

# Voice alternations in Kazym Khanty participial relative clauses

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## 1 Introduction

- Kazym Khanty, close to Obdorsk Khanty described in (Nikolaeva 1999) but showing several morphological differences (i.e. number of cases, pronominal paradigms, DOM)
- Data comes from fieldwork (elicitation + texts) with 17 native speakers living in Kazym
- Non-rigid SOV, head-final
- Four morphological cases in total
  - Nouns: NOM=ACC (unmarked), DAT and LOC
  - Personal pronouns distinguish NOM (unmarked), ACC and DAT; impossible in the contexts that require Locative

## 2 Argument alternations in Kazym Khanty: general background

There is a  $-a(j)/-i(j)$ - morpheme that has been traditionally defined as passive. The natural context for its occurrence is answering a general question like *What happened?* or beginning a story. The demoted participant bears the Locative case.

- (1) ma i puš am-ən pur-s-aj-əm  
I one time dog-LOC bite-PST-PASS-1SG  
'Once I was bitten by a dog'.

Another argument alternation does not involve the  $-a(j)/-i(j)$ - morpheme and has generally been approached as secundative alternation: IO promotes to the DO position, triggering the object agreement on the finite verb. DO turns into Locative.

- (2) aŋk-εm apl-εm sołamat-ən mä-s-ʔe  
mother-1SG younger.brother-1SG mash-LOC give-PST-3SG.SG  
'My mother gave kasha to my brother (lit. My mother gave my brother with kasha)'.

This can be further passivized:

- (3) apl-εm aŋk-εm-ən sołamat-ən mä-s  
younger.brother-1SG mother-1SG-LOC mash-LOC give-PST-PASS  
'My mother gave kasha to my brother (lit. My brother is given by my mother with kasha)'.

Only dative arguments and high applicatives (in terms proposed by Pyłkkänen (2002)) can be promoted to DO; low applicatives, as well as other lower positions cannot participate in secundative alternation.

- (4) pet'aj-en rəpit-ʔ ma jaj-əm-a  
Peter-2SG work-NPST[3SG] I elder.brother-1SG-DAT  
'Peter works for my brother'.

- (5) \*ma jaj-əm                    pet'aj-en-ən    rəpit-ʔ-a  
 I    elder.brother-1SG Peter-2SG-LOC work-NPST-PASS  
 Intended reading: 'Peter works for my brother', promotion to SU + passive morpheme
- (6) \*pet'aj-en ma jaj-əm                    rəpit-ʔ-əʔe  
 Peter-2SG I    elder.brother-1SG work-NPST-3SG.SG  
 Intended reading: 'Peter works for my brother', promotion to DO + object agreement

While argument alternation supported by the use of *-a(j)-/-i(j)-* can be associated with topicalization, secondary alternation has been claimed to co-occur with so-called secondary topicalization (Nikolaeva 2001).

### 3 Non-finite relativization: general information

The two participial forms *-əm* (NFIN.PST) and *-ti* (NFIN.NPST) are involved almost in any subordinative construction in Kazym Khanty: control clauses, sentential adjuncts and complements, relative clauses. The two forms differ in their temporal (rather than aspectual) interpretation and do not show any differences over their relativizability. Thus, syntactic positions that are directly accessible to relativization are SU, DO, dative Goals, adjuncts (restrictedly), possessors (restrictedly).

- Subject relativization:

- (7) aj ikij-a    mońś mońśi                    pirəs iki  
 little man-DAT tale tell.NFIN.NPST old man  
 'the old man who tells a fairytale to the boy'

- Direct object relativization

- (8) śas-əm                    ʔət-əm                    päsan nuχ məŋ-s-əm  
 paternal.grandmother-1SG buy-NFIN.PST table up wipe-PST-1SG.SG  
 'I wiped the table that my grandmother bought'.

- Goal relativization

Goals are initially marked with the Dative case. Relativization of goal arguments is somehow restricted and not approved by all of the speakers.

- (9) aŋk-əm    kińskaj-əʔ nurəm-a    pun-s-ʔe  
 mother-1SG book-3    shelf-DAT put-PST-3SG.SG  
 'My mother put her book on the shelf'.
- (10) ?aŋk-əm    kińskaj-əʔ pun-əm                    nurəm-a    än juχət-ʔ-əm  
 mother-1SG book-3    put-NFIN.PST shelf-DAT NEG come-NPST-1SG  
 'I can't reach the shelf that my mother put her book on'.

