

Types of Moksha-Russian code-switching¹

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1. What this paper is about

Moksha and Russian have a long history of language contact, which results in a lot of switches to Russian in Moksha oral speech. Talking about code-switching (CS), I adopt Muysken's (2000) classification of types of CS: insertion, alternation and congruent lexicalization. The latter type is expected between the languages with similar grammars. As Moksha and Russian are **genetically and typologically different**, we do not expect cases of congruent lexicalization. However, I argue that some instances of CS in Moksha corpus have to be classified as **congruent lexicalization**. I explain this possibility by arguing that Moksha has undergone substantial grammatical changes under the influence of Russian. Therefore, the ease of CS in Moksha is a sign of language **convergence**: the grammars of two different languages are reanalyzed by bilinguals as structurally more equivalent.

2. Roadmap of the paper

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3. Sociolinguistic situation in Moksha

Moksha (and Erzya) is a Mordvin **Finno-Ugric** language of the Uralic family spoken by around **2000 people** in the Republic of Mordovia (Russia). There are around 5000 ethnic Moksha, and we can see that only around **40%** of ethnic Moksha speak the language.

Almost all Moksha speakers are **bilingual** and speak both Moksha and Russian. In the villages, Moksha is still the language of everyday communication, and most elderly speakers learned Russian only in school. Mordvin languages are official languages of the Republic of Mordovia, but all education is in Russian, and there are only language classes of Mordvin languages at schools. Now, there are less and less people in the villages, the children do not acquire Moksha, and more and more situations require communication in Russian: shopping, administration, education (Pussinen 2010).

The Russian spoken by Moksha differs from Standard Russian (Kashkin 2018).

While speaking in Moksha, all speakers use a great deal of Russian words, phrases, sometimes entire sentences: there is a lot of code-switching (CS) in Moksha speech.

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4. Theoretical background

4.1. The phenomenon

Code-switching is an alternation “between languages in an unchanged setting, often within the same utterance” (Bullock & Toribio 2009: 2). Here, I use this term broadly, without restricting the usage of CS to any specific property, such as premeditation and control, dynamicity or the size of switched units. In Table 1, I present different terms that were proposed for the contact phenomena that I consider to be CS in this paper.

Table 1: different properties of switching

Author	Term	Property
Poplack (1987)	<i>smooth vs. flagged CS</i>	no effort or attention vs. attention with pauses and comments
de Bot (2002)	<i>motivated vs. performance switching</i>	intentional vs. unintentional
Paradis (1993); Grosjean (2001)	<i>dynamic vs. static interference</i>	nonce vs. conventional
Poplack (1980)	<i>inter-sentential vs. intra-sentential CS</i>	on clause boundaries vs. within one clause

There is also a problem of distinguishing borrowing from CS. The two phenomena are considered by some researchers to be parts of the same continuum (Treffers-Daller 1991; Myers-Scotton 1993). Here, I adopt this idea and treat CS and borrowing uniformly.

4.2. The Matrix Language Frame Model

The most influential model of CS is **the Matrix Language Frame Model (MLF)** proposed by (Myers-Scotton 1993). This model presupposes that the two languages involved in the process of switching have different roles: one of them, the **matrix language (ML)**, provides the structural base of the sentence; the other one, the **embedded language (EL)**, provides content words.

She distinguishes three types of constituents:

- (i) **ML islands**, where there are no switches;
- (ii) **EL islands**, where the internal structure of the entire constituent obeys structural rules of the EL, being inserted in a ML clause;
- (iii) **mixed ML+EL constituents**, where the word order and functional morphemes are from the ML while some content words are in EL.

There are several approaches to determine the ML:

- (i) discourse-oriented (Berk-Seligson 1986): the ML is the language of the entire discourse;
- (ii) morpheme-counting (Myers-Scotton 1993): the ML is the language is the one which provided more morphemes to the sentence;
- (iii) structural (Klavans 1985; Treffers-Daller (1994): the ML is the language of the main verb of the clause or the complementizer;

(iv) left-to-right parsing (Doron 1983): the ML is the language of the first word of the sentence.

Muysken, whose classification I use in my research (see section 4.3), adopts the structural approach. He assumes that it is not obligatory to have one ML for the entire clause, what is more important is the ML of a constituent (2000: 67). The problems of determining the ML are also characteristic for congruent lexicalization (section 7.3).

As Sebba (1998) notes, most researchers imply that there must be a sufficient congruence between the two fragments taken from different languages for CS to be possible.

