



# Approaching the competition between strategies in Uralic subordination

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# Subordination and (non-)finiteness

**Subordination:** main clause + subordinate clause (dependency)

- relative clause      *Have you met the woman [who wrote this book]?*
- complement clause      *Did you really think [that she could win]?*
- adverbial clause      *I did not go to the party [because Jessie was there].*

**Finiteness:** prototypical main-clause forms (finite) vs. deranked forms (non-finite)

Non-finites:

- participles
- nominalizations, infinitives      + multifunctional non-finites
- converbs

# Relative clauses

## Finite (relative pronoun + finite form): Estonian (Erelt 2003)

<i>mehed,</i>	<i>kellele</i>	<i>te</i>	<i>maja</i>	<i>müüsite</i>
man.PL	who.SG.ILL	2PL	house.ACC	sell.PST.2PL

‘the men to whom you sold the house’

## Non-finite (participle): Meadow Mari (Brykina & Aralova 2012)

<i>Saša-n</i>	<i>košt-mo</i>	<i>pölem</i>	—	<i>məj-ən</i>	<i>pört-em</i>
Sasha-GEN	enter-PTCP.PST	room		I-GEN	house-POSS.1SG

‘The room which Sasha entered is my home.’

# Complement clauses

## Finite (complementizer + finite form): Finnish

*Tiedä-n,*            ***että***            *hän*            ***tul-i***            *eilen*  
know.PRS-1SG    **that**            3SG            **come-PST.3SG**    yesterday  
'I know that he came yesterday.'

## Non-finite (nominalization): Udmurt (Beljaev 2012)

*Mon*            *tod-iš'ko*            *so-lâš'*            *tolon*            ***lâkt-êl-em-z-e***  
1SG            know-PRS            that-GEN            yesterday            **come-ITER-NZR-3-ACC**  
'I know that he came yesterday.'

# Adverbial clauses

**Finite (conjunction + finite form): Hungarian** (Kenesei et al. 1998)

*Amikor* Anna olvasott, Péter aludt  
**when** Anna read.PST Peter slept

‘While Anna was reading, Peter was sleeping.’

