# Possessive suffixes in constructions with quantifiers in Permic languages

#### Natalia Serdobolskaya

Institute of Linguistics, Russian Academy of Sciences/Pushkin State Russian language Institute

THE WORK IS SUPPORTED BY RFBR GRANT 20-512-14003 ASCF\_A"LINGUISTIC DIVERSITY IN THE VOLGA-KAMA REGION. TYPOLOGY AND LANGUAGE DOCUMENTATION BETWEEN VOLGA AND URALS"

#### Outline of the talk

- 1. The puzzle of indefinite possessive NPs in Permic.
- 2. "Referential function" of possessive expressions.
- 3. Morphosyntax of "indefinite sub-set constructions".
- 4. Conclusions

## 1. The puzzle of indefinite possessive NPs in Permic

## Background on possessives in Permic

- Possessive markers in Permic languages are widely used outside the contexts that have been described as possessive relations [Aikhenvald, Dixon 2013].
- In particular, they can signal definiteness [Schlachter 1960, Suihkonen 2005, Edygarova 2010, Winkler 2011, Collinder 1957: 276, Tauli 1966: 148; Klumpp 2008, 2014].
- As a consequence, there are works that consider the hypothesis of grammaticalization of possessive markers in Permic as definite articles [Fraurud 2001].

## Possessive markers signaling afore-mentionedness

#### Beserman Udmurt

	mašina	lâkt-e.
go.out-VN-NLOC-LOC/ILL-P.1(SG)		
šusa	dugd-i=no	
COMPL	stop-PST(1s	G )=A D D
dugd-i-z.		
stop-PST-3(	sg)	
	šusa COMPL dugd-i-z.	car šusa dugd-i=no COMPL stop-PST(1s

'As I went out (of the building), a car approached. I stopped to let the car go by, **the car** stopped, as well.' [C]

## Indefinite "definites": the puzzle

However, possessive markers can be used in contexts that require an indefinite reading: Pechora Komi-Zyrian

kutčəm-kə	iz-jas	seni	da	myj	da.	iz-sə
what.like-INDEF	stone-PL	there	and	what	and	stone-ACC.P.3(SG)
boš't-i-s	ǯер-а-s			š'uj-i-s	5	ət'ik-a-s
take-PST-3(SG) P.INESS/ILL-P.3(SG)	pocket-P.INE	ESS/ILL-P.	.3(sg)	poke-	PST- <b>3(</b> S0	G) one-

{A man found a hut in the wood. There were chests and barrels inside. He opened one barrels.} There was sand and stones inside or something like that. He took **one of the stones** and poked it into his pocket, into one of his pockets.' [C]



POSS encode indefinite elements of a definite set or part of a mass.

## Indefinite "definites": the puzzle

• They also occur with indefinite pronouns:

```
Pechora Komi-Zyrian
```

```
ət'ik-səšu-i-s-nyPedəš'əj-əniməd-səone-ACC.P.3(SG)say-PRT-3-PL Fedosiy-INSTRand other-
```

ACC.P.3(SG)

Al'ona-an vot

Alyona-INSTR here

(Eremey had two children.) 'One of them was called Fedosiy and the other one Alyona.' [C]

Possessives also occur with interrogative pronouns:

Udmurt (Beserman)

```
a kud-iz petux-ez? ted'i-jez il'i gord-ez?
and which-p.3(sg) rooster-p.3(sg) white-p.3(sg) or
red-p.3(sg)
```

'Which of the roosters? The white one or the red one?' [C]

The elements in question focus constitute new information; however, they can take possessive markers.

## Indefinite "definites": the puzzle

• Finally, they are used with quantifiers and numerals (in contexts of indefiniteness)

Udmurt (Beserman)

ǯ'aǯ'eg	pi-jed=pe	kêk-ez	even'	tare,
goose	son-P.2(SG)-CIT	two-P.3(sG	) not.more then	
«ma-lə̂	kâk-ez	u-z	luâ?»	
what-DAT	two-p.3(sg)	NEG-3	become(sg)	

<sup>&#</sup>x27;She said, two of your baby geese are lost, why are they not here?' [C]

### Another puzzle: the marker must be 3.SG

Pechora Komi-Zyrian

una kn'iga-**sə** e-n boš't.

many book-ACC.P.3(SG) NEG-2 take

[The boy is borrowing some books from the speaker.] 'Don't take many books (you won't manage to read them).' [E]

## The goal of this study

- WHY do Permic languages make use of possessive markers in these contexts?
- WHY do they use 3.SG for contexts where the possessor is the speaker/hearer?

