

About a Metalinguistic Degree Suffix in Tundra Nenets

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1. Introduction

In Tundra Nenets (TN), an understudied and threatened Samoyedic language of the Uralic language family, the suffix *-rka* can be commonly found on the gradable adjectives

in comparison constructions. Berezovskaya (2020) proposes that *-rka* in comparison constructions is a degree modifier that modifies the differential degree and states that the difference between the standard of comparison and the associate is small. Strikingly, this suffix can also be found cross-categorially, namely on nouns, verbs, basically all syntactic categories. In this talk, I propose an analysis of ***-rka* on nouns** where it acts as a modifier that marks a small difference between **degrees of imprecision** (in the spirit of Morzycki's 2011 metalinguistic comparatives).

1.1. The Tundra Nenets language

1.1.1. Some general info on TN

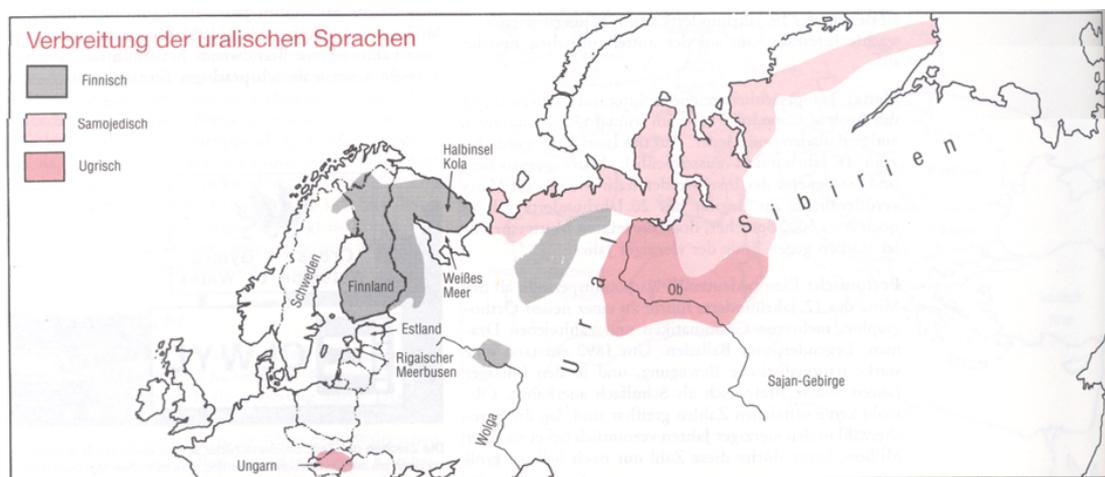


Figure 1: Uralic languages (Chrystal 1993: 304)

Some info according to Ethnologue:

- **Population:** 21,900 (2010 census), 25.000 speakers (Chrystal 1993:304). Ethnic population: 44,600 (2010 census).
- **Language Status:** 6b (Threatened).
- **Classification:** Uralic, Samoyed, Northern Samoyed
- **Dialects:** Forest Yurak, Tundra Yurak.
- **Location:** Northwest Siberia, north Dvina river mouth tundra area to Yenisei river delta, scattered in Kola peninsula; Nenetskiy Avtonomnyy Okrug, Yamalo-Nenetskiy Avtonomnyy Okrug, and Khanty-Mansiyskiy Avtonomnyy Okrug; also in Krasnoyarskiy Krai, Komi, and Arkhangel'skaya Oblast'.
- **Writing:** Cyrillic script [Cyril].
- **Other Comments:** Mainly nomadic (in my experience: not anymore!). Christian, traditional religion.

1.1.2. Grammatical properties of TN

- TN is a highly agglutinative language

Nouns.

- the noun is inflected for number, case, absolutive and non-absolutive declension (person and number of the possessor or predestinator)
- there is no grammatical category for gender, for instance *pyda to* means ‘he/she arrived’. However, there is the distinction between the ‘genus humanum’ and the ‘genus non humanum’, i.e. there are personal and ‘non-personal’ pronouns
- in terms of the number system (Numerus), there exists the singular, the dual and the plural
- personal suffixes and even tense suffixes can be added to the noun root

Verbs.

- the verb is inflected for mood, tense, number of objects (there is object agreement in Nenets), person and number of the subject (subject agreement)
- there are between 10 and 16 grammatical moods
- there is no distinction between the active and the passive voice
- TN is quite consistently head-final. It is a verb-last language, it has postpositions etc.
- An example of a postposition phrase is in (1).

(1) *ɲamderc' ninja*
table on
‘on the table’

- Nenets has the following word order illustrated in (2).

