Head last to head first and left peripheries: evidence from Eastern Khanty and Udmurt relatives

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1. Introduction

1.1 SOV to SVO and pre- to postnominal relatives: the phenomenon to be accounted for

It is well-known that the OV/VO parameter is a predictor of other word order correlations (table from Croft 2003: 72; see also Greeberg 1963, Lehman 1973, Vennemann 1974, Hawkins 1983, Dryer 1992):

	OV	VO		OV	VO
Clausal orders	SV	VS	Phrasal orders	Post	Prep
	Vaux	AuxV		GN	NG
	VAdv	AdvV		RelN	NRel
	VSubr	SubrV		AN	NA
	PurpV	Vpurp		DemN	NDem
	OcompV	VOcomp		NumN	NNum
	SentQ	Qsent		AdvA	AAdv

Khanty and Udmurt are originally SOV languages that are currently undergoing a shift to SVO. In the wake of the OV to VO shift, other word order parameters are also undergoing a change. Of these, we focus on the RelN/NRel parameter.

Khanty and Udmurt RCs

before the change:	prenominal gap strategy		non-finite
	\downarrow	\downarrow	\downarrow
after the change:	postnominal	overt relativizer	finite

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The change takes place in 3 steps; the 3 individual changes happen in a specific order \rightarrow it is true for both languages that some logically possible combinations are not attested.

Aim: syntactic analysis of the change at each step

Claim: changes are driven by the formation of a left periphery in the RC

1.2 About Khanty and Udmurt

Similarities:

• Uralic, Finno-Ugric languages²

Uralic Languages Finno-Ugric Languages Samoedic Languages Ugric Finno-Permic Northern Samoedic South Samoedic Hungarian **Ob-Ugric** Nganasan Permic Volgaic Selkup Enets Sayan Samoedic (extinct) Khanty (ostyak) Mansi (vogul) Komi (zyryan) Nenets Udmurt (votyak) Finno-Volgaic Trans-Baltic - Finnic Mari Finnish (Suomalainen) Mordva (Erzya, Moksha) Karel (karvaleinen) Veps Izhora (Inkeri) Voda Estonian (Virolainen) Livv Saam (Lopar)

- agglutinative SOV
- one finite verb per sentence, widespread use of non-finite subordination
- RCs are non-finite, prenominal, and use the gap-strategy
- minority languages in the Russian Federation \rightarrow intenstive influence of Russian

Differences:

- in different branches of the Uralic Family: Udmurt is Permic, Khanty is Ob-Ugric
- areal differences: Khanty is spoken in Western Syberia, along the river Ob and its tributaries, Udmurt is spoken in the Volga-Kama Region, just south of the Ural mountains
- different contact languages in addition to Russian: Tatar (SOV) for Udmurt, Nenets and Komi-Zyrian (both SOV) for Khanty
- Khanty is an endangered language Udmurt isn't (based on the Russian census in 2010, 30 943 total Khanty ethnic population, of which 9600 native speakers; 552 299 total Udmurt ethnic population, of which 339 800 native speakers)³

² language tree from <u>http://www.policy.hu/filtchenko/Documenting%20Eastern%20Khanty/Eastern%20Khanty%20Map.htm</u>

- Khanty has morphologically unmarked objects, Udmurt has differential object marking (only definite direct objects bear Acc, other objects are unmarked)
- Khanty is a dialect continuum with 3 main dialects: western (a.k.a northern), eastern, and the extinct southern

Current situation:

- diglossia, unidirectional bilingualism (cca. 100%)
- Khanty: most living speakers went to boarding school, which helped assimilation; young people speak primarily Russian, children learn Khanty only if their parents have very traditional jobs (Sipos 2014)
- Udmurt: many children learn the language but only those living in remote rural areas continue to use it actively (Ethnologue)
- strong influence of the inflectional SVO Russian on both the lexicon and the syntax
- spread of OV and finite subordination, but the two languages are at different stages of the OV – VO change

2. The starting point of the change

2.1 Original RCs in Khanty and Udmurt

Prenominal, non-finite RCs employing the gap strategy. Khanty: Nikolaeva (1999), Filchenko (2007, 2012), Potanina (2008 2013), Csepregi (1996, 2012) Udmurt: GSUJa (1962), Alatyrev (1974), Winkler (2001)

- (1) [katüʌ-m-am] kuʌ put-nü kit' catch-PTC.PST-1SG fish pot-LOC stay-[PST.3SG]
 'The fish that I have caught stayed in the pot.' (Csepregi 2012, ex. 9b) Khanty
- (2) [Kük nunal zorüš'] zor gült-i-z š'erüs'-ez
 two day fall-ING rain.NOM destroy-PST road-ACC
 The rain that has been falling for 2 days destroyed the road.' (Belyaev 2012, ex. 6a) Udmurt

Prenominal RCs cannot be finite and cannot have a relative operator. Claim: this is because they are truncated clauses; they don't have a left periphery. Relative operators sit in spec, CP; that positon is not projected in these RCs.

