



3 x 209 Challenges Accepted: Compiling the Typological Database of the Volga Area Finno-Ugric Languages

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A short (pre)history of the project

- 2005: Initiative launched at the Tenth International Congress of Finno-Ugrists held in Yoshkar-Ola, Mari El
- 2008: A closer delineation of the project at a dedicated international conference at Vienna University
- 2008: Establishment of a steering committee
- 2008–2009: Presentation of the project at different conferences (Bratislava, Khanty-Mansijsk, Moscow, Tallinn, Szeged...)

A short (pre)history of the project

- 2010: A dedicated workshop of the Eleventh International Congress of Finno-Ugrists, held in Piliscsaba, Hungary
- 2012–2015: Elaborating the frames for the database, creating the Typological Database of the Ugric Languages
- Havas et al. (2015) <http://utdb.elte.hu/>

Participants:

- **Members of the project team:**

Ferenc Havas (project leader, editor/author of the parameter descriptions), Márta Csepregi (author of the Surgut Khanty parameter values), Nikolett F. Gulyás (author of the Synya Khanty parameter values), Szilvia Németh (author of the Northern Mansi parameter values), András Czentrár (assistant researcher)

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- **Contributors:**

Alina Duboveckaya (Russian translation), Dénes Lados (IT development), Anastasiya Saypasheva (Russian translation), Melinda Széll (English translation), Edit Takács (English translation)

A short (pre)history of the project

- 2015: Presentation of the Ugric database at CIFU 12, Oulu
- 2017–2022: Creating the Typological Database of the Volga Area Finno-Ugric Languages

Aims and motivations

- To create an online typological database of (some less described) Finno-Ugric languages
- using some comparative concepts provided in previous studies (Dryer 2001, Haspelmath & Dryer 2013) in order to
- make these languages more “visible” cross-linguistically,
- broaden our perspective on some morphosyntactic properties of the target languages.

WALS and UTDB: similarities and differences

WALS (Dryer & Haspelmath 2013)

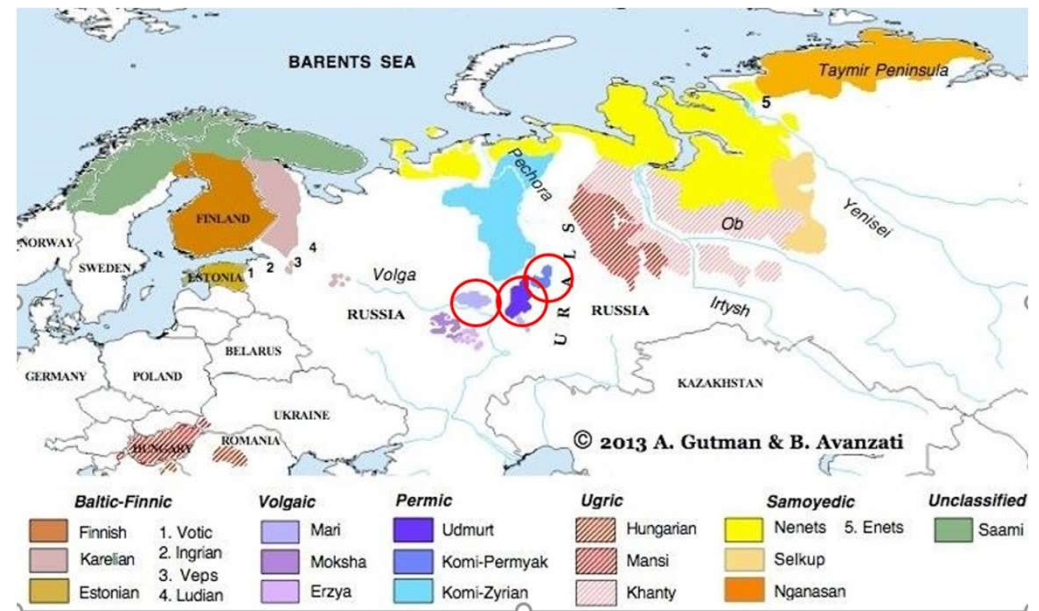
- Languages of the world
- Phonology, morphology, syntax, lexicon
- 192 parameters
- For FU languages: poor and sometimes outdated data
- Aim is to outline cross-linguistic patterns

UTDB (Havas et al. 2015)

- One language family
- Morphology, syntax
- 213 parameters
- Some new data based on fieldwork and elicitation
- Aim is to provide a more detailed description of morphosyntactic properties

