Word order typology and the case of Udmurt

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Outline

1. Word order typology
   1. Greenberg (1963) and his word order correlations
   2. The OV-VO typology:
      1. Vennemann (1974): *Principle of Natural Serialization*
      2. Dryer (1992): *Correlation pairs* and the *Branching Direction Theory*
   3. The concept of basic word order
2. Udmurt: an ongoing (S)OV > (S)VO change?

Greenberg (1963): Some Universals of Grammar with Particular Reference to the Order of Meaningful Elements

Relevance

- typology before Greenberg: classifying languages into (morphological) types: agglutinative/fusional/isolating
- Greenberg → linguistic universals – patterns that are potentially true for all languages of the world → revolutionizing linguistic typology
- object of his study: 30 languages, roughly representing areally + geneologically the world's languages
- outcome: 45 universals (mainly, but not only on word order) – many of them held true also in the light of more extensive later studies (e.g., Dryer 1992)

Language types

- classifying languages on the basis of the relative order of:
    1. nouns + adpositions → 2 types: **Prep N** / **N Postp**
    2. adjectives + nouns → 2 types: **N Adj** / **Adj N**
    3. verb (V) + nominal subject (S) + nominal object (O)→ 6 types: **SOV, SVO, VSO, VOS, OSV, OVS**

- instead of the 6 possible types based on the order of S, O and V, in practice he only counts with 3 types (SOV, SVO, VSO)

    (VOS, OSV, OVS languages also exist, but they are rare)
- "basic" word order – but no clear-cut definition of the term except for mentioning that it is found in indicative clauses

Some other examined parameters: the relative order of

- pronominal object + verb
- adverb + verb
- verb + auxiliary
- possessor + nominal possessee
- demonstrative pronoun + noun
- numeral + noun
- relative clause + noun
- position of question particles in a sentence
- position of interrogative words in a sentence   etc.

Types of universals

1. Scope:
   a) **absolute** universals: no exceptions:

(1) *Languages with dominant VSO order are **always** prepositional.*
(Universal 3)

   b) **statistical** universals: tendencies – they allow some exceptions:

(2) *If a language has dominant SOV order and the genitive follows the governing noun, then the adjective **likewise** follows the noun.*
(Universal 5)

Types of universals

2. Logical form:

   a) unrestricted universals: form "All languages have X":

(3) *In declarative sentences with nominal subject and object, the dominant order is almost always one in which* **the subject precedes the object**. (Universal 1)

Types of universals

b) implicational universals:

(4) *Languages with dominant VSO order are **always** prepositional.* (Universal 3)

- logical formula: p → q
- ! unidirectional correlations: ≠ q → p

The OV-VO typology

Vennemann (1974): Principle of Natural Serialization

→ [[**Operand**] **Operator**] *or* [**Operator** [**Operand**]

Operand	Operator
Verb	Object
Verb	Adverb
Auxiliary	Verb
Noun	Adjective
Noun	Relative Clause
Noun	Genitive
Noun	Numeral
Noun	Determinant
Comparative morpheme	Adjective
Adjective	Standard of Comparison
Adposition	Noun phrase

Vennemann (1974): Principle of Natural Serialization

→ **[[Operand] Operator]** *or* **[Operator [[Operand]]]**

- in consistent languages, the relative order of V and O predicts the relative order of any other pairs of elements

→ problems:

1. Elegant but simplistic → empirically does not hold: many inconsistent languages; more than half of the languages examined by Greenberg (1963) do not conform to the predictions of the theory (Song 2001: 60)
   - the originally unidirectional implications are taken to be bidirectional
   - no difference between absolute and statistical universals (Song 2001: 61–63)
2. by virtue of the theory, the relative order of V + O is not a more relevant predictor of word order than any other operand + operator pair (Hawkins 1983: 36)

Dryer (1992)

- Questions:
    1. **What** are the pairs of elements whose order (statistically) correlates with that of the verb and object?
    2. **Why** do these correlations exist?

- Data: database containing 625 languages (/a 543-language subset) representing areally and genetically the world's languages

1. a. **Correlation pairs:** "If a pair of elements X and Y is such that X tends to precede Y significantly more often in VO languages than in OV languages, then <X, Y> is a correlation pair, and X is a verb patterner and Y an object patterner with respect to this pair."