4.3. Classification of intra-sentential CS

Muysken (2000) proposes a **classification of intra-sentential CS** distinguishing three processes: insertion, alternation and congruent lexicalization.

Insertion is a classic case of occurrence of elements from EL in larger ML structures.

Alternation does not involve embedding but complete switching between structures.

Congruent lexicalization is a case when two languages share the structure, and the morphemes are freely taken from either of the two languages.

For each type, Muysken provides some properties that distinguish it from others. The exact properties will be listed and exemplified with Moksha sentences in section 7.

5. Data and annotation

The data for the research comes from the Corpus of Moksha oral speech collected in the villages of Lesnoje Tsibajevo and Lesnoje Ardashevo in the Republic of Mordovia (Russia) during the expeditions organized by the Department of Theoretical and Applied Linguistics of Lomonosov Moscow State University in 2013-2016. It contains 98 texts / 20103 tokens. Most texts are spontaneous narratives about everyday life or events in the past. Some texts are descriptions of pictures or movies, as well as tales.

To every switched constituent, I determined its category: np (noun phrase), n (noun), adj (adjective), pp (postpositional phrase), adv (adverb), conj (conjunction), v (verb), other.

6. Problem

Trying to identify the type of the CS in Moksha, we meet a problem: there are Russian finite verbs in totally Moksha environments.

- (1) *mon pere-šel vir'-i rabota-mə²*
 1SG PV-go.PST.M(R) forest-LAT work(R)-INF
 'I started working in the forest'.

- Is this the case of a sentence with **Russian as the ML** and all other elements inserted from Moksha?

² For Moksha examples, a phonological transcription is used. Russian examples were transliterated from the Cyrillic alphabet system. Some phonetically adapted words are glossed as MDF and are also written in phonological transcription.

- Is it possible that this is the case of **congruent lexicalization**, given the fact that Moksha and Russian are genetically and typologically different?
- If congruent lexicalization is possible, what made it to be possible?

7. Types of CS in Moksha

I understand CS very broadly, considering also some cases that look like borrowings, as it is very difficult to distinguish the two. Even the most clear cases of CS (nonce-borrowings) can be phonetically adapted to Moksha. In (2a) the word *d'ér'əva-* is taken from Russian, however there is a well-known and broadly used word *šuft* (2b), which is native to Moksha. The form of the Russian word should be *dérevo*, not *déreva*. One could assume that the form *d'er'eva-* is the genitive case that is doubled then by Moksha morphology, but it is the same in nominative (2c).

- (2) a. *tosə d'er'əva-t' alə ašč-əs'-t' s'oran'et*
 there tree(R).MDF-DEF.SG.GEN under.IN be.situated-PST.3-PL boy-DIM-PL
 'There under the tree, there were boys'.
- b. *pra-s' šuft-t' ez-də lov mar*
 fall-PST.3SG tree-DEF.SG.GEN in-ABL snow heap
 'A heap of snow fell from the tree'.
- c. *a d'er'əva-s' mēr'g-i:*
 and tree(R).MDF-DEF.SG say-NPST.3SG
 'And the tree says.'

The same holds for adjectives, they all end in *-aj*, not *-yj*, as they do in Russian. In (3), the adjective is definitely considered not to be from Moksha, yet we see that it is phonetically adapted to the Moksha system.

- (3) *t'i-s' liža-t' lang-s bumažnaj... bumaga-n'a-stə*
 do-PST.3SG ski(R)-DEF.SG.GEN on-ILL paper.ADJ(R).MDF paper(R)-DIM-EL
karablik-ən'ε
 ship(R)-DIM
 'She made on a ski a small ship from paper'.

The verbs mostly get adapted to Moksha morphologically (see 7.3 for the exceptions).

- (4) *proverja-sa-jn'ən' dokumentacija-t', kona er'a-v-i*
 check(R)-3.O-1SG.S documentation(R)-DEF.SG.GEN which be-PASS-NPST.3SG
t'ij-əms t'ε ši-t'i
 do-INF-ILL this day-DEF.SG.DAT
 'I review the documentation that I have to make for that day'.

All this can be considered as insertion under Muysken's approach.

7.1. Insertion

First of all, inserted elements have to be **selected elements** (Muysken 2000: 63). Here, I concentrate on subject (5) and object (6) NPs and complements of postpositions (7).

(5) SUBJECT NP; INDEFINITE

mon'-d'ejə-n smertj aš
 1SG-PRON.DAT-POSS.1SG death(R) NEG.EX
 'I'm still alive (lit. I don't have a death)'.