#### The clue:

• Common feature of all the examples given above: they all refer to a subset of a definite set. This use is described in terms of partitive specificity in [Klumpp 2008: 125–127].

## 2. "Referential function" of possessive expressions

## Material and methodology

- Pechora dialect of Komi-Zyrian
- Beserman dialect of Udmurt

#### Methods:

- elicitation in April 2019 in the village of Shamardan, Udmurt Republic
- elicitation in 2002-2003 in the village of Yeremeyevo, Komi Republic
- corpus analysis:

http://web-corpora.net/KomiTexts/ beserman.ru • Permic POSS are widely used to encode afore-mentionedness:

Pechora Komi-Zyrian

```
viǯʻəd-a-m a ošk-ys kotərt-ə mijan-yšʻ loot-NPST-1PL and bear-P.3(SG) run-PRS.3SG we.OBL-EL bok-ə vər-lan'.
```

side-ILL forest-APPROX

(My sister shouted that she saw **a bear**.) 'We look and see the bear running by our side towards the wood.' [C]

• Based on similar data, many authors argue that Permic possessives can be analyzed as definiteness markers.

- However, [Suihkonen 2005; Klumpp 2008, 2014; Fraurud 2011; Serdobolskaya, Usacheva, Arkhangelskiy 2019] show that POSS have not grammaticalized in this function:
- first, they are not obligatory in contexts of definiteness
- second, they can be used in contexts of indefiniteness, nonreferential contexts etc.

#### Definition of definiteness

• Formal semantic works describe definiteness based on exhaustivity: the referent should be uniquely identified in a given context. It does not necessarily presuppose familiarity to the hearer:

Go into the next room and bring me the bag of chips lying on the bed. [Birner, Ward 1994]

non-familiar, but uniquely identifiable object

• [von Fintel 1994]: the referent must be identified in a given context, and not in the whole world:

Everyone had a great time. [von Fintel 1994: 28]

Thus, everyone does not mean "everyone in the world", but "everyone in the given situation", e.g. at a party.

• [Sharvy 1980]: plural definites are characterized with the notion of maximality:

The books arrived.

Here the referent is defined as the maximal number of books fitting the description in a given context. • Prepositive genitives in English, French and some other languages also require the exhaustivity condition [Barker 2011]:

My children are smart. (Barker 2011: 1118)

Harold's tools are over there.

• Barker (2011): "All of Harold's tools (at least, all of Harold's tools that are going to be relevant for present conversational purposes)" [Barker 2011: 1118]. This condition is not fulfilled if the POSS is in predicative position, *John is my friend*.

• By contrast, Permic POSS do not require maximality:

Udmurt (Beserman)

kal' **petuk-me** vand-ono val tože, marâm kâk now rooster-ACC.P.1(SG) cut-DEB be.PST also HES two petuk, no mar-ke so <...> so mar-ke... l'abom-i-z rooster but what-INDEF that that what-INDEF grow.weak-PST-3(SG)

'I need to slaughter one of my roosters, I have two, and this one grew somewhat weak.' [C]

Pechora Komi-Zyrian

**č'oj-əj** gətyr-a, mužyk-a že.

sister-P.1sg wife-ATTR man-ATTR PTCL

'(We went fishing and first went to my sister's village.) My sister is already married.' [K]

 Maximality is not required also when POSS are used with aforementioned NPs:

Udmurt (Beserman)

```
nomôr-ze=notros=gesl'uka-j,možet=pi,worm-ACC.P.3(SG)=ADDmany-CMPRcollect-PST-1Smay.be=AUTOCITzəktroskut-oč'orôg.bigmanycatch-FUT(1SG)fish
```

(I want to go fishing, and went to the vegetable garden to collect some worms.) 'I took many worms (As for worms, I took them many) hoping to catch many fish.' [C]

- Thus, Permic POSS can be used to encode an indefinite part of a definite set. This meaning is also attested with POSS in Izhma dialect of Komi-Zyrian and Meadow Mari [Simonenko 2017; Simonenko in press]. The analysis suggested by [Simonenko 2017]:
- (i)  $[[3sg]]^{g,c}$  ( $[[table]]^{g,c}$ )( $[[i]]^{g,c}$ ) is defined if g(i) is not a speaker or hearer, if defined,  $[[3sg]]^{g,c}$  ( $[[table]]^{g,c}$ )( $[[i]]^{g,c}$ ) =  $\lambda x$  .  $\lambda s$  . x is a table in s and R(x) (g(i)), where R = possession, inclusion, context, discourse situation [Simonenko 2017]
- Both possessive and non-possessive uses are involved.