(2) **word order in Nenets in a regular transitive sentence:**
(Time adverbial)-subject NP-(place adverbial)-indirect object NP-object NP-(manner adverbial)-verb.
(cf. e.g. Salminen 1998, Nikolaeva 2014: 214)

→ canonical word order is **SOV** with variations in the placement of the subject vs. the object

2. Data

What is the distribution of *-rka* in comparative constructions and beyond?

2.1. The suffix *-rka* in comparative constructions (Berezovskaya 2020)

In Berezovskaya (2020), I show that:

- ...*-rka* in comparatives is not the comparative morpheme itself and that there is no overt morphological marking of the comparative in TN
- ...it is not the differential argument or an argument that quantifies off the differential either
- ...the suffix is blocked when the difference between the associate and the standard is big, cf. (5-b)

(3) **Context:** Katya is 1.75m tall. Masha is 1.70m tall.¹

- a. *Katya Masha-xad pirc'a-rka.*
Katya Masha-ABL. tall-RKA
'Katya is a little taller than Masha.'

- The next example is a CompDeg (Comparison to a Degree).
- CompDegs are one of the diagnostics in Beck et al. (2009) that are indicative of a degree semantics in a language.

(4) *Polka sind'etyuh santimetr-xad jamb(-rka).*
Shelf eighty cm-ABL. long(-RKA)
'The shelf is a little longer than 80cm.'

Comment by informant: "If we add the ending *-rka*, we want to make clear that the shelf is a little longer."

- The example in (5) illustrates that the difference in height between the two individuals is big, adding *-rka* to the gradable adjective makes the sentences infelicitous.

(5) a. *Katya Masha-xad ηarka-vna pirc'a.*
Katya Masha-ABL. large-ADV. tall
'Katya is a lot (by large) taller than Masha. '

¹It is established in the context that 5cm is a small difference.

b. *Katya Masha-xad ηarka-vna #pirc'a-rka.*

Katya Masha-ABL. large-ADV. tall-RKA

Literally: 'Katya from-Masha by-large a little taller.'

'Katya is a lot taller than Masha.'

Comment by informant: "If there is a big difference in heights, you cannot use *-rka*."

- I provide more examples below showing that *-rka* is only felicitous when the difference between the individuals is established to be small in the context.
- The polarity of the adjective does not play any role in that pattern.
- It also does not matter whether the individuals compared are tall or small.

(6) Katya and Masha are both not tall. However, the difference in height between Masha and Katya is 25cm, i.e. Katya is 1.45m tall, Masha only 1.20m tall.

a. *Katya Tanya-xad pirc'a.*

Katya Tanya-ABL. tall.

'Katya is taller than Tanya.'

b. *#Katya Tanya-xad pirc'a-rka.*

Katya Tanya-ABL. tall-RKA.

'Katya is taller than Tanya.'

(7) Katya is 1.45m tall, while Tanya is 1.43m tall.

a. *Tanya Katya-xad n'ud'a.*

Tanya Katya-ABL. small.

'Tanya is smaller than Tanya.'

b. *Tanya Katya-xad n'ud'a-rka.*

Tanya Katya-ABL. small-RKA

'Tanya is a little smaller than Tanya.'

(8) Katya is 1.95m tall, while Tanya is 1.92m tall.

a. *Katya Tanya-xad pirc'a.*

Katya Tanya-ABL. tall

'Katya is taller than Tanya.'

b. *Katya Tanya-xad pirc'a-rka.*

Katya Tanya-ABL. tall-RKA.

'Katya is a little taller than Tanya.'

- The Differential Comparative (DiffC) ² in (9) rules out the possibility of *-rka* being the differential argument itself or an operator that quantifies it off, since that argument slot is already saturated by 5cm.

(9) *Katya Masha-xad saml'ang santimetra-nh pirc'a-rka.*

Katya Masha-ABL. five cm-DAT. tall-rka

'Katya is 5 cm taller than Masha.'

²This is another crucial diagnostics in Beck et al. (2009) showing that a language introduces degrees into the semantics (via the gradable adjective).

2.1.1. Analysis by Berezovskaya (2020)

- Berezovskaya (2020) analyzes this suffix as a differential degree modifier stating the the difference between the associate and the standard is small using the compositional rule of **Degree Restriction** (DR) in the spirit of RESTRICT by Chung & Ladusaw (2004).