- Adjunct relativization

Most of the adjuncts initially bear the Locative case. All of them can easily be relativized:

- (11) täm χatʔ-ən jaj-əm                    mašaj-əʔ imij-a                    wu-s-ʔe  
 this day-LOC elder.brother-1SG Mary-3 woman-DAT take-PST-3SG.SG  
 'On this day, my brother married Mary (lit. took his Mary as a wife)'.
- (12) məŋ woš-ew-ən                    ńəm-ʔ-a                    jaj-əm                    mašaj-əʔ imij-a                    wu-əm                    χatʔ  
 we village-1PL-LOC remember-NPST-PASS elder.brother-1SG Mary-3 woman-DAT take-NFIN.PST day  
 'In our village they remember the day when my brother married Mary'.

Relativization of postpositional complement is hindered. There are two cases when it is acceptable (at least to some extent):

- Arguments encoded with postpositions

- (13) ma amp ewəʔt päʔ-ʔəm  
 I dog from be.afraid-NPST-1SG  
 'I am afraid of the dog'.

- (14) ?up-εm päd-ti \*ʔewəʔt amp ma jira woš-s-εm  
 elder.sister-1SG be.afraid-NFIN.NPST (from) dog I away chase-PST-1SG.SG  
 ‘I chased away the dog my sister is afraid of’.

- Adjuncts of several postpositions can be relativized iff the head noun is the complement of an identical postposition itself (i.e., Case Matching takes place, as it has been studied in free relatives (Izvorski 1997 ao)):

- (15) sašaj-en päsän iʔpij-a χäänεm-s  
 Sasha-2SG table under-DAT hide-PST[3SG]  
 ‘Sasha hid under the table’.
- (16) \*sašaj-en (iʔpij-eʔ-a) χäänεm-əm päsän  
 Sasha-2SG (under-3-DAT) hide-NFIN.PST table  
 Intended reading: ‘the table under which Sasha hid’
- (17) ma sašaj-en χäänεm-əm päsän iʔpij-a wal-εmə-s-əm  
 I Sasha-2SG hide-NFIN.PST table under-DAT look-INCH-PST-1SG  
 ‘I checked under the table under which Sasha hid’.

- Possessor relativization

Most of the possessor-like relations are expressed via juxtaposition. The possessive marking on the head is optional except for pronominal possessors, for which it is obligatory. Only the most salient of the possessor-like relations allow for relativization, as e.g. constructions involving kinship terms.

- (18) χiʔ-eʔ-aʔ amña woš wəʔ-ti pirəś iki  
 grandchild-pl-3 Amnya village be-NFIN.NPST old man  
 ‘the old man whose grandchildren live in Kazym (lit. in the Amnya (river name) village)’

## 4 Argument alternations within relative clauses

Khanty participles are voice-neutral. When used as passive ones, they do not attach the *-a(j)-/-(j)-* morpheme - argument alternation can only be seen from argument encoding: SU demotes to Locative.

- (19) a. aŋk-εm ʔət-əm ńań  
 mother-1SG buy-NFIN.PST bread  
 b. aŋk-εm-ən ʔət-əm ńań  
 mother-1SG-LOC buy-NFIN.PST bread  
 ‘the bread that my mother bought’

If the Agent is inanimate, only a passive counterpart can be used:

- (20) a. jiiŋk-ən wəj-əm χot  
 water-LOC take-NFIN.PST house  
 b. \*jiiŋk wəj-əm χot  
 water-LOC take-NFIN.PST house  
 ‘a house flooded with water’

However, not any relative clause allows for argument alternations. For instance, adjunct or possessor relativization is incompatible with SU-DO alternation:

- (21) a. aŋk-εm ńań ʔət-ijəʔ-ti ʔapka  
 mother-1SG bread buy-FREQ-NFIN.NPST shop  
 b. \*aŋk-εm-ən ńań ʔət-ijəʔ-ti ʔapka  
 mother-1SG bread buy-FREQ-NFIN.NPST shop  
 ‘the shop where my mother usually buys bread’

Secundative alternation is also attested within relative clauses. Moreover, in some cases it is required. In particular, IO can only be relativized if firstly promoted to DO:

- (22) a. up-εm            núχij-ən    mij-əm            amp nuχ amt-əs  
elder.sister-1SG meat-LOC give-NFIN.PST dog up get.happy-PST[3SG]
- b. \*up-εm            núχi    mij-əm            amp nuχ amt-əs  
elder.sister-1SG meat give-NFIN.PST dog up enjoy-PST[3SG]  
‘The dog to whom my sister had given meat was happy’.