- Thus, Permic POSS should not be described as definiteness markers, rather as "referential markers", see the analysis of [Simonenko 2017]. They must be anchored in the context or situation.
- This explains why they can be used both if referring to the aforementioned participant or to the subset of aforementioned participants.

#### Pechora Komi-Zyrian

```
a. n'əb kutčəm-kə kož'in / *kož'in-sə.
buy.IM P what.like-IN D E F gift / gift-A C C. P. 3 (S G )
'Buy him a gift.' [E]
b. š'et kutčəm-kə kož'in-sə.
give.IM P какой-IN D E F подарок-A C C. P. 3 (S G )
'Give him one of the gifts (we bought yesterday).' [E]
```

- Adding the POSS changes the meaning of the indefinite pronoun from "indefinite" to "indefinite from a definite set".
- The meaning of the POSS is, hence, 'referential anchoring', rather than definiteness itself.

#### Udmurt (Beserman) bətč'a tros baš't-i-d? a. mar-jos ton SO what-PL that number many take-PST-2(SG) you 'What have you bought, so many?' [E] baš't-i-d b. mar-jos-se ton mus-se=a, what-PL-ACC.P.3(SG) you take-PST-2(SG) liver-ACC.P.3(SG)-Q š'ulem-ze=a, ty-ze=a? heart-Acc.p.3(sg)-Q lung-Acc.p.3(sg)-Q

'What have you bought out of these – liver, heart, lungs?' [E]

## 3. Morphosyntax of "indefinite sub-set constructions"

## Pechora Komi-Zyrian: quantifier marking

• N + N **ət'ik mužyk**šu-ə məd-ys-ly dozmər leb-ž'-ə.

one man say-prs.3sg other-p.3(sg)-dat wood.grouse fly-smlf-prs.3sg

(There were three men in the boat.) 'One man tells to another one: "There is a wood grouse flying." (C)

```
• N + N-poss
```

i veš'ig ət'i **č'oj-əj** vošt-i-s kəmkət-sə. and at.all one sister-p.1sg loose-prt-3(sg) shoes-acc.p.3(sg)

(We went to the field with my sisters, then we saw wild horse, were afraid and flew away.) 'And even one of the sisters lost her shoes.' [C]

The word order is rigid in both cases.

• If the nominal head is not expressed, the possessive marker is obligatory:

```
korzina-yn kujl-i-s-ny jablok-jas, me basket-INESS lie-PST-3-PL apple-PL aprle-PL aprle-PL one-ACC.P.3(SG) one eat-PST(1SG) 'There were apples in the basket, I ate one of them.' [E]
```

## Why 3SG?

• The possessive can be 3SG, even in contexts where the possessor is the speaker/hearer:

una kn'iga-**sə** e-n boš't.

many book-ACC.P.3(SG) NEG-2 take

[The boy is borrowing some books from the speaker.] Don't take many books, (you won't manage to read them). [E] (repeated)

• The basic explanation: the 3SG is the default marker.

## Alternative explanation

- I hypothesize that the 3SG POSS in similar examples refers to the set, "many books from the abovementioned set of books". The set is 3SG, thus, this particular form is used.
- In case the nominal head is not expressed, the POSS is also 3SG for the same reason (the only attested possibility for Pechora Komi-Zyrian).

#### Beserman Udmurt

- The syntax of the NP is much more complicated.
- First, POSS are not obligatory in case of absence of the head noun:

ma **ted'**ê gine ju-i-m.

PTCL white only drink-PST-1PL

(Alcohol is being discussed.) 'Well, we only drink the white one.' [C]

### Usacheva, Arkhangelskiy (2016 and other works)

- Both the noun and the modifier can take the POSS
- The noun and the modifier can change places or be separated by elements not belonging to the NP, e.g. the verb:

```
tin' mon nôl-me zək-se š'ot-i, o-t' here I daughter-ACC.P.1(SG) big-ACC.P.3(SG) give-PST(1SG) that-PROL ž'ankino-e š'ot-i, nôl-me.

Ziankino-ILL daughter-PST(1SG) daughter-ACC.P.1(SG)

'I gave my elder daughter in marriage, I have her to Ziankino, my daughter.' [C]
```

```
gord-ez=na val vin-ez.
red-p.3(sg)-yet be.pst wine-p.3(sg)
'There was also RED wine.' [K]
```

- [Arkhangelskiy, Usacheva 2016]: these constructions contain two NPs, which explains the presence of two POSS and the possibility of word order change and verb insertion.
- This happens if the head and the modifier belongs to different components of information structure (IS):

I gave my daughter... the elder one in marriage...

the red one we also drink, the wine.