(6) OBJECT NP; INDEFINITE

kal-də mel'ə min' pi-c'ə-mə uxa i jarc-... l'em-n'e
 fish-ABL then 1PL cook-IPFV-PST.1PL fish.soup(R) and eat-... soup-DIM
 'We make a fish soup from fish and ea... a soup'.

(7) COMPLEMENT OF A POSTPOSITION; DEFINITE

lestnica-t' ez-də valk-s'
 ladder(R)-DEF.SG in-ABL descend-PST.3SG
 'He went down from the ladder'.

There are more one-word NPs in the corpus, but multiple-words NPs are found as well.

(8) OBJECT NP; INDEFINITE (MULTIPLE-WORDS)

narmən'-c' n'ej-sa kand-i ploxoje izvestije
 bird-DEF.SG see-NPST.3.O.S.1SG bring-NPST.3SG bad.N(R) news(R)
 'The bird, as you see, brings bad news'.

The selectivity is closely related to another property of insertions: **morphological integration**. Russian lacks determiners (articles), so both definite and indefinite NPs look the same. Moksha has an overt definiteness marker in argument positions, on nouns in the nominative (subject), genitive (direct object, complement of a postposition) and dative (indirect object); see Kashkin (2018) on the use of definite markers in Moksha.

The **marking** is always made **according to Moksha grammar**: only indefinite subjects are realized as bare Russian nouns, like in (5). Definite subjects have to bear a definite marker, and definite objects also get definite (genitive) marking and trigger object agreement on the verb (9).

(9) SUBJECT NP & DIRECT OBJECT NP; DEFINITE

glava-s' kočk-s'-əz'ə-n' s'embə es' robotnik-n'ə-n'
 head(R)-DEF.SG gather-IPFV-3.O-3SG.S all REFL worker(R)-DEF.PL-GEN
 'The head collected all his workers'.

The **marking of DOs** is a good example of following Moksha rules, as Moksha and Russian are very different in this regard. Moksha is a language with differential object marking (DOM), while Russian is not. Therefore, VPs with direct objects (DOs) do not meet congruence requirements, and we expect to see some restrictions on CS.

In Moksha, definite DOs receive genitive/accusative and trigger obligatory agreement on the verb (10a). Indefinite DOs are in nominative/unmarked and do not trigger agreement (10b) (Toldova 2017).

(10) MOKSHA

a. DEFINITE DO → GENITIVE; AGREEMENT ON THE VERB

c'ora-n'ε-z'ə *mora-z'ə* / **mora-s'* *morə-t'*
 son-DIM-1SG.POSS.SG sing-PST.3SG.S.3SG.O sing-PST.3SG song-DEF.SG.GEN
 'My son sang the song'.

b. INDEFINITE DO → NOMINATIVE; NO AGREEMENT ON THE VERB

c'ora-n'ε-z'ə *mora-s'* / **mora-z'ə* *mora*
 son-DIM-1SG.POSS.SG sing-PST.3SG sing-PST.3SG.S.3SG.O song
 'My son sang a song'. (Toldova 2017: 129)

In Russian, all DOs, independently from definiteness, receive accusative. However, the morphological realization depends on animacy and declension type. All nouns of declension on -a (II declension) have a special accusative case marker (11). Accusative marking of consonant-final declension of feminine nouns (III) and neuter nouns of I declension (all inanimate) is the same as nominative and different from genitive (12)-(13). Accusative case on the masculine nouns of I declension is realized as nominative if they are inanimate (14) and as genitive if they are animate (15). This can in principle be analyzed as DOM, although it is not traditionally considered as such. In any case, Moksha DOM and Russian tentative DOM are quite different (definiteness based vs. lexically determined and animacy based), and direct correspondence between the two is hard to establish.

(11) RUSSIAN: II DECLENSION → DIFFERENT MARKERS FOR NOM, ACC AND GEN

devočk-a *vstreti-l-a* *podrug-u* *svoj-ej* *sestr-y*
 girl.II-NOM meet-PST-F.SG friend.II-ACC REFL-GEN sister.II-GEN
 'The girl met her sister's friend'.

(12) RUSSIAN: III DECLENSION → NOM = ACC; A DIFFERENT MARKER FOR GEN

myš-Ø *dočer-i* *po-gryz-l-a* *rož-Ø*
 mouse.III-NOM daughter.III-GEN PV-gnaw-PST-F.SG rye.III-ACC
 'My daughter's mouse ate the rye'.

