

INVERSE ATTRACTION IN FINNO-UGRIC LANGUAGES ¹

1. Introduction

1.1. Inverse attraction

- Inverse attraction (IA): the head of the relative clause is marked for the case assigned to the corresponding participant in the subordinate clause.

(1) Besermyan Udmurt, NOM → GEN2

pânâ-lâš’ kud-iz-lâš’ mon kâška-š’ko kâl’l’-e š’âres vâl-ân
dog-GEN2 which-POSS.3SG-GEN2 I fear-PRS lie-PRS.3SG road on-IN
‘The dog I fear is lying on the road’.

- Non-Finno-Ugric attestations:
 - Many dead Indo-European languages:
 - Ancient Greek (Grimm 2005: 78–92);
 - Hittite, Old Persian, Oscan and Umbrian (Hahn 1964);
 - Latin (Touratier 1980: 147–211);
 - Vedic and Sanskrit (Gonda 1975: 195);
 - Middle High German (Pittner 1995);
 - Modern Church Slavonic (Smotrickij 1619: 238);
 - Old English (Harbert 1983).
 - Some modern Indo-European languages:
 - Albanian of Xranje (Bevingston 1979), as cited in (Cinque 2015);
 - Dari (Houston 1974), as cited in (Cinque 2015);
 - Modern Persian (Aghaei 2006: 72–76, 90–95);
 - East Franconian German (Fleischer 2006: 229);
 - Non-standard Icelandic (Wood et al. 2015);
 - Non-standard Russian.
 - Other:
 - Old Georgian (Harris & Campbell 1995).
- previous research on Finno-Ugric languages:
 - Besermyan Udmurt
 - (Aralova 2003): the construction in question is noted in passing;
 - (Belyaev 2012): the construction is mentioned, but is analyzed differently;
 - Ingrian Finnish (Kholodilova 2013);
 - Moksha Mordvin (Privizentseva, in print).

1.2. Finno-Ugric languages and our sample

- Finno-Ugric languages constitute a subfamily within the Uralic family;
- The internal classification of Finno-Ugric languages is subject to much debate; see an overview in Salminen (2002);
- The classification in Table 1 is borrowed from WALS (Dryer, Haspelmath 2013). These language groups are generally recognized;
- Our data so far: 10 languages (14 language varieties) belonging to 5 genera within the Finno-Ugric family:

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Table 1. Internal classification of Finno-Ugric languages

Genus	Language	Basic study (see part 2)	Varieties considered	More in-depth study (see part 3)
Finnic	Estonian	✓	standard	
	Finnish	✓	standard	
	Izhor (= Ingrian)	✓	non-standard (Ingrian)	✓
	Karelian		non-standard (Lower Luga)	
	Liv			
	Veps			
	Votic			
Mari	Meadow Mari	✓	non-standard (Volga dialect)	
	Hill Mari			
Mordvin	Erzya	✓	standard	
			non-standard (Shoksha)	
	Moksha	✓	standard	
Permic			non-standard (Central dialect, Temnikovsky district)	✓
	Komi-Zyrian	✓	non-standard (Izhma Komi)	
	Komi-Permyak (Komi-)Yazva			
	Udmurt	✓	standard	
Saami			non-standard (Besermyan)	✓
	Kildin Saami			
	Central-South Saami			
	Northern Saami			
Ugric	Hungarian	✓	standard	
	Khanty (= Ostyak)	✓	non-standard (Kazym)	
	Mansi			

2. Inverse Attraction in Finno-Ugric languages

2.1. The data

Table 2. Acceptability of inverse attraction in Finno-Ugric languages of our sample

Genus	Language	Standard (s) / nonstandard (n) dialect ²	Inverse attraction	
			light-headed relative clauses	headed relative clauses
Finnic	Estonian	s	?	–
	Finnish	s	–	
		n	+	
Mari	Izhor	n	+	
	Meadow Mari	n	+	
Mordvin	Erzya	s	–	
		n	+	
	Moksha	s	+	–
Permic	Komi-Zyrian	n	–	
		s	+	–
	Udmurt	n	+	
Ugric	Hungarian	s	–	
	Khanty	n	–	

² For more details on the varieties see Table 1.