Analysis of DiffC in (9). I am providing the crucial lexical entries in (10) and the compositional principle of DR in (11):

(10) lexical entries:

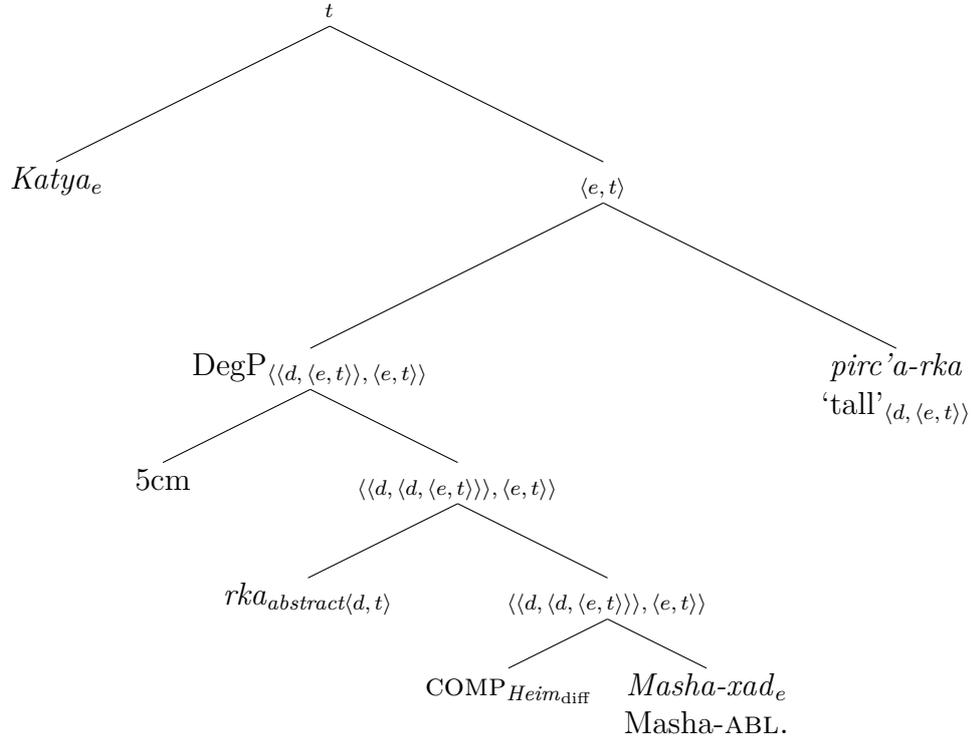
- $\llbracket -rka_{\text{abstract}} \rrbracket^c = \lambda d. d \text{ is small}_c$
- $\llbracket \text{COMP}_{(\text{Heim}_{\text{diff}})} \rrbracket = \lambda y_e. \lambda d_{\text{diff}d}. \lambda R_{\langle d, \langle e, t \rangle \rangle}. \lambda x_e. \text{MAX}(\lambda d'. R(d')(x)) \geq \text{MAX}(\lambda d''. R(d'')(y)) + d_{\text{diff}}$
- $\llbracket \text{pirc}'a \rrbracket = \lambda d. \lambda x_e. \mu_{\text{height}}(x) \geq d$

(11) DR, shorter version:

- If $\alpha = \{ \widehat{\beta \gamma} \}$, and $\llbracket \beta \rrbracket^g \in D_{\langle d, t \rangle}$ and $\llbracket \gamma \rrbracket^g \in D_{\langle \langle d, \langle d, \langle e, t \rangle \rangle \rangle, \langle e, t \rangle \rangle}$, then:
 $\llbracket \alpha \rrbracket^g = \lambda d_d. \lambda R_{\langle d, \langle e, t \rangle \rangle}. \lambda x_e. \llbracket \gamma \rrbracket^g(d)(R)(x)=1 \wedge \llbracket \beta \rrbracket^g(d)=1.$

- The LF is in (12), the composition and resulting truth conditions are in (13).

(12) LF



(13) semantic composition:

- $\llbracket \text{COMP}_{(\text{Heim}_{\text{diff}})} \text{Masha}xad \rrbracket = \lambda d_{\text{diff}}. \lambda R_{\langle d, \langle e, t \rangle \rangle}. \lambda x. \text{MAX}(\lambda d'. R(d')(x)) \geq \text{MAX}(\lambda d''. R(d'')(Masha)) + d_{\text{diff}}$
(via FA)