(13) RUSSIAN: I DECLENSION, NEUTRAL → NOM = ACC; A DIFFERENT MARKER FOR GEN

a. *solnc-e* *vsta-l-o*
 sun.I.N-NOM stand.up-PST-N.SG
 'The sun rose'.

b. *ja* *viž-u* *solnc-e* / *vosxod* *solnc-a*
 1SG see-NPST.1SG sun.I.N-ACC rise.M.I.ACC sun.I.N-GEN
 'I see the sun / the sunrise'.

(14) RUSSIAN: I DECLENSION, MASCULINE, ANIMATE → NOM = ACC; A DIFFERENT MARKER FOR GEN

a. *denj-Ø* *by-l* *čudesnyj*
 day.I.M-NOM be-PST. M.SG wonderful
 'The day was wonderful'.

b. *ja* *pomnj-u* *tot* *denj-Ø*
 1SG remember-NPST.1SG that.ACC day.I.M-ACC
 'I remember that day'.

c. *pod konec-Ø dnj-a vse usta-l-i*
 under end.I.M day.I.M-GEN all.NOM get.tired-PST-PL
 ‘At the end of the day, everybody was tired’.

(15) RUSSIAN: I DECLENSION, MASCULINE, ANIMATE → NOM = ACC; A DIFFERENT MARKER FOR GEN

a. *odin konj-Ø obo-gna-l drugogo konj-a*
 one horse.I.M-NOM PV-speed.along-PST.M.SG other.M.SG.ACC horse.I.M-ACC
 ‘One of the horses speeded up the other one’.

b. *u konj-a krasivaja griva*
 PREP horse.I.M-GEN beautiful mane
 ‘The horse has a beautiful mane’.

If a Russian NP is inserted in Moksha clause, case marking always follows the rules imposed by Moksha syntax. Indefinite DO is always in nominative (16a), not in the Russian accusative (16b), and there is no object agreement on the verb. Definite DOs receive Moksha genitive, (9), (17).

(16) INDEFINITE DO

a. CS: NOM; NO AGREEMENT ON THE VERB

mad-at i raščesk-a pr'e alə-t put-at
 lie-NPST.2SG and hair.brush-NOM(R) head under.IN-POSS.2SG put-NPST.2SG

b. RUS: ACC

loži-š-sja i raščesk-u pod golov-u klad-eš
 lie-NPST.2SG-MED and hair.brush-ACC under head-ACC lay-NPST.2SG
 ‘You lie and put a hair brush under your head’.

(17) DEFINITE DO: GEN

kryš-a-t' polaft-əma
 roof-NOM(R)-DEF.SG.GEN change-INF
 ‘{In order to} change the roof’.

Single-constituent and **nested structures** are two other properties listed by Muysken as characteristic of insertion. Not all switched NPs in the Moksha corpus occur as single constituents, like in (8). Frequently, there are other constituents in the row around them. For example, in (18), the three consecutive Russian words do not form a single constituent. Sometimes we also see back-and-forth switches (19).

(18) SEVERAL DIFFERENT CONSTITUENTS IN A ROW

a tosə voobščē objedenije, leša, l'is'-i
 and there at.all(R) delicious(R) Ljesha(R) go.out-NPST.3SG
 ‘And that will be out of this world’.

(19) BACK-AND-FORTH SWITCHES

naprimēr fke zjatj-əz'ə postojannyj tosə rabotnik
 for.example(R) one son.in.law(R)-1SG.POSS.SG full.time(R) there worker(R)
 ‘For example, one of my sons in law is a full-time worker there’.

The sequence of non-related fragments is characteristic of alternation (see section 7.2). However, in an alternation both lexical items and structure undergo switching. Back-and-forth

switches are a property of congruent lexicalization, so in the section 7.3 I consider it to be the case in Moksha.

7.2. Alternation

Sometimes, CS involves a sequence of words that do not form a **single** constituent but rather **several constituents** (18). They typically occur at the periphery of the clause; the structures are **not nested**, and switches are **peripheral** (20).

- (20) *vot i okazyvajetsja min' pal-s' kud-n'əkə*
 so(R) and(R) it.turns.out(R) we.GEN burn-PST.3SG house-1PL.POSS
 ‘So, it turned out, our house was burnt’.

There are also switches of **complex constituents** (21). Note that in (21) we observe the **doubling** of the same information.

- (21) DEPENDENT CLAUSE + DOUBBLING
mon məjardə ara-n' ava-ks, kogda zamuž vy-š-l-a,
 1SG when become-PST.3SG woman-TRANS when(R) married(R) PV-go-PST-F.SG(R)
son od ul'-s'
 3SG new be-PST.3SG
 ‘When I married him, he was young’.

