

Syntax of comparative constructions

Tatiana Philippova

tfilippova@hse.ru

Lecture 1

Plan of the course

- Stassen's typology of comparatives
- Debate on the internal structure of phrasal comparatives
- Russian genitive of comparison as a case study
- Correlate constraints in Russian and beyond
- Quirky attributive genitive of comparison in Russian and its kin

Comparative constructions

The ability to make comparisons between objects is a basic component of human cognition (cf. Kennedy 2005)

→ Comparative strategies are likely to be found in all natural languages; they can be more or less grammaticalized

Comparative constructions

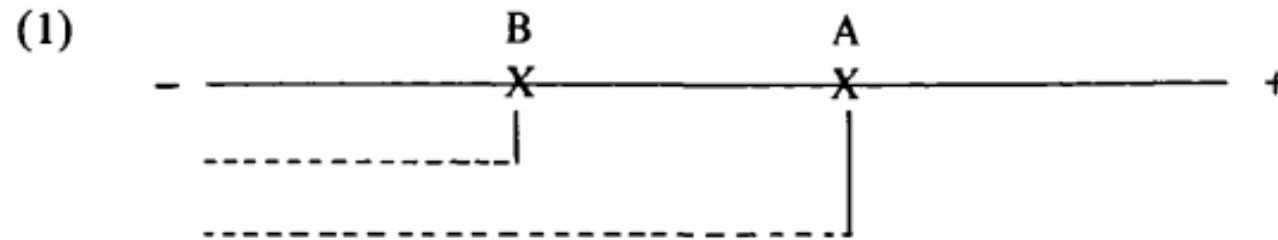
“The prototypical comparative scheme in human languages involves comparing two participants in terms of the degree of some gradable property relating to them, as in the English sentence *John is more handsome than Felix.*”

(Dixon 2008:787)

Stassen’s (1984, 1985, 2013) famous typology of comparatives is confined to this prototypical scheme.

Stassen's (1984) typology

- 110 languages from genetically diverse language families
- Cognitive definition for the comparative construction:
- a construction counts as a comparative construction if that construction has the semantic function of assigning a graded (i.e. non-identical) position on a predicative scale to two (possibly complex) objects.



Spatial representation as an approximation of the language-independent cognitive structure underlying comparative constructions

Stassen's typology

- Limited to the **inequality comparatives**: cases where the two objects compared differ in the degree of intensity to which they possess the quality at issue. Equality and superlative comparatives are not considered:

The house is *as tall as* the tree

This house is the *tallest*

- Limited to cases where 2 objects or individuals are being graded against each other: both the standard and the target of comparison are NPs, e.g.