- b. $\llbracket [\mathbf{rka}_{\text{abstract}}[\text{COMP}_{(\text{Heim}_{\text{diff}})} \text{Mashaxad}]] \rrbracket = \lambda d_{\text{diff}}. \lambda R_{\langle d, \langle e, t \rangle \rangle}. \lambda x. \text{MAX}(\lambda d'. R(d')(x)) \geq \text{MAX}(\lambda d''. R(d'')(Masha)) + d_{\text{diff}} \wedge \mathbf{d}_{\text{diff}} \text{ is small}_c$
(via **Degree Restriction (DR)**)
- c. $\llbracket [5cm[\mathbf{rka}_{\text{abstract}}[\text{COMP}_{(\text{Heim}_{\text{diff}})} \text{Mashaxad}]] \rrbracket = \lambda R_{\langle d, \langle e, t \rangle \rangle}. \lambda x. \text{MAX}(\lambda d'. R(d')(x)) \geq \text{MAX}(\lambda d''. R(d'')(Masha)) + \underline{5cm} \wedge \underline{5cm} \text{ is small}_c$
(via FA)
- d. $\llbracket [5cm[\mathbf{rka}_{\text{abstract}}[\text{COMP}_{(\text{Heim}_{\text{diff}})} \text{Mashaxad} [\text{pircarka}]]] \rrbracket = \lambda x. \text{MAX}(\lambda d'. \text{HEIGHT}(x) \geq d') \geq \text{MAX}(\lambda d''. \text{HEIGHT}(Masha)) \geq d'' + 5cm) \wedge 5cm \text{ is small}_c$
(via FA)
- e. truth conditions for (9):
 $\llbracket (9) \rrbracket = 1$ iff $\text{MAX}(\lambda d'. \text{HEIGHT}(Katya) \geq d') \geq \text{MAX}(\lambda d''. \text{HEIGHT}(Masha)) \geq d'' + 5cm \wedge 5cm \text{ is small}_c$
“The maximal degree of height that Katya reaches exceeds Masha’s height by 5cm and 5cm is a small value in c.”

2.2. The suffix *-rka* on nouns

- Strikingly, *-rka* can also be found on nouns (as well as cross-categorically, see appendix A)!
- Examples can be found in the literature, for instance in Terezhenko (1947) in (14). In (15), I provide original data from my own fieldwork³.

- (14) *puɣuc'a* - old woman; *puɣuc'arka* (‘less of an old woman’)
My consultants’ translation: ‘not a young woman, but also not an old woman yet’
- (15) ***-rka* on nouns:**
- ɲamderc'* - chair, *ɲamderc'arka* - kind of a chair
 - neb'a* - mother, *neb'arka* - a mother who kind of fulfills her duties as a mother, but not quite;
ne - woman, *nerka* - kind of a woman (but does not behave like one in all relevant respects)
 - talej* - thief, *talejarka* - someone who has started being a thief, i.e. sort of a thief (he might have been spotted stealing once or so)
 - syra* - snow, *syrarka* - a light snow (as opposed to heavy snow)
 - sarmik* - a wolf, *sarmirka* - hard to tell whether it is a wolf or not a wolf, i.e. kind of a wolf, or maybe not
ɲano - a boat, *ɲanorka* - hard to tell whether it is a boat or not, i.e. sort of a boat

→ weakening or attenuating effect imposed by *-rka* on the nouns it attaches to

³For details about my informants and my fieldwork, cf. appendix B.

- This attenuation is reminiscent of Décsy (1966) who classifies *-rka* as an adjectival suffix which can mark “**incompleteness of quantity**”.
- closest translation of *-rka* on nouns in English: *sorta/kinda/kind of*

What is common to all these nominal examples?

Descriptively:

- The suffix *-rka* coerces a non-gradable noun into something gradable, and then tells us that the property considered is not the full-fledged property of being a chair, for instance, (15-a).
- Thus, it always diminishes the quality or the amount or (with verbs, cf. appendix A) the time span under consideration by a certain degree.

3. Analysis

How exactly can we implement this data pattern in a formal semantic framework?

- I will argue for a degree-based analysis of *-rka* on nouns, because:
 - *-rka* is synchronically most common in comparative constructions, cf. Berezovskaya (2020)
 - In contextual comparatives (‘Peter is taller.’), *-rka* is likely turning into an obligatory comparative suffix pointing to a possible change in progress, cf. appendix C.
 - I want to capture the intuition from comparatives with *-rka*, where *-rka* marks a small difference, but this time not between “regular” degrees, but rather **degrees of (im)precision**, cf. Morzycki (2011).

3.1. Theoretical background

- Intuition to be modeled:
 - coercion of traditionally non-gradable properties gradable
 - maintain the core meaning of *-rka*, i.e. that of marking a small difference
- I will take as a basis a line of research on vagueness in grammar, more precisely on metalinguistic comparatives (Morzycki 2011), on the metalinguistic degree morpheme *-ish/...ish* (Bochnak & Csipak 2014) and hedges like *sorta* or *kinda* (Anderson 2013).
- This literature is concerned, among other things, with the question of coerced gradability, i.e. more globally with the question of how traditionally non-gradable things are made gradable.

Morzycki (2011)

- Morzycki (2011) analyzes metalinguistic comparatives such as ‘John is more dumb than crazy.’ by introducing **degrees of imprecision** that measure the halo size (Lasersohn 1999) of an expression.
- According to Lasersohn, the pragmatic halo of an expression is a set of (semantic) objects of the same type as its denotation which differ in only “pragmatically ignorable” ways.
- The key idea is that metalinguistic comparatives compare imprecision and these degrees of imprecision provide a means of ‘measuring’ halo size.
- Halos are modeled as sets of alternatives in Morzycki (2011).