**Non-finite (action nominal + case): Tundra Nenets** (Nikolaeva 2014)

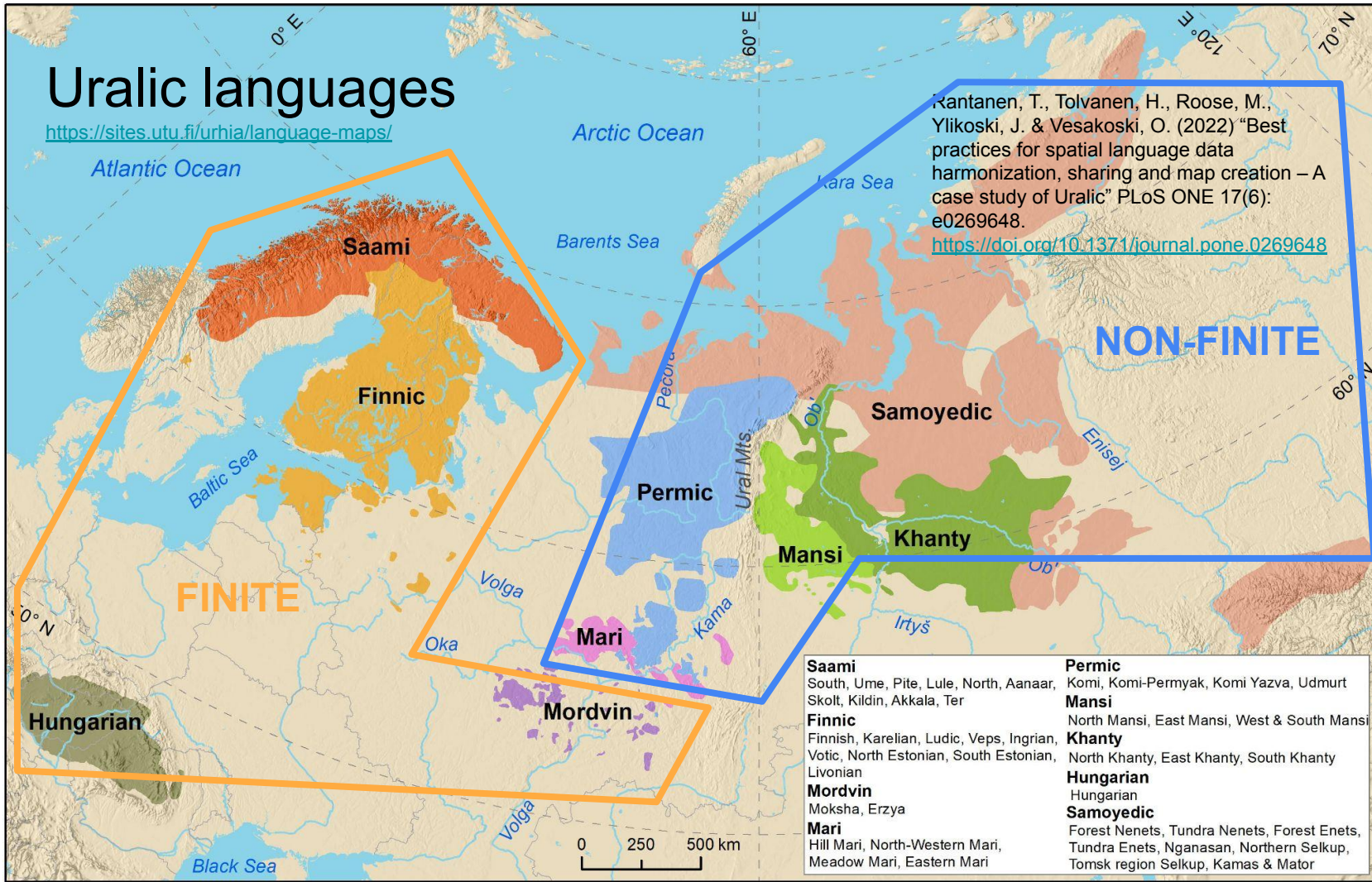
*xasawa-n'i* *xæ-qm'a-xəd°* *m'aq-naq* *m'uy°* *wercory°-q*  
man-GEN.1SG **go-PERF.AN-ABL** tent-GEN.1PL inside become.empty-REFL.3SG

‘After my husband left, it has become empty in our tent.’

# Uralic languages

<https://sites.utu.fi/urhia/language-maps/>

Rantanen, T., Tolvanen, H., Roose, M., Ylikoski, J. & Vesakoski, O. (2022) "Best practices for spatial language data harmonization, sharing and map creation – A case study of Uralic" PLoS ONE 17(6): e0269648.  
<https://doi.org/10.1371/journal.pone.0269648>



<b>Saami</b> South, Ume, Pite, Lule, North, Aanaar, Skolt, Kildin, Akkala, Ter	<b>Permic</b> Komi, Komi-Permyak, Komi Yazva, Udmurt
<b>Finnic</b> Finnish, Karelian, Ludic, Veps, Ingrian, Votic, North Estonian, South Estonian, Livonian	<b>Mansi</b> North Mansi, East Mansi, West & South Mansi
<b>Mordvin</b> Moksha, Erzya	<b>Khanty</b> North Khanty, East Khanty, South Khanty
<b>Mari</b> Hill Mari, North-Western Mari, Meadow Mari, Eastern Mari	<b>Hungarian</b> Hungarian
	<b>Samoyedic</b> Forest Nenets, Tundra Nenets, Forest Enets, Tundra Enets, Nganasan, Northern Selkup, Tomsk region Selkup, Kamas & Mator

# (Non-)finites in Uralic subordination

É. Kiss (2022):