Typological Database of the Volga Area Finno-Ugric Languages

- 2017–2021 (NKFI K 125282)
- Meadow Mari, Udmurt, Komi-Permyak
- topics covered: nominal and verbal morphology, structure of nominal and verbal phrases, simple and complex clauses, word order



Participants

- **Members of the project team:** Ferenc Havas (project leader, editor/author of the parameter descriptions), Erika Asztalos (author of the Udmurt parameter values), András Czentnár (assistant researcher), Nikolett F. Gulyás (author of the Komi-Permyak parameter values), Laura Horváth (author of the Udmurt and some Komi-Permyak parameter values), Ditta Szabó (assistant researcher, author of some Udmurt and Komi-Permyak parameter values), Bogáta Timár (author of the Meadow Mari parameter values)
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- **Contributors:** Jeremy Bradley (IT development), Anastasia Saypasheva (Russian translation), Krisztina Szécsényi (English translation), Elena Vedernikova (Russian translation)

Key notions of the database

- **Parameters:** cross-linguistically comparable grammatical properties
 - e. g. Optative mood
 - Is there a distinct verbal paradigm to express the optative mood?
- **Values:** the set of logically possible variants of a certain parameter
 - Using abbreviations (NoOptInfl, OptInfl)

Types of parameter values

- **yes-no type:**

- NoOptInfl: There is no distinct verbal paradigm to express the optative mood.
- OptInfl: There is a distinct verbal paradigm to express the optative mood.

Types of parameter values

- **multiple choice type:**
- Person marking on nominal adpositions
 - NoAdp: The language does not have adpositions.
 - AdpNonPM: Person marking cannot be expressed on adpositions.
 - AdpNNonPM: Person marking cannot be expressed on nominal adpositions.
 - AdpN(PM): Person marking is optional for adpositions when they appear with nouns.
 - AdpNPM: Person marking is required for adpositions when they appear with nouns.

Types of parameter values

- **combination of different values:**
- Marking of the subject (Komi-Permyak)
 - NPPnonobl + Agr
 - NPPnonobl: The subject may optionally be marked with an explicit pronoun or noun.
 - Agr: Morphosyntactic agreement on the verb is used to mark the subject.
- &, /, +, ()

What is this section going to be about?

- 2 case studies:
 - 1) a concrete parameter (*Antipassive constructions*) and its values in the languages under consideration
 - 2) some preliminary research inspired by a couple of parameters related to *possessive agreement in adnominal constructions*

Antipassive constructions: Terminology

- **P**: roughly equivalent to the **direct object** of a transitive V
- **S**: roughly equivalent to the **subject of an intransitive V**
- **A**: roughly equivalent to the **subject of a transitive V**

Case study 1: Antipassive constructions

- a verbal construction with an **obligatory agent** combining with
- a verb that is semantically transitive, but **syntactically intransitive** due to the **demotion of the P** argument:
 - oblique argument subtype*: what appeared in the P function in the transitive pattern appears in an **oblique** form (oblique case and/or adposition);
 - implicit argument subtype*: the **former P** function **cannot be expressed** at all

Antipassives: Examples from Russian

(1) a. *Sobaka kusa-et malčik-a.*
dog bite-3SG boy-ACC
'The dog bites a/the boy.'

b. *Sobaka kusa-et-śa.*
dog bite-3SG-AP
'The dog bites (is a biter).'

(-ś-: polyfunctional morpheme,
AP expression is just one of its
functions)

(2) a. *My zakupi-l'i pripas-y.*
1PL buy.up-PST-PL reserve_stock-ACC.PL
'We have bought up some reserve stock.'

b. *My zakupi-l'i-ś pripas-ami.*
1PL buy.up-PST-PL-AP reserve_stock-INS.PL

(roughly) 'We have supplied ourselves with reserve stock (sc. by buying up lots of it).'

Criteria for antipassivity

1. The construction can be easily **associated with** a less marked bivalent construction such as **transitives**;
2. The **P** argument of the transitive construction is **demoted** (and appears in an oblique form or not at all);
3. Antipassivization has an identifiable **marker**;
4. The construction is intransitive (with its only obligatory argument having the **S** function).

Antipassives: Productivity

- in some languages: ***fully productive*** (can be formed from any tr. V)
- ***partially productive*** (limited to tr. V-s of a certain type or meaning)
- ***not productive at all*** (limited to a closed class of tr. V-s)

Antipassive constructions: Parameter values

- **NoAntipass**: The language does not have antipassive constructions.

