

# **Polypersonal agreement vs. impersonal constructions in Aanaar Saami modal verbs**



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**KONEEN SÄÄTIÖ  
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# Background

- Uralic languages commonly allow the use of impersonal and/or zero-person constructions.

*Sataa.*

rain.3SG

'It is raining.'

*Uskaltaisikohan*

dare.COND.Q.DSC

*tuota*

that.PART

*syödä?*<sup>1</sup>

eat.INF

'I wonder if that's edible.'

- These constructions are especially common with modals.
- Verbs indicating necessity often lack polypersonal agreement entirely.
  - Agent or theme, if present, takes an oblique case (although sometimes still analyzed as a subject)

- GEN in Finnish

*Minun*

1SG.GEN

*täytyy*

must.3SG

*mennä.*

go.INF

'I must go.'



# Background

- In Saami languages, modal auxiliaries tend to behave much like any other verb.
- The impersonal type for at least some auxiliaries of necessity is attested in some variants, and is standard in Skolt Saami for one verb (*fe'rttjed*).

	<i>mu'st</i>	<i>fe'rttai</i>	<i>kaunnâd</i>	<i>na'zvaan-id</i> <sup>1</sup>
– Agent/theme	1SG.LOC	fe'rttjed.3SG	find.INF	friend.PL.ACC
takes LOC.	'I must find friends.'			
- In Aanaar Saami, the impersonal type is mentioned as being attested in some studies, with agent/theme taking genitive.
- No detailed studies focusing on the syntax of modal verbs in Aanaar Saami available.

<sup>1</sup>) de Saint-Exupéry 1999 [1943]: 69; gloss Koukkari 2012: 11.



# Previous Research

- Single-verb studies (PU \**kelke*-):
  - Korhonen 1962: Zum syntaktischen Gebrauch des lappischen Verbs *gâl'gât* 'sollen, müssen' (Pan-Saamic)
  - Laitinen 1988 (Aanaar Saami, semantics)
  - Koskinen 1993 (Saami & Mari)
- North Saami:
  - Bartens, H.-H. 1979
  - Magga 1982
  - Koskinen 1998 (most extensive study available)
- Aanaar Saami:
  - Bartens, R. 1972 (case syntax, mentions impersonal constructions w\ genitive agent)
    - Also Seipiharju 2022
  - Morottaja, M. 2007 (normative guidebook, includes semantics of *kolgâđ* vs. *ferttiđ*)
    - Also Morottaja, P. 2024 (short podcast)
  - Seurujärvi 2014 (Bachelor's thesis, one construction)



# Types of modality

- Possibility vs. necessity
- Epistemic: speaker's knowledge of action
- Deontic: rules, regulations, norms, orders, etc.
- Dynamic: physical & mental abilities & limitations
  - Circumstantial/causal necessity: inanimate/abstract cause
  - Existential possibility: quantificational; 'some', 'sometimes'
    - Overlaps with epistemic
- Practical necessity: arises from action itself
  - Overlaps with deontic & dynamic



# Modal source and target

- Necessity or possibility of action applies to target
- Necessity or possibility of action arises from source
  - Target-internal sources: target's own will or abilities/limitations
  - Target-external sources:
    - speaker, third parties (when not also target)
    - rules, regulations, norms
    - circumstances, inanimate causes
- Modal auxiliaries can be source-oriented or target-oriented
  - If a subject is present, it will (usually) be either the modal source or modal target, depending on the verb
  - In impersonal constructions, a source or target is implied



# Scope and object of study

- Syntax of common target-oriented modal verbs in modern literary Aanaar Saami
  - Aanaar Saami cognates of common target-oriented modal verbs in North Saami (cf. Koskinen 1998: 248-251); see table →
  - *pyehtid̥* (NS cognate rarely modal)
- Semantics and the relationship between semantics and syntax
  - Secondary focus, preliminary at this point
- Outside current scope:
  - Primarily epistemic & existential verbs
  - Interaction of mood & modality; only IND covered