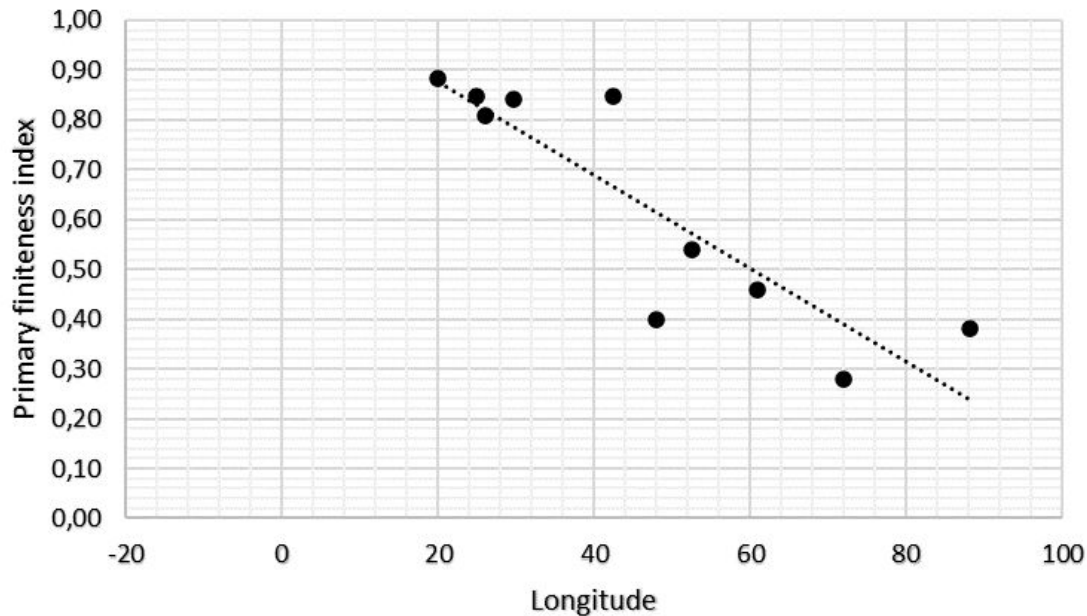
- Uralic languages + Indo-European languages → finite subordination

Shagal, Nichols, and Wahlström (in prep.):

- 50 languages in Northern Eurasia – 10 of them Uralic
- 26 contexts of clause combining: coordination and (co-)subordination
- primary strategy in each context: finite vs. non-finite
- number of contexts in a language with finite primary strategies / 26 contexts
- finiteness index from 0 to 1 for each language