A. QUANT-POSS + n-POSS

odig-**ə̂z** nə̂l-**ə̂** 'one of my daughters' [C]

one-P.3(SG) girl-P.1SG

B. QUANT + N-POSS

odig mad'-ed 'one of your songs' [C]

one song-P.2(SG)

C. QUANT-POSS + N

odig-**3z** gord kureg 'one of the red hens' [C]

one-P.3(sg) red hen

not frequent in the corpus; unacceptable for NPs with modifiers

D. QUANT + N

odig nəl 'one of the girls (who came from Moscow)' [C]

one girl

## NPs with quantifiers

• With quantifiers, the two POSS structure can also be used in case of contrast, different components of the IS. However, it is not the necessary condition.

tať ten'=n'i petuk-te odig-ze here-already this-PROL rooster-ACC.P.2(SG) one-ACC.P.3(SG) pun-i-m=n'i, tak ved'? asmes put-PST-1PL-already REFL.1PL SO **PTCL** 

'Then we have put one of the roosters here ourselves, haven't we?' [C]

- The example is taken from the experiment with cards; the cards only included one rooster. Thus, it cannot be hypothesized that *odig* 'one' here serves to identify one of the set. The whole group belongs to the sentence background, as the intensifier is focused.
- Thus, unlike with modifiers, possessives on quantifiers may occur even if the quantifier and the noun belong to one and the same component of the information structure.

## Udmurt: person, number of the possessive

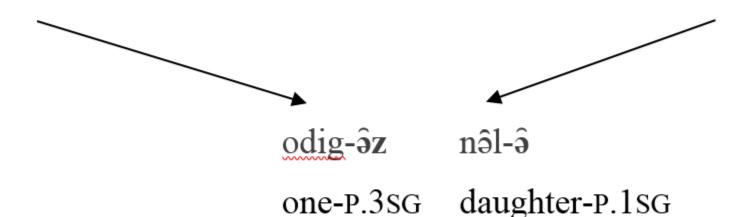
```
n'an'-ez š'i-i,
  mon šor-em
                                                        muket-se
a.
          cut.bread-NZR bread-ACC eat-PST(1sg)
                                                        other-
ACC.P.3(SG)
n'an'-ze / n'an'-me
                                                   pənə-lə.
                                  kušt-i
bread-Acc.p.3(sg) bread-Acc.p.1(sg) throw-pst(1sg)
                                                   dog-DAT
    *...muket-me
                            n'an'-me...
     other-ACC.P.1(SG) bread-ACC.P.1(SG)
a.=b. 'I ate one piece of bread, and threw another one to the dog.' [E]
```

## Explanation

• The 3SG possessive does not refer to the actual possessor, but to the set.

the set of 'my daughters'

the possessor (= the speaker)



'one of my daughters', lit. 'one my daughter' [C]

#### What is the head?

• In Russian, the head is the quantifier: according to the criterium of morphosyntactic locus [Zwicky 1985; Тестелец 2001: 84–86]:

увидел одн**у** из девушек, ушел с одн**ой** из девушек

• By contrast, in Beserman Udmurt the head is, obviously, the noun:

```
...kwin' č'in'ê-de gine č'oš vož'.
three finger-ACC.P.2(SG) only together hold.IMP.SG
```

'As you are drawing don't hold your pencil with your fist, just hold it with three fingers.' [E]

```
kâk vojna-ez aǯ'-i-z.
two war-ACC see-PST-3(SG)
```

'[He] survived (lit. saw) two wars.' [C]

• Thus, the head of the constructions with quantifiers is the noun.

## 4. Conclusions

- The Permic possessive markers do not exhibit exhaustivity, which is a property of articles and possessive pronouns in English, French and other languages [Simonenko 2017; Simonenko in press]. This is why they can denote an indefinite part of a definite mass or an indefinite subset of a definite set (e.g., there were some stones in the barrel, and he took a stone). Therefore, it is incorrect to characterize them in terms of definiteness, rather as "referential anchors".
- Komi-Zyrian: In constructions with numerals, quantifiers and pronouns the noun is a head. It can take the 3SG.POSS even if the possessor is the speaker/hearer. My explanation is that the POSS refers to the set.
- Udmurt: There are two types of constructions with numerals and quantifiers: 1) headed by the noun; 2) with two NPs and the POSS on the quantifier/numeral. In the latter case, the POSS on the quantifier refers to the set, and the POSS on the noun refers to the possessor.