- Varieties without IA:
 - Finnish (standard);
 - Erzya (standard);
 - Komi-Zyrian (non-standard);
 - Hungarian (standard);
 - Khanty (non-standard).
 - Varieties with IA only in (a subset of) light-headed relatives:
 - Estonian: IA is sometimes allowed with light heads, though the speakers' judgments are not uniform. IA is excluded altogether for non-light heads.
- (2) Estonian (standard, only in the colloquial variety), NOM → PART
?Seda mida ma kartsin, juhtus.
 that.PART what.PART I fear.PST.1SG happen.PST.3SG
 lit. 'That what I was afraid of has happened'.
- (3) Estonian, NOM → PART
**Koera, mida ma kardan, magab teel.*
 dog.PART what.PART I.NOM fear.NPST.1SG sleep.NPST.3SG road.AD
 'The dog I am afraid of is lying on the road'.
- Moksha (standard): IA is possible with inanimate light heads ('everything', 'that');
- (4) Standard Moksha, NOM → DAT
OKSemboti, mezti mon keman', af vide.
 everything.DEF.SG.DAT what.DEF.SG.DAT I believe.PST.1SG NEG right
 'Everything I used to believe is not true'.
- (5) Standard Moksha, NOM → DAT
*Azks' / *azksti, konandi mon keman', af vide.*
 story.DEF.SG story.DEF.SG.DAT which.DAT I believe.PST.1SG NEG right
 'The story I used to believe is not true'.
- Udmurt (standard): IA is possible with universal quantifiers ('everything', 'everyone', but not 'those');
- (6) Standard Udmurt, NOM → DAT
Van'myzly, kinly ta knigaez lyddžyny setüs'ko val,
 all.DAT who.DAT this book.ACC read.INF give.PRS.1SG be.PST
soku ik ta knigaez beren seto val.
 immediately this book.ACC back give.PRS.3PL be.PST
 'All those whom I gave this book returned it immediately'.
- (7) Standard Udmurt, NOM → DAT
*Soos / *soosly kinly ta knigaez lyddžyny setüs'ko val,*
 that.PL that.PL.DAT who.DAT this book.ACC read.INF give.PRS.1SG be.PST
soku ik beren seto val.
 immediately back give.PRS.3PL be.PST
 'Those whom I gave this book returned it immediately'.
- Varieties with IA in both light-headed and headed relatives: ³
- (8) Ingrian Finnish, NOM → GEN
lampà-n minkä miä eilen ost-i-n loikò koi-n luon
 sheep-GEN what.GEN I.NOM yesterday buy-PST-1SG lie.PRS.3SG home-GEN near
 'The sheep I bought yesterday is lying in front of the house'.

³ Examples on Ingrian Finnish, Izhor, Besermyan Udmurt, and non-standard Moksha Mordvin are given in phonetic transcription. Examples on Erzya, Standard Moksha, and Standard Udmurt are transliterated. Estonian and Standard Finnish examples are given in the standard orthography.

- (9) Izhor (non-standard), NOM → GEN
kirjən, kummən mie toin, kirjutatta mejjən kyläst
 letter.GEN which.GEN I receive.PST.1SG write.PTCP.IPS we.GEN village.EL
 ‘The letter I received is from our village’.
- (10) Meadow Mari (non-standard), NOM → ACC;
Čyla kočkyšym kudym nalynam ustembalne kija.
 all food.ACC which.ACC take.PRT.1SG on.the.table lie.PRS.3SG
 ‘All the food I bought is on the table’.
- (11) Shoksha Erzya (non-standard), NOM → DAT
tonatnine kine mon maksne tet’ kiniškät’
 that.PL.DEF.DAT who.DAT I give.PST.3SG.O.1SG.S this book.DEF.SG.GEN
moravtuma sesk sonde aj maksyz’ mekim
 read.NZR.LOC now he.GEN:3SG IPFV give.PST.3.O.3PL.S back
 ‘Those whom I gave this book to read gave it back immediately’.
- Besermyan Udmurt (non-standard); see (1).