# (Non-)finites in clause combining in Uralic

**West  
Finite**

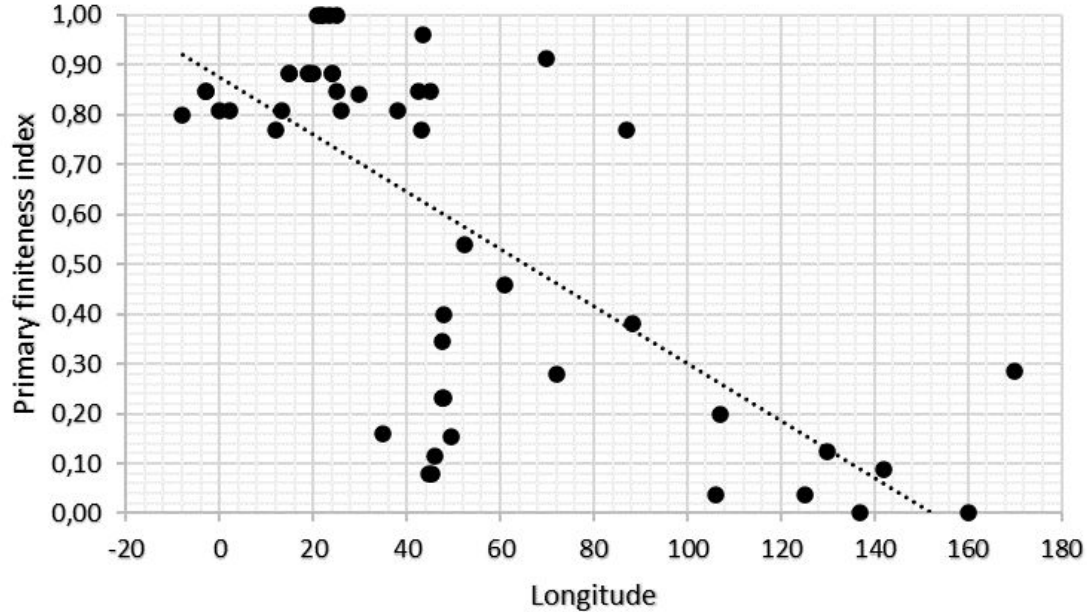


**East  
Non-Finite**



# (Non-)finites in clause combining in Northern Eurasia

**West  
Finite**



**East  
Non-Finite**

# Clause combining contexts and (non-)finiteness

**The Subordination Deranking Hierarchy** (Cristofaro 2003: 229)

## **Deranked ( $\approx$ Non-finite)**

Phasals, Modals >

Desideratives, Manipulatives, Purpose >

Perception >

Before, After, When, A relativization, S relativization >

Reality condition, Reason, O relativization >

Knowledge, Propositional attitude, Utterance, Indir. Object & Oblique relativization

## **Balanced ( $\approx$ Finite)**

# Finnish: fairly finite (0.85), but...

Phasal: **non-finite** strategy (infinitive)

- a. *Alo-i-n*                    **[luke-a].**  
start-PST-1SG                **read-INF<sub>1</sub>**  
'I started to read.'
- b. *Aloit-i-n*                    **[luke-ma-an].**  
start-PST-1SG                **read-INF<sub>2</sub>-ILL**  
'I started to read.'

# Tundra Nenets: fairly non-finite (0.28), but...

**Propositional attitude:** **finite** strategy (asyndetic)

*s'ir'o*      *m'a-kənt°*      *to°-dəm-c'°*,

DP      tent-DAT.2SG      come-1SG-PAST

*ma-dəm-c'°*      [*xan'ena-r°*      ***to-waki°***]

say-1SG-PAST      hunter-2SG      **come-PROB.PAST**

'I came to your tent on purpose, I thought your hunter had arrived.'

(Nikolaeva 2014: 284)

# But what if a context allows for both strategies?

Example: **Relative clauses** (Shagal 2023)