The tree is taller than *the house*

I like Pamela better than *Lucy*

And not

The boy ran faster today than *the girl swam yesterday*

The general was more cunning than *brave*

The president is smarter than *you think*

Basic terminology

John

is more

emotional than

Bill

Comparee
Object/target of
comparison
Correlate
Associate

Index
comparative marker
comparative quantifier

Gradable
predicate

Standard
marker





Standard of
comparison

Stassen 1984: 6 types of comparatives

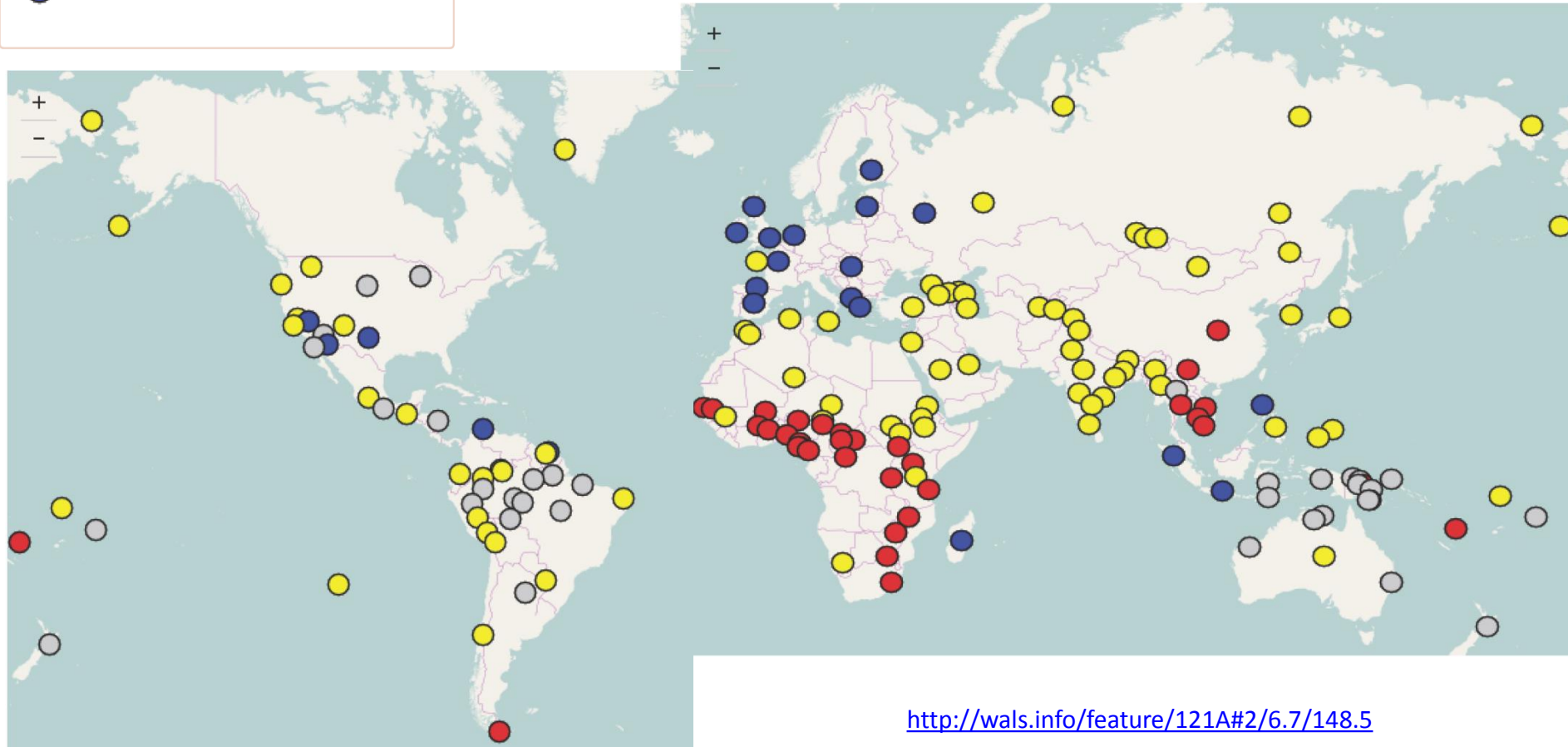
- I. Separative comparative
- II. Allative comparative
- III. Locative comparative
- IV. Exceed comparative
- V. Conjoined comparative
- VI. Particle comparative (possibly non-homogeneous)

} “Locational” in Stassen 2013

Values

	Locational	78
	Exceed	33
	Conjoined	34
	Particle	22

Stassen's (2013) typology



Stassen 1984: Locational comparatives

I. Separative comparative (34 langs)

Standard NP = a constituent part of an adverbial phrase with a separative ('source') interpretation. *Fixed case-form*

II. Allative comparative (7 langs)

Standard NP = a constituent part of a goal-phrase. *Fixed case-form*

III. Locative comparative (12 languages)

Standard NP = a constituent part of an adverbial phrase marked by an element with the basic meaning "on" or "at". *Fixed case-form*

Separative Comparative

- *Adposition-marking only*

- (1) Taroo-wa watashi **yor**i takai *Japanese*
Taroo-TOP 1SG from tall
'Taroo is taller than me.'
- (2) MoSe (yoter) gavoha **mim**xa/ **mi**-Simon *Hebrew*
Moshe more tall from-you from-Shimon
'Moshe is taller than you/Shimon.'

Separative Comparative

- *Case-marking only*

(3) Ivan vyš**e** tebja
Ivan tall-er you.**GEN**

(4) O Giannis ine psil**o**teros su
The Giannis is tall-er-MS you.**GEN**

'Ivan/Giannis is taller than you.'