Several consecutive constituents, non-nested structures, peripheral switches, complex constituents and doubling are all properties of alternational CS. This type is also characterized by switches of **adverbs** and **conjunctions**, which indeed constitute 29% of all switches in Moksha corpus.

- (22) *tosə potom kaja-j-t' orga-t*
 there then(R) pout-NPST.3-PL barm-PL
 ‘And then they pour barm’.

Therefore, we see a great deal of alternational CS in Moksha.

7.3. Congruent lexicalization

In (19), we saw **back-and forth** switches. These are **non-constituent switches**, which are congruent lexicalization according to Muysken (see also (23)). The constituent switches with morphological integration (see section 7.1) can be instances of congruent lexicalization as well (Muysken 2000: 134).

- (23) *mon tože t'ε-t'n'ə-n' vs'ex znaj-u*
 I also(R) this-DEF.PL-GEN all.ACC(R) know-NPST.1SG(R)
mol'itfa-t'n'ə-n' naizus't'
 prayer(R).MDF-DEF.PL-GEN by.heart(R)
 ‘I also all these prayers know by heart’.

A part of switched elements in the Moksha corpus is formed by Russian inflected verbs in Moksha environment (surrounded mostly with Moksha constituents). If the verb is in Russian, it is very tempting to decide that Russian is ML of this clause (according to the structural criterion adopted by Muysken). However, if a Russian verb is the only Russian element in the clause (18), which is often the case, all other criteria say against it: under the discourse-oriented

approach, Moksha should be considered the ML; under the morpheme-counting approach, it should also be treated as the ML.

(24) RUSSIAN VERB

il'jε-n' ši-s' prazdnuj-et-s'a kunarə
 Ilja-GEN day-DEF.SG celebrate-NPST.3SG-MED(R) long.ago
 'Ilja's day has been celebrated for a long time'.

I propose to consider Russian finite verbs in otherwise Moksha sentences as lexicalizing a shared Moksha / Russian congruent structure. For most of CS-ed Russian verbs, Moksha equivalents are available, compare Russian and Moksha causative verbs in (25).

(25) CAUSATIVE

a. RUSSIAN VERB

vačəši-s' zastavi-l ara-m-s ava-ks
 hunger-DEF.SG make.do-PST.M(R) become-INF-ILL woman-TRANS
 'The hunger made me marry'.

b. MOKSHA VERB

da košərd'əma-z', vačəšis' košərd'əma-n'
 PTCL make.do-1SG.O-3PL.S hunger-DEF.SG make.do-1SG.O-3SG.S
 'I was obliged, the hunger made me do it'.

Russian verbs that occur in Moksha environments can be different, but a large group is formed by modals (21% of all Russian finite verbs in Moksha sentences).

The modal desire verb 'want' has a native equivalent (26). However, there is no native modal possibility verb. The Russian modal predicated are used instead (27). For a necessity modal predicate, no occurrences in Russian are attested³. This can be due to presence of a native modal verb with different structural requirements (28).

(26) DESIRE

a. RUSSIAN VERB

mon ne xote-l-a tosə er'a-m-s
 1SG NEG(R) want-PST-F.SG(R) there live-INF-ILL
 'I didn't want to live there'.

b. MOKSHA VERB

jor'ə-z'ə kunda-m-s
 want-3.O.3SG.S catch-INF-ILL
 'He wanted to catch him'.

(27) POSSIBILITY MODAL (RUSSIAN)

a. *t'a-sə možno pid'ə-m-s mejə mel'-c'ə*
 this-IN is.possible(R) cook-INF-ILL what thought-2SG.POSS.SG
 'Here, you can cook whatever you want'.

³ This is out of the scope of this paper, but the situation with modals that we see contradicts the borrowing hierarchy suggested by Elšik and Matras: "necessity > ability > inability > volition" (2006: 343), which predicts that necessity is borrowed more easily than ability, inability and volition.

- b. *s'in' mez'avək ne mog-l-i t'ij-əm-s*
 3PL what-ADD NEG(R) can-PST-PL(R) do-INF-ILL
 'They couldn't do anything'.