NS	AS
NEC	
<i>galgat</i>	<i>kolgâḑ</i>
<i>fertet</i>	<i>ferttiḑ</i>
<i>dárbašit</i>	<i>tarbâšiḑ</i>
<i>gártat</i>	<i>karttâḑ</i>
<i>šaddat</i>	<i>(šoddâḑ)</i>
POSB	
<i>oažžut</i>	<i>uážžuḑ</i>
<i>bastit</i>	<i>pasteḑ</i>
<i>máhttit</i>	<i>mättiḑ</i>
<i>diehtit</i>	<i>tiettiḑ</i>
<i>sáhttit</i>	<i>sättiḑ</i> (EXST)
<i>dáidit</i>	<i>täidiḑ</i> (EPST)
<i>(buktit)</i>	<i>pyehtid̥</i>



# Methodology and data

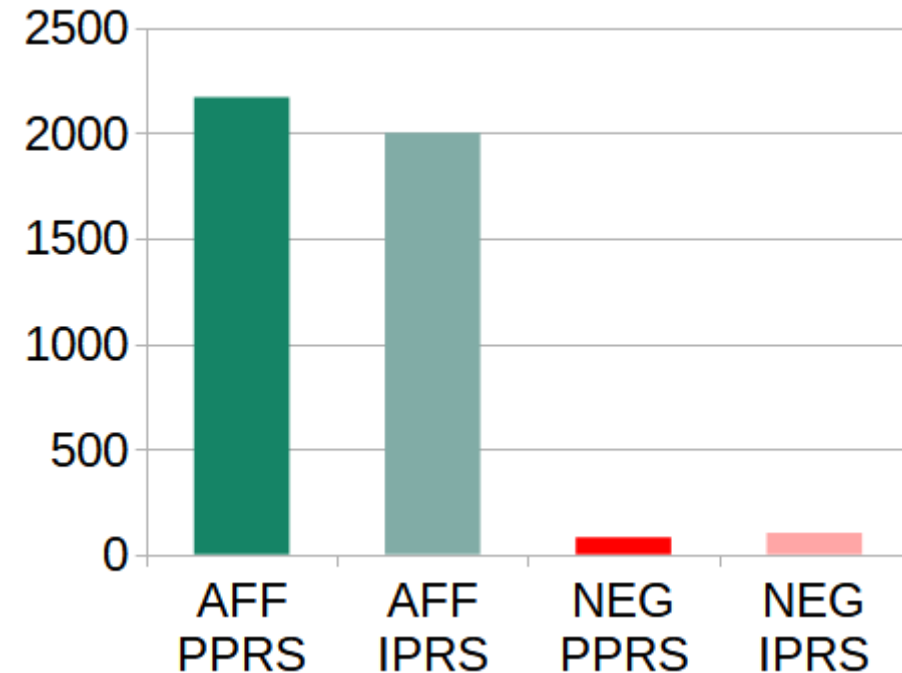
- SIKOR = *Sámi Internationála Korpus* (<http://gtweb.uit.no/korp/>)
- Search for sentences with desired modal verbs
- Extract impersonal constructions, remove duplicates
- Manual checking and analysis
  - For extremely frequent verbs, a (pseudo-)random sample analyzed, not every occurrence.
- Due to presence of duplicates, erroneous data, etc., quantitative data are somewhat uncertain > numbers rounded to two significant figures (cf. Kuokkala 2021: 341)





# NEC: *kolgâđ*

- Very common, > 4300 times in corpus.
  - About 1700 (ca. 40 %) analyzed so far.
  - Negative forms rare, only 180 total (ca. 4 %).
- Almost equal frequency for PPRS & IPRS.
  - One example found with genitive theme.



- 1 *Tom kalga ain mušted.*  
that.ACC kolgâđ.3SG always remember.INF  
'One always has to remember that.'
- 2 *Tun koolgah jieš mušted mäksid tom.*  
2SG kolgâđ.2SG REFL remember.INF pay.INF that.ACC  
'You have to remember to pay that yourself.'
- 3 *Kalle peeivi muu kalga tääbben leđe ?*  
how\_many day.GEN 1SG.GEN kolgâđ.3SG here be.INF  
'How many days do I have to spend here?'



