

# Relative clause or nominalized clause: the evidence from Kazym Khanty\*

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## 1 What is this talk about?

In Kazym Khanty (Ob-Ugric, Uralic) there is no "usual" nominalization. Instead, a participial construction with a semantically vacuous noun *wɛr* 'deed' is used.

- (1) aś-eł wə-ł-łe puχ-əł kaša ɬɛw-əm wɛr  
father-3 know-NPST-3SG.O boy-3 kasha eat-NFIN.PST deed  
'The father knows that his son ate the kasha'.

This construction (hereafter **analytical nominalization**) is akin to non-finite relative clauses, see relativization of an adjunct in (2):

- (2) ma śatśaś-em nəm-ł-əłle ɬał par-əm χatł  
I paternal.grandfather-1SG remember-NPST-3SG.O war die-NFIN.PST day  
'My grandfather remembers the dat when the war ended'.

In this talk:

- We are going to show that the analytical nominalization can be approached as relativization

## 2 Relativization in Kazym Khanty: basic information

- Two participial forms: *-ti* (NFIN.NPST) and *-əm* (NFIN.PST)
- Do not differ in what they can relativize
- Almost any syntactic position is accessible to relativization (areal feature, as shown in (Pakendorf 2012))
- Subject relativization:

- (3) 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

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- (4) *śaś-εm* *łət-əm* *pāsan nuχ məŋ-s-εm*  
 paternal.grandmother-1SG buy-NFIN.PST table up wipe-PST-1SG.SG  
 ‘I wiped the table that my grandmother bought’.

- Adjunct relativization

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

- (5) *täm χatł-ən jaj-əm mašaj-əł imij-a wu-s-łe*  
 this day-LOC elder.brother-1SG Mary-3 woman-DAT take-PST-3SG.O  
 ‘On this day, my brother married Mary (lit. took his Mary as a wife)’.
- (6) *məŋ woš-ew-ən nəm-ł-a jaj-əm mašaj-əł imij-a wəj-əm χatł*  
 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 from under postpositions is severely restricted, although possible in some cases; this will not be considered in this talk.

- Possessor relativization

- (7) *χitł-eł-ał amńa woš wəł-ti pirəs 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)’

The pronominal subject of a relative clause triggers the possessive agreement on the head noun. Agreement with non-pronominal subjects is optional.

- (8) *łuw łuŋt-ti kinškej-\*(eł)*  
 s/he read-NFIN.NPST book-3  
 ‘the book she is reading’
- (9) *mašaj-en jem-a arij-əm ar-(ł) wera katra*  
 Mary-2SG good-DAT sing-NFIN.PST song-3 very ancient  
 ‘The song that Mary sang well is very old’.

Bikina (2019) showed that the unmarked subject of a relative clause has possessor properties and takes the corresponding position in the structure.

### 3 Analytical nominalization

- Occurs in argument positions, especially with factive predicates
- Has a semantically vacuous noun as a head
- Can be formed with both NPST and PST participles
- Can involve unaccusative verbs as well (11)

- (10) *ma wə-s-εm täm aj ikij-en mänəm lipət mojtə-ti wər*  
 I know-PST-1SG.SG this little man-2SG I.DAT flower gift-NFIN.NPST deed  
 ‘I knew that the boy would give me flowers’.
- (11) *täta jįk uw-əm wər ma wə-ł-εm*  
 here water flow-NFIN.PST deed I know-NPST-1SG.SG  
 ‘I know that water flowed here’.

- Pronominal subjects behave alike subjects of participial clauses, triggering possessive agreement on *wər*:

- (12) *łuw nawrəm łəmət-tə-ti wər-\*(ł) ma wə-ł-εm*  
 s/he baby dress-TR-NFIN.NPST deed I know-NPST-1SG.SG  
 ‘I knew that she was dressing the baby’.

Unmarked subjects of a *wər*-construction are possessors, as in relative clauses (see Starchenko 2019 for details).

## 4 Relativization vs. analytical nominalization: the differences

### 4.1 Interaction with argument alternations

In Khanty, there are two argument alternation operations:

- Passivization

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.

- (13) 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'.

- Secundative alternation (or dative shift)

IO promotes to the DO position, triggering the object agreement on the finite verb. No special morphological marking is involved. DO turns into Locative. This structure can be further passivized.