Combination of secundative alternation and passivization is also legitimate:

- (23) up-εm-ən            núχij-ən    mij-əm            amp nuχ amt-əs  
elder.sister-1SG-LOC meat-LOC give-NFIN.PST dog up enjoy-PST[3SG]  
‘The dog to whom my sister had given meat was happy’.

Predictably, passivization without secundative alternation is banned:

- (24) \*up-εm-ən            núχij mij-əm            amp nuχ amt-əs  
elder.sister-1SG-LOC meat give-NFIN.PST dog up enjoy-PST[3SG]  
Intended reading: ‘The dog to whom my sister had given meat was happy’.

However, it seems that secundative alternation is only possible when needed: subject relativization does not allow for it.

- (25) a. śerk-en    išək-ʔ-əʔ-ʔe    kät`ij-əʔ-a    εsəm    jɪŋk    mij-əm            aj    ik-eʔ  
Sergey-2SG praise-NPST-O-3 cat-3-DAT breast water give-NFIN.PST little man-3
- b. \*śerk-en    išək-ʔ-əʔ-ʔe    kät`ij-əʔ    εsəm    jɪŋk-ən    mij-əm            aj    ik-eʔ  
Sergey-2SG praise-NPST-O-3 cat-3    breast water-LOC give-NFIN.PST little man-3  
‘Sergey praises the boy who gave milk to his cat’.

Adjunct relativization is also incompatible with secundative alternation:

- (26) a. pirəs iki    χiʔ-əʔ-a            mońs mońsi            χot  
old man grandchild-3-dat tale tell.NFIN.NPST house
- b. \*pirəs iki    χiʔ-əʔ            mońs-ən mońsi            χot  
old man grandchild-3-dat tale tell.NFIN.NPST house  
‘the house where the old man tells fairytales to his grandson’

Relativized position	Passivization	Secundative alternation
Subject	NA	*
Direct object	ok	NA
Indirect object	ok	needed
Adjunct	*	*
Possessor	*	*

## 5 Internal structure of participial RCs

- Participles have argument structure  $\implies$  vP;
- Possibility to hold aspectual affixes  $\implies$  AspP;
- Possible to modify with ‘once’, impossible to modify with ‘later’; the difference between the two forms is more temporal than aspectual (even though in some other close dialects it is aspectual, e.g. in the Shuryshkary one (Muraviev 2017)  $\longrightarrow$  TP?
- Impossible to modify with modal adverbs  $\longrightarrow$  no ModP or higher.

## 6 Passivization

### 6.1 Unmarked subjects vs. demoted subjects

Demoted subject of relative clause shows different syntactic behaviour in comparison to unmarked one. I argue that unmarked subjects of relative clauses are possessors.

- Agreement within RC

In a possessive construction, pronominal possessor obligatorily triggers agreement on the possessee. In other cases, agreement is optional.

- (27) a. ma χot-εm  
I house-1SG  
b. \*ma χot  
I house  
'my house'
- (28) jɥwan χot-(ɬ)  
John house-3  
'John's house'

Similarly, pronominal subject of RC triggers possessive agreement marker on the head noun; agreement with non-pronominal subjects is optional.

- (29) ɬɥw ɬɥjt-ti kinškaj-\*(eɬ)  
s/he read-NFIN.NPST book-3  
'the book she is reading'
- (30) mašaj-en jεm-a arij-εm ar-(ɬ) wera katra  
Mary-2SG good-DAT sing-NFIN.PST song-3 very ancient  
'The song that Mary sang well is very old'.

Agreement with locative subjects is impossible:

- (31) mašaj-en-ən jεm-a arij-εm ar-(\*ɬ) wera katra  
Mary-2SG-LOC good-DAT sing-NFIN.PST song-3 very ancient  
'The song that Mary sang well is very old'.

- Competition from the same structural position

In contrast to passive RC, it is impossible to add another possessor to the structure with unmarked subject.

- (32) a. aɲk-εm pəs-εm jεnas nuχ sor-s  
mother-1SG wash-nfin.pst dress up dry-PST[3SG]  
b. aɲk-εm-ən pəs-εm jεnas nuχ sor-s  
mother-1SG-LOC wash-nfin.pst dress up dry-PST[3SG]  
'The dress that my mother washed is dry'.
- (33) a. \*aɲk-εm pəs-εm jεnas-εm nuχ sor-s  
mother-1SG wash-nfin.pst dress-1SG up dry-PST[3SG]  
b. aɲk-εm-ən pəs-εm jεnas-εm nuχ sor-s  
mother-1SG-LOC wash-nfin.pst dress-1SG up dry-PST[3SG]  
'My dress that my mother washed is dry'.

