed analysis might undergenerate.

Russian personal pronouns only display GEN/ACC syncretism, so oblique correlates are expected to be disallowed with such standards. However, corpus searches of *bol'še* with 3<sup>rd</sup> person pronouns revealed 3 such examples, out of 70 adverbial instances (62 had a NOM correlate and 5 – an ACC correlate); they are presented in (37-39). Each exception has a different type of correlate: a dative indirect object, a dative subject-like DP and the possessor-introducing PP, headed by *u* 'at'.

- (37) Bol'še nego krasnuju kartočku pokazyvali tol'ko Juriju Kovtunu.

  More he.GEN red.ACC card.ACC showed.PL only Yury.DAT

  'Only Yury Kovtun was shown the red card more often than him.'
- (38) Bol'še nix udalos' zarabotat' tol'ko PIFam,
  More they.GEN managed.N.REFL to earn only open-end funds.DAT
  'Only open-end funds managed to earn more than them [bond funds].'
- (39) Bol'še nego iz igrokov sbornoj tol'ko u... Malkina. More he.GEN from players.GEN team.GEN only at Malkin.GEN 'Of all national team players, only Malkin has [scored] more [goals] than him.'

Another example of an apparent OCC-violation is the judgment pattern for a sentence with a topicalized oblique (dative) DP:

(40) Maše₁ ja plaču t₁ bol'še Miši.
 Masha.DAT I.NOM pay more Misha.GEN≠DAT
 'I pay Masha more than Misha.'
 'I pay Masha more than I pay Misha.'
 'I pay Masha more than Misha pays Masha.'
 DAT-reading
 'NOM-reading

Of 6 speakers I asked, just one speaker who is also a linguist accepted the NOM-reading only (as predicted by the analysis), but making that judgment took her quite some time. The remaining 5 speakers got the OCC-violating DAT-reading first. Only three of them also got the NOM-reading afterwards. Two of these three furthermore said that NOM was in fact the only acceptable one, while one speaker still accepted both. Thus, for 1 speaker the sentence had NOM-correlate interpretation, for 2 speakers the sentence had DAT-correlate interpretation and for 3 speakers it was ambiguous. Now, the prolonged reaction time of the OCC-abiding speaker and two speakers denying acceptability of the salient OCC-violating DAT-reading raises the question of whether the unexpected acceptability

of the DAT-reading of (40) translates into grammaticality or whether topicalization merely creates a grammatical illusion.

The same question should be asked about sentences in (37-39) as we know that not all real-occurring utterances are grammatical. To assess the grammaticality of sentences like (37-40) under the oblique reading, one would need to quantitatively compare the respective acceptability of NOM and oblique readings in disambiguating contexts. If they turn out to be equally acceptable, the proposed small clause analysis with multiple case-checking will only be able to capture this if the relevant oblique Cases are shown to be structural (e.g. all instances of DAT case in Russian are structural for Pereltsvaig 2007). If not, the unexpected acceptability of the oblique reading will not have to be explained within grammar proper.

#### 5. Conclusions and issues for further research

I discussed novel evidence for a clausal structure underlying the Russian (nominal) genitive comparative. <sup>13</sup> I showed that the choice of the correlate to a genitive standard DP is morphologically constrained. I derived the Oblique Correlate Constraint from a small clausal structure à la Pancheva (2009), employing the assumptions that DPs may receive multiple case values in the course of the derivation and that inherent/lexical case features have to be morphologically realized, unlike structural case features. Next, I discussed additional data that may suggest that the OCC is both too strong and too weak and showed that the proposed analysis can explain the former if speakers differ in which multiple case resolution strategies are available to them and can capture the latter if the relevant oblique cases can be shown to be structural. I then noted, however, that the grammatical status of the non-complying data has to be clarified: speakers who rejected OCC-abiding oblique readings might have done so for information-structural reasons, whereas real occurrence or acceptability of OCC-violating readings might not translate into grammaticality.

To fully understand the nature of correlate constraints, one would need to systematically compare the acceptability of NOM and non-NOM readings (especially, oblique) in disambiguating contexts. If acceptability ratings are significantly different, with oblique readings approaching the acceptability of ungrammatical controls, the small clause analysis proposed here will be supported. If they are of comparable acceptability, correlate constraints observed in isolated sentences will have to be explained by information-structural constraints or by an appeal to processing biases, probably making the direct, DP-analysis a more viable option.

This kind of research is also needed for other languages with phrasal comparatives that don't have an overt clausal counterpart. It appears that such comparatives constrain correlate choice in some languages (cf. Wunderlich 2001 for Hungarian), but not in others (Bhatt & Takahashi 2011 for Hindi/Urdu and Japanese). This distinction thus has the potential to become a test for the structure underlying the standard DP.

<sup>&</sup>lt;sup>13</sup> Note that the argument works for adverbial comparatives, but not necessarily for adjectival (predicative) comparatives, since the latter typically involves only one possible correlate – the NOM DP. Thus, one might want to stick to the simple DP structure for the latter.

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