Correlation pairs (Dryer 1992: 108)

VERB PATTERNER	OBJECT PATTERNER	EXAMPLE
verb	object	*ate + the sandwich*
verb	subject	*(there) entered + a tall man*
adposition	NP	*on + the table*
copula verb	predicate	*is + a teacher*
'want'	VP	*wants + to see Mary*
tense/aspect auxiliary verb	VP	*has + eaten dinner*
negative auxiliary	VP	cf. 7 in §4.2
complementizer	S	*that + John is sick*
question particle	S	cf. 8 in §4.4.
adverbial subordinator	S	*because + Bob has left*
article	N'	*the + tall man*
plural word	N'	cf. 9 in §4.7
noun	genitive	*father + of John*
noun	relative clause	*movies + that we saw*
adjective	standard of comparison	*taller + than Bob*
verb	PP	*slept + on the floor*
verb	manner adverb	*ran + slowly*

TABLE 39. Complete list of correlation pairs.

Non-correlation pairs (Dryer 1992: 108)

DEPENDENT	HEAD	EXAMPLE
adjective	noun	*tall* + *man*
demonstrative	noun	*that* + *man*
intensifier	adjective	*very* + *tall*
negative particle	verb	*not* + *go*
tense/aspect particle	verb	cf. examples in 6 in §3.5

TABLE 40. Noncorrelation pairs.

(Dryer 1992: 108)

The Branching Direction Theory

- Verb patterners are nonphrasal (nonbranching, lexical) categories and object patterners are phrasal (branching) categories.

- Alternate version: verb patterners are heads
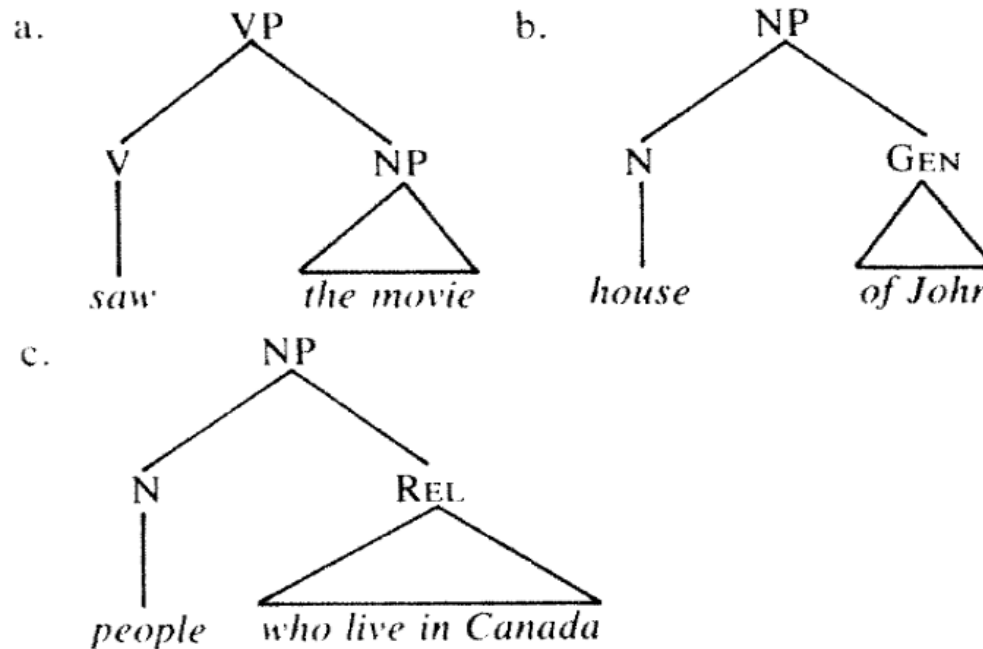
(Dryer 1992: 90)

The notion of basic word order

Basic word order

- The word order of "stylistically neutral, independent, indicative clauses with full noun phrase (NP) participants, where the subject is definite, agentive and human, the object is a definite semantic patient, and the verb represents an action, not a state or an event" (Siewierska 1988: 8) → basic word order **at the sentence level**

  (5) **Barbara hit Matthew.** (SVO)

- basic word order also at the **phrasal** level

- Criteria (sometimes contradict each other):
    1. Unmarkedness
    2. Pragmatic neutrality
    3. Frequency

1. Unmarkedness

a) **structural** (cf. Croft 1990) or **formal** (cf. Dryer 1995, Song 2001) unmarkedness: the unmarked word order is morphologically less complex (it contains less morphemes) than the marked one:

(6) **Töhötöm   kávé-t   isz-ik.**   (SOV)

Töhötöm   coffee-ACC   drink-3SG

'Töhötöm is drinking coffee.'

