## Using Phasal Syntax to Make Generalizations in Manchu **Vowel Harmony**

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-ATR

-LAB

U

-ATR

+LAB

## **BACKGROUND**

Manchu vowel harmony (VH) is taught as highly irregular. Manchu L2 learners often have to rely on memorization and looking up in dictionary to conjugate verbs correctly. Is Manchu VH really irregular? Can a formal linguistic account be applied to teaching Manchu VH?

## INTRODUCTION

- 1. Vowel Harmony
- Labial Harmony: two syllable
  - adjacent non-diphthong [5] triggers [+LAB].

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- ATR: [a,ʊ,ɔ] trigger [-ATR], [ə] triggers [+ATR], [i,u] are transparent.
- Dorsals also undergo harmony: Velars are [+ATR] and Uvulars are [-ATR]
- Roots with only [i,u] vowels have an arbitrary [ATR] value
- 2. The Imperfective suffix /rA/ acts differently: "transparent" vowels and /u/ are treated as opaquely [+ATR]
- 3. Referenced 5 grammar books and textbooks in Chinese and English; Interviewed 3 manchu teachers

	Perfective	Imperfective	Caus. Perfective	Caus. Imperfective
/toqto/