Antipassive constructions: Parameter values

- *Agreement of the V:*
- **NoAntipassAgr:** Antipassive constructions **do not feature any kind of agreement on the verb.**
- **AntipassAgrA:** In an antipassive construction, the verb uses the same strategy to mark agreement with the S argument **as it would do it with the A argument** in the associated transitive construction.
- **AntipassAgrAElse:** In an antipassive construction, the verb uses a **different strategy** to mark agreement with the S argument than the way it would mark agreement with the A argument in the associated transitive construction.

Antipassive constructions: Parameter values

- *The P argument:*
- **AntipassObq:** Antipassive constructions feature the **P** argument of the transitive pattern in an **oblique** form (oblique case and/or with an adposition).
- **AntipassImpl:** Antipassive constructions **do not feature the P** argument of the transitive pattern at all.

Antipassive in Meadow Mari, Udmurt, and Komi-Permyak

- understudied topic (but see Tánczos 2017 for Udmurt)

Antipassive constructions: Komi-Permyak

AntipassAgrA +AntipassImpl

AntipassAgrA: In an antipassive construction, the verb uses the same strategy to mark agreement with the S argument as it would do it with the A argument in the associated transitive construction.

AntipassImpl: Antipassive constructions do not feature the P argument of the transitive pattern at all.

Antipassive constructions: Komi-Permyak

(3) *Pon-ys pur-i-s menö.*
dog-3SG bite-PST-3SG I.ACC
'The dog bit me.' (V. E.)

-*ś*-/*-ć*-: polyfunctional
morpheme – other (e.g.,
reflexive) functions as well

(4) *Pon-ys pur-ś-ö.*
dog-3SG bite-AP-3SG
'The dog bites.' (V. E.)

(5) *Škola-yn velöt-ć-ö sija med-umöl'-a.*
school-INE study-AP-3SG 3SG SUPERL-bad-ADV
'(S)he is the worst student at school.' (Ponomareva 2010: 245)

Antipassive constructions: Udmurt

AntipassAgrA +AntipassImpl / AntipassAgrA +AntipassObq

AntipassAgrA: In an antipassive construction, the verb uses the same strategy to mark agreement with the S argument as it would do it with the A argument in the associated transitive construction.

AntipassImpl: Antipassive constructions do not feature the P argument of the transitive pattern at all.

AntipassObq: Antipassive constructions feature the P argument in an oblique form (oblique case and/or with an adposition).

Antipassive constructions: Udmurt

- **transitive sentences:**

(6) *Kuašt-em gubi-z-e śi-je.*
dry-PTCP.PRF mushroom-DET-ACC eat-3SG
'(S)he eats dried mushrooms.' (Udmurt corpus)

(7) *Pijaš [...] Kuzebaj Gerd śaryś malpan-jos-se lydź-i-z.*
boy Kuzebay Gerd about thought-PL-3SG.ACC read-PST-3SG
'The boy read out his thoughts on Kuzebay Gerd.'

- **antipassive with no P:**

(8) *Ataj śi-śk-e, ju-e, tamak kysk-e, lydži-śk-e.*
father eat-AP-3SG drink-3SG tobacco pull-3SG read-AP-3SG
'Father eats, drinks, smokes, and reads.' (Udmurt corpus)

Antipassive constructions: Udmurt

- **transitive:**

(9) *Al'i Pi'ci Purga gimnazi-ja-my 762 pinal dyšet-e udmurt*
now Pichi Purga high_school-INE-1PL 762 child study-3SG Udmurt
kyl-ez.

language-ACC

'In our Pichi-Purga high school 762 children study the Udmurt language now.' (Udmurt corpus)

Antipassive constructions: Udmurt

- antipassive with P in the **oblique** case:

(10) *Dyšetškiś udmurt kyl-ly dyšet-sk-e urok-yn.*
student udmurt language-DAT study-AP-3SG class-INE

'The student studies the Udmurt language in class.' (Tánczos 2017: 18)

(-*śk*-/-*sk*-: polyfunctional morpheme (reflexive, passive, anticausative etc.))

- further examples?

Antipassive constructions: Meadow Mari

NoAntipass: The language does not have antipassive constructions.

- no specific marker for marking P demotion:

(11) *Pij joča-m pur-ən.*
dog child-ACC bite-PST2.3SG
'The dog bit the child.'