2.2. Distribution of relative constructions across languages

- IA is relatively wide-spread in Finno-Ugric languages;
- IA is present in at least 4 of the 6 Finno-Ugric genera;
- Its distribution cannot be described as purely genetical;
- IA tends to be more pervasive in non-standard varieties, cf.:
 - standard Finnish vs. Ingrian Finnish;
 - standard Erzya vs. Shoksha Erzya;
 - standard Moksha vs. Moksha non-standard variety of Temnikovskiy district;
 - standard Udmurt vs. Besermyan Udmurt;
 - cf. also non-colloquial Estonian vs. colloquial Estonian.
- Language standardization presupposes language learning of the new variety by adults, which influences the outcome considerably (McWhorter 2007);
- Adult learning is imperfect and imposes certain restrictions (Trudgill 2001; McWhorter 2007; Lupyán, Dale 2010);
- The resultant languages tend to be **less complex**; see e. g. Trudgill (2009). The notion of language complexity (Nichols 2009: 111):
 - number of elements;
 - **number of paradigmatic variants**;
 - **syntagmatic phenomena, such as agreement**;
 - constraints on elements, allomorphs, and syntagmatic dependencies.
- **Our claim:** IA is probably a case for language complexity, which tends to become more marginal or disappear altogether in course of standardization;
 - This suggestion could explain the marginality of IA in modern languages;
 - Cf. also the fact that IA is attested as an error in some languages which disallow it in their standard variety, namely, German (Bader, Bayer 2006), English (Fowler 1994: 68), and Slovene (Pogorelec 1955/1956: 208).

3. Inverse attraction, correlatives, and externally-headed relatives in Moksha-Mordvin, Besermyan Udmurt, and Ingrian Finnish

3.1. Introduction

- Dual nature of IA:
 - The head of the relative clause is marked as if it is internal;
 - The head and the relativizer are ordered as in externally-headed relative clauses.
- Two possible views of IA:
 - IA is subtype of ‘normal’ externally headed relative clauses;
 - IA is similar to correlative construction.

- In the literature the second approach is most wide-spread (Bianchi 1999; Bhatt 2005);
- The present research:
 - A fine-grained study of three languages belonging to different genetic groups:
 - Non-standard Moksha Mordvin;
 - Besermyan Udmurt;
 - Ingrian Finnish.
 - These languages have at least three types of relative constructions:
 - Postnominal relatives with external head;
 - Inverse attraction (12)–(14);
 - Internally headed correlatives.

(12) Ingrian Finnish, NOM → GEN

lampà-n minkä miä eilen ost-i-n loikò koi-n luon
 sheep-GEN what.GEN I.NOM yesterday buy-PST-1SG lie.PRS.3SG home-GEN near
 ‘The sheep I bought yesterday is lying in front of the house’.

(13) Moksha-Mordvin (non-standard), NOM → GEN

uča-t', kona-n' mon rama-jn'ə is'ak,
 sheep-DEF.SG.GEN which-GEN I buy-PST.3.O.1SG.S yesterday
ašč-i kut'-t' vaksə
 be.situated-PST.3SG house-DEF.SG.GEN near.IN
 ‘The sheep I bought yesterday is lying in front of the house’.

(14) Besermyan Udmurt, NOM → ACC

âž-z-e kud-z-e vand-i-z ataj-e
 sheep-POSS.3-ACC which-POSS.3-ACC slaughter-PRT-3 father-POSS.1SG
kâl'l'-e korka š'er-ân
 lie-PRS.3SG house behind-IN
 ‘The sheep my father slaughtered is lying behind the house’.

- We will compare the properties of relative constructions in these three languages.

3.2. Inverse Attraction ≠ Headed RC

a. Left-dislocated position of the relative construction

- IA is basically found in the same positions as correlatives;
- These positional restrictions do not apply to externally headed RC.

(15) Ingrian Finnish, NOM → GEN

*talo-n luon loikò lammas / *lampà-n*
 house-GEN near lie.PRS.3SG sheep.NOM sheep-GEN
minkä miä eilen ost-i-n
 what.GEN I.NOM yesterday buy-PST-1SG
 ‘In front of the house, there is a sheep I bought yesterday’.

b. Extraposition

- One more positional restriction for inverse case attraction: the extraposition of the relative clause is not compatible with IA;
- This criterion cannot be applied to correlatives.