³ http://www.gks.ru/free_doc/new_site/perepis2010/croc/perepis_itogi1612.htm

2.2 RCs in the contact language

Russian has 3 types of RCs.

(3)

A) prenominal non-finites (Hendery 2012: 202)

 (4) Saša otpravil [napisannoe včera] pis'mo. Sasha .NOM PRT.send.PST.3SG PRT.write.PASS.PST.PTC.NEU yesterday letter.ACC
 'Sasha sent the letter written yesterday.'

B) more commonly postnominal non-finites (Hendery 2012: 202)

(5) Saša otpravil pis'mo [napisannoe včera].
 Sasha .NOM PRT.send.PST.3SG letter.ACC PRT.write.PASS.PST.PTC.NEU yesterday
 'Sasha sent the letter written yesterday.'

C) postnominal, finite RCs with a *wh*-based relative operator in spec, CP. The relativizer agrees with the antecedent in gender and number but takes case from the relative clause (Bailyn 2012). No P-stranding (Miller and Weinert 1998: 351).

- (6) to, [čego ja bojus']
 that.NEUT.SG which-GEN I fear
 'that which I fear' (Bailyn 2012:116)
- (8) Čego vy boites'?
 what-GEN you.NOM fear
 'what are you afraid of?'
- (9) pričiny, [po kotorym žeščiny brosajut mužčiny] reasons by which-DAT.PL women throw men 'reasons for which women leave men' (Bailyn 2012:116)

3. The change to the head-first structure

The head-final to head-first shift first affects the position of RCs (RelN \rightarrow NRel), but not the finiteness of the relativizing strategy.

(10) kun, [ma-nü katn-üm] put-nü kičť
fish 1SG-LOC catch-PTC.PST pot-LOC stay-[PST.3SG]
"The fish that I have caught stayed in the pot." (Csepregi 2012, ex. 9c) Khanty

This type is "highly infrequent" and is "eventually self-repaired into" a prenominal non-finite RC in Khanty (Filchenko 2007: 468) and does not exist in Udmurt. We suggest that this is because postnominal RCs in these languages have a left periphery, which needs overt marking.

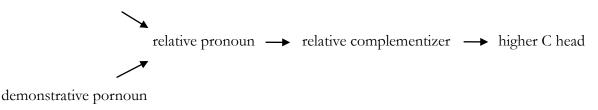
NB: Russian participial clauses have number and case agreement, the Khanty RCs of this type don't (Csepregi 2012: 86).

4. The emergence of the relativizer

In post-nominal RCs a relativizer may appear.

Relativizers often grammaticalize from *wh*-pronouns or demonstrative pronouns (van Gelderen 2004, 2009, Hopper and Traugott 1993, Heine and Kuteva 2002), and the relative operator may later grammaticalize into a C head (and further grammaticalize into a higher C head), a process known as the Relative Cycle (van Gelderen 2004, 2009).

(11) interrogative pronoun



s'iw

4.1 The wh-based relativizer

In post-nominal RCs both Khanty and Udmurt may feature a wh-based relative operator⁴.

⁴ The *wh*-based relative operator can be found also in the Northern Khanty dialect:

⁽i) nin, løp-əΛ, xøΛta man-Λ-ətən? DU2 say-PRES.SG3 where.to go-PRES-DU2 'He says, where are you going?' (Homljak 2002)
(ii) min man-Λ-amən, løp-əΛ, [xøΛta pa jøxt-Λ-amn],

DU1 go-PRES-DU1 say- PRES.SG3 where.to PTCL arrive-PRES-DU1 there man-A-amən. go-PRES-DU1 'We are walking, he says, where we arrive, there we go!' (Homljak 2002)

- (12) juwül-wülqa-nü[qomäwül-m-äm]3SGlive-PRES.3SGhouse-LOCwhere1SGlive-PST.PRT-1SG'He lives in the house where I lived.' (Potanina 2013: 79)Khanty
- (13) qol-pa mən-l-ən?
 where-ILL go-PRS-2SG
 'Where are you going?' (Filchenko 2010: 385)
 Khanty
- (14) So korkan ik ul-i, [kytyn lu-ono mynym]
 3SG house.INESS same live-PST.3SG where be-PRT 1SG.DAT
 'He lived in the same house, where I have to live.' Udmurt
- (15) Kytyn so ul-i?where 3SG live-PST.3SG'Where did (s)he live?'