(Greek; Merchant 2014, ex. 8)

(5) Nykyinen professori on edellis-**a** heikko-mpi
Current professor is former-**PART** weak-er

'The current professor is less strict than the former.'

(Finnish; Stassen 1985:248, ex. 54)

Separative Comparative

- *Adposition + case marking*

(6) O Giannis ine psiloterios apo tin Maria *Greek*
The Giannis is tall-er-MS from the Maria.ACC
'Giannis is taller than Maria' (modelled on Merchant's 2014 examples)

(7) Anna jest wyższa od Agnieszki. *Polish*
Anna is taller from Agnieszka.GEN
'Anna is taller than Agnieszka.'

(Pancheva 2006, ex. 20c)

Allative comparative

(8) Jonas aukštesnis už Mariją
John taller for Mary.ACC
'John is taller than Mary'

Lithuanian

(Grinsell 2010: ex 3)

Locative Comparative

- (9) Anna érdekes-ebb volt Péter-nél *Hungarian*
Anna interesting-er was Peter-**ADESS**
'Anna was more interesting than Peter.'

(Wunderlich 2001: ex.3a)

- (10) Anna smukaka aiz Trinas *Latvian*
Anna.NOM prettier.F **on** Trina.**GEN**
'Anna is prettier than Trina'

(Stassen 1984: 152)

Stassen 1984: types of comparatives

IV. *Exceed* comparative (20 langs)

Standard NP = the direct object of a special transitive verb, with the meaning "to exceed", "to surpass", "to excel"; ***Fixed case-form***

Comparee NP = the grammatical subject of the verb.

Exceed comparatives

- (11) kǎw sǔŋ kwǎ kon túk kon
he tall exceed man each man
'He is taller than anyone.' (Stassen 2013)

Thai

- (12) nin ndabo e kolo buka nine
this house it big exceed that
'This house is bigger than that.' (Stassen 2013)

Duala, Bantu

Stassen 1984: types of comparatives

V. *Conjoined* comparative (19 langs)

NP-comparison by means of the adversative coordination of two clauses, exhibiting a structural parallelism.

Derived case-form

Australian, Papuan, Polynesian OR on the American continent (areal phenomenon?)

Conjoined comparatives

- (13) jo i ben jo eu nag *Amele*
house this big house that small
'This house is bigger than that house.' (Stassen 2013)
- (14) Kaw-ohra naha Waraka, kaw naha Kaywerye *Hixkaryana*
tall-not he-is Waraka, tall he-is Kaywerye
'Kaywerye is taller than Waraka.' (Kennedy 2005)

Stassen 1984: types of comparatives

VI. *Particle* comparative (16 langs)

Standard NP introduced by a specific comparative particle (of various origins → possibly not a natural class). ***Derived case-form***

European sprachbund + Austronesian

Derived case: particle comparatives

(15) Ivan vyše **čem** ty *Russian*
Ivan.NOM taller WH you.NOM
'Ivan is taller than you.'

(16) Anna érdekes-ebb volt, **mint** Péter *Hungarian*
Anna interesting-er was than Peter
'Anna was more interesting than Peter.'

(Wunderlich 2001, ex 3)

And other, predominantly European languages.

Not in Stassen: specialized standard markers

- Nivkh, a language isolate spoken in Siberia only marks standards of comparison with a designated affix *-yk* (Amur dialect) or *-ak* (East Sakhalin dialect):

(17) Tlanj qanŋ-**ak** ey-d
Reindeer.NOM dog-**COMP**fast-FIN
'A reindeer is faster than a dog.'

(Gruzdeva 1998: 19, ex. 11)

Not in Stassen: specialized standard markers

- Sakha (Yakut) has several case-markers that are not typical for Turkic languages, one of which is the comparative case affix (TA:γAr in the abstract form), only found on standards of comparison.

(18) Xaχay ehe-**te:yer** kü:stex

Lion bear-**COMP** strong

'A lion is stronger than a bear.'