(12) *Pij pur-a.*
dog bite-3SG
'The dog bites.'

(13) *Pij pur-alt-eš.*
dog bite-REFL/PASS-3SG
'The dog gets bitten.'

Antipassive constructions: Meadow Mari

- in a few rare cases, the reflexive marker *-alt* was suspected to have antipassive qualities:

(14) *dogovor-əm podpisatl-aš* vs. (15) *dogovor jəmalan podpisatl-alt-aš*
contract-ACC sign-INF contract under sign-REFL-INF
'to sign the contract' 'to sign the contract'

- however, data suggests it is a simple reflexive construction ('to sign something' vs. 'to sign himself under something'):

(16) *Gazet-la-šte psevdonim dene podpisatl-alt-əm.*
newspaper-PL-INE pseudonym with sign-REFL-PST1.1SG
'I signed up for the newspaper under a pseudonym.'

(17) *Tide dokument jəmalan podpisatl-alt-aš o-m tünal.*
this document under sign-REFL-INF NEG-1SG start.CNG
'I will not sign this document. (lit. I will not sign myself under this document.)'

Antipassive constructions in the languages under consideration

- different values:
 - Meadow Mari: no AP constructions
 - Komi-Permyak:
 - AP constructions with no expression of P
 - lexical antipassivity
 - Udmurt:
 - AP constructions; no expression of P and one example with P in the oblique case
 - lexical antipassivity
- questions for further research:
 - productivity of AP constructions in Komi-Permyak and Udmurt
 - AP constructions from a Uralic perspective

Case study 2: Possessive agreement in adnominal possessive constructions

- 4 related parameters:
 1. **Marking possession on nouns** (Head- or dependent-marking?)
 2. **Semantic distribution of personal possessive affixes** (Does possessive agreement depend on the semantic properties ((in)alienability) of the possessee?)
 3. **Syntactic distribution of person marking within possessed nouns alongside nominal possessors** (Does it depend on the morphosyntactic properties of a nominal possessor?)
 4. **Syntactic distribution of person marking within possessed nouns alongside pronominal possessors** (Does it depend on the morphosyntactic properties of a pronominal possessor?)

Possessive agreement in adnominal possessive constructions

- canonical structure: **N/Pron-GEN N-Px**
(**Px: agrees in number and person** with the possessor)
- ! however, there are examples with **non-agreeing possessives** in all three languages
- the **frequency of lack of agreement differs** in the languages
- What **factors** may be behind lack of agreement?

Possessive agreement in adnominal possessive constructions: Meadow Mari

- so far, we haven't been able to demonstrate that possessive agreement depends on the semantic properties of the possessor/possessee or on the morphosyntactic properties of the possessor:
 - inalienable possesseees:

(18) *lepeń-ən* *šuldər-žo*
butterfly-GEN wing-3SG
'the wing of the butterfly' (Beke 1911: 183)

(19) *jüksə-n* *üdər*
swan-GEN girl
'the swan's daughter' (Beke 1911: 184)

Possessive agreement in adnominal possessive constructions: Meadow Mari

- alienable possessives:

(20) *jeŋ-ən* *lud-žə*
other_man-GEN duck-3SG
'another man's duck' (Bereczki 1990: 35)

(21) *kuwa-n* *kugu* *üškaž*
old_woman-GEN big ox
'the old woman's big ox' (Beke 1911: 184)

(22) *Məj-ən* *šergaš* *šörtən.*
1SG-GEN ring silver
'My ring is silver.' (Bereczki 1990: 42)

Possessive agreement in adnominal possessive constructions: Udmurt

- Frequency of **non-agreeing possessives**:

	nr. of examined PNP-s	lack of possessive agreement
corpus	50	4%
blog posts	290	4,5%

Possessive agreement in adnominal possessive constructions: Komi-Permyak

- Frequency of **non-agreeing possessives** :

	nr. of examined PNP-s	lack of possessive agreement
corpus	100	83%
elicitation	100	90%

Non-agreeing possessives in Udmurt: Previous findings

- **sometimes inalienable** possessives do not agree (Vakhrushov 1970)
- lack of agreement only occurs in **external** poss. constructions (Edygarova 2010, Pleshak 2018: 144)
- no lack of agreement in **adnominal (internal)** possessive constructions?