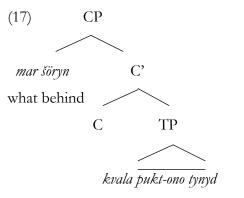
Supporting evidence that these are operators, not relative complementizers at this stage: may be modified by prepositions, can take plural and case marking (relevant Khanty examples can be found in section 5).

Udmurt

(16) So korkan ul-i, [mar shöryn kvala pukt-ono tynyd]
3SG house.INESS live-PST.3SG what behind holy.house build-PRT you.DAT
'He lived in the house behind which you have to build the holy house.' Udmurt

Claim:

- the *wh*-based relative operator may appear here because post-nominal RCs have a left periphery, i.e they may project a CP layer
- when the CP layer is present, there is a need to overtly mark clause-typing
- Khanty and Udmurt have no relative complementizers
- \rightarrow clause-typing is taken care of by a relative operator in spec, CP



holy.house build-PRT you.DAT

In which CP does the relativizer sit in Rizzi's (1997, 1999) split CP?

(18) FORCE (TOP*) INT (TOP*) FOC (TOP*) FIN IP

No co-occurrence with the complementizer shuisa 'that':

(19) Mon todisko co pinalez, [kudze Sasha uramish adziz (*shuisa)].
1SG know.PRS that child.ACC which.ACC Sasha.NOM street.ABL see.PST.3SG that
'I know that child which Sasha saw on the street.' Udmurt

No topicalization above the operator:

(20) *Mon todisko co pinalez, [Sasha kudze uramish adziz].
1SG know.PRS that child.ACC Sasha.NOM which.ACC street.ABL see.PST.3SG
'I know that child which Sasha saw on the street.' Udmurt

Proposal: (at least in Udmurt), the relativizer in the spec of the lower CP (FinP), the higher phrases in the left periphery are not projected⁵

⁵ Compare Russian: topicalization is not possible, the general complementizer cannot appear in RCs.

(21)	a. * Eto this	tot that	dom, house.NOM	[Saša Sasha.NOM	kotoryj v prošlo 4 which.ACC in last.Pl		godu year.PREP	postroil]. build.PST.3SG
b. *	Eto this postr build	tot that oil]. PST.3SC	dom, house.NOM	[što that	kotoryj Saša which.ACC Sasha.NOM	v in	prošlom last.PREP	godu year.PREP

'This is the house that Sasha built last year.'

Possible position: no real change in the Udmurt/Khanty clause structure, these are Russian structures with Udmurt/Khanty words (i.e. reverse of the typical relexification scenario, see Bakker 2000 on Sri Lanka Malay).

However: 1) Russian has no postnominal non-finites with relative operators (22), and 2) Khanty develops relative operators from demonstratives, too, which cannot be explained this way.

(22) *Saša otpravil pis'mo, [kotoroe včera napisannoe].
 Sasha.NOM PRT.send.PST.3SG letter.ACC which.ACC yesterday PRT.write.PASS.PST.PTC.NEU
 'Sasha sent the letter written yesterday.'

4.2 The Dem-based relativizer in Khanty

demonstratives in Khanty:

- distinguish bw. proximal and distal, as well as definite/visible and indefinite/invisible
- adnominally uninflected, inflected in the anaphoric and deictic use

The system of Khanty demonstratives (Surgut dialect, Márta Csepregi, pc.):

	spec	ific	abstract		
	pronominal	adnominal	pronominal	adnominal	
proximal	tēmi	tēm	ťit	ťi	
distal	tomi	tom	ť'ūt	ť'ū	

Normally, $t'\bar{u}$ appears adnominally and $t'\bar{u}t$ pronominally (23 a and b), however, $t'\bar{u}$ also occurs as a complement to Ps (23c) and pronominally in subject or object position (23d) \rightarrow it is always uninflected

- (23) a. mā $t'\bar{u}$ $r\bar{y}t$ -nat mən- Λ -əm
 - I that boat-COM go-PRS-2SG

'I take that boat.' (Márta Csepregi, pc.)