(Stachowski and Menz 1998:429)

Issues for formal approaches to the syntax of comparatives

- **Internal structure of phrasal comparatives**
- Contribution of the standard markers to the semantics of the comparative construction
- Correlate constraints

Terminology

- (19) John is taller than Bill. *Phrasal*
(20) John is taller than Bill is. *Clausal*
(21) John runs faster than Bill swims. *Clausal*
-

Matrix/antecedent clause Standard DP/clause

Bill = standard DP *than* = standard marker

John = correlate DP *more* = degree quantifier
-er = comparative morpheme

Phrasal/clausal vs Stassen

- I. Locational comparatives: phrasal
- II. Exceed comparatives: phrasal
- III. Conjoined comparatives: clausal
- IV. Particle comparatives: phrasal or clausal

Particle comparatives are most typical for European languages + Anglo-centricity of (early) Generative Grammar →

the key question of the syntactic research on comparative constructions has been whether phrasal comparatives are underlyingly clausal or not

- Standard marker *than* introduces both *phrasal* and *clausal* comparatives in English
- **Natural hypothesis**: the phrasal comparative is derived from the clausal comparative via ellipsis (Bresnan 1973; Hackl 2000; Lechner 2001, 2004, 2008; Bhatt and Takahashi 2011).
- But *than* introducing single DP-standards has been shown to behave like a preposition → direct [P DP] analysis. (Hankamer 1973; Hoeksema 1983; Pinkal 1990; Kennedy 1999)

→ No complete consensus on English BUT in general we need BOTH:

☐ *Elliptical CP* for the Greek *apo'ti* (Merchant 2009), *Dari* comparative (O'Connor 2013)

☐ *DP* for Hindi (Bhatt & Takahashi 2011), Malayalam (Menon 2012), Malagasy (Potsdam 2012)

Internal structure of phrasal comparatives

Sources of evidence discriminating between the Reduction (clausal) Analysis and the Direct Analysis:

- similarities and disparities between the ellipsis processes affecting degree clauses and coordinate structures;
- (morpho)syntactic restrictions on the standard argument in phrasal comparatives;

Evidence for the clausal analysis

Ellipsis processes affecting degree clauses and coordinate structures: Gapping

- (22) a. Some visited Millhouse more often than others <visited> Bart.
b. *Lisa said that some visited Millhouse more often than Otto claimed that others <visited> Bart.
c. *Lisa said that some visited Millhouse more often than Otto <claimed that others visited> Bart.
- (23) a. Some visited Millhouse and others <visited> Bart.
b. *Lisa said that some visited Millhouse and Otto claimed that others <visited> Bart.
c. *Lisa said that some visited Millhouse and Otto <claimed that others visited> Bart.

Lechner 2015: ex. 29-30

Like gapping, ellipsis in degree clauses does not reach into embedded clauses, as shown in (22b) and (23b) and cannot delete a finite sentence boundary, as shown in (22c), (23c).

Evidence for the clausal analysis

Ellipsis processes: verb deletion in V-2 languages

- (24)
- a. Ich glaube daß mehr Leute das Buch lesen als (*daß) \triangle den Artikel_{ACC} <lesen>.
I believe that more people the book read than that the article read
'I believe that more people are reading the book than the article.
- b. Ich glaube daß Hans das Buch liest und (*daß) Maria den Artikel_{ACC} <liest>.
I believe that H. the book reads and that M. the article reads
'I believe (that) John is reading the book and Mary the article.

German, from Lechner 2015: ex. 29-30

V-deletion in degree clauses (24a) is blocked in presence of an overt complementizer daß, like in coordinate structures (24b).

Internal structure of phrasal comparatives

Case-connectivity effects: case-marking on noun phrases in the standard clause should be the same as in the correlate/antecedent clause, like in gapping

(25) Vanja pokupaet žurnaly cašče čem Petja knigi
Vanja.NOM buys magazines.ACC more.often WH Petya.NOM books.ACC
'Vanya buys magazines more often than Petya (does) books.'

(26) Vanja pokupaet žurnaly, a Petja knigi
Vanja.NOM buys magazines.ACC CTR Petya.NOM books.ACC
'Vanya buys magazines and Petya books.'

Evidence for the Direct Analysis

Reflexive and accusative remnants are only licensed in phrasal comparatives (Hankamer 1973):

(27) Nobody is taller than himself vs. *Nobody is taller than himself is

(28) Ann is taller than me vs. *Ann is taller than me am

Not challenging for the clausal analysis if we assume that (some) non-phrasal degree complements are *small* rather than *full* clauses, cf. (27-28) and (29-30).

