SONORANTS IN AMGUEMA CHUKCHI

06/12/2018 Inna Sieber, Higher School of Economics (Moscow) <u>innasieber@gmail.com</u>

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Outline

- Preface: the language variety, the research, the data
 Amguema Chukchi: consonantal system, sonorants
- Nasals
- Approximants
- A rhotic sound



Amguema, Iultinskij district, Chukotka AO

Amguema Chukchi

- Amguema village, Iultinskij district, Chukotka AO (central Chukotka)
- Fieldwork by Higher School of Economics (Moscow) and Lomonosov Moscow State University (Moscow) since 2016
- Special focus on consonants summer 2018

The research

What phonetic/acoustic variants do sonorants have?

What is their distribution?

Field recordings of 100 representative words 11 speakers ears & Praat

Consonants

		labial	alveolar	palatal	velar	uvular	glottal
obstruents	stops	р	t		k	q	?
	fricatives		4				
			S				
sonorants	nasals	m	n		ŋ		
	approxi- mants	W		j	щ		
	rhotics		r				

Consonants: unusual features

The size-structure correspondence
 [Lindblom, Maddieson 1988]: small inventories – simple articulations.
 But: q, щ, 4!

Consonants: unusual features

- The size-structure correspondence
 [Lindblom, Maddieson 1988]: small inventories simple articulations.
 But: q, щ, 4!
- 2. The percentage of sonorants [Lindblom, Maddieson 1988]



Sonorants vs. obstruents

	Sonorants	Obstruents
Articulation	Almost free airflow	Narrow constriction
Acoustics	Vowel-like formant structure No fricative noise	Fricative noise No formant structure
Phonology	Interaction with vowels Vowel-like behaviour	Typical consonants

Consonants

		labial	alveolar	palatal	velar	uvular	glottal
obstruents	stops	р	t		k	q	?
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	rhotics		r				

Sonorants

- 3 nasals, 3 approximants, 1 rhotic
- all sonorants are voiced

Nasals

mnŋ

Lovely, but nothing unusual

Approximants

wjщ

Rare: velar approximant [ɰ] (traditionally – [ɣ]) Only 2% of the languages have rare approximants [Ladefoged, Maddieson 1996]

Approximants or fricatives?

W

Sonorant w: [Dunn 1999; Скорик 1961]

Sonorant/fricative β : [Асиновский 2003]

У Sonorant щ: [Dunn 1999; Скорик 1961] Obstruent **ү**: [Скорик, Володин 1997]

Sonorants vs. obstruents in Chukchi

	Sonorants w and w	Obstruents w and w
Articulation	No information	Visual analysis only
Acoustics	No information/ conversational	No information/ conversational
Phonology	Interaction with vowels The dropping of γ	Assimilative devoicing and fricativisation

Sonorants vs. obstruents in Chukchi

What phonetic variants do *w* and *w* have?

/\	N/	/u	ч/
W W ^j	φ	պ պ ^յ ~j	
V V ^j	f	γ γ ^j ~j	X
uw		ĥ	Ø
uv		(g)	(kx)

awetawaq 'suddenly'



ŋetwət 'herd'

ŋ	e	ł	ф	ə	ł
ŋelwəl					

ewiłuki 'earless'



Sonorants vs. obstruents in Chukchi

- 1. What phonetic variants do *w* and *w* have?
- 2. How are these variants distributed?
 - ##_V
 V_V
 obstruent_V
 sonorant_V
 V_obstruent
 V_sonorant
 C_C
 V ##

Total: 1300 tokens for w, about 850 for w

Tendencies in pronouncing w

sonorant: w	obstruent: <i>v, f</i>
most frequent pronounciation	
speaker-dependent: n	nost speakers prefer w
no obligato	ry devoicing
word-final position	narrow vowels nearby
sonorants nearby	fricatives leftward
stops nearby (except <i>p</i>)	<i>p</i> leftward

Tendencies in pronouncing <i>W</i>				
sonorant: <i>щ</i>	obstruent: <i>ɣ, x</i>			
most frequent pronounciation				
context-dependent more than speaker-dependent				
no obligato	ry devoicing			
consonant rightward	consonant leftward			
(Synable-Infally)	(Synable-Initially)			
highly variable: intervocally, word-finally				

Summary: approximants

- j: always sonorant approximant, not so variable
- w and w: approximants, highly variable, have obstruent-like variants

Rhotic: sources

- "r" (tap or flap IPA) [Dunn 1999: 43]
- Fricative or trill (2 bursts), contextual distribution [Скорик 1961: 30]
- Fricative, tap/flap, trill, complex contextual distribution [Асиновский 2003: 120—123]

Rhotic: Amguema Chukchi

- A trill (2-4 birsts)
- A tap (r in Spanish caro) [Ladefoged 1968]
- A flap (t in Am. English letter, r in Russian 'mor^ja/море) [Ladefoged 1968]
- A fricative (apical)

Rhotic: Amguema Chukchi

- All variants are possible in all positions
- Taps are rare
- Fricatives are basic
- Tendencies:



Conclusion

- Nasals and *j* are stable
- Approximants w, պ are highly variable, more or less predictable
- A rhotic sound is highly variable, hardly predictable
- Amguema phonetic system is influenced by Russian greatly
- Russian influenced phonetics correlates with less competence in grammar

Literature

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