

Russian iotation: length is key

Alexandra Shikunova, Daniar Kasenov

HSE Laboratory for formal models in linguistics, Moscow

Iotation

Alternation caused by iotation in Russian:

(1) pob ud ka – bu ž <u>u</u>	(d/ž)	(2) l ju bo <u>v</u> i – l yu bl <u>ju</u>	(b/bʲ)
ko sa – ko š <u>u</u>	(s/š)	sp aʲtʲ – sp l <u>ju</u>	(p/pʲ)
uklon – klon <u>ju</u>	(n/nʲ)	stav ka – stav l <u>ju</u>	(v/vʲ)

- » Often analysed as a merger of the consonant with an iotising segment J
- » How does palatalised /l/ appear in iotised labials?
- » Morén (2006) for Serbian, Magomedova and Slioussar (2017) for Russian: labial and palatal features do not combine well

Iotation exists on par with palatalisation – a distinct alternation:

(3) Three forms of consonants, Brown (1998, Table 5)

Zero Grade Soft Grade Iotised Grade

/p/	/pʲ/	/pʲʲ/
/b/	/bʲ/	/bʲʲ/
/m/	/mʲ/	/mʲʲ/
/f/	/fʲ/	/fʲʲ/
/v/	/vʲ/	/vʲʲ/
/t/	/tʲ/	/čʲ/
/d/	/dʲ/	/žʲ/
/s/	/sʲ/	/šʲ/
/z/	/zʲ/	/žʲʲ/
/l/	/lʲ/	/lʲʲ/
/n/	/nʲ/	/nʲʲ/
/r/	/rʲ/	/rʲʲ/
/k/	/čʲ/	/čʲʲ/
/g/	/žʲ/	/žʲʲ/
/x/	/šʲ/	/šʲʲ/

- » Do consonant grades exist?
- » Or can these alternations be modelled procedurally?
- » Framework of choice – Strict CV (Scheer, 2004), Substance-free phonology (Reiss, 2017)

Previous work

An OT analysis by Magomedova and Slioussar (2017):

- » J is a floating segment
- » Palatalisation cannot expone J
- » Palatalising instead of iotising violates MAXFLT and base-final palatalised labials are banned in the output
- » *MAP(lab, pal) ⇒ no b/ž-like alternations
- » Epenthesis of /lʲ/ results

(4) lʲub + Ju → lyublʲu (b/bʲ)

OT tableau for a *b*-final stem

/lʲub/ + /Ju/	MAXFLT	*MAP(lab,pal)	DEP	IDENT(place)
lʲubʲu	*!			
✱ lʲublʲu			*	
lʲužu		*!		*
lʲubžu		*!	*	

The problem: since palatalisation cannot expone J, we expect /lʲ/-insertion in iotised /n r l/, in which Soft Grade and Iotised grade coincide:

(5) klon + Ju → klonʲu (n/nʲ)

Putative OT tableau for a *n*-final stem – the correct form is ruled out by MAXFLT

/klon/ + /Ju/	MAXFLT	*MAP(lab,pal)	DEP	IDENT(place)
klonʲu	*!			
✱ klonlʲu			*	
kložu		*!		*
klonžu		*!	*	

Iotation can mean consonant alternation (k/čʲ), palatalisation (n/nʲ) or /lʲ/-insertion (b/bʲ), which is too diverse for an elegant substance-driven analysis

Iotised consonants are geminates

Proposal: consonant grades proposed by Brown (1998) are real

- » Zero grade = non-palatalised consonant
- » Soft grade = short palatalised consonant
- » Iotised grade = long palatalised consonant (C + J occupy two C-slots)

Exponent of /Ju/ ‘1sg’

C	V
J	u

Expected: lʲub + J → lʲublʲ

G					
C	V	C	V	C	V
lʲ	u	b	ə	J	

lʲub + Ju → lʲublʲu ‘I love’

C	V	C	V	C	V
lʲ	u		b+J		u

lʲub + ja → lʲubja ‘love-conv’

C	V	C	V
lʲ	u	b	ja

Supporting evidence: no base-final iotation, or else Government breaks up the geminate

References

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Supported by the project ”Cross-modular interactions in grammatical theory: Modelling grammatical features in the languages of Russia”, carried out within the framework of the Basic Research Program at HSE University in 2023.