- b. mā t'ūt-nat mən-л-əm
 - I that-COM go-PRS-2SG

'I take that.' (Márta Csepregi, pc.)

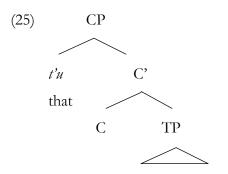
c. **t'ū pyrnə** tam miša-nə wās-kən noq ńät'-Λ-i-γən. that after there Misa-LOC duck-DU PRT pluck-PRS-PASS-DU3 'After that the two ducks are plucked by Misa.' (Csepregi 1998: 60) d. nüng tom torəm tom iAəm pälək-nə käw, you DET world DET front half-LOC stone
t⁷ū küč pow-A-e, muşti wīčəpə əntə pitə-A. DEM while blow-PRS-SG2.OBJSG through forever not get-PRS(SG3)
'At the front part of the world [there is] a stone, even though you blow it, you never get through it.'(Csepregi 1998: 64)

The distal demonstrative $t \int u/t u/t' \bar{u}$ grammaticalized into an element introducing the RC (it is uninflected as a relative operator, too, see Potanina 2013: 79):

(24) pirəš iki, [t'u Λŭw ăwi-Λ-at ma nămΛaɣt-əɣəΛ-t-am] old man that 3SG daughter-3SG-INSF 1SG think-FREQ-PRT.PRS-1SG 'the old man whose daughter I am thinking about' (Csepregi 2012: 87)

Claims:

- the $t \int u/t u/t' \bar{u}$ at the beginning of the RC is a relative operator
- the *wh*-based relativizer and the dem-based relativizer are two competing strategies to mark clause-typing in the relative clause
- we suspect that the fact that *tfu/tu/t'ū* is always uninflected played a role in its reanalysis, and the reanalysis started in contexts where the pronominal use of that *tfu/tu/t'ū* was immediately followed by the RC



лй*ж й*wi-л-at та пăтлаұt-әүәл-t-ат

3SG daughter-3SG-INSF 1SG think-FREQ-PRT.PRS-1SG

5. Change in finiteness

Khanty: relativizer is near-obligatory in finite clauses (Csepregi 2012: 87).

(26) merəm-qən [muyulə-yən jateswe-wəl aŋk-im]
tale-DU which-DU tell-PRES.3SG mother-POSS.1SG
'the tale that is told by my mother.' (Filchenko 2010: 302)

- (27) puɣəʌ, [mətapi-nə ma săm-a pit-əm]
 village which-LOC 1SG eye-LAT fall-[PST]1SG
 'the village where I was born' (Csepregi 2012: 88)
- (28) mä wel-s-əm [qo kötſköl qasɨ käs-äyi wajay lök]
 1SG be-PST2-1SG where hunter man find-PST.3SG animal track
 'I have been to that place, where the hunter found the animal track.' (Filchenko 2007: 500)
- (29) mä amə-yal-əm qat [tʃu qaŋən-nə aməs-wəl]
 1sg sit-PST-1SG house dem bank-LOC sit-PRS.3SG
 'I built the house which is on the riverbank.' (Potanina 2013: 79)

Udmurt: relativizer is obligatory

- (30) veras'ki todmo-nenym [kudiz jarat-e kochysh-jos-ty] talk-PST.1SG friend-POSS.1SG.INS REL.NOM like-PRS.3SG cat-PL-ACC
 'I talked with my friend who likes cats.'
- (31) veras'ki todmo-nenym [kudiz jarat-i kochysh-jos-ty] talk-PST.1SG friend-POSS.1SG.INS REL.NOM like-PST.3SG cat-PL-ACC
 'I talked with my friend who liked cats.'