(16) Moksha-Mordvin, NOM → DAT

*st'ər'-n'ε-s' / *st'ər'-n'ε-t'i tu-s' kaftə n'ed'al'a-t,*
 girl-DIM-DEF.SG girl-DIM-DEF.SG.DAT go-PST.3SG two week-PL
kona-n'd'i maks-in'ə kn'iga-z'ə-n'
 which-DAT give-PST.3.O.1SG.S book-1SG.POSS.SG-GEN
 ‘The girl whom I gave my book left for two weeks’.

c. Movement out of the relative construction

- First this criterion was applied in (Belyaev 2012) as an argument that the construction in question is in fact a correlative;

(17) Besermyan Udmurt (Belyaev 2012), NOM → DAT

mon pin'al-lâ kud-iz-lâ vož-m-e pot-i, so pegž'-i-z
 I child-DAT which-POSS.3-DAT green-1POSS-ACC go_out-PRT this run_away-PRT-3
 'The child, at whom I got angry, ran away'.

- It is possible to place some elements of the dependent clause before the relative pronoun and the head in correlatives (18), (20);
- The same is true for relative clauses with IA, however, it is disallowed for 'normal' relative clauses with external head(19), (21);

(18) Besermyan Udmurt, CORRELATIVE

mân-a-m vâñ-e kud-iz-lâ eš-e-lâ gož-ja-z
 I-GEN1-POSS.1 brother-POSS.1SG which-POSS.3-DAT friend-POSS.1SG-DAT write-MULT-3
piš'mo ž'og-en lâkt-o-z
 letter quickly-INSTR come-FUT-3
 'My friend to whom my brother wrote letters will arrive soon'.

(19) Besermyan Udmurt, NOM → DAT

*mân-a-m vâñ-e eš-e-lâ / *eš-e kud-iz-lâ*
 I-GEN1-POSS.1 brother-POSS.1SG friend-POSS.1SG-DAT friend-POSS.1SG which-POSS.3-DAT
gož-ja-z piš'mo ž'og-en lâkt-o-z
 write-MULT-3 letter quickly-INSTR come-FUT-3
 'My friend to whom my brother wrote letters will arrive soon'.

(20) Ingrian Finnish, CORRELATIVE

^{OK}*miä minkä lampàn ostin, lojkò talon luon*
 I what.GEN sheep.GEN buy.PST.1SG lie.NPST.3SG house.GEN near
 'The sheep I bought is lying near the house'.

(21) Ingrian Finnish, NOM → GEN

^{OK}*miä lampàn / *lammas, minkä ostin, lojkò talon luon*
 I sheep.GEN sheep what.GEN buy.PST.1SG lie.NPST.3SG house.GEN near
 'The sheep I bought is lying near the house'.

- More precise study of Besermyan Udmurt has shown that not all elements of the depended clause can be located before the head and the relative pronoun;
- The predicate of the dependent clause cannot be placed at the left;
- This restriction holds for both IA and correlatives.

(22) Besermyan Udmurt, NOM → DAT

**mân-a-m vâñ-e gož-ja-z eš-e-lâ / eš-e*
 I-GEN1-POSS.1 brother-POSS.1SG write-MULT-3 friend-POSS.1SG-DAT friend-POSS.1SG
kud-iz-lâ piš'mo ž'og-en lâkt-o-z
 which-POSS.3-DAT letter quickly-INSTR come-FUT-3
 'My friend to whom my brother wrote letters will arrive soon'.

Brief summary: there are at least three common properties of IA and correlatives which set them apart from externally headed relatives.

3.3. Inverse Attraction = Externally headed RC

d. Declension of relativizers

- The relative element is declinable in all three constructions in Ingrian Finnish and Besermyan Udmurt;

- In Moksha Mordvin, the relative pronoun does not agree with the head in correlatives.