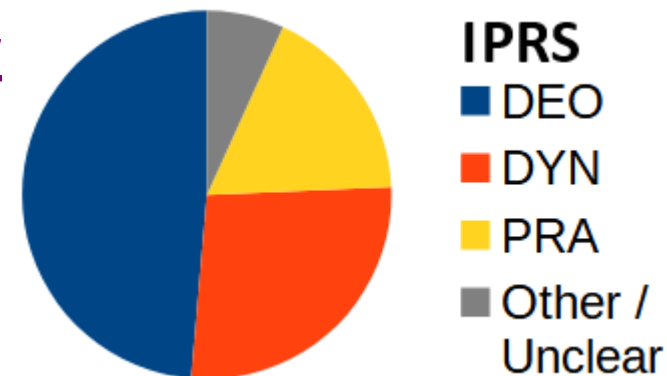
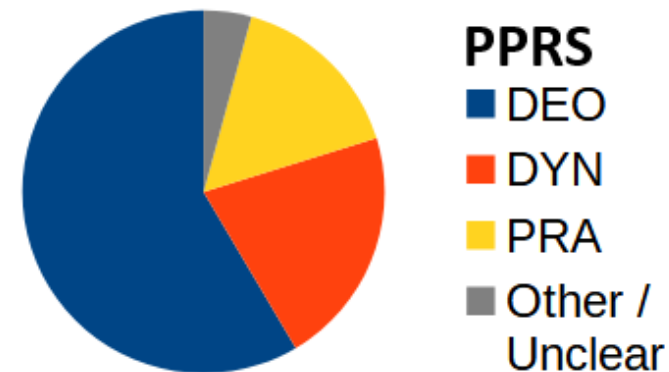
# NEC: *kolgâđ*

- Most commonly indicates target-external deontic modality, but also dynamic and practical.
  - Non-deontic slightly more common with impersonals?

4 *Kolgâvetted̥ puohah leđe siijvost!*  
kolgâđ.2PL all.PL be.INF quiet  
'You must all be quiet!'

5 *Čohčuv koolgâi korrâ pieggân moonnâđ.*  
in\_fall kolgâđ.PST.3SG hard wind.ESS go.INF  
'In the fall one had to travel in high winds.'

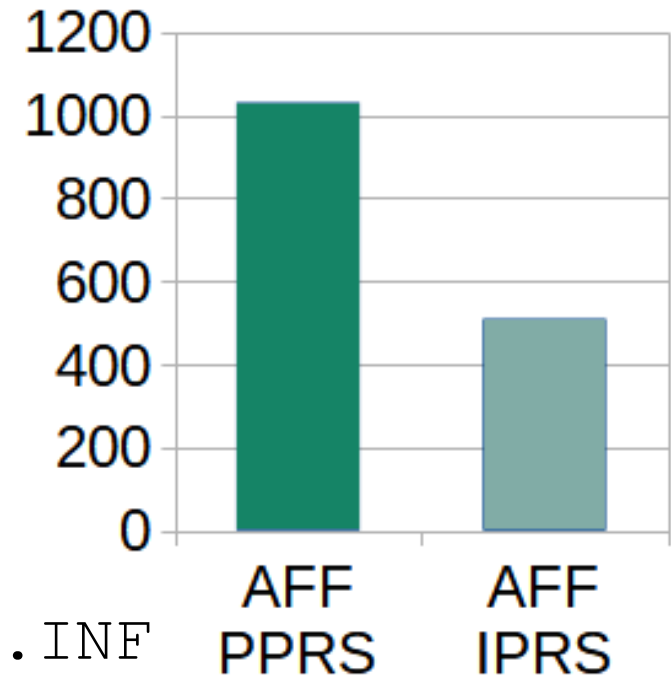
6 *Pottáákpiäldu kalga vistig kendid̥.*  
potato\_field.ACC kolgâđ.3SG first plow.INF  
'First the potato field must be plowed [before potatoes can be planted].'





# NEC: *ferttid*

- > 1500 occurrences.
  - About 660 analyzed (44%)
- Negative forms not found.
- PPRS about twice as common as IPRS.



7 *Mij ferttip finnid čuovâ časkâđ!*  
1PL ferttid.1PL get.INF light.ACC turn\_on.INF  
'We must get the light to turn on!'

8 *Korttâčovduu ferttee mušted väldid meddâl lohhest.*  
keycard.ACC ferttid.3SG remember.INF take.INF away reader.LOC  
'One has to remember to take the keycard out of the reader.'