**Finite relative clauses:** attested in (almost) all of the Uralic languages

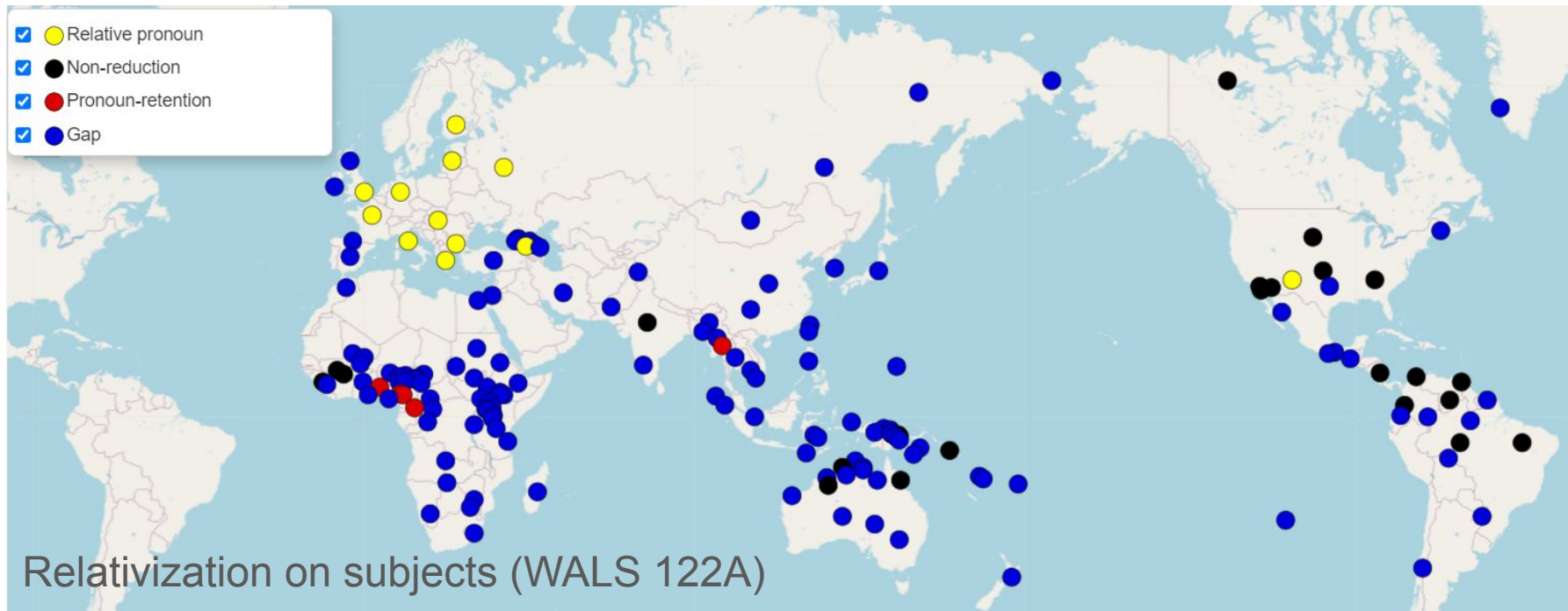
**Estonian** (Erelt 2003)

<i>mehed,</i>	<i>kellele</i>	<i>te</i>	<i>maja</i>	<i>müüsite</i>
man.PL	<b>who.SG.ILL</b>	2PL	house.ACC	sell.PST.2PL

‘the men to whom you sold the house’

- Relative/interrogative syncretism; Proto-Uralic \**m3* ‘what’ and \**k3* ‘who’
- Developed under the influence of Indo-European languages (cf. Comrie 1998)

# Finite relative clauses



# Non-finite relative clauses

**Participial relative clauses:** attested in (almost) all of the Uralic languages

**Meadow Mari** (Brykina & Aralova 2012)

<i>Saša-n</i>	<i>košt-mo</i>	<i>pölem</i>	—	<i>məj-ən</i>	<i>pört-em</i>
Sasha-GEN	<b>enter-PTCP.PST</b>	room		I-GEN	house-POSS.1SG

‘The room which Sasha entered is my home.’

## Finnish

<i>Anna</i>	<i>tämä</i>	<i>taka-rivi-ssä</i>	<i>istu-va-lle</i>	<i>tyttö-lle</i>
give.IMP	this	back-row-INE	<b>sit-PTCP.PRS.ACT-ALL</b>	girl-ALL

‘Give this to the girl sitting in the back row.’

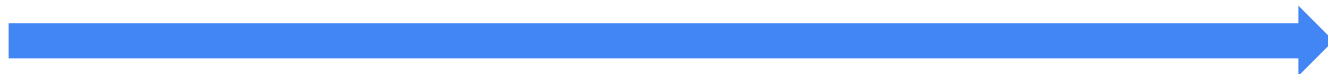
# Finite vs. non-finite relative clauses

Two types of Uralic languages:

- **Broad** competition between finite and non-finite relative clauses
- **Narrow** competition between finite and non-finite relative clauses

Accessibility Hierarchy (Keenan & Comrie 1977)

**Subject > Direct Object > Indirect Object > Oblique > Possessor**





# Broad competition: Hill Mari

**Non-finite relative clauses:** from subject to possessor relativization

- Subject relativization:

[*Tengečä zvon'ë-šë*]      *vrač*      *tagaçê*      *to-k-em*      *tol-eš*  
 yesterday **call-PTCP.ACT**      doctor      today      home-ILL-POSS.1SG      come-NPST.3SG  
 'A doctor who called yesterday will come to me today.'