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

- (15) apl-əm aŋk-əm-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)'.

Participles are voice-neutral: they do not attach the passive morpheme. Nevertheless, they can be passive, which can be seen from argument encoding. Thus, the passive subject (= the promoted DO) can be relativized, in which case the initial subject gets the Locative marking:

- (16) a. aŋk-əm ɬət-əm ńań  
mother-1SG buy-NFIN.PST bread  
b. aŋk-əm-ən ɬət-əm ńań  
mother-1SG-LOC buy-NFIN.PST bread  
'the bread that my mother bought'

Secundative alternation is also compatible with relativization. For instance, dative arguments are generally inaccessible to relativization and can only be relativized after a promotion to DO:

- (17) a. up-əm ńuxij-ən mij-əm amp nuχ amt-əs  
elder.sister-1SG meat-LOC give-NFIN.PST dog up get.happy-PST[3SG]  
b. \*up-əm ńuxi 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:

- (18) up-əm-ən ńuxij-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'.

However, it is impossible to relativize an adjunct from a passive clause or from a clause where secundative alternation has occurred:

- (19) a. aŋk-əm ńań ɬət-ijət-ti ɬapka  
mother-1SG bread buy-FREQ-NFIN.NPST shop  
b. \*aŋk-əm-ən ńań ɬət-ijət-ti ɬapka  
mother-1SG-LOC bread buy-FREQ-NFIN.NPST shop  
'the shop where my mother usually buys bread'

- (20) a. pirəs iki χiɫ-əɫ-a mońs mońsi χot  
 old man grandchild-3-DAT tale tell.NFIN.NPST house  
 b. \*pirəs iki χiɫ-əɫ mońs-ən mońsi χot  
 old man grandchild-3 tale-LOC tell.NFIN.NPST house  
 ‘the house where the old man tells fairytales to his grandson’

Analytical nominalization is more similar to the subject/object relativization than to that of the adjunct: it allows for any kind of argument alternations.

- (21) ɬəχs-εm-ən kinška wuj-ɫ'-əm wɛr wə-ɫ-εm  
 friend-1SG-LOC book take-FREQ-NFIN.PST deed know-NPST-1SG.SG  
 ‘I know that my friend has taken the book (lit. that the book has been taken by my friend)’.
- (22) aj ikij-en-ən lipət-ən mojɬə-ti wɛr-εm wə-s-εm  
 little boy-2SG-LOC flower-LOC give-NFIN.NPST deed-1SG know-PST-1SG.SG  
 ‘I knew that the boy would give me flowers (lit. that I would be given by the boy by flowers)’.

Relativized position	Passivization	Secundative alternation
Subject	NA	?
Direct object	ok	ok
Adjunct	*	*
Possessor	*	*
<b>Analytical nominalization</b>	ok	ok

## 4.2 Adnominal modification

Khanty is left-branching and has the following order of adnominal modifiers:

- (23) Possessor / Demonstrative > Numeral / Adjective > Bare noun

In a relative clause, the head noun can be modified with any kind of adnominal elements: adjectives, numerals, demonstratives:

- (24) jaj-əm äkt-əm wəsɛm-əŋ mərəχ nuɫ-s-εm  
 brother-1SG pick-NFIN.PST sour-PROP cloudberry grind-PST-1SG.SG  
 ‘I grinded the sour cloudberry that my brother had picked’.
- (25) aŋk-εm kat'aj-en jont-əm χəɬəm jɛrnas tini-j-əs  
 mother-1SG Katya-2SG sew-NFIN.PST three dress sell-PST[3SG]  
 ‘My mother sold the three dresses that Katya had sewed’.
- (26) tám aŋk-εm ɬət-əm náń jɬəp  
 this mother-1SG buy-NFIN.PST bread new  
 ‘This bread that my mother bought is fresh’.