Anderson (2013)

- Following Morzycki (2011), Anderson (2013) analyzes the English *sorta* as a hedge that can modify verbs and nouns by making them conceptually gradable (by type-shifting and assigning a degree argument to a non-gradable predicate).

(16) Example:
*He **sorta** swam over to the boat.*

- He determines two different sources of gradability, the first one being inherent gradability of scalar adjectives, and the other one being coerced gradability derived from sets of alternatives.

Bochnak & Csipak (2014)

- Bochnak & Csipak (2014) also propose an analysis of *...ish/-ish* using ideas from Morzycki (2011).

(17) Example with an adjectivizing derivational morpheme on nouns:
*The cake has a coffee-**ish** flavor.*

- Anderson’s *sorta* requires a degree to be close to the standard, while *...ish/-ish* requires a degree to be lower than the standard. In that respect, *-rka* is more like *...ish/-ish*.⁴

⁴There is a different line of research by Sassoon (2016, 2017a,b) who explores psychological theories, where nouns are assumed to be associated with dimension sets and are thus degree expressions which I am not using here in my analysis.

3.2. Analysis of *-rka* with nouns

- I propose that *-rka* on nouns, *-rka_{nom}*, is a degree modifier and a halo widener.
- It has coercive powers when used with predicates without a gradable interpretation: if there is a non-gradable predicate, it forces a type shift via the operator PREC, cf. (18), (cf. Morzycki 2011) so that *-rka_{nom}* can saturate a degree of precision argument.

$$(18) \quad \llbracket \text{PREC } \alpha \rrbracket^d = \lambda d'. \llbracket \alpha \rrbracket^{d'}$$

- To determine whether two objects are similar, we need a standard of similarity d and a context C that provides the scale of similarity.
- The standard of similarity can be construed as a degree d , a real number in the interval $[0, 1]$.

$$(19) \quad \text{cross-categorial 'approximates relation' (Morzycki 2011: 51)} \\ \alpha \approx_{d,C} \beta \text{ iff, given the ordering imposed by the context } C, \alpha \text{ resembles } \beta \text{ to (at least) the degree } d \text{ and } \alpha \text{ and } \beta \text{ are of the same type}$$

- For any context C , $\alpha \approx 1, \beta$ iff $\alpha = \beta$

$$(20) \quad \llbracket \text{chair} \rrbracket^{d,C} = \{f_{\langle e,t \rangle} : f \approx_{d,C} \text{chair}\}$$

$$(21) \quad \text{PREC applied to } \text{chair}: \\ \llbracket \text{PREC chair} \rrbracket^{d,C} = \lambda d'. \llbracket \text{chair} \rrbracket^{d',C} = \lambda d'. \{f_{\langle e,t \rangle} : f \approx_{d',C} \text{chair}\}$$

- With the help of PREC, our suffix *-rka_{nom}* can now apply to the new noun made gradable by PREC and return a property that holds of an individual to a degree that is close to, but is a little less than, the standard degree of precision for the noun.
- This is implemented by the context-sensitive predicate **small_C** which is true of a degree if it counts as ‘small’ in a given context.
- The LF that serves as the input to interpretation of (15-a) is in (22). The semantics of *-rka_{nom}* is in (23).
- In (23), α is a predicate turned into a gradable property by PREC.
- **standard** is a function that is defined for standards associated with the degree of precision.
- Remember: Halos are modeled as sets of alternatives in Morzycki (2011). Our suffix picks a single alternative from the halo and applies it to the individual argument of *-rka_{nom}*.
- In (24), we apply this semantics to the coerced noun *chair*.

$$(22) \quad \llbracket \text{NP-}rka_{nom} \llbracket \text{NP PREC } \llbracket \text{NP chair}_{\langle e,t \rangle} \rrbracket \rrbracket \rrbracket$$

$$(23) \quad \llbracket -rka_{nom} \ \alpha \rrbracket^{d',C} = \lambda x. \exists d [\mathbf{small}_C([\mathbf{standard}(\llbracket \text{PREC} \ \alpha \rrbracket) - d) \wedge \exists f : f \in \llbracket \alpha \rrbracket(d)[f(x)]]$$

$$(24) \quad \text{a.} \quad \llbracket (22) \rrbracket^{d',C} = \lambda x. \exists d [\mathbf{small}_C([\mathbf{standard}(\llbracket \text{PREC} \ \text{chair} \rrbracket) - d) \wedge \exists f : f \in \llbracket \text{PREC} \ \text{chair} \rrbracket(d)[f(x)]]$$