#### References

Arkhangelskiy T. A., Usacheva M. N. 2016. Functions of the 3sg Possessive in Beserman Udmurt: Corpus Analysis. Talk given at the 13<sup>th</sup>

Conference on Typology and Grammar for Young Scholars (Saint-Petersburg, 24–26 November 2016).

Barker C. 2011. Possessives and relational nouns. Semantics: An international handbook of natural language meaning, 2. Pp.1109–1130. Birner B., Ward G. 1994. Uniqueness, familiarity, and the definite article in English. In Proceedings of the 20th meeting of the Berkeley Linguistic

Society. Pp. 93-102.

Collinder B. 1957. Survey of the Uralic languages. Stockholm: Almkvist & Wiksell.

Décsy G. 1990. The Uralic Protolanguage: A Comprehensive Reconstruction. Bloomington, Indiana: EUROLINGUA. Dobrovie-Sorin C. 2004. Genitives and determiners. In Lander Y. A., Kim J.-Y., Partee B. H. (eds.) Possessive and beyond: Semantics and Syntax.

University of Massachusetts Amherst. Pp. 115–132.

von Fintel K. 1994. Restrictions on Quantifier Domains. Doctoral Dissertation, University of Massachusetts Amherst.

Fraurud K. Possessives with extensive use: A source of definite articles? In Baron I., Herslund M., Sørensen F. (eds.). Dimensions of

possession. Typological Studies in Language. Amsterdam; Philadelphia: John Benjamins, 2001. Pp. 243–267.

Heller D. 2002. Possession as a lexical relation: evidence from the Hebrew Construct State. In WCCFL 21 Proceedings. 2002.

von Heusinger K., Kornfilt J. 2017. Partitivity and case marking in Turkish and related languages. In Glossa: a journal of general linguistics 2(1):

20. Pp. 1–40.

Klumpp G. 2008. Differentielle Objektmarkierung & Informationsstruktur in Dialekten des Komi. Dr. phil. habil. diss., München.

Künnap A. 2006. Historically problematic morphosyntactic features in Uralic languages. München: LINCOM EUROPA.

Nikolaeva I. A. 2003. Possessive affixes as markers of information structuring: Evidence from Uralic. In Suihkonen P., Comrie B. (eds.)

International Symposium on Deictic Systems and Quantification in Languages spoken in Europe and North and Central Asia. Collection of papers.

Izhevsk; Leipzig: Udmurt State University; Max Planck Institute of Evolutionary Anthropology. Pp. 130–145.

Raun A. 1988. Proto-Uralic Comparative Historical Morphosyntax. In Sinor D. (ed.) The Uralic languages. Description, history, and foreign influences. Leiden, New York, København, Köln: Brill. Pp. 555–571.

Schlachter W. 1960. Studien zum Possessivsuffix des Syrjänischen. Berlin: Akademie Verlag.

Serdobolskaya N., Usacheva M., Arkhangelskiy T. 2019. Grammaticalization of possessive markers in the Beserman dialect of Udmurt. In Johanson L., Nevskaya I., Mazzitelli L. F. Linguistic possession. New insights from the languages of Europe and North and Central Asia. (Studies in Language Companion Series.) John Benjamins, 2019. Pp. 291–311.

Sharvy R. 1980. A more general theory of definite descriptions. In Philosophical Review 89. Pp. 607–24.

Siegl F. 2015. The structure of noun phrases with referential Px.2p in Northern Samoyedic. In Tomsk Journal of Linguistic and Anthropology 1 (7). Pp. 21-31.

Simonenko A. 2017. Towards a semantic typology of specific determiners. In The 21st Amsterdam Colloquium. Pp. 425–434.

Simonenko A. In press. Full vs. clitic vs. bound determiners. To appear in the Oxford Handbook of Determiners. Oxford University Press. Suihkonen P. On the categories and functions developed from the possessive and deictic suffixes in Udmurt. In Hasselblatt C., Koponen E.,

Widmer A. (eds.) Beiträge zur Finnougristik aus Anlaß des sechzigsten Geburtstages von Hans-Hermann Bartens. Wiesbaden: Otto Harrassowitz, 2005. Pp. 401-427.

Tauli V. 1966. Structural tendencies in Uralic languages. Indiana University Publications (Uralic and Altaic Series 17). The Hague: Mouton & Co.

Winkler E. 2011. Udmurtische Grammatik. Wiesbaden: Harrassowitz Verlag.

Zwicky A. 1985. Heads. In Journal of linguistics. Vol. 21. Pp. 109–132.