- Quantifiers are impossible

Quantifier phrases such as 'nobody' or 'every' can occur neither as possessors nor as unmarked subjects. The Locative counterpart is grammatical though.

- (34) \*nɛmχujat aj amp(-əʃ)  
 nobody little dog-3  
 Intended reading: ‘nobody’s puppy’
- (35) a. nɛmχujat-ən ən ʃuxit-əm an-ət ma päsan ewəʃt jira wɯj-s-əm  
 nobody-loc NEG wash-NFIN.PST cup-PL I table from away take-PST-1SG  
 b. \*nɛmχujat ən ʃuxit-əm an-ət ma päsan ewəʃt jira wɯj-s-əm  
 nobody NEG wash-NFIN.PST cup-PL I table from away take-PST-1SG  
 Intended reading: ‘I took away from the table the cups that nobody had washed’.

- Manner adverbs can only follow the unmarked subject. Locative subjects can be either preceded or followed by an adverbial modifier.

- (36) a. mašaj-en-ən jɛm-a arij-əm ar wɛra katra  
 Mary-2SG-LOC good-DAT sing-NFIN.PST song very ancient  
 b. jɛm-a mašaj-en-ən arij-əm ar wɛra katra  
 good-DAT Mary-2SG-LOC sing-NFIN.PST song very ancient  
 c. mašaj-en jɛm-a arij-əm ar wɛra katra  
 Mary-2SG good-DAT sing-NFIN.PST song very ancient  
 d. \*jɛm-a mašaj-en arij-əm ar wɛra katra  
 good-DAT Mary-2SG sing-NFIN.PST song very ancient  
 ‘The song that Mary sang well is very old’.

A natural question arises whether there is no subject inside RC at all (and thus, it either demotes to Locative or raises to possessor) or there is a PRO or some other silent element, e.g. a trace. The second option seems to be more plausible:

- In contrast to locative ones, unmarked subjects of RCs can control purpose clauses:

- (37) a. aŋk-ɛm kɔr-ən pʉnšt-ti päta ʃət-əm núxi wʉʃi núxi wɛʃ-m-aʃ  
 mother-1SG oven-LOC bake-NFIN.NPST for buy-NFIN.PST meat deer meat be-NFIN.PST-3  
 b. \*aŋk-ɛm-ən kɔr-ən pʉnšt-ti päta ʃət-əm núxi wʉʃi núxi wɛʃ-m-aʃ  
 mother-1SG oven-LOC bake-NFIN.NPST for buy-NFIN.PST meat deer meat be-NFIN.PST-3  
 ‘The meat bought by my mother was deer meat’.

- ..and intensifier floating - at least in some cases:

- (38) a. pet’aj-en ʃɯw saχt-aʃ-a kińškaj-eʃ ʃɯjt-s-əʃ-ʃe  
 Peter-2SG s/he INT-3-DAT book-3 read-PST-O-3  
 b. pet’aj-en kińškaj-eʃ ʃɯw saχt-aʃ-a ʃɯjt-s-əʃ-ʃe  
 Peter-2SG book-3 s/he INT-3-DAT read-PST-O-3  
 ‘Peter read the book by himself’.
- (39) \*kińškaj-eʃ pet’aj-en-ən ʃɯw saχt-aʃ-a ʃɯjt-s-əʃ-ʃe  
 book-3 Peter-2SG-LOC s/he INT-DAT-3 read-PST-PASS  
 Intended reading: ‘The book was read by Peter by himself’.
- (40) pet’aj-en kińška ʃɯw saχt-aʃ-a ʃɯjt-əm χatʃ-əʃ aŋk-eʃ nɛm-ʃ-əʃ-ʃe  
 Peter-2SG book s/he INT-3-DAT read-NFIN.PST day-3 mother-3 remember-NPST-O-3  
 ‘Peter’s mother remembers the day when Peter read a book by himself’.

## 7 Conclusion

- Participial relative clauses in Kazym Khanty exhibit argument alternations: promotion to subject and promotion to object.
- These alternations can only take place when *needed*:

- Participial relatives are reduced structures that do not exhibit a full-fledged TP; since there is no possibility to assign Case to the Agent participant. There is some evidence for PRO.
- Secundative alternation within RCs can only be done in order to make IO accessible to relativization
- It might be the case that this is a mechanism that does not involve variation in information structure at all.

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