$$\text{b.} \quad \llbracket (22) \rrbracket^{d',C} = \lambda x. \exists d [\mathbf{small}_C([\mathbf{standard} - d] \wedge \exists f : f \in \{f_{\langle e,t \rangle} : f \approx_{d,C} \mathbf{chair}\}) [f(x)]]$$

$$\text{c.} \quad \llbracket (22) \rrbracket^{d',C} = \lambda x. \exists d [\mathbf{small}_C([\mathbf{standard} - d] \wedge \exists f : f \in \left\{ \begin{array}{l} \text{chair,} \\ \text{chair w/o a leg,} \\ \text{tilted chair,} \\ \dots \end{array} \right\}) [f(x)]]$$

Informally: We have a property such that there is a degree which is slightly below the standard degree of precision for chairs and pick one alternative to chairs that is similar or close, but not a chair, such as a chair missing a leg, i.e. the difference between a prototypical chair and chair-*rka* is **small**.

- The degree argument of $\llbracket \text{PREC} \ \text{chair} \rrbracket$ is saturated by d in (24-b) creating a set of alternatives. $\llbracket \text{PREC} \ \text{chair} \rrbracket$ is substituted by the halo, i.e. the alternatives to *chair*. Examples of these alternatives are in (24-c).
- **To sum up**, *-rka_{nom}* does several things:
 - It existentially quantifies over degrees that are close (at a small distance) to the standard degree of precision for the context.
 - It thus widens the pragmatic halo of the noun it combines with.
 - Since it needs a gradable property to combine with, it coerces the non gradable properties into gradable ones via the *PREC* typeshift.
 - It quantifies over the degree of precision of the non-gradable property it combines with.
 - Finally, a function is picked from the halo and applied it to the individual argument of *-rka_{nom}*.

4. Concluding remarks

In this talk, I proposed an analysis of *-rka_{nom}* on nouns that allows to maintain the link to the suffix *-rka* encountered in TN comparative constructions. The connection is that in both cases, the suffixes mark a small difference, in the cases of comparison constructions a small difference between degrees of height, length etc. of two individuals and in the nominal cases between degrees of precision.

- *-rka_{nom}* on nouns in TN provides us with an example of a morpheme that can force coerced gradability outside of domain of degree constructions.

- The suffix *-rka* outside of comparisons is a great candidate to be added to a whole pleiad of expressions that are capable of turning non-gradable things into gradable ones. Thanks to elements like *sorta*, *...ish/-ish* and *-rka*, we gain insights into phenomena like coerced gradability, scale structure of typically non-gradable elements in language.
- TN complements the rather Anglo-centric picture with respect to our understanding of hedges or vagueness markers cross-linguistically and makes first steps towards a more complete cross-linguistic picture that includes under-studied languages.

Directions for future work.

- It remains to be laid out what the exact semantic contribution of *-rka* cross-categorially is (cf. appendix A) and whether it can be given a similar semantics with other categories as I propose for *-rka_{nom}* with nouns.
- Competing theories (for instance Sassoon’s work) should be explored further.

References

- Anderson, Curt (2013). “Inherent and Coerced Gradability across Categories: Manipulating Pragmatic Halos with *sorta*”. In: *Proceedings of SALT 23*, 81–96.
- Beck, Sigrid, Svetlana Krasikova, Daniel Fleischer, Remus Gergel, Stefan Hofstetter, Christiane Savelsberg, John Vanderelst & Elisabeth Villalta (2009). “Crosslinguistic Variation in Comparison Constructions”. *Linguistic Variation Yearbook 9*: 1–66.
- Berezovskaya, Polina (2020). “Comparing Comparatives: New Perspectives from Fieldwork and Processing.” PhD thesis. University of Tübingen. DOI: <http://dx.doi.org/10.15496/publikation-49845>. URL: <http://hdl.handle.net/10900/108468>.
- Bochnak, Ryan & Eva Csipak (2014). “A New Metalinguistic Degree Morpheme”. In: *Proceedings of SALT 24*, 432–452.
- Chrystal, David (1993). *Die Cambridge Enzyklopädie der Sprache*. Frankfurt/Main: Campus Verlag.
- Chung, Sandra & William A. Ladusaw (2004). *Restriction and Saturation*. The MIT Press.
- Décsy, Gyula (1966). *Yurak Chrestomathy*. Bloomington: Indiana University Publications.
- Lasersohn, Peter (1999). “Pragmatic Halos”. *Language 75* (3): 522–551.
- Morzycki, Marcin (2011). “Metalinguistic Comparison in an Alternative Semantics for Imprecision”. *Natural Language Semantics 19*(1): 39–86.
- Nikolaeva, Irina (2014). *A Grammar of Tundra Nenets*. Berlin, Boston: de Gruyter Mouton. URL: [//www.degruyter.com/view/product/208261](http://www.degruyter.com/view/product/208261).
- Salminen, Tapani (1998). “Nenets”. *The Uralic Languages*. Ed. by Daniel Abondolo: 516–547.