- Reflexives possible, because no binding domain boundary
- Accusatives emerge since NOM case cannot be assigned in absence of a TP-layer

(29) Nobody considers [_{small clause} himself tall]

(30) Ann considers [_{small clause} me tall]

...MORE (than) [_{<d,t>} [_{small clause} λd_1 [me d_1 -tall_{<d,<e,t>>}]]]

(Pancheva 2006)

Subject deg. variable deg. predicate

Evidence for the Direct Analysis

Impossibility of reconstructing some phrasal comparatives to a full clause

(31) *She ran faster than the world record* (*ran). (Lechner 2015: ex. 40a)

The small clause alternative: 'world record' is the subject of a contextually supplied degree predicate, e.g. *15 mph*

Extraction is possible only out of phrasal comparatives (*than* behaves as a stranded preposition):

(32) *Who is Ann taller than ___?* (Lechner 2015: ex. 40b)

**Who is Ann taller than ___ is?*

The small clause alternative: also works. Phrasal standards are like ECM subjects in terms of mobility.

Russian comparatives as an illustration

We shall compare two varieties of phrasal comparatives in Russian, the *čem-*comparative and the genitive of comparison (particle & locational comparatives according to Stassen 1984, 1985), employing argumentation for/against Reduced Clause Analysis.

- (33) Ivan (prygaet) vyše *čem* ja.
Ivan.**NOM** (jumps) higherWH I.**NOM**
'Ivan {is taller; jumps higher} than I.'
- (34) Ivan (prygaet) vyše *menja*.
Ivan.NOM (jumps) higher I.**GEN**
'Ivan {is taller; jumps higher} than me.'

CP in the standard?

Unlike genitive comparatives, *čem*-comparatives admit full clauses in the standard position:

(35) Ivan prygaet vyše *čem* prygaju ja.
Ivan.NOM jumps higher WH jump I.NOM
'Ivan jumps higher than I jump.'

(36) Ivan prygaet vyše (*prygaju) **menja** (*prygaju)
Ivan jumps higher jump 1SG.GEN jump
'*Ivan jumps higher than me jump(s).'

CP in the standard?

- (37) Ivan prygaet vyše **čem** ja.
Ivan.**NOM** jumps higher WH I.**NOM**
'Ivan jumps higher than I jump.'

2 superficial indications of the clausal nature of *čem*-standards:

- 1) the standard marker is morphologically a *wh*-item, cf. *čto* 'what.NOM/ACC' introducing embedded indicative and relative clauses;
- 2) the morphological case of the standard corresponds to that of the correlate, e.g. nominative, suggesting that there is a case-assigning element underlyingly [T(ense)-head in the mainstream generative approaches; cf. Legate 2008]

Multiple XPs in the standard?

Čem-comparatives but not *gen*-comparatives admit multiple, discontinuous phrases in the standard position suggesting the presence of clausal structure underlying the former but not the latter.

- (38) Ivan segodnja prygaet vyše *čem* Petja (včera)
Ivan.NOM today jumps higher WH Petya.NOM yesterday
'Ivan jumps higher today than Petya yesterday.'
- (39) Ivan segodnja prygaet vyše Peti (*včera)
Ivan.NOM today jumps higher Petya.GEN yesterday
'Ivan jumps higher today than Petya yesterday.'

Single non-NP standard?

Čem-comparatives but not *gen*-comparatives admit phrases of categories other than NPs as the standard, suggesting the presence of clausal structure underlying the former but not the latter.

(40) Segodnja Ivan prygaet vyše *čem* v ponedel'nik.
Today Ivan jumps higher WH in Monday
'Today Ivan jumps higher than on Monday.'

(41) *Segodnja Ivan prygaet vyše {v ponedel'nik; ponedel'nika}.
Today Ivan jumps higher in Monday Monday.**GEN**
'Today Ivan jumps higher than (on) Monday.'

Locality diagnostics

The tests to follow are aimed at establishing whether the standard NP in the phrasal comparative is separated from its correlate NP by a clausal boundary or not.