(23) Moksha Mordvin, CORRELATIVE

kona / **kona-n'd'i jalga-z'a-n'd'i* *t'ašn 'ə-n'* *kizə-n'* *per'f*
 which which-DAT friend-1SG.POSS.SG-DAT write.IPFV-PST.1SG year-GEN around
s'orma-t, *vandi* *sa-j.*
 letter-PL tomorrow come-NPST.3SG
 'My friend, to whom I wrote letters all the year round, will arrive tomorrow'.

e. Possible relativizers

- The set of allowed relativizers is sometimes different in externally headed relative clauses and correlatives, e.g., the Moksha relative pronoun *mez'a* 'what' cannot be used in correlatives;
- Relative clauses with IA do not have the restrictions attested in correlatives.

(24) Moksha Mordvin, NOM → GEN

kn'iga / *kn'iga-t'* *mez'-t'* *s'ev-ən'd'-in'a* *bibl'iat'eka-stə*
 book book-DEF.SG.GEN what-DEF.SG.GEN take-IPFV-PST.3.O.1SG.S library-EL
ul'-s' *pek* *int'er'esnaj*
 be-PST.3SG very interesting
 'The book I took from the library was very interesting'.

(25) Moksha Mordvin, CORRELATIVE

kona / **mez'a kn'iga-t'* *s'ev-ən'd'-in'a* *bibl'iat'ekə-stə*
 which what book-DEF.SG.GEN take-IPFV-PST.3.O.1SG.S library-EL
ul'-s' *pek* *int'er'esnaj*
 be-PST.3SG very interesting
 'The book I took from the library was very interesting'.

f. Determiners (demonstratives or quantifiers) in the head

- The head of the correlative cannot be modified with determiners;
- The head of the 'normal' headed relative clause and IA-construction allows this kind of modification.

(26) Besermyan Udmurt, NOM → DAT

ta soš'ed-e / *soš'ed-e-lâ* *kud-iz-lâ* *mon š'ot-i*
 that neighbor-POSS.1SG neighbor-POSS.1SG-DAT which-POSS.3-DAT I give-PRT
n'an' ul-e *gord korka-n*
 broad live-PRS.3SG red house-IN
 'That neighbor to whom I gave broad lives in the red house'.

(27) Besermyan Udmurt, CORRELATIVE

(**ta kud-iz-lâ* (**ta soš'ed-e-lâ* *mon š'ot-i* *n'an'*
 that which-POSS.3-DAT that neighbor-POSS.1SG-DAT I give-PRT broad
ul-e *gord korka-n*
 live-PRS.3SG red house-IN
 'That neighbor, to whom I gave broad, lives in the red house'.

g. Appositive interpretation

- Correlatives do not have appositive interpretation (Strivastav 1991; de Vries 2002) ;
- IA can have both restrictive and appositive semantics.

(28) Ingrian Finnish, NOM → PART

miu-n isä-jä-in *ke-tä* *löö-ti* *loikò* *pol'nitsa-s*
 I-GEN father-PART-P1SG who-PART beat-IPS.PST lie.PRS.3SG hospital-IN
 'My father, who has been beaten, is in the hospital'.

- (29) Ingrian Finnish, CORRELATIVE
**ke-tü miu-n isä-jü-in lüö-ti loikò pol'nitsa-s*
 who-PART I-GEN father-PART-P1SG beat-IPS.PST lie.PRS.3SG hospital-IN
 ‘My father, who has been beaten, is in the hospital’.

h. Coordination with a noun phrase

- Examples (30), (31) show relative clauses of different types coordinated with noun phrases;
- Both types of relative clauses in (30) can be coordinated with noun phrases, which means that they have one and the same category;

- (30) Besermyan Udmurt, NOM → DAT
mân-a-m brat-e i ad'ami / ad'ami-lâ kud-iz-lâ
 I-GEN1-POSS.1 brother-POSS.1SG and person person-DAT which-POSS.3-DAT
mon š'ot-i kartoška d'eš'-eš' drog'jos
 I give-PRT potato good-PL friend.PL
 ‘My brother and the man, to whom I gave potatoes, are good friends’.

- (31) Besermyan Udmurt, CORRELATIVE
**mân-a-m brat-e i kud-iz-lâ ad'ami-lâ*
 I-GEN1-POSS.1 brother-POSS.1SG and which-POSS.3-DAT person-DAT
mon š'ot-i kartoška d'eš'-eš' drog'jos
 I give-PRT potato good-PL friend.PL
 ‘My brother and the man to whom I gave potatoes are good friends’.