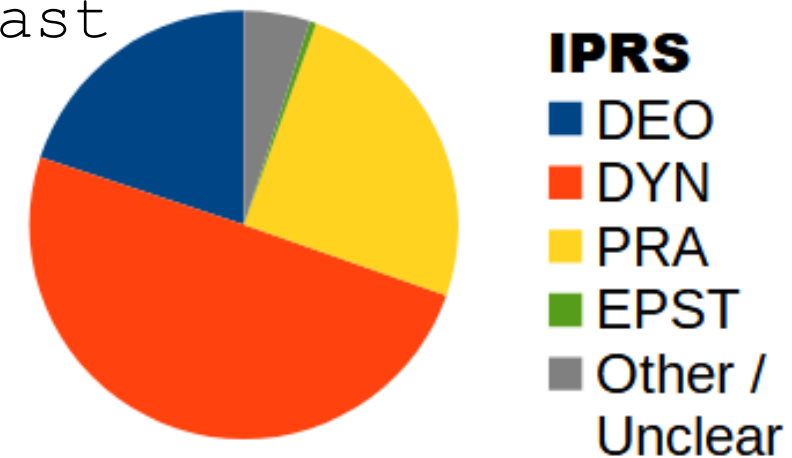
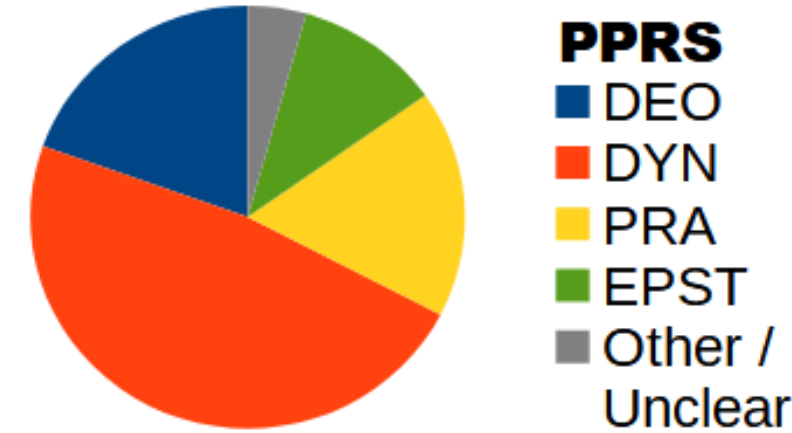
# NEC: *ferttid*

- Most common modality target-external dynamic circumstantial), but deontic and practical also found, as well as target-internal dynamic.
- Epistemic modality (often with *leđe* 'be') significant with PPRS. <sup>9</sup>

*Pennuu ferttee toollâđ kiddâ.*  
dog.ACC ferttid.3SG hold.INF fast  
'Dogs must be leashed [at Lemmenjoki].'

<sup>10</sup> *Na nuuvt tot ferttee talle leđe !*  
well so it ferttid.3SG then be.INF  
'Well that's how it must be then!'

<sup>11</sup> *Toh ferttejuh elâččid čässuáivist vuoįâmin*  
they ferttid.3PL visit water\_surface.LOC breathe.ACT.ESS  
'They must rise to the surface to breathe.'





## NEC: *tarbâšid*

- Also a lexical verb, 'need'
- Occurs a total of 640 times in the data, of which almost all negative forms; only ca. 10 times affirmative
- Affirmative forms seem to indicate practical necessity, but too few instances to say much about usage

12 *Sun taarbâš opâttâllâđ tuše oovtâ uđđâ vuájáán*  
3SG tarbâšid.3SG learn.INF only one.ACC new.ATTR vehicle.ACC  
'He only needs to learn to drive one new vehicle.'



## NEC: *tarbâšid*

- Negative forms indicate negation of necessity (not necessity of the action's negation; cf. *kolgâđ*)

13    *Jiem*            *tarbâšâm*                      *innig*            *moonnâđ*            *škoovlân*  
NEG.1SG   tarbâšid.PST.CNG   anymore   go.INF            school.ILL  
'I no longer had to go to school.'