- Possessor relativization:

[*Əškal-žê*      *kolê-šê*]      *edem*      *ves*      *êškal-ê*      *näl-ën*  
 cow-**POSS.3SG**      die-PTCP.ACT      person      other      cow-ACC      take-PRF[3SG]  
 'The person whose cow died bought a new cow.'

# Broad competition: Hill Mari

## Finite relative clauses: from subject to possessor relativization

- Subject relativization:

*vrač*      [*kêdê*      *tagaçê*      *to-k-em*      *tol-eš*]  
doctor      **which**      today      home-ILL-POSS.1SG      come-NPST.3SG  
'the doctor that will come to me today'

- Possessor relativization:

*edem*      [*kêdê-n*      *êškal-žê*      *kol-en*]  
person      **which-GEN**      cow-**POSS.3SG**      die-PRF[3SG]  
'the person whose cow died'

# Broad competition in other Uralic languages

- Usually, the competition is not addressed in grammatical descriptions
- Finite relative clauses are a recent innovation, which occurs only in the speech of younger generations
  - Nikolaeva (2014: 283) for Tundra Nenets
  - Nikolaeva (1999: 45) for Northern Khanty
- Finite relative clauses occur only in elicitation, and this strategy is only used when the speaker has problems employing the more common participial strategy
  - Siegl (2013: 460–461) reports for Forest Enets

# Broad competition: Hill Mari

Younger speakers (< 50)

**Subject > Direct Object > Indirect Object > Oblique > Possessor**

finite

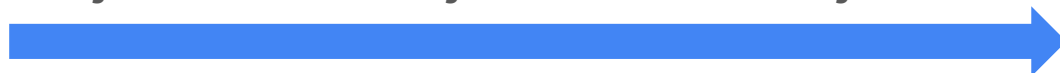


Older speakers (> 50)

**Subject > Direct Object > Indirect Object > Oblique > Possessor**

non-finite

finite



# Relativizing obliques: non-finite strategy

## Instruments and locatives:

*Van'a-lan* [irgodêm pört-šë-m **čičältë-šäšlêk** čičä-m  
Vanya-DAT tomorrow house-POSS.3SG-ACC **paint-PTCP.DEB** paint-ACC  
*ajêr-aš* *kel-eš*  
choose-INF need-NPST.3SG

'Vanya needs to choose the paint **with which** he will paint his house tomorrow.'

[**čičälë-dämë**] *pört* *jële* *pêdêrg-a*  
**live-PTCP.NEG** house quickly break-NPST.3SG

'The house **where** nobody lives goes bad quickly.'

# Relativizing obliques: finite strategy

## Objects of postpositions with a specific meaning:

<i>Kövör-ëm</i>	[ <i>kêdê-n</i>	<i>lëväl-në</i>	<i>mä</i>	<i>šukê</i>	<i>veremä</i>
carpet-ACC	<b>which-GEN</b>	<b>down-IN</b>	we	much	time
<i>ëšt-ël-de-lna]</i>		<i>lükt-äl-më-m=ät</i>			<i>a-k</i>
sweep-FREQ-PRF.NEG-1PL		lift-ATT-PTCP.NACT-POSS.1SG=ADD			NEG.NPST-3
<i>šo</i>					
reach[SG]					

'I don't even want to lift the carpet **under which** we have not swept for a long time.'