- Coordination can also serve as an argument against the approach proposed in (Harbert 1983), according to which the head of the relative construction with IA is in the position where no other case can be assigned.

i. Number mismatches: head noun in PL, relative pronoun in SG

- If the head noun is plural, it is possible to use the singular form of the relative pronoun for externally headed relative clauses in some languages;
- The option is excluded for correlatives.

- (32) Ingrian Finnish, ALL → NOM
^{OK}oppilâ-t kuka müöhästü-i anne-tti kaks
 pupil-PL.NOM who.NOM be_late-PST.3SG give-IPS.PST two.NOM
 ‘The pupils who were late were graded “poor”’.

- (33) Ingrian Finnish, CORRELATIVE
*^{OK}kutka / *kuka oppilât müöhästüit annetti kaks*
 who.PL.NOM who.NOM pupil.PL.NOM be_late.PST.3PL give.IPS.PST two.NOM
 ‘The pupils who were late were graded “poor”’.

- (34) Besermyan Udmurt, DAT → NOM
dâšeč'kiš'-jos-lâ / dâšeč'kiš'-jos kud-iz / kud-jos-âz
 pupil-PL-DAT pupil-PL which-POSS.3 which-PL-POSS.3
urok-e e-z vu-e so-os-lâ pukt-i-z-e kâk očenka
 lesson-ILL NEG-3 come-PL he-PL-DAT give-PRT-3POSS-PL two note
 ‘The pupils who didn’t attend the lesson were graded “poor”’.

- (35) Besermyan Udmurt, CORRELATIVE
*kud-jos-âz / *kud-iz dâšeč'kiš'-jos urok-e*
 which-PL-POSS.3 which-POSS.3 pupil-PL lesson-ILL
e-z vu-e so-os-lâ pukt-i-z-e kâk očenka
 NEG-3 come-PL he-PL-DAT give-PRT-3POSS-PL two note
 ‘The pupils who didn’t attend the lesson were graded “poor”’.

j. Number mismatches: head noun in SG, relative pronoun in PL

- If the head noun is semantically plural, but does not have any surface markers of plurality, it is possible to use both singular and plural relative pronouns;
- Semantic agreement is disallowed in correlatives.

(36) Besermyan Udmurt, NOM → DAT

š'emja / *š'emja-lâ* *kud-iz-lâ* / *kud-jos-âz-lâ*
 family family-DAT which-POSS.3-DAT which-PL-POSS.3-DAT
mi š'ot-i-m kartoška tros šumet-o
 we give-PRT-1PL potato a lot make_noise-PRS.3PL
 'The family to whom we gave potatoes makes a lot of noise'.

(37) Besermyan Udmurt, CORRELATIVE

kud-iz-lâ / **kud-jos-âz-lâ* *š'emja-lâ* *mi š'ot-i-m*
 which-POSS.3-DAT which-PL-POSS.3-DAT family-DAT we give-PRT-1PL
kartoška tros šumet-o
 potato a lot make_noise-PRS.3PL
 'The family to whom we gave potatoes makes a lot of noise'.

(38) Ingrian Finnish, PART/GEN → NOM

okpere kutka ellâ-t nuapuri-n talo-s
 family.NOM who.PL.NOM live.PRS-3PL neighbor-GEN house-IN
miä kutsu-i-n louna-i-l'
 I.NOM call-PST-1SG dinner-PL-ALL
 'I asked the family who live next door to dinner'.

(39) Ingrian Finnish, CORRELATIVE

**kutka pere ellâ-t / ellâ nuapuri-n talo-s*
 who.PL.NOM family.NOM live.PRS-3PL live.PRS.3SG neighbour-GEN house-IN
miä kutsu-i-n louna-i-l'
 I.NOM call-PST-1SG dinner-PL-ALL
 'I asked the family who live next door to dinner'.

k. Case mismatches

- The direct object in Ingrian Finnish can be marked with the genitive or the partitive;
- In case of IA, the relative pronoun can have the partitive marker, while the head of the relative clause bears the genitive marker;
- Case mismatches are ungrammatical in correlatives;

(40) Ingrian Finnish, NOM → GEN

?ihmise-n ke-tä nä-i-t eilen ellâ naapuri-s
 man-GEN who-PART see-PST-2SG yesterday live.PRS.3SG neighbor-IN
 'The man you saw yesterday lives next door'.