Non-agreeing possessives in Udmurt

- distinguishing internal (adnominal) possessive constructions from external possessive ones is not always straightforward
 - presumably internal possession (→ adnominal construction):

(23) *Mil'am kolkhoz uzyr.*

1SG.GEN kolkhoz rich

'Our kolkhoz is rich.' (Vakhrushev 1970: 101)

Non-agreeing possessives in Udmurt

- clearly internal possession (→ adnominal construction):

(24) *Rad'io 54 Network – Ital'i-yś Kalabrija region-len*

radio 54 Network Italy-ELA Calabria region-GEN

Redžo-Kalabrija provinci-len Lokri kommun-len tuž-ges

Reggio-Calabria province-GEN Locri village-GEN very-CMPR

kema uža-ś rad'iostancija.

for_a_longtime work-PTCP.IMP radio_station

‘Radio 54 Network is the most long-standing radio station of Locri village of the Reggio-Calabria province of the Calabria region of Italy.’ (Udmurt corpus)

Non-agreeing possessive structures in Udmurt

Possessee → Possessor ↓		inalienable					alienable			
		body part	other part-whole	kinship term	other animate	abstract	other inanimate	human	anim. -human	inanim.
animate	1st/2nd Pron	✓✓		✓		✓✓✓		✓		✓✓✓
	3rd Pron									
	PropN	✓✓			✓	✓✓✓✓				✓
	other human					✓✓				
	-human	✓								✓✓
inanimate	concrete		✓✓✓			✓				
	abstract		✓			✓		✓✓		✓✓

Syntactic function of non-agreeing possessives in Udmurt

syntactic function	occurrences	total
S (of tr. V)	✓	1
S (of unerg. V)	✓✓✓	3
S (of unacc. V)	✓✓✓✓✓✓✓✓✓✓✓	10
S (of nom. sentence)	✓✓✓✓✓✓✓✓✓✓	9
nom. predicate	✓✓✓✓✓✓✓	6
O	✓	1
Gen	✓✓	2
other PP	✓	1

Possessive agreement in adnominal possessive constructions: Komi-Permyak

- Frequency of **non-agreeing possessives** :

	nr. of examined PNP-s	lack of possessive agreement
corpus	100	83%
elicitation	100	90%

Komi-Permyak: Obligatory agreement in certain cases?

- with certain possessives, the informants considered lack of agreement ungrammatical :

(25) *Nasta-lön / nyvka-lön / sylön ki*(-ys) vyn.*
Nastyá-GEN/ girl-GEN / 3SG.GEN hand-3SG strong
'Nastyá's/the girl's/her hand is strong.' → **body part**

(26) *Kytčöm tenat ním*(-yt)?* → **abstract noun**
how 2SG.GEN name-2SG (inalienable)
'What's your name?'

Non-agreeing possessives in Komi-Permyak: Syntactic function of the possessee

- not clear whether the syntactic function of the possessee plays a role:

(27) *Menam mam(-ö) öd'dön basök.*
1SG.GEN mother-1SG very nice
'My mother is very nice.'

(28) *Me töd-i Petra-liś von(-sö).*
1SG know-PST Peter-ABL brother-ACC.3SG
'I knew Peter's brother.'

Non-agreeing possessives in Komi-Permyak: Syntactic function of the possessee

- BUT: if the possessee is the part of a nominal predicate, agreement seems to be ungrammatical:

(29) Context: 'What's this?'

Eta Nasta-lön néböğ(-ys).*

DEM Nastya-GEN book(-3SG)

'This is Nastya's book.'

Non-agreeing possessives: Conclusions

- still not clear if the examined properties (lexical properties and animacy of the possessor, inalienability, animacy and syntactic function of the possessee) condition the lack of poss. agreement
- lack of agreement is possible both in external and internal poss. constructions
- lack of agreement is rare in Udmurt and surprisingly more common in Komi-Permyak → due to
 - the stronger influence of Russian on Komi-Permyak?
 - the influence of the neighboring Turkic languages in the case of Udmurt?