14    *lj*                      *tain*                      *taarbâš*                      *poollâđ* .  
NEG.3SG   those.LOC   tarbâšid.CNG            fear.INF  
'There's no need to fear those.'

15    *Jienâi*                      *oolâ*    *ij*                      *koolgâ*                      *moonnâđ*.  
ice.GEN.PL   upon   NEG.3SG   kolgâđ.CNG            go.INF  
'One should not go on the ice.'



## NEC: *karttâđ*

- Also a lexical verb, 'end up'
- Occurs about 330 times in data
  - Negated very rarely, only 5 occurrences
- IPRS found (ca. 30x), but PPRS almost ten times more common
- Indicates target-external dynamic modality; rarely practical or deontic.

16 *Tave-Suomâ* *ulmuuh* *karttii* *vyelgid* *evakon* .  
north-Finland.GEN person.PL karttâđ.PST.3PL leave.INF evacuation.ILL  
'The people of northern Finland had to be evacuated.'

17 *Motomin* *kárttá* *keksid* *aaibâs* *uđđâ* *sääni*  
sometimes karttâđ.3SG invent.INF quite new.ATTR word.ACC  
'Sometimes one has to make up an entirely new word.'



# NEC: *šoddâđ*

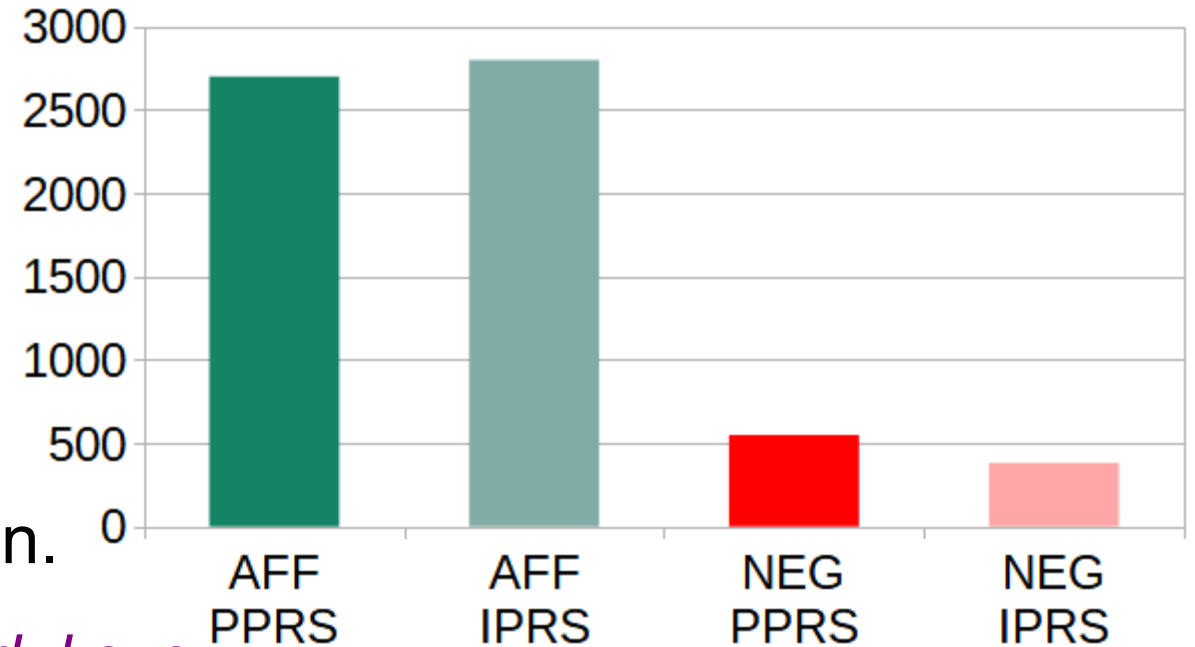
- Also a lexical verb, 'be born'; 'grow'; 'become'
- Impersonal constructions occur, but polypersonal agreement almost ten times more common
- Most commonly indicates subject-external dynamic modality, but often also deontic; rarely subject-internal
  - No clear examples of practical necessity
  - Modal interpretation not always clear
- With polypersonal agreement, deontic and dynamic modality about equally common, but deontic occurs predominantly in administrative texts and with a singular subject





# POSB: *pyehtid̥*

- Also a lexical verb, 'bring'
- Extremely common, > 6400 occurrences
  - About 900 analyzed (~14 %)
  - Negation relatively rare, ca. 930 occurrences (~14 %)
- PPRS & IPRS about equally common.