Čem-comparatives and *gen*-comparatives differ as to whether

- *Reflexive pronouns* are licensed in the standard position
- *N-words (NPIs)* are licensed in the standard position
- Movement of the standard NP is possible

Locality diagnostics: reflexive in the standard

The genitive of comparison licenses reflexive pronouns in the standard NP:

- (42) Maša ljubiti sebj_a bol'she {svoego; *eë} otca
Maša.NOM loves self.ACC more self's her father.GEN
'Masha loves herself more than her father.' (ambiguous)
= Masha_j loves herself_j more than her_j father does.
= Masha_j loves herself_j more than she loves her_j father.

→ The correlate and the standard NPs must be in the same binding domain, i.e. not separated by a clausal boundary

Locality diagnostics: reflexive in the standard

The čem-comparative: reflexive pronouns are impossible in the nominative standard NP and obligatory in the accusative standard NP (or other objects/oblique NPs).

- (43) Maša_k ljubit sebja bol'se čem {svoego_k; *eë_k} otca
Maša.NOM loves self.ACC more WH self's her father.ACC
'Masha_k loves herself more than ~~she loves~~ her_k father.'
- (44) Maša_k ljubit sebja bol'se čem {*svoj; eë_k} otec
Maša.NOM loves self.ACC more WH self's her father.NOM
'Masha_k loves herself more than her_k father ~~does~~.'

Locality diagnostics: reflexive in the standard

The facts fall out if the standard NPs in the *čem*-comparative are analyzed as remnants of an elided clause: the ‘full’ versions of phrasal comparatives introduced by *čem* exhibit exactly parallel behavior.

- (45) Maša ljubit sebja bol’še čem sebja/eë ljubit
Maša.NOM loves self.ACC more WH self/she.ACC loves
{*svoj; ✓eë} otec.
self’s.NOM her father.NOM
‘Masha_j loves herself_j more than her_j father loves himself/her_j.’

- (46) Maša ljubit sebja bol’še čem ona ljubit
Maša.NOM loves self.ACC more WH she.NOM loves
{✓svoego; *eë} otca.
self’s.ACC her father.ACC
‘Masha_j loves herself_j more than she_j loves her_j father.’

The standard and its correlate in the *čem*-comparative are in separate binding domains → a clausal boundary

Locality diagnostics: n-word in the standard

Clausal negation in Neg concord languages only licenses n-words in the same minimal CP → availability of an n-word in the standard signals absence of a clausal boundary

(47) Maša nikogo ne vyše (v klasse)

Masha.NOM nobody.GEN NEG taller in class

‘Masha isn’t taller than anyone (in the class).’

(48) *Maša ne vyše čem nikto

Masha.NOM NEG taller WH nobody.NOM

‘Masha isn’t taller than anyone.’

Locality diagnostics: n-word in the standard

- (49) ?Maša vyše čem nikto
Masha.NOM higher WH nobody.NOM
‘Masha is higher (in status) than just a nobody.’

Not problematic, since *nikto* ‘nobody’ is interpreted as a person of little importance and as such does not require matrix negation, cf.

- (50) Maša v ètoj strane nikto.
Masha.NOM in this country nobody.NOM
‘Masha is a nobody in this country.’

Locality diagnostics: wh-movement of the standard

Genitive standard of comparison is mobile

Adjectival comparative is stranded

- (51) Kogo ty vyše?
Who.GEN you.NOM taller
'Who(m) are you taller than?'

Adverbial comparative is pied-piped

- (52) Vyše kogo ty prygnul segodnja?
Higher who.GEN you.NOM jumped today
'Who did you jump higher than today?'

Locality diagnostics: wh-movement of the standard

- (53) *Kto ty vyše čem (v klasse)?
Who.NOM you.NOM taller WH in class
'Who are you taller than (in your class)?'
- (54) *Čem kto ty vyše?
WH who.NOM you.NOM taller
*'Than who are you taller?'
- (55) */??Vyše čem kto ty prygnul segodnja?
Higher WH who.NOM you.NOM jumped today
'Higher than whom did you jump today?'