Status of indefinite articles

- **NoArt**: The language does not have articles.
- **NoIndefArt**: The language does not have indefinite articles.
- **Indef=Num**: The indefinite article is the numeral 'one.'
- **Indef~Num**: The indefinite article is not identical to the numeral 'one,' but it can be etymologically traced back to that numeral.
- **IndefNotNum**: The indefinite article bears no resemblance to the numeral 'one.'
- **Indef=Aff**: Indefiniteness is marked by an affix on the noun.
- **IndefArt=NonDefArt**: Definiteness is a marked feature, while indefiniteness is indicated by the lack of such a marking.
- **+DoubleIndef**: A functional distinction is made between the use of and lack of indefinite articles, such as contrasting the nonspecific and the generic.
- Komi-Permyak: **NoIndefArt**; Mari, Udmurt: **NoArt**

Status of indefinite articles (Meadow Mari)

- Meadow Mari does not have the category of indefinite articles. However, the numeral *ik* 'one' may occasionally function as an indefinite article:

(30) A *ik* *kečə-n ik* *marij-ən* *klat-še* *kevyt* *lij-ən*
but one day-GEN one Mari-GEN shed-3SG shop be-PST2.3SG
počəlt-o *jal-lan.*
open-PST1.3SG village-DAT

'But one day a Mari's shed was opened as a shop for the village.' (Korp.)

Status of indefinite articles (Udmurt)

- Udmurt: **NoArt**

- Udmurt: the numeral *odig* 'one' may occasionally function as an indefinite article

(31) *Noš odig čukna anu noš ik zarež-e myny-ny*
CONJ one morning Anu again PCL sea-ILL go-INF
dašašky-ku sipsik vekči kuara-jen-yz kur-i-z:
get_ready-PTCP.SIM Sipsik thin voice-INSCOM-3SG ask-PST-3SG

'One morning, when Anu was getting ready again to go to the sea, Sipsik asked this in a high pitched voice:' (UdmCorp.)

Status of indefinite articles (Udmurt)

(32) *Anu-ly tuž-ges no zol kelš-i-z odig mułtfilm.*
Anu-DAT very-COMP PCL strong like-PST-3SG one cartoon

‘Anu liked a cartoon very much.’ (UdmCorp.)

- refers to a particular (specific) member of a group/class (referring indefinites, see Givón 2001: 65, 451–452)
- Ongoing grammaticalization process?
 - At the end of the process: **Indef=Num**: The indefinite article is the numeral ‘one.’ ?
- Differentiation between the two categories can be problematic
 - Distinguishing factors : e.g. word order
 - Udmurt: *odig* ‘one’ as indefinite article + its numeral usage: always precedes the noun/NP
 - Frequency of occurrence?
 - the role of frequency in grammaticalization: debated (see, e.g. Heine & Kuteva 2007: 38–39), but: the indefinite article usually belongs to the most frequently used words of a language (see, e.g. Pountain 2019)

(Status of indefinite articles: Finnish parallels)

- the use of numeral yksi ‘one’ as indefinite article: already in the 16. century (Byble translations) (Kolehmainen & Nordlund 2011)

(33) *Niin oli sijmon petarilla yxi miecka ia wetij*
so be.PST.3SG Simon Peter-ADE one sword CONJ draw.PST.3SG
se-n vlghos.
DEM-ACC out

‘Simon Peter had a sword, and he drew it.’ (UEK, 1537–44; Kolehmainen & Nordlund 2011: 8)

- contact with other languages may have accelerated changes already occurring (external/internal causes of linguistic change) (Kolehmainen & Nordlund 2011)
- spoken Finnish (Kolehmainen & Nordlund 2011), rare; specific, indefinite (VISK 2008: §1410, 1418)

(34) *Gunilla, yks tyhmä akka (...) hak-i mut koulu-sta.*
Gunilla one stupid woman pick_up-PST me.ACC school-ELA

‘Gunilla, a stupid woman, picked me up from school.’ (ISK 2004: 732; Kolehmainen & Nordlund 2011: 5)

Distributive numerals

- DNs express how a given quantity is distributed within a set of entities
- Semantically: **distributive share, distributive key** (makes the restrictions of the distribution clear: per agent/action)
- **Syntactically**: a DN is subordinate to a nominal or verbal head
 - **Nominal**: quantifies the noun numerically
 - **Verbal**: expresses degree

Distributive numerals (Udmurt)

- **NoDN:** Distributive numerals do not exist in the language.

(35) *Maša no saša byden kuiń čöž yb-i-zy.*
Masha and Sasha each three duck shoot-PST-3PL
'Masha and Sasha shot three ducks each.' (Y. S.) (nominal head)

(36) *Turist-jos-ty byden kyk ležy-l-i-zy komnata-je.*
tourist-PL-ACC each two let-FREQ-PST-3PL room-ILL
'Tourists were let into the room two at a time.' (Y. S.) (verbal head)

Distributive numerals (Komi-Permyak)

- **Suf(DN)(V)**: A special suffix, or special suffixes, can attach to the stem only within verbal heads.
- nominal head → cardinal numeral (nominative):

(37) *Mikov da saša vij-i-sö kuim utka-ön.*

Mikov and Sasha kill-PST-3PL three duck-INS

‘Mikov and Sasha killed three ducks each.’ (L. P.)