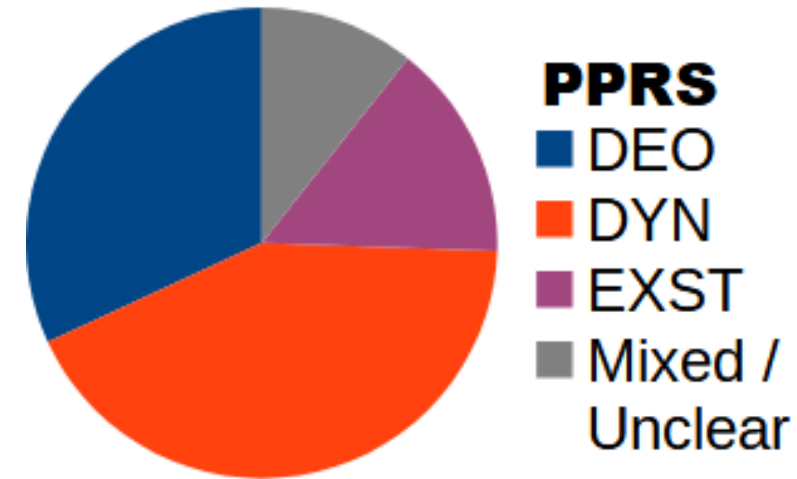
18 *Fáárun puáhtá lahteđ meid kove*  
along *pyehtid̥*.3SG attach also picture.ACC  
'One may also attach a photograph.'

19 *Raavâdamnâsij lasanem puáđusin pyehtih tiäpuh lasanid̥*  
nutrient.GEN.PL increase.GEN result.ESS *pyehtid̥*.3PL alga.PL increase.INF  
'As a result of the increase in nutrients the algae can bloom.'



# POSB: *pyehtid̃*

- Most commonly target-external dynamic modality
- Target-external deontic occurs esp. with PPRS
  - Administrative texts; target may legally perform action
- Target-internal dynamic likewise esp. with PPRS
  - Most commonly indicates physical ability, may overlap with existential modality
  - Rare with IPRS
- Existential modality common with PPRS



20 *Häldeeh pyehtih jotteed̃ jotelávt .*  
elf.PL pyehtid̃.3PL travel.INF quickly  
'Elves can travel quickly.'

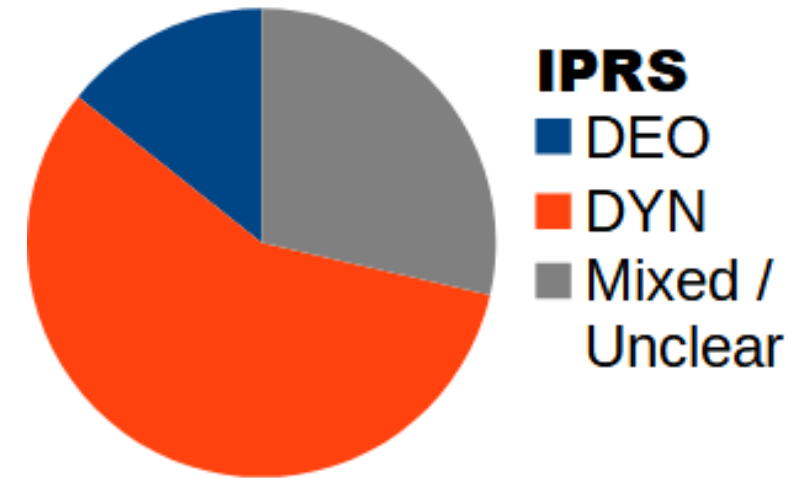
21 *Tot puáhtá teddiđ joba 5 kiilu*  
*it pyehtid̃.3SG weigh.INF even 5 kilo.GEN*  
'It may weigh as much as 5 kilos.'

22 *Tun puávtađ uuccâđ nubástus miärádâsân.*  
2SG pyehtid̃.2SG seek.INF change.ACC decision.ACC  
'You may appeal the decision.'