(7) **Töhötöm   issza   a   kávé-t.** (SVO)

Töhötöm drink:3SG>3SG   the   coffee-ACC

'Töhötöm is drinking the coffee.'

1. Unmarkedness

b) **distributional** unmarkedness (Croft 1990, Dryer 1995): word orders that have a more restricted distribution compared to another (i.e., they can occur in less morphosyntactic environments) are considered to be distributionally marked

e.g., VS in English: only in special constructions, e.g., locative inversion:

(8) **Outside were five police officers**.

(http://www.ling.cam.ac.uk/li8/word_order.pdf)

2. Pragmatic neutrality

- often mentioned in the literature, but usually not defined
- stylistic neutrality
- neutral **context**, or
- neutral **information structure** of the sentence → no focussed element in the sentence, and the topic is the subject (or no topic):

(9) **That pizza, I won't eat.** → OSV → O is topicalized → not neutral
   → possible syntactic test for eliciting sentences without any topic
      (*thetic* or *all-new* sentences):
  (10) - **What's new? / What happened?**
        - **Sally left New York.** → SVO

3. Frequency

- Greenberg (1963: 67), Givón (1979: 50), Brody (1984: 717): basic word order = the most frequent order

- Dryer (1995): the most frequent word order is not necessarily the same as the pragmatically neutral one → notion of **dominant word order**, cf. WALS

a) **textual/statistical frequency** → a big quantity of texts of different genres is needed

b) **frequency in the grammatical system** (Hawkins 1983: 13): e.g., the number of adposition lexemes (postpositions and prepositions) in Finnish

Tasks

1. Think of a non-Uralic language you speak. What sentence orders (combinations of S, V and O) are grammatical in this language? Which of these word order variants may be pragmatically neutral and why? Is any of the word order variants formally more marked than the others? Is any of the word order variants subject to distributional restrictions?

2. Consider some of Dryer's (1992) correlation pairs (e.g., V + O, adpositions + noun, complementizer + sentence, genitive + noun). Does your language seem to be consistent in terms of word order?

Udmurt: an ongoing (S)OV > (S)VO change?

Uralic languages in the light of word order typology

- Uralic protolanguage: assumed to have been consistent SOV (head-final) → *modifier–head* order (Bereczki 2003: 59, 96)

- Contemporary Uralic languages:
  - SOV: Ob-Ugric, Mari, Samoyedic
  - SOV > SVO change: Komi, Mordvin (due to Russian influence), Finnic, Saami
  - Hungarian: Havas: SOV; Siwierska's definition, generative approach: SVO

- Udmurt: usually classified as a non-rigid (but consistent) SOV language, in which non-verb-final sentences are pragmatically marked

  (cf. Zhuikov 1937, Bulychov 1947, Gavrilova 1970, Suihkonen 1990, Csúcs 1990, Timerkhanova 2011, Vilkuna 1998, Winkler 2011)

→ … thus, maybe we could finish our class at this point?

Word order in contemporary Udmurt

- No! Actually, the picture is more complicated:
  - SVO/SVX order is not marginal (Salánki 2007)
  - SVX order can be both pragmatically marked and neutral (Ponariadov 2010, Asztalos & Tánczos 2014, Asztalos 2016)

→ An ongoing SOV > SVO change in contemporary Udmurt (similarly to what happened in Komi and in Mordvin)?