# Broad competition: Hill Mari

Younger speakers (< 50)

**Subject > Direct Object > Indirect Object > Oblique > Possessor**

finite

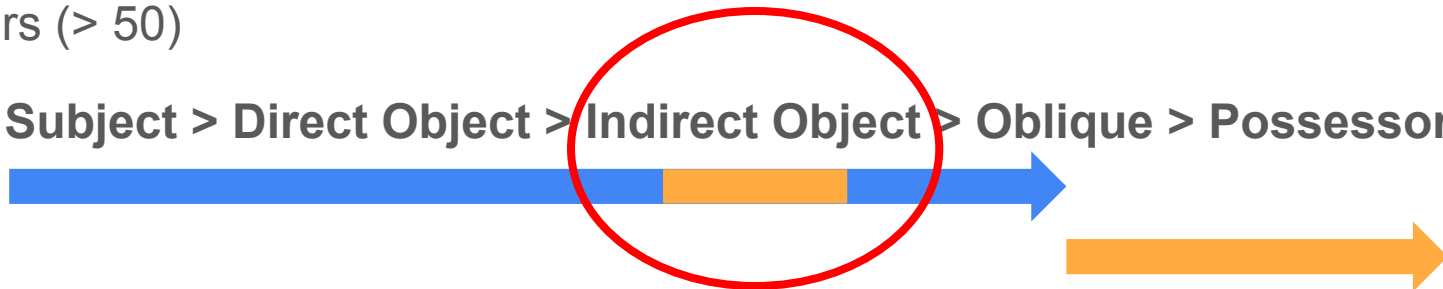


Older speakers (> 50)

**Subject > Direct Object > Indirect Object > Oblique > Possessor**

non-finite

finite



# Relativizing indirect objects: finite strategy

## Recipients in ditransitive constructions: relative pronoun in DAT

Ərvezäš      [*kêdê-lan*      *irok*      *pi-m*      *podar-en-ët*]  
boy            **which-DAT**      morning      dog-ACC      give.as.a.present-PRF-3PL  
*këzët=ät*      *susu*      *êl-eš*  
now=ADD      happy      be-NPST.3SG

‘The boy whom they gave a dog in the morning is still happy.’

- Seems to be preferred even by the older speakers



# Relativizing indirect objects: non-finite strategy

## Recipients in ditransitive constructions: non-active participle

??*Kê-štê* [tën'-ən            *oksa-m*            *pu-mê*]            *edem-et?*  
which-IN   you-GEN            money-ACC            **give-PTCP.NACT**            person-POSS.2SG  
'Where is the person to whom you gave the money?'

- Hardly ever produced in elicitation
- Commonly considered ungrammatical
- Brykina & Aralova (2012: 481–482) for Meadow Mari:  
Relativizing dative dependents of the verbs *šərgəžaš* 'smile' and *vozaš* 'write' is particularly problematic (cf. Valency Rule in Mal'čukov 2008: 218)

# Pragmatic constraints in non-finite adnominal modification

~ What can easily be recovered can be produced (and vice versa):

## General noun-modifying clause constructions, or GNMCCs

(Matsumoto, Comrie, and Sells 2017)

*Mën'*      [*ävä-m-ën*                      *cêlan-êštê*      *turi*      *žarê-mê*]  
I              mother-POSS.1SG-GEN      kitchen-IN      potatoes      fry-PTCP.NACT  
*juk-šê-m*                      *kol-a-m*  
**sound-POSS.3SG-ACC**      hear-NPST-1SG

'I hear the sound of my mother frying potatoes in the kitchen.'

# Summary on Hill Mari relative clauses

- Both strategies (finite and non-finite) are available
- **Sociolinguistic factors:** finite strategy strongly preferred by younger speakers (Russian influence)
- **Structural factors** (for older speakers): finite strategy preferred when the non-finite one is unavailable or requires additional elements (e.g. POSS)
- **Pragmatic factors** (for older speakers): finite strategy preferred when the non-finite one cannot guarantee recoverability (e.g. recipients)

# Narrow competition: Finnish

The **finite strategy** is clearly the main one. The **non-finite strategy** is only available on a limited segment of the Accessibility Hierarchy:

[*kirje-ttä*      ***kirjoitta-va***]      *tyttö*  
letter-PART      **write-PTCP.PRS.ACT**      girl  
'the girl who is writing a letter'