- Sassoon, Galit Weidman (2017a). “Comparisons of Nominal Degrees”. *Language* 93 (1): 153–188. DOI: doi:10.1353/lan.2017.0005.
- (2017b). “Dimension Accessibility as a Predictor of Morphological Gradability”. In: *Compositionality and Concepts in Linguistics and Psychology*. Ed. by James A. Hampton & Yoad Winter. Cham: Springer International Publishing, pp. 291–325. URL: https://doi.org/10.1007/978-3-319-45977-6_12.
- (2016). *Multidimensionality in the Grammar of Gradability*. Unpublished ms.
- Terezhenko, Natalia (1947). *Ocherk Grammatiki Nenezkogo (Jurako-Samojedskogo) Jazyka (A Sketch of the Nenets (Jurak-Samoyed Grammar))*.

Appendices

A. Cross-categorial data

-rka on verbs. For completeness, I provide examples of *-rka* on verbs in (25) and (26) which are, however, not analyzed in this talk.

- (25) a. *Man'a" biblioteka-xana namd'u-rka-va"*.
We library-LOC. sit-RKA-2.PL.
'We are sitting around a little in the library.'

- (26) **-rka on activity verbs:**
- a. *N'un'ah vyη-ana t'oryrηa-rka*.
loon tundra-LOC. cry.3.SG-RKA
'The loon is crying in the tundra from time to time.'
- b. *Man' pis'a-rka-m*.
I laugh-RKA-1.Sg
'I laughed a little. = I chuckled.'
- c. *Olga tara-rka men'e-da*.
Olga dance-RKA like-3.SG
'Olga likes to dance occasionally/a little.'

- (27) **-rka with degree achievements:**
- a. *Evej xanteve-rka*.
Soup cool-RKA
'The soup almost cooled down.'
- b. *T'eran tyry-rka-*".
Things dry-RKA-PL.
'The things have dried a little (= not completely).'

The example in (28) shows how *-rka* can even appear **on adverbs**. Here, the quality of running quickly is weakened to a shuffling (rather than running).

- (28) *Man' mera-rka s'urmbidamz'*.
I quickly-RKA ran
'I shuffled.'

- Abstracting away from the syntactic category, we can visualize what is common to all these examples in the Figure 2:

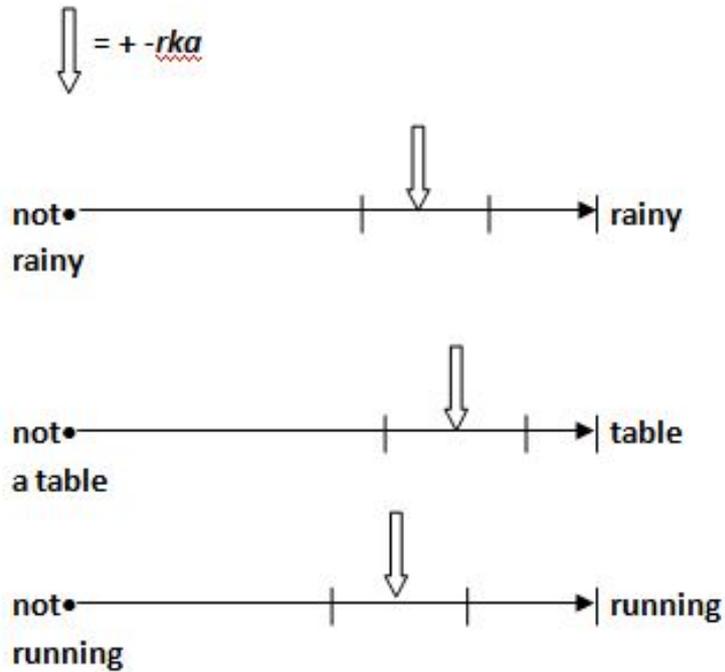


Figure 2: The cross-categorial contribution of *-rka*

→ The graph shows that, if we accept that *-rka* imposes a scale structure on the adjective, noun or verb it modifies, it removes us farther away from the rightmost part of the scale, which would be the full-fledged quality of being a table, for instance. It always diminishes the quality or the amount or the time span.