# POSB: *pyehtid̃*

- Esp. impersonal constructions often used for advisory statements where primary nature of modality (dynamic/deontic?) is ambiguous
- Fixed phrases such as *puáhtá ettâđ* 'one may say': source of modality is ambiguous but can be considered target-internal dynamic (cf. Koskinen 1998)



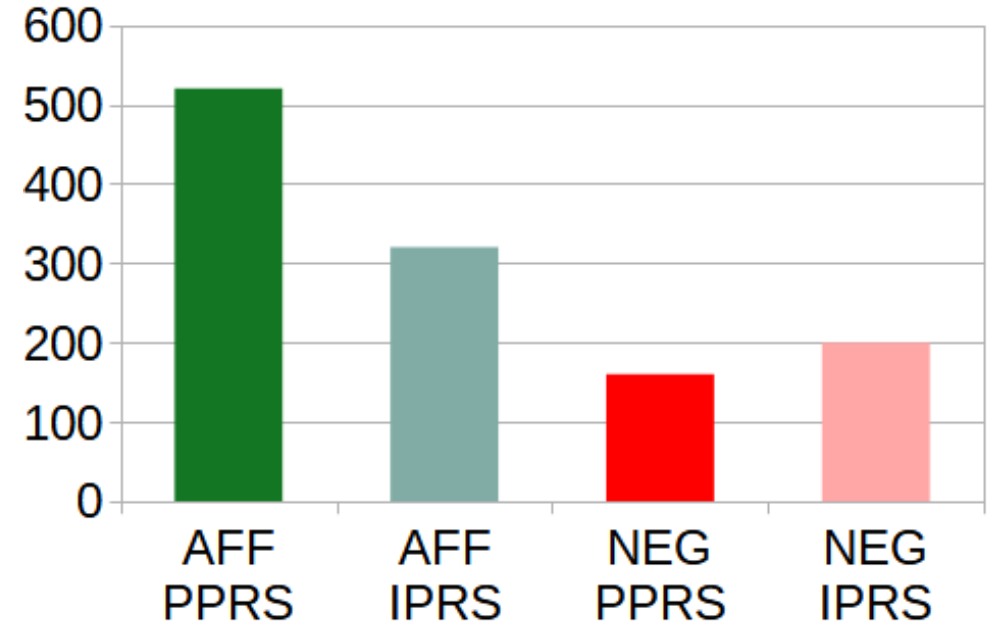
23 *Tiervuodâid* *puáhtá* *vuolgâttid̃* *Yle Sáámán* .  
greeting.ACC.PL pyehtid̃.3SG send.INF Yle Säämi.ILL  
'You may send your greetings to Yle Säämi.'

24 *Puáhtá* *ettâđ* *ete* *kirje* *almostittem máksá* *3500-5000 eurod*  
pyehtid̃.3SG say.INF that book.GEN publishing cost.3SG 3500-5000 Euro.PART  
'One may say that publishing a book costs 3500-500 Euros.'



# POSB: *uážžud*

- Also a lexical verb, 'get, acquire'
- Common, ca. 1200 occurrences
  - 840 AFF, 360 NEG
- Polypersonal agreement slightly more common, but impersonal constructions also significant



25 *Mun uážžum uáiniđ juovlâstáálu ovdil juovlâi !*  
*1SG uážžud.1SG see.INF Santa\_Claus.ACC before Christmas.GEN.PL*  
'I get to see Santa Claus before Christmas!'

26 *Maid sabattin uážžu porgâđ ?*  
*what.ACC Sabbath.ESS uážžud.3SG do.INF*  
'What may one do on the Sabbath?'



# POSB: *uážžud*

- Most commonly target-external deontic modality, but also dynamic
  - Dynamic modal sense often seems to be closely tied to the lexical meaning, with agent or experiencer as beneficiary/recipient
  - Target-internal modality occurs in fixed (often impersonal) phrases such as *uážžu ettâđ* 'one may say', where source of modality is ambiguous

27 *Miärádâstohâmân uážžuh uásálistiđ tuše aalmugovdâsteijeeh .*  
decision\_making.ILL uážžud.3PL take\_part.INF only representative.PL

'Only elected representatives may take part in decision making.'