- verbal head → cardinal numeral-INS:

(38) *Akań-ńe-sö teć-a-m vit-ön korobka-ez-a-s.*

doll-PL-ART put-PRS-1PL five-INS box-PL-ILL-3SG

‘We put five dolls into each box.’ (‘We put the dolls into boxes – we put five at a time’) (L. P.)

- verbal head: the rate at which the dolls were put in the boxes

Distributive numerals (Meadow Mari)

- **NoDN / Dupl(DN)(N)**: Reduplication of the stem can only occur within nominal heads.
- Meadow Mari uses the postposition *dene* ‘with’ to form distributive numeral constructions. It is placed after the noun and not the numeral, so the distributive numeral cannot be distinguished within the category of numerals:

(39) miša den saša kum ludo dene pušt-ən-ət.
Misha and Sasha three duck with shoot-PST2-3SG
‘Misha and Sasha shot three ducks each.’ (N. I.) (nominal head)

(40) korobka-ške vič kurčak dene pəšt-ena.
box-ILL five doll with put-1PL
‘We put five dolls into each box.’ (‘We put the dolls into boxes – five at a time’)(N. I.)
(verbal head)

- The numeral can reduplicate (optional, nominal heads):

(41) miša den saša kum-kum ludo dene pušt-ən-ət.
Misha and Sasha three-three duck with shoot-PST2-3SG
‘Misha and Sasha shot three ducks each.’ (N. I.)

Distributive numerals in the Volga-Kama area and in the Ugric languages

marker	Tatar	Chuvash	Bashkir	Udmurt	Komi-Permyak	Meadow Mari	Hungarian	Surgut Khanty	Northern Mansi
Distributive suffix	X	X	X				X (verbal heads)	X (verbal heads)	
Reduplication	X (verbal head)					X (nominal heads, optional)	X (nominal heads)		X (nominal heads)
Suffix (INS)					X (verbal heads)		!		X (verbal heads); Px+INS
Particle or preposition before the numeral								X (nominal heads)	

Action nominal constructions

- Derived from a verb and expresses an action/event/state (with the original arguments of the verb)
- Shows features of verbs and nouns (possessive structures)
- Classification based on the syntactic treatment of **S**, **A**, and **P** as verbal arguments of an action nominal
 - **S**: the argument of a monovalent intransitive verb expressing agentive action
 - **A**: argument and agent of a divalent transitive verb that expresses agentive action
 - **P**: argument and patient of a divalent transitive verb expressing agentive action
- Problems with classification of action nominal constructions

Action nominal constructions (Udmurt)

- Constructions with suffixes *-(o)n* and *-(e)m*
- Differences (cf. , e.g. Georgieva 2018: 48–57) :
 - forms with *-on*: more nominal properties
 - temporal reference: *-(e)m* suffix: past interpretation

(42) *Tolon* *maša* *no* *peťa* *buskeľ-zy-leś* *kućapi*
yesterday Masha and Petya neighbour-3PL-ABL puppy
bašt-em-zy *śaryś* *veraśk-i-zy.*
buy-NMLZ-3PL about talk-PST-3PL

‘Yesterday Masha and Petya were talking about having bought a puppy from the neighbours.’ (Georgieva 2018: 54)

(43) *Tolon* *maša* *no* *peťa* *buskeľ-zy-leś* *kućapi*
yesterday Masha and Petya neighbour-3PL-ABL puppy
bašt-on-zy *śaryś* *veraśk-i-zy.*
buy-NMLZ-3PL about talk-PST-3PL

‘Yesterday Masha and Petya were talking about buying a puppy from the neighbours (in the future)’. (Georgieva 2018: 54)

Action nominal constructions (Udmurt)

- S argument: genitive

(44) *Mon solen lykt-em-ez-ly tuž šumpot-i.*
I (s)he.GEN come-NMLZ-3SG-DAT very be_glad-PST.1SG
'I was very glad that (s)he came.' (Keľmakov – Hännikäinen 2008: 228)

- A argument: genitive (if the action nominal is in nominative):

(45) *Dyšetis-len dyšetskiš-jos-ly urok-jos-yz tros pol valekt-em-ez*
teacher-GEN student-PL-DAT lesson-PL-ACC many times explain-NMLZ-3SG
umoj val.
good be.PST

'It was good that the teacher explained the lesson to the students many times.' (Y. S.)