Etc...No matter how much material is pied-piped along with the *wh*-standard, it is immobile in the *čem*-comparative

wh-movement of the standard in full clauses

Parallel to the phrasal case. Reason: finite embedded clauses are islands for extraction in Russian. In turn, pied-piping of the standard marker *čem* alone or together with the comparative adjective/adverb *vyše* 'taller/higher' is ungrammatical because *wh*-items typically do not pied-pipe complementizer-like elements, let alone elements from a higher clause.

(56) Ty prygnula vyše čem prygnul Miša.
you.NOM jumped.F higher WH jumped.M Misha.NOM
'You jumped higher than Misha jumped.'

(57) *Kto ty prygnula vyše čem prygnul?
Who.NOM you.NOM jumped.F higher WH jumped.M
'*Who did you jump higher than jumped?'

CP behind the NP-standard?

	Case connectivity?	Only NP-standards?	Only 1 XP per standard?	Standard & correlate = clause-mates?	Verdict: clausal (CP) boundary?
<i>čem</i>	✓	X	X	X	✓
<i>Genitive of comparison</i>	X	✓	✓	✓	X

The tests suggest that the standard of comparison should be in the same clause as its correlate in the genitive of comparison and in a separate clause in the *čem*-comparative.

Greek comparatives

- The Russian *čem*-comparative behaves roughly in parallel to the Greek *ap'oti*-comparative (particle comparative), and the genitive of comparison – to the Greek *apo*-comparative (locational comparative):

(58) O Giannis ine psiloteros **ap'oti** i Maria.
The Giannis is tall.er.MSG from-WH the.NOM Maria
'Giannis is taller than Maria (is).'

(59) O Giannis ine psiloteros **apo** tin Maria.
The Giannis is tall.er.MSG from the.ACC Maria
'Giannis is taller than Maria.'

(adapted from Merchant 2009)

Genitive of comparison in Russian

- What's clear: the standard of comparison should be in the same clause as its correlate (unlike in *čem*-comparatives)
- What's not clear: what exactly is the underlying structure?

Null hypothesis: simple DP/NP (e.g. Bhatt & Takahashi 2011, Merchant 2014)

Alternative 1: a small clause analysis (Pancheva 2006, 2010 for Slavic)

Alternative 2: a CP-analysis; standard moves out (Merchant 2009)

Genitive of comparison

- Take-home message
- Even when a phrasal comparative does not allow any overt material besides the standard DP and the locality tests tell us that the standard and its correlate are clause-mates, we cannot exclude the possibility that the standard is underlyingly clausal.

References

- Dixon, Robert M. W. (2008). Comparative constructions: A cross-linguistic typology. *Studies in Language*, 32(4), 787–817.
- Grinsell, Timothy W. (2010). *Lithuanian modal comparatives: implication for the syntax and semantics of comparison*. In Proceedings of FASL 19.
- Kennedy, Christopher. (2005). Semantics of Comparatives. In K. Brown (Ed.), *Encyclopedia of Language and Linguistics, Second Edition* (pp. 690-694). Oxford: Elsevier Limited.
- Merchant, Jason. (2012). *Two phrasal comparatives in Greek*. Ms. University of Chicago.
- Pancheva, Roumyana. (2006). Phrasal and Clausal Comparatives in Slavic. In J. Lavine, S. Franks, M. Tasseva-Kurktchieva & H. Filip (Eds.), *Formal Approaches to Slavic Linguistics 14: The Princeton Meeting* (pp. 236-257).

References

- Stachowski, Marek, & Menz, Astrid. (1998). Yakut. In L. Johanson & É. Á. Csató (Eds.), *The Turkic Languages* (pp. 417-433). London, New York: Routledge.
- Stassen, Leon. (1984). The comparative compared. *Journal of Semantics*, 3, 143-182.
- Stassen, Leon. (1985). *Comparison and Universal Grammar*. Oxford: Basil Blackwell.
- Stassen, Leon. (2013). Comparative Constructions. In M. S. Dryer & M. Haspelmath (Eds.), *The World Atlas of Language Structures Online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. Available online at <http://wals.info/chapter/121>.
- Wunderlich, Dieter. (2001). Two comparatives. In I. Kenesei & R. M. Harnish (Eds.), *Perspectives on semantics, pragmatics and discourse. A Festschrift for Ferenc Kiefer* (pp. 75-89). Amsterdam: Benjamins.