Sociolinguistic and areal background

- mostly bilingual speakers (Udmurt–Russian):
  - *old speakers*: balanced or Udmurt-dominant bilingualism
  - *young speakers*: balanced or Russian-dominant bilingualism (Salánki 2007: 59)
    → influence of Russian (SVO/head-initial)

- southern areas: Tatar (consistent SOV/head-final) is also spoken
  → influence of Tatar

Research questions and methods

- Can (S)VX and head-initial constituents occur in neutral sentences? (→ *qualitative* aspect)

- **How frequent** are the head-final and the head-initial variants of the same phrase **in the same context**?

  (→ *quantitative* method)

- Is there a difference in terms of word preferences of
  - **young** vs. **old** speakers of Udmurt
  - Udmurts living in **Udmurtia** vs. Udmurts living in **Tatarstan**?
    (→ *quantitative*)

Data 1.: The examined constructions

- Dryer's *correlation pairs* (1992)
  (except for: *Postp, N+Det, V+Aux_{Temp}* → strictly *head-final*)
+
- adjectival phrases: Adj + AdpP: *rich + in minerals*
- noun phrases: N + AdpP: *presentation + about the typological change of Udmurt*

Data 2.: The questionnaire and the informants

- fieldwork (2014–2015)
- **neutral** sentences → context: '*What happened?*' (or topical subject)
- 90 respondents, from all main dialectal groups + Izhevsk

  → grouped into: 1. respondents living **in Udmurtia**

             2. **in Tatarstan**

  → age groups: 1. born between 1935–1965

             2. 1970 and 2002

- non-representative survey

Question types

- **closed-ended questions:**

1. completing sentences by ordering and conjugating/declining given words:
    - *What's new?*
    - *Nothing interesting. Yesterday _____ (soup, Mary, to cook).*

2. grammaticality judgement about head-initial phrases:
    - *What's new?*
    - *Georgy fell off a ladder.*   *a) good*   *b) not that good*   *c) bad*

3. grammaticality judgement about both the head-initial and the head-final variants of the same sentence

- **open-ended question:** comparing two figures   *('Anja is taller than Tanja')*

Data 3.: Textual analysis

- % of the head-initial vs. head-final variants in
  - old folklore texts (Wichmann, 1891–92) vs. blog posts
    (*Mynam malpanjosy, Marjalen zareźez* etc.)
  - newspaper articles from 1924 (*Gudyri*) vs. contemporary
    newspaper articles (*Udmurt Dart, Invožo, Udmurt duńńe*)

- information structural analysis of SVX sentences and sentences
  containing head-initial phrases
  → only pragmatically marked or also neutral?

Results

Textual analysis

- Head-initial variants of some constituents: higher frequency in contemporary texts than in old ones

Textual analysis

- SVO sentences can also be neutral, cf. (11), which is the first sentence of a blog post:

(11) *Odig   džyte   öťi   kollegaosme*

     one   evening.ILL   invite.PST.1SG   colleague.PL.1SG.ACC

     doram   kunoje.

     to.ILL.1SG   guest.ILL

     'One evening I invited my colleagues to my place.'

<div align="right">(udmurto4ka.blogspot.ru)</div>

Questionnaire: Head-initial vs. head-final

- with almost all of the constituent types, head-initial variants were produced and judged grammatical by a part of the informants

- still, head-final orders are more frequent and more acceptable

- some speakers for some constituents preferred the head-initial variants over the head-final ones

Generational and areal differences 1.

- **younger** speakers produced **more frequently** and judged more favourably the head-initial variants than older ones
  → *apparent time-hypothesis*: an age-stratified variation can be the sign of a linguistic change in progress (cf. Labov 1963, Trudgill 1992)

- speakers **from Udmurtia** produced **more frequently** and judged more favourably the head-initial variants than speakers from Tatarstan

Generational and areal differences 2.

→ *older speakers from Tatarstan*: almost exceptionless preference for the head-final variants