B. My fieldwork on TN

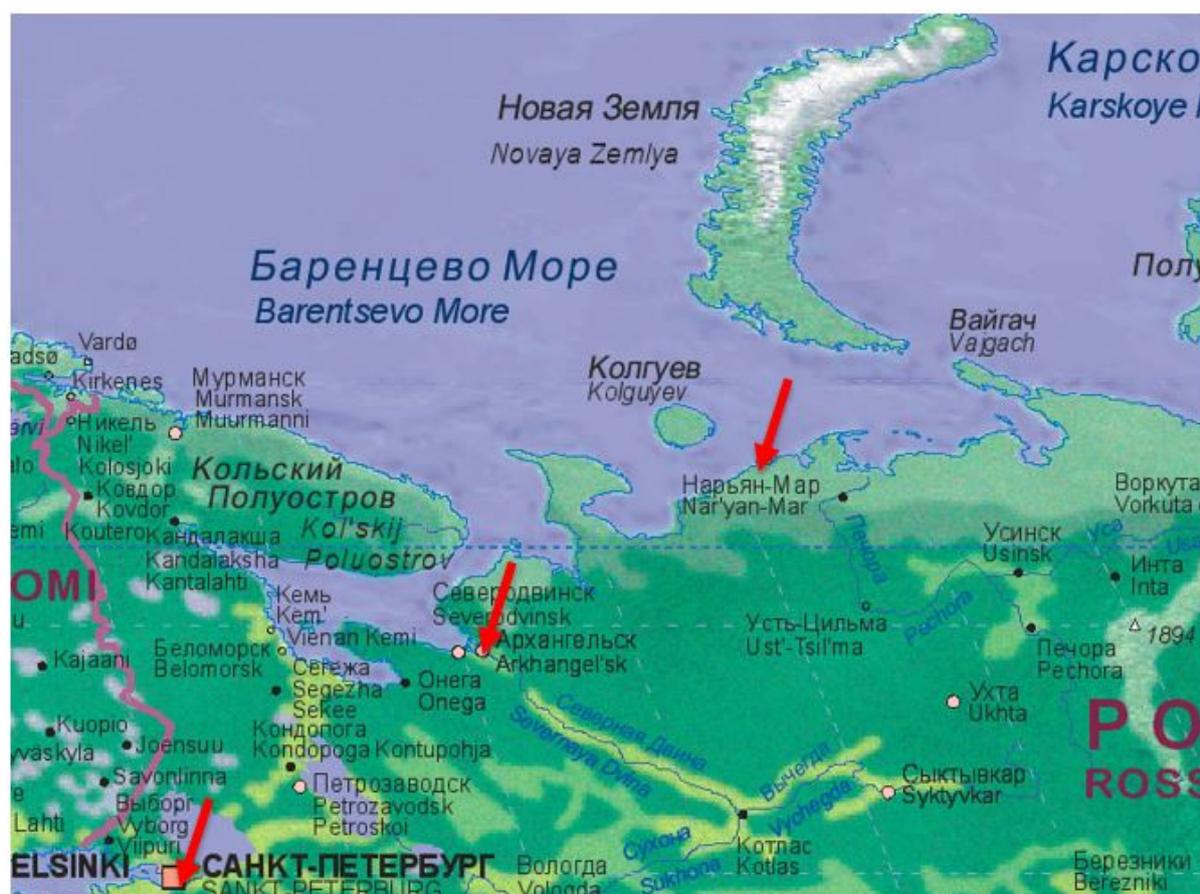


Figure 3: Loci of my fieldwork

Trips and informants.

Subdialects	<ul style="list-style-type: none"> - „Kanine“ - Malaya Zemlya - Bol'shaya Zemlya - Yamal
Time and place	<ul style="list-style-type: none"> - February 2014: Arkhangelsk + in Saint Petersburg (Institute of the Peoples of the North, Herzen State Pedagogical University) - September 2014, September 2016: Naryan-Mar, NAO - March 2014, September 2015: Saint Petersburg
Native speakers	<ul style="list-style-type: none"> - 19 native speakers in total from Naryan-Mar, Arkhangelsk & St. Petersburg - 17 female and 2 male informants between 19-77 years of age (mean age: 44 years) - All were (at least) biligual TN and Russian speakers

C. *-rka* in contextual comparatives (ConCs)

The examples in (29-b) show that when in the context both individuals compared are small for most speakers, the bare adjective cannot be used, i.e. it cannot carry the comparative meaning in it by its own. However, when *-rka* is added, the comparison becomes acceptable.

(29) Katya is 1.45m tall, while Tanya is 1.43m tall.

a. %*Katya pirc'a*.

Katya tall

'Katya is tall.'

b. *Katya pirc'a-rka*.

Katya tall-RKA

'Katya is taller.'

- I hypothesize that *-rka* in contextual comparatives starts being grammaticalized as a comparative suffix. For the majority of Nenets native speakers, *-rka* is obligatory in ConCs. I claim that this points to an interesting change in progress: Namely that *-rka* starts turning into a real comparative morpheme.