In contrast, analytical nominalization can only attach high modifiers, e.g. demonstratives, but not adjectives or numerals:

- (27) wasaj-en tám tərəm ɬor-a jäjχ-əm wɛr-ɫ ma wə-ɫ-εm  
 Vasya-2SG this Numto-DAT go-NFIN.PST deed-3 I know-NPST-1SG.SG  
 ‘I know about this Vasya’s trip to Numto’.
- (28) \*ma wə-ɫ-εm mašaj-en təs jak-ti wɛr  
 I know-NPST-1SG.SG Masha-2SG skillful dance-NFIN.NPST deed  
 IR: ‘I know that Masha is a skillful dancer’.
- (29) wasaj-en tərəm ɬor-a jäjχ-əm wɛt wɛr-ɫ ma wə-ɫ-εm  
 Vasya-2SG Numto-DAT go-NFIN.PST five deed-3 I know-NPST-1SG.SG  
 IR: ‘I know about the five trips of Vasya to Numto’.

Modifier type	Analytical nominalization	Head noun of a RC
Adjectival	–	+
Numeral	–	+
Demonstrative	+	+
Possessor	+	+

### 4.3 Adverbial modification

Analytical nominalization and relative clauses allow for different number of adverbial modifiers. In particular, analytical nominalization can be modified by temporal adverbials, while relative clauses restrict their use:

- (30) wašaj-en jəχət tərəm ɫor-a jäjχ-əm wər-ɫ ma wə-ɫ-əm  
 Vasya-2SG later Numto-DAT go-NFIN.PST deed-3 I know-NPST-1SG.SG  
 ‘I know that Vasya went to Numto later’.
- (31) wašaj-en imətijən tərəm ɫor-a jäjχ-əm wər-ɫ ma wə-ɫ-əm  
 Vasya-2SG once Numto-DAT go-NFIN.PST deed-3 I know-NPST-1SG.SG  
 ‘I know that Vasya went to Numto once’.
- (32) \*ma wəmɫ-ijət-ɫ-əm up-əm jəχət wənɫ-ijət-ti aškola-j-ən  
 I study-FREQ-NPST-1SG sister-1SG later study-FREQ-NFIN.NPST school-LOC  
 IR: ‘I study in the school where my sister will study later’.
- (33) ??amp-ən imətijən pur-əm aj ik-en juɫ-ən oməs-ɫ  
 dog-LOC once bite-NFIN.PST little man-2SG home-LOC sit-NPST[3SG]  
 ‘The boy that was once bitten by a dog stays at home’.

### 4.4 Analysis

- Analytical nominalization involves more structure than relative clauses: it allows for more adverbial modifiers
- However, the head noun cannot attach low modifiers
- Finally, analytical nominalization resembles argument relativization with respect to argument alternations: it can be derived from a passive clause and from a clause where the object has been promoted.

	Argument relativization (SU, DO)	Adjunct relativization	Analytical nominalization
Argument alternations	+	–	+
Low modification	+	+	–
TP-adverbial modification	?	–	+

- We assume that analytical nominalization is actually relativization of a factive argument. This argument is located somewhere above TP (say, ForceP) and introduces the factive proposition.
- Sentential complements of attitude nouns such as *claim*, *belief* etc. have often been analyzed as relative clauses (see Nichols 2004; Arsenijević 2009; Moulton 2017 for English; Krapova, Cinque 2016). These proposals consider sentential complements of attitude nouns as relativization of factive argument, although they have some commonalities with sentential complements of verbs. However, it has been observed that nouns that can be complemented exhibit different syntactic properties and do not form a single class (Krapova, Cinque 2016; Letuchiy 2018).
- The crucial difference of our proposal is that when the factive argument gets moved, it has to be spelled-out, and that is why the semantically empty head is needed.

#### Why does the analytical nominalization involve more structure?

→ Because of the high position of the factive argument, which requires more structure.

#### Why cannot the analytical nominalization be modified with adjectives?

→ Because *wēr* ‘deed’ is a spelled-out factive argument and does not possess several nominal characteristics. The possibility for high modification can be explained as follows: by relativization, the nominal functional layers of are overbuilt above the verbal structure, starting from PossP. In this way, they provide a position for the subject of a relative clause, which is possessor indeed.

### **What are the weaknesses of our analysis?**

→ Some authors claim that the factive argument cannot undergo movement (Rothstein 1995). Our analysis, in contrast, involves its relativization. Even though we cannot argue for raising or matching analysis of relativization in Kazym Khanty so far, we speculate that the English data analyzed by Rothstein is different from the Kazym Khanty one in the following aspect: Kazym Khanty has a special grammaticalized element to spell the factive argument out. However, further research is needed.

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