(41) Ingrian Finnish, CORRELATIVE

*ke-tä okihmis-tä / *ihmise-n miä niä-n miu-st näüttijä*
 who-PART man-PART man-GEN I.NOM see-1SG I-EL please.PRS.3SG
 'I like the man I see'.

- Another example on case mismatch comes from Moksha:

(42) Moksha Mordvin, NOM → IN

gítara / gítara-sə kona-n' martə možnə mora-m-s, pək pitn'i.
 guitar guitar-IN which-GEN with is.possible play-INF-ILL very expensive
 'A guitar that can be played is very expensive'.

- Nothing new can be said about the structure, because the test cannot be applied to correlatives;

- However, it serves as an argument against the raising analysis of relative clauses; among others proposed in (Bianchi 1999) and (Kayne 1994);
- One more important question concerning IA: what is the element that assigns case to the head;
- Possible answers:
 - Case is assigned directly from the predicate (or another element) in the relative clause;
 - It is transmitted to the head of the RC through the relative pronoun:
 - Examples (40)–(42) exclude the second possibility.

3.4. Summary and discussion

Table 3. Headed relatives vs. inverse attraction vs. correlatives: summary

Properties / languages	Ingrian Finnish	Moksha Mordvin	Besermyan Udmurt
a. Left-dislocated position of the relative construction	Corr \approx IA \neq HRC	Corr \approx IA \neq HRC	Corr = IA \neq HRC
b. Extraposition (not applicable to correlatives)	IA \neq HRC	IA \neq HRC	IA \neq HRC
c. Movement out of the relative clause	Corr = IA \neq HRC	Corr = IA \neq HRC	Corr = IA \neq HRC
d. Declension of relativizers	Corr = IA = HRC	Corr \neq IA = HRC	Corr = IA = HRC
e. Possible relativizers	Corr = IA = HRC	Corr \neq IA = HRC	Corr \neq IA = HRC
f. Determiners (demonstratives or quantifiers) in the head	Corr \neq IA = HRC	Corr \neq IA = HRC	Corr \neq IA = HRC
g. Appositive interpretation	Corr \neq IA = HRC	Corr \neq IA = HRC	Corr \neq IA = HRC
h. Coordination with a noun phrase	Corr ? IA = HRC	Corr = IA = HRC	Corr \neq IA = HRC
i. Number mismatches: head noun in PL, relative pronoun in SG	Corr \neq IA = HRC	no data	Corr \neq IA = HRC
j. Number mismatches: head noun in SG, relative pronoun in PL	Corr \neq IA = HRC	no data	Corr \neq IA = HRC
k. Case mismatches	Corr \neq IA = HRC	Corr \neq IA = HRC	no data

4. Plans (suggestions are very welcome)

- Some more differences between headed relatives and correlatives to be tested against the IA clauses:
 - A study of intonation (work in progress);⁴
 - We compiled texts in Besermyan Udmurt and Moksha Mordvin that contained headed relative clauses, correlatives, and relatives with IA. Native speakers were presented with these texts and read them aloud;
 - Expectations (yet to be checked):
 - The headed relatives and IA-constructions might differ in pausation after the head noun;
 - The three relative constructions can differ in intonational patterns;
 - Availability of multiple relativization;
 - e.g., lit. ‘Which child in which way is brought up, he behaves this way’.

⁴ This study is conducted with much help from Anton Kukhto.

Abbreviations

ACC — accusative; AD — adessive; ALL — allative; DAT — dative; DEF — definite; DIM — diminutive; EL — elative; FUT — future; GEN — genitive; I — inflected; ILL — illative; IN — inessive; INF — infinitive; INSTR — instrumental; IPFV — imperfective; IPS — impersonal; LOC — locative; MULT — multiplicative; NEG — negative; NOM — nominative; NPST — nonpast; NZR — nominalization; O — object; PART — partitive; PL — plural; POSS — possessive; PRS — present; PRT — preterite; PST — past; PTCP — participle; S — single argument of canonical intransitive verb; SG — singular.

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