(28) NECESSITY MODAL

a. MOKSHA

- s'ivəl'-s' er'a-v-i es'-t'ej-t kas-ft-əmə*
 meat-DEF.SG be.necessary REFL-PRON.DAT-2SG.POSS grow-CAUS-INF
 'The meat has to be grown by yourself'.

b. RUSSIAN

- svinin-u nužno vy-rašč-iva-tj sam-omu*
 pork.II-ACC(R) is.necessary(R) PV-grow-IPFV-INF(R) REFL-M.SG.DAT(R)
 'The pork has to be grown by yourself'.

These cases suggest that congruent lexicalization is a possibility in Moksha-Russian CS. Most sentences that are clearly Russian occur in chains at least of two sentences and do not contain any Moksha elements. There is also a very small number of switched single clauses, that also are only in Russian.

Therefore, I assume that Moksha and Russian share structure in many cases, and even the main verb can get lexicalized by Russian morphemes.

8. Language change in Moksha

In this section I show that Moksha grammar has undergone substantial changes under Russian influence. Moksha had some changes in basic word order, as well as adopted Russian subordinate conjunctions.

The basic word order for Proto-Uralic languages is SOV (Sinor 1988). According to Zaicz (1998), the word order in Mordvin languages shifted to SVO under influence of Russian (p.206). In the corpus, we find equal number of OV and VO orders (Toldova 2018: 551).

Most subordinate conjunctions in Moksha and especially in this particular variety are Russian. In most cases, conjunctions are optional, and polyclosal constructions are paratactic. However, there are some cases where the conjunction is obligatory, e.g. in purpose clauses (29) (Korjakov & Kholodilova 2018).

- (29) *mon' mēl'-əz'ə, *(štobə) son sa-zə*
 1SG.GEN desire-1SG.POSS.SG in.order.to 3SG come-OPT[3SG]
 'I want him to come'.

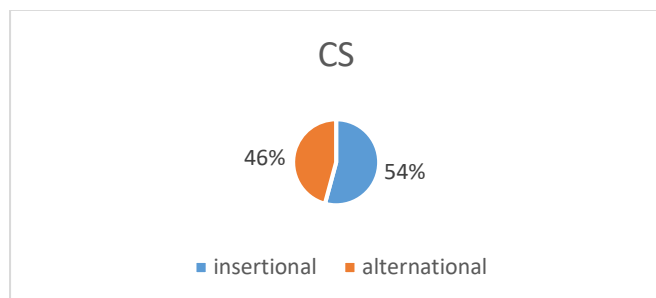
Among other results of intense contact with Russian, universal quantifiers *kažnaj* 'each' (< rus. *každyj*), *s'akoj* (< rus. *vsjakij*), *l'ubovaj* (< rus. *ljuboj*) 'any'; superlative *samaj* (< rus. *samyj*); avertive *čutj* + NEG are mentioned (Korjakov & Kholodilova 2018: 12).

9. Discussion and conclusions

Treffers-Daller (2009) proposes a ranking model of the three types of CS with respect to separation between language. She considers alternation to be characteristic of CS between the most separate languages, while congruent lexicalization for the most congruent. The insertion is in the middle. If we count all NP, N and Adj insertions, whether morphologically integrated and not, as well as morphologically integrated verbs, we find that insertional CS is more

common than alternational CS. The prevalence of insertional CS indicates that the separation between Russian and Moksha is not necessarily that significant.

Figure 2: Distribution of insertional and alternational CS in the Moksha corpus



Muysken proposes that languages can move from insertional CS either to alternational CS (greater separation) or to congruent lexicalization (convergence). Given some substantial changes discussed in section 8, I contend that Moksha-Russian CS is an example of convergence. In order to have more contexts which allow CS, the two typologically different languages were reanalyzed as structurally more equivalent by bilingual speakers of Moksha and Russian.

Thus, even though morphology and most common syntactic patterns of Moksha are maintained, and the language is used for the everyday communication by older speakers, the language itself has undergone substantial changes under the influence of Russian.

Abbreviations

ABL – ablative, ACC – accusative, ADD – additive ADJ – adjective, CAUS – causative, DAT – dative, DEF – definite, DIM – diminutive, EL – elative, EX – existential predicate, F – feminine, GEN – genitive, ILL – illative, IN – inessive, INF – infinitive, IPFV – imperfective, LAT – lative, M – masculine, MDF – phonetically modified, MED – medial voice, N – neutral, NEG – negation, NOM – nominative, NPST – non-past tense, O – object, OPT – optative, PASS – passive, PL – plural, POSS – possessive, PRON – pronominal, PST – past tense; PTCL – particle, PV – preverb, (R) – Russian, REFL – reflexive, S – subject, SG – singular, TRANS – translative, 1-3 – person, I-III – Russian declensions

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