→ *younger ones from Udmurtia*: the highest % of production and acceptance of the head-initial variants
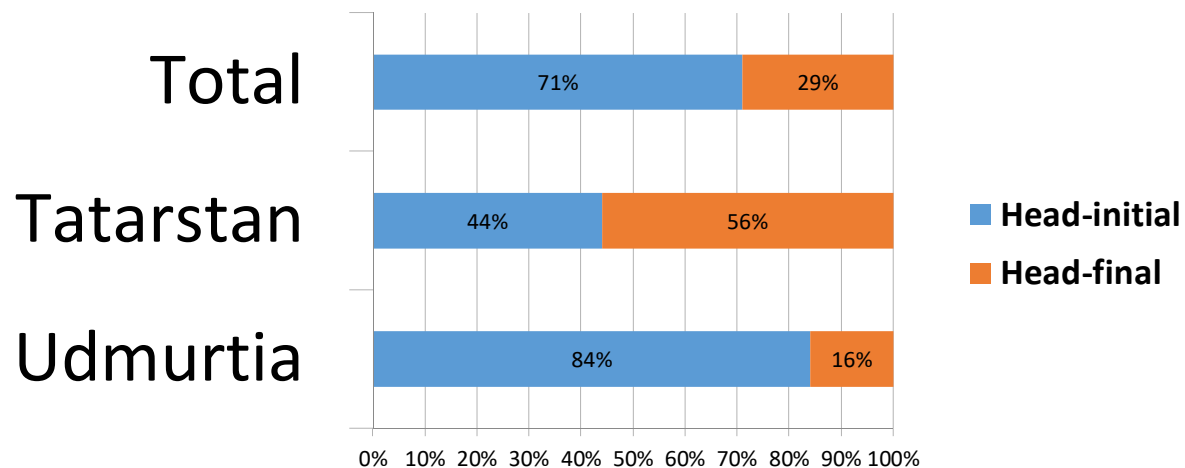
V + S (existential sentences) – areal difference

Context: 'Our village is big and nice.'

(12) a. ***Otyn*** *<u>vań</u>* *kinoťeatr* *no* *klub.*
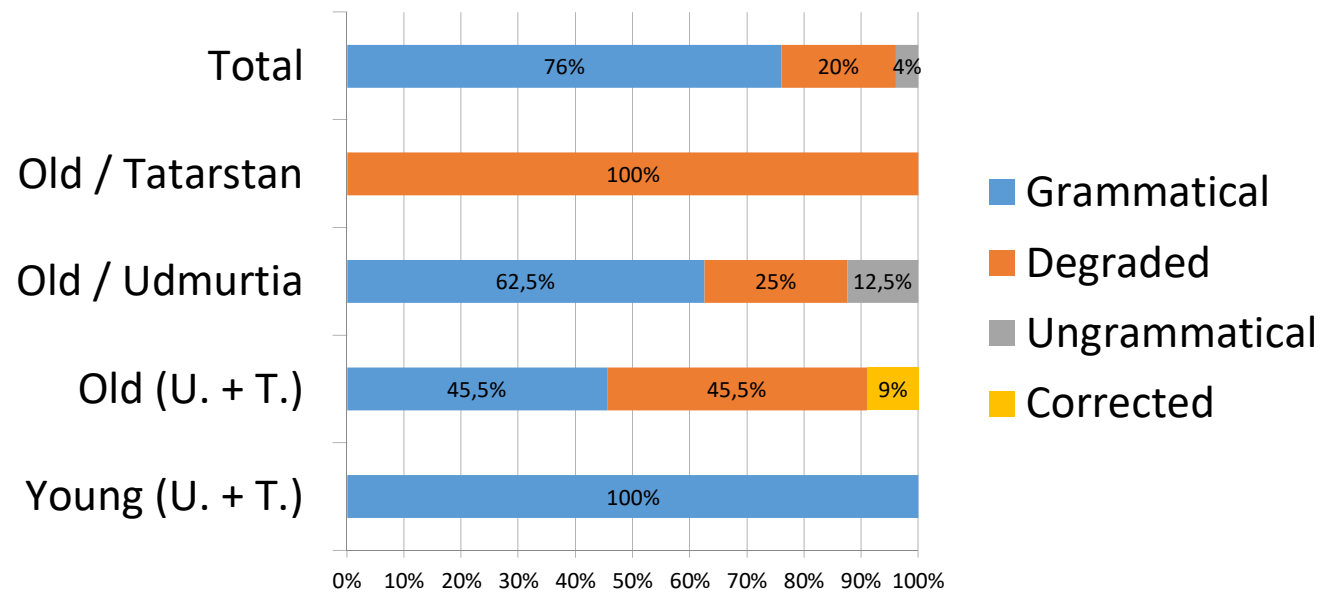
there is cinema and clubhouse

b. ***Otyn*** *kinoťeatr* *no* *klub* *<u>vań</u>.*

'There is a cinema and a clubhouse.'