[*tyttö-n*      ***kirjoitta-ma***]      *kirje*  
girl-GEN      **write-PTCP.A**      letter  
'the letter that the girl has written'

# Factors in the competition?

cf. Kholodilova (2014) on relativization in Russian

- written vs. spoken (written favors participles)
- formal vs. informal (formal favors participles)
- type and status of the head
- well-formedness/frequency of the participial form (lexical factor)
- availability of verbal categories and recoverability of the temporal relation
- length of the relative clause (long favor the finite strategy)
- predicate dependents (more dependents favor the finite strategy)

→ Properties associated with deranking/nominalization favor participles

# Negative participle: Broad competition

## Subject relative clause

[*loppututkinto-a suoritta-maton*] *hakija*  
final.degree-PTV **complete-PTCP.NEG** applicant  
'the applicant that did not complete the final degree'

## Direct object relative clause

[*kenen-kään kerto-mattoma-t*] *tarina-t*  
who.GEN-POL **know-PTCP.NEG-PL** story-PL  
'the stories that nobody has told'

# Negative participle: Broad competition?

## Locative adverbial relative clause

[*lähes*            *istu-maton*]            *vuodesohva*  
almost            **sit-PTCP.NEG**            sofa  
'the sofa that almost was not sat on'

## Temporal adverbial relative clause

[*täysin*            *syö-mätön*]            *päivä*  
fully            **eat-PTCP.NEG**            day  
'the day when one did not eat at all'

→ All these contexts can (and usually do) feature finite relativization...

# Negative participle in Finnish: When can it be used?

... but when can a negative participle compete with a finite relative clause?

Other languages with **contextually oriented** participles (see Haspelmath 1994):

- Sociolinguistic factors: younger vs. older speakers
- Structural/pragmatic factors: Accessibility Hierarchy

Finnish negative participle:

- Lexical factors: what can be relativized with which verbs/meanings  
NB: not where the *-maton* participle wins but where it competes!



# What kinds of relative clauses can be formed?

Based on a corpus study ( $\approx$  370 mln sentences, 42 verbs, <https://korp.csc.fi/>)

- S 'a person [who doesn't wake up]'
- A 'a woman [who didn't cover her head]'
- P 'a thesis [that I haven't done]'
- Location, Goal 'the region [in which almost nobody lives]'
- Time 'a day [when I wouldn't cry]'
- Reason 'a deed [for which nobody is punished]'
- Content, Topic 'a herpes [about which I wasn't told]'

**NB:** Indirect object (recipient) relative clauses are not attested at all!

# GNMCC contexts

*pese-mätön*

*aamu-hengitys*

wash-PTCP.NEG

morning-breath

‘a morning breath one has if they haven’t washed their mouth’

*keskustele-mattoma-t*

*parisuhtee-t*

discuss-PTCP.NEG-PL

relationship-PL

‘the relationship in which partners don’t discuss things’

*syö-mätön*

*kunto*

eat-PTCP.NEG

condition

‘a condition [of your throat] in which you can’t eat’

# Lexical restrictions on the use of the negative participle

- Core participants usually can be relativized
  - Intransitive verbs: subjects
  - Transitive verbs: direct objects strongly preferred (cf. Absolutive Hypothesis in Fox 1987)
- Non-core participants: Valency Rule
  - Participants belonging to the valency of the verb
- Temporal adjuncts
  - *nukkumaton* yö ‘the night when smb didn’t sleep’: 71% of contexts
- Every verb tends to have a preferred type of relative clauses

→ Are lexical preferences in this domain underrated?

# Overall summary

- The competition between finite and non-finite strategies in Uralic languages can be considered on different levels
- Among languages: more finiteness in the west, less finiteness in the east
- Among constructions: some favor finiteness, some favor non-finiteness
- Within constructions:
  - Sociolinguistic factors (e.g. age), written vs. spoken, style, etc.
  - Structural factors
  - Pragmatic factors (e.g. recoverability)
  - Lexical factors
- Competition within constructions is largely understudied

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