28 *Konsertviehâ uážui kuldâliđ Satu Aikio lávlum*  
audience uážžud.3SG listen.INF Satu Aikio singing

'The audience got to hear Satu Aikio sing.'



# POSB: *pasted*

- Total 160 occurrences; 100 AFF, 60 NEG
- Only once IPRS, otherwise always PPRS
- Indicates dynamic modality, usually target-internal (skill or physical ability); rarely circumstantial.

29 *Suái pastev adelid̃ vuossâiše*  
3DU pasted̃.3DU give.INF first\_aid.ACC  
'They know how to administer first aid.'

30 *Cuobbuuh pasteh rävisin lihâdiđ koške enâmist*  
frog.PL pasted̃.3PL adult.ESS move.INF dry.ATTR land.LOC  
'As adults, frogs can move on dry land.'

31 *Jieh tun taid čuovâid paste časkâdiđ !*  
NEG.2SG 2SG those.ACC light.ACC.PL pasted̃.CNG turn\_on.INF  
'You cannot turn on those lights!'



# POSB: *mättid*

- Total 470 occurrences; 290 AFF, 180 NEG
- Almost universally PPRS; ~10 times IPRS in corpus
- Indicates target-internal dynamic modality, usually skill/knowledge

32 *Mun máátám čäällid anarâškielân*  
1SG mättid.1SG write.INF Aanaar\_Saami.ILL  
'I can write in Aanaar Saami.'

33 *Máátáh-uv tun vuoijâđ ?*  
mättid.2SG-Q 2SG swim.INF  
'Can you swim?'

34 *Šleđgâpiergâseh láá torvoliih, ko taid máttá kevttid*  
electricity\_device.PL be.3PL safe.PL when those.ACC mättid.3SG use.INF  
'Electronic appliances are safe when one knows how to use them'



## POSB: *tiettid̥*

- Also a lexical verb, 'know'
- Always polypersonal
- Rarely used as modal, modal sense closely tied to lexical meaning of knowledge (i.e. target-internal dynamic)

35 *Tiäďám* *verdid̥*, *ko lam* *aassâm* *tobbeen*  
tiettid̥.1SG compare.INF as be.1SG inhabit.PTCP there  
'I can make the comparison, as I have lived there.'

36 *Id̥edist* *muái tied̥ijm* *jo vyerdid̥* *áášán* *jood̥hâ* .  
morning.LOC 1DU tiettid̥.PST.1DU by expect.INF thing.ILL continuation.ACC  
'By morning we knew to expect that there would be more.'





# Summary

VERB	affirmative			negative			total
	AFF PPRS	AFF IPRS	total AFF	NEG PPRS	NEG IPRS	total NEG	
<b>kolgâđ</b>	2200	2000	4200	80	100	180	<b>4400</b>
<b>ferttiđ</b>	1000	510	1500			0	<b>1500</b>
<b>tarbâšiđ</b>	5	7	12			630	<b>640</b>
<b>karttâđ</b>	290	30	320	3	2	5	<b>330</b>
<b>šoddâđ</b>	260	30	290	50	4	50	<b>340</b>
<b>pyehtidđ</b>	2700	2800	5500	550	380	930	<b>6400</b>
<b>uážžudđ</b>	520	320	840	160	200	360	<b>1200</b>
<b>pastedđ</b>	100	1	100	60	4	60	<b>160</b>
<b>mättidđ</b>	280	8	290	180	2	180	<b>470</b>
<b>tiettidđ</b>	50	0	50	8	0	8	<b>60</b>



# Concluding remarks

- Modal verbs in literary Aanaar Saami syntactically resemble North Saami: if an overt agent or theme is present, the verb will show polypersonal agreement.
- Influence of Finnish surprisingly minimal; only one example of genitive theme found in data.
- Impersonal constructions nonetheless common when no (overt) agent/theme is present, but only for some verbs.
  - Possibly (indirectly) connected to semantics?
    - Common for verbs that primarily indicate target-external modality (*kolgâđ*, *ferttiđ*, *pyehtid̥*); rare for primarily target-internal (*pasted̥*, *mättid̥*).
    - Requires further study.



# Takkâ!

<https://github.com/tkoukkar/anaraskiela/>



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