V + AdpP – areal + generational

(13) *Mon* **_śulmaśkiśko_** **_D'ima_** **śaryś.**

     I   worry   Dima   about

'I am worried about Dima.'

Comp + Sent – generational difference

(14) a. *Tren'erjos*   *veralo,*   **<u>čto</u>**   **sport**   **tuž**   **pajdajo**.

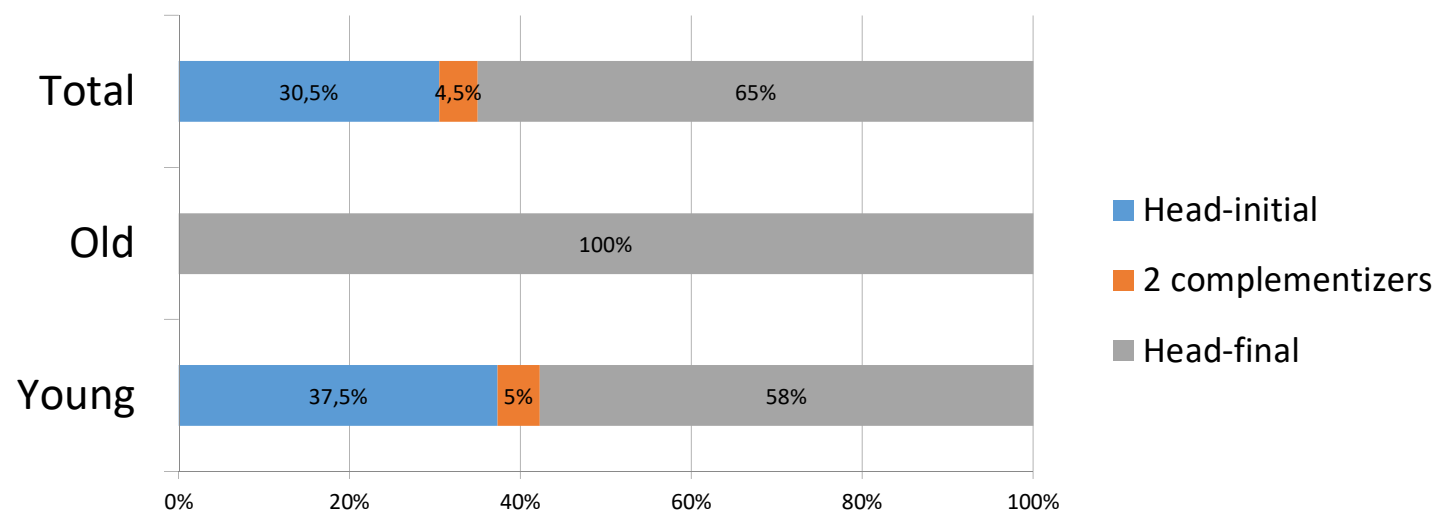   trainers   say   that   sport   very   useful

     b. *Tren'er-jos*   *veralo,*   **sport**   **tuž**   **pajdajo**   **<u>šuysa</u>**.

