

Numerals as the context of code-switching in Moksha-Russian bilingual speakers

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Corpus study

Data:

Moksha – Mordvin, Finno-Ugric, Uralic
Immense Russian influence (Johanson 2000)
Corpus of Moksha spoken texts: 20103 word
Collected in the villages of Lesnoje Tsibajevo and Lesnoje Ardashevo
(the Temnikov district, the Republic of Mordovia)
2013-2017 years

Code-switching:

Inter-sentential (whole utterances)
Intra-sentential (words, phrases)

Problem:

33% (1/3) of entries of numerals are in Russian

Research questions:

Russian numerals in Moksha speech: code-switching or lexical borrowing?
Does the behavior of Numeral constructions fit the MLF model?

Background:

Theoretical assumptions:

- The borrowing of numerals is infrequent (Matras 2007:50)
- Hierarchy of contexts (Matras 2007:51)
more formal contexts > less formal contexts
higher numerals 1000, 100 > above 20 > above 10 > above 5 > below 5

Numeral constructions in Moksha (Sidorova, in press):

Cardinal numerals

- simple (1-10, 20, 100, 1000 + million)
- complex (21-29, 31-39, ...)
- compound (11-19, 30, 40, ...)

+ Ordinal, Distributive, Collective (+smaller subclasses)

Syntax of Numeral constructions

Small numerals (2-10) + Noun-PL

(1) *kafta c'ora-*(t)* [two boy-PL] 'two boys'

Big numerals + Noun-SG

(2) *s'is'gemän' c'ora-*(t)* [seventy boy-PL] 'seventy boys'

No shift to Russian system is attested

Parameters of annotation:

- Semantical class of the head noun (dependency on the topic)
- Morphological type of the numeral (based on Moksha)
 - Simple vs non-simple
 - Simple: small vs. big
- Semantic-syntactic type of the numeral
 - Cardinal
 - Ordinal
 - Distributive
 - Collective
- Presence of the head-noun
- Moksha morphological marking for external syntax
- Russian PPs

Difficulties of annotation:

Intrasentential CS vs. lexical borrowing (Myers-Scotton 1993)
→ No equivalent in Moksha - borrowing

Influence of the type:

Ordinal > Cardinal > Distributive > Collective
Ordinal: 51% of CS
Cardinal: 28% of CS
Distributive: 18% of CS
Collective: 0% of CS

Marking:

Numeral expression in Russian has to be well-formed:
Internal syntax – Russian

(3) *t'eja-st er'av-äl'-Ø sa-m-s*
PRON.DAT-3PL.POSS be.needed-PQP-SG come-INF-ILL

*пять часов-сә / *пять часә*

five hour.PL.GEN-IN five hour.IN

'They had to come at five o' clock'. (Kholodilova, p.c.)

Then it can take either Moksha marking (41% of oblique phrases in the Corpus) for internal syntax or Russian marking (59%): No examples for doubled marking

(4) *tosä ul'-i za tysyča=vosem'sot rublej*
there EX-NPST.3SG for 1800 ruble.PL.GEN
'There were for 1800 rubles'.

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Influence of the topic:

	RUS	MSH
date	25%	11%
money	16%	1%
educ.	12%	1%
time	11%	15%
person	4%	16%
kinship	5%	25%

Percentage of CS in topics:

91% of expressions about money contain a Russian numeral ...
money: 90%
education: 83%
year: 54%
measure: 46%
age: 36%
time: 27%
person: 11%
kinship: 9%

25% of phrases with Russian numerals denote a date
25% of phrases with Moksha numerals denote number of kins ...

27% of CS numeral expressions are headless

In the 73% phrases with heads 22% of ordinals are in Russian with the head in Moksha; 0% cardinals of cardinals are in Russian with the head in Moksha

Big/complex > Small

Big/complex: 46% of CS vs. Small: 17% of CS

Matrix Language Frame Model (Myers-Scotton 1993):

- Matrix Language* (determines the grammatical frame of the utterance) vs. *Embedded Language* (can only contribute content morphemes: nouns, verbs, adjectives, prepositions)
- "Embedded Language Island Principle allows EL system morphemes to appear in EL phrases consisting of all words from the EL". (Hok-Shing Chan 2009)
- "The Double Morphology Principle licenses an EL system morpheme (e.g. a plural morpheme) if it is "doubled" with its counter-part from the ML. (Hok-Shing Chan 2009)

Problem of congruence in CS studies (Sebba 2009):

"there must be some kind of "sameness" between the categories of the two languages"

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Analysis:

Obligatory Russian morphology for internal syntax on constructions with cardinal numerals & "language harmony" between the head and the dependent
→ Cardinal numeral constructions are EL islands
← Russian syntax of NCs is not congruent
Compatibility of Russian ordinal numerals with Moksha heads → no EL islands, their syntax differ from the syntax of CNCs, congruent syntax
Two possibilities in the marking of oblique phrases
→ PPs are not obligatorily EL islands ← Congruent syntax

Conclusions:

- Although one third of the numerals in the Moksha corpus is in Russian, it is due to **the phenomenon of CS**, not of the lexical borrowing
- The system of morphological marking of numerals and the internal syntax of Numeral phrases are conserved
 - Fragments containing Russian numerals obey the rules of CS (EL islands in the MLF Model)
 - Hierarchies for borrowability likelihood can reflect contexts of CS triggering as well

References:

- Johanson, L. (2000). Linguistic convergence in the Volga area. *Studies in Slavic and General Linguistics*, 28, 165-178.
Hok-Shing Chan, B. (2009). Code-switching between typologically distinct languages. In Bullock B.E., Toribio A. (Eds.) *The Cambridge Handbook of Linguistic Code-switching*. Cambridge: Cambridge University Press.
Matras, Y. (2007). The borrowability of structural categories. *Empirical Approaches to Language Typology*, 38, 31.
Myers-Scotton, C. (1993). *Duelling languages: Grammatical structure in codeswitching*. New York: Oxford University Press.
Sebba, M. (2009). On the notions of congruence and convergence in code-switching. In Bullock B.E., Toribio A. (Eds.) *The Cambridge Handbook of Linguistic Code-switching*. Cambridge: Cambridge University Press.
Sidorova M. A. (in press). Numeral constructions. *Elementy mokshanskogo jazyka v tipologicheskom osveschenii*. [Elements of Moksha language in typological perspective].