Action nominal constructions (Udmurt)

- A argument: ablative (if the action nominal is in accusative):

(46)	dyšetis-leś	dyšetiskis-jos-ly	urok-jos-yz	tros	pol
	teacher-ABL	student-PL-DAT	lesson-PL-ACC	many	times
	valekt-em-ze	vań-zy	tod-o.		
	explain-NMLZ-3SG.ACC	every-3PL	know-3PL		

‘Everybody knows that the teacher explained the lesson to the students many times.’ (Georgieva 2018: 49)

- but: property of possessive constructions in general and not the result of nominalization
- P argument can be marked (16) or unmarked (12), which again characterizes Udmurt P arguments in general (not confined to action nominals)
- **SAPossPVtype**: The construction is of the possessive–accusative type. The verb becomes a noun, with S and A treated as its possessors and P retaining its accusative position.

Action nominal constructions (Komi-Permyak)

- Komi-Permyak grammars usually do not accept *nomen actionis* as an independent category but consider it a part of the perfect participle paradigm (cf. Lobanova 2017, Ponomareva 2010)
- Bartens (2000): nouns with *-öm* suffix can be regarded as *nomen actionis* (can occupy the subject position)
- S: genitive

(47) *Nasta-lön uż-öm vöi-i bur.*

Nastya-GEN sleep-NMLZ be-PST good

‘Nastya’s sleep was good.’ (L. P.)

Action nominal constructions (Komi-Permyak)

- P: original case marking

- A argument: Instrumental

(48) *Nasta-ön* *stat'ja* *giž-öm* *kyśś-i-s* *dyr.*
Nastya-INS article write-NMLZ last-PST-3SG long

‘Writing the article took Nastya a long time.’ (L. P.)

- A argument: Genitive

(49) *Nasta-lön* *stat'ja* *giž-öm* *kyśś-i-s* *dyr.*
Nastya-GEN article write-NMLZ last-PST-3SG long

‘Writing Nastya’s article took a long time.’ (L. P.)

‘Writing the article took Nastya a long time.’ (L. P.)

- **SAPossPVtype & Else** (The language uses a specific strategy)

- requires further research

Action nominal constructions (Meadow Mari)

- Meadow Mari uses the passive participle form of the verb (-*mE*) in its action nominal constructions. The passive participle of action nominals can take possessive person markers:

(50) *Məj-ən pisma-m vozə-m-em šuko žap-əm nal-eš.*
 I-GEN letter-ACC write-PTCP.PASS-1SG much time-ACC take-3SG
 ‘Writing a letter takes a lot of time for me.’ (T. E.)

- S and A: possessive form (Gen), irrespective of whether they are pronominal (optional) or nominal S/A

(51) *No Jurij Jerofejev-ən Msarij mer kaŋaš-əm petər-aš*
 but Yuriy Yerofeyev-GEN Mari World Council-ACC close-INF
kül-mö nergen serə-mə-že pogən-ən radam-ž-əm
 must-PTCP.PASS about write-PTCP.PASS-3SG meeting-GEN order-3SG-ACC
puž-en o-g-əl.
 disturb-PST2.3SG NEG-3SG-is

‘The order of the meeting was not disturbed by Yuriy Yerofeyev’s writings on the necessity for the dissolution of the Mari World Council.’ (Arkhangelskiy 2019)

Action nominal constructions: Meadow Mari

- P: ACC

(50) *Məj-ən pisma-m vozə-m-em* *šuko* *žap-əm* *nal-eš.*
I-GEN letter-ACC write-PTCP.PASS-1SG much time-ACC take-3SG

‘Writing a letter takes a lot of time for me.’ (T. E.)

- **SAPossPVtype:** The construction is of the possessive–accusative type. The verb becomes a noun, with S and A treated as its possessors and P retaining its accusative position.

Results

- numbers of parameters: 207 (205 for Komi-Permyak)
- same values for all the languages: 97
- same values for Udmurt and Meadow Mari: 27
- same values for Udmurt and Komi-Permyak: 22
- same values for Meadow Mari and Komi-Permyak: 14
- different values: 47
- Further research:
 - starting point for comparative studies (Uralistics, linguistic typology)
 - explanations for the results (possible genealogic, contact phenomena?)

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Thank you!

Tay!

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Tay!

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