     trainers   say   sport   very   useful   that

     c. *Tren'er-jos veralo,* **<u>čto</u> sport tuž pajdajo <u>šuysa</u>**.
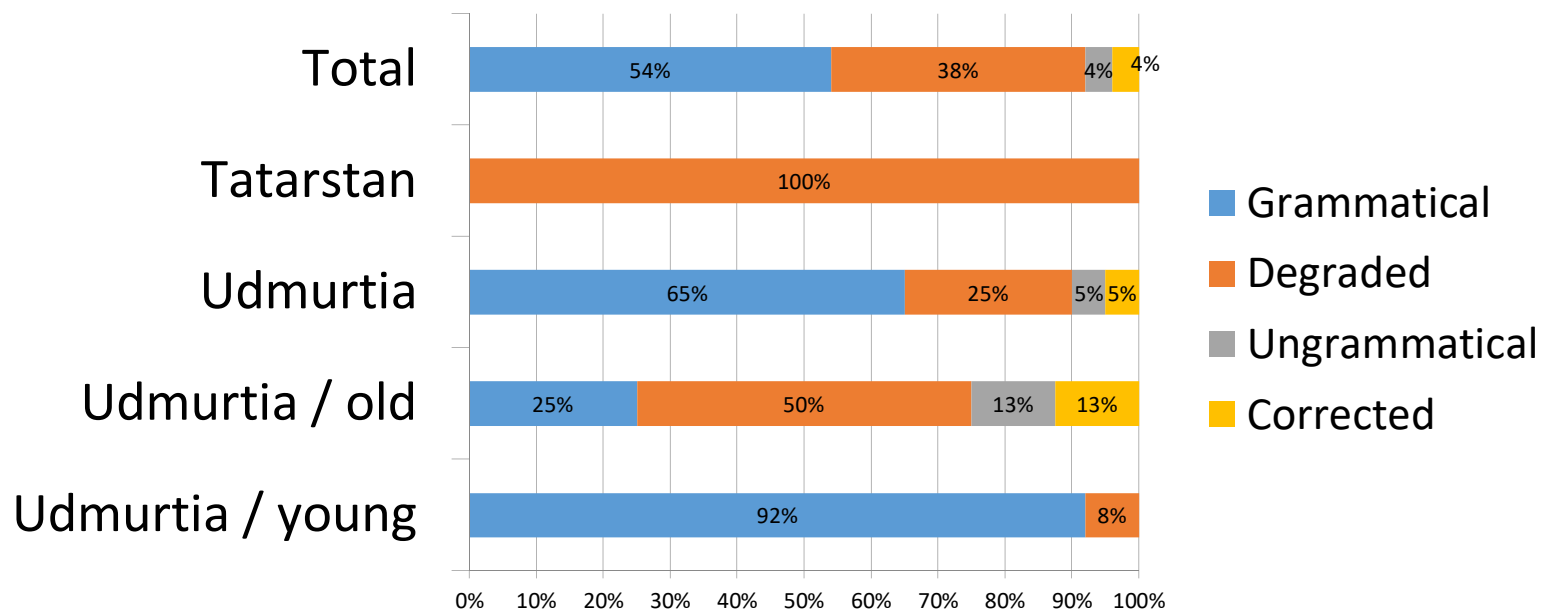
     'Trainers say that sport is healthy.'

Chart: Comp + Sent by generation

Group	Head-initial	2 complementizers	Head-final
Total	30,5%	4,5%	65%
Old			100%
Young	37,5%	5%	58%

'want' + VP – areal + generational

(15) *Jegitjoslen*   ***potiz***   ***šuldyrjaśkemzy*** *(…)*

    of_youngs   came_out   having_fun

    'Young people wanted to have fun (…)' (and they went to the disco.)

Constituents' inclination for word order change

Highest (frequency: > 50% acceptability: > 70%)	**Average** (frequency: 21–48% acceptability: 41–70%)	**Lowest** (frequency: ⬚ 17% acceptability: ⬚ 61%)
V + S (ex.)	**Comp + Sent.**	**AdvSub + Sent.**
N + Rel	**V + O**	**V + Adv**$_{Manner}$
	V + PostpP	**Cop + Pred**
	'want' + VP	**N + Gen**
	Aux$_{Mod}$ **+ VP**	**N + PostP**
	[Adj + PostP]$_{Pred}$	**[Adj + PostpP]**$_{Attr}$
	[Adj + Stand]$_{Pred}$	**[Adj + Stand]**$_{Attr}$

[**CP**
IP
NP
AdjP]

Conclusions

- VO grammar is also present in Udmurt
- but OV grammar still dominant
- generational differences → change from head-final to head-initial (or from the (S)OV to the (S)VO type)
- due (at least partly) to the influence of Russian (head-initial) – a part of the younger speakers are Russian-dominant bilinguals
- influence of Tatar (head-final) → slows down the change in trilingual areas
- verbal phrases and complementizers phrases: more prone to change than noun phrases and adjectival phrases

Task 3

- Think of a Uralic language which is SVO (that has changed its original basic SOV order to SVO). Which constituent orders (correlation pairs) are head-initial and which ones kept their original head-final arrangement?

Thank you for your attention!

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