Claim:

- finite clauses always have a left periphery, they can't be as truncated as non-finites
- Khanty strongly prefers, while Udmurt requires marking of clause typing
- an overt element on the left periphery is strongly preferred in Khanty and obligatory in Udmurt

 \rightarrow in absence of a relative complementizer, the relative operator must be used

Khanty RCs without a relativizer (note that the DEM element is not the tfu/tu DEM):

(32) mä wel-käs-im köt fəγ [ti ni öγö-wəl n'an']
1SG do-PST-1SG knife dem woman cut-PRS.3SG bread
'I made the knife which that woman cuts the bread with' (Potanina 2008: 83, 2013:80)
'I have made the knife, which a woman cuts the bread with' (Filchenko 2010: 499)

- (33) män-nə onəl-l-əm, tom qu jo-wəl
 1SG-LOC know-PRS-1SG det man walk-PRS.3SG
 'I know the man, who is walking there.' (Filchenko 2010: 500)
- (34) män-nə illə-nə onəl-l-əm, ti quj-äli ajri-nə jaγəntə-wəl
 1SG-LOC ago-LOC know-PRS-1SG det man-DIM canoe-LOC go-PRS.3SG
 'I have known for long the boy, who is going in the canoe.' (Filchenko 2010: 500)

In (33) and (34) the subjects are "that man who" and "that boy who" (Márta Csepregi, pc) so these are finite RCs without a relative operator. Note, however, that Filchenko (2010) claims that these are internally headed relative clauses, in which case it is not surprising that there is no relative operator in them.

6. Diachronic depth of the new RCs and intra-speaker variation6.1 Diachronic depth

When did these structures emerge? Khanty: reported from the 1950's-1960's by Gulya in headless relative clauses:

(35) [möyöli mänä mas-wəl] t'u məji-yilə-yas
what 1SG-LOC need-3SG that give-TR-PST3.3SG
'What I need, that he gave me.' (Gulya 1966: 86)

(36) töγ-l-a, [qo wəl-ət tʃ'u jaɣ]
DET-3SG-ILLAT where live-PST.3PL det people
'there, where those people lived (Filchenko 2007, citing Kalinina 1970)

Csepregi (1983) reports that Karjalainen (1964) also contains one sentence with a *wb*-based relativizer; and that Kalinina (1966, 1970) also contain a few examples. However, all but one of Kalinina's examples are translations from Russian, where the original Russian sentence also contains such a relativizer. Csepregi reports that in the Kalinina texts there are 8 RCs introduced by *when*, 7 of which are non-finite and 1 is finite.

Filchenko (2010: 508) on Khanty: 80% participial predicates in RCs, 20% finite predicates Filchenko (2010: 499) on Khanty: 15% of RCs is introduced by *wh*-based relativizers Udmurt: Winkler (2001) states that in Udmurt interrogative pronouns such as *kin* 'who', *mar* 'what', etc. functions as relative pronouns. However, he also claims that the useage of *kud* 'which' is resticted as a *wh*-word and it is more characterisitcally used as relative pronoun. In this function *kud* is compounded with a demonstrative suffix -iz. Suihkonen (2005) argues that the demonstrative suffix is used to restict the function of *kud* pronouns as relative pronouns.

As a relative pronoun kudiz 'which' can be marked with cases or can be merged with postpositions.

- (37) [Kud-jos-ez-lô pin'al'-l'os-lô mon vož-me pot-i], soos pegǯ'-izô.
 which-PL-DET-DAT child-PL-DAT 1SG anger-1SG.ACC come.out-PST.3SG 3PL run-PST.3.PL
 'The boys, which I got angry at, have run away.' (Belyaev 2012, ex. 14)
- (38) Mon so korkain uly, [kudiz söryn tyala aryn kvala
 1SG that house.INESSlive.PST.1SG which behind next year.INESS holy.house
 puktozy].
 build.FUT.3SG

'I lived that house, which behind they will build a holy house.'

6.2 Intra-speaker variation

3 steps of the change: 1) change in position, 2) change in relativizing strategy (introduction of an operator), 3) change in finiteness.

The original structures are still highly preferred by self-conscious language users and 'purists'. The three varieties live side by side, the same speaker may produce all three variants

 \rightarrow no separation of the varieties in time or by dialect/idiolect

7. Conclusions

Original structures: prenominal, non-finite, gap strategy

Steps of the change:

- 1. prenominal to postnominal
- 2. gap to relativizer strategy
- 3. non-finite to finite

Unattested combinations:

- A. prenominal and finite and/or has relativizer
- B. postnominal finite without relativizer in Udmurt
- C. postnominal nonfinite without a relativizer in Udmurt

Main claims:

- I. postnominal RCs is Khanty and Udmurt developed a left periphery
- II. Khanty strongly prefers to overtly mark the left periphery for clause typing
- III. Udmurt makes this marking obligatory
- IV. marking of clause typing is done via relative operators in spec, CP
- V. these operators are grammaticalizing from *wh*-elements (in both languages) and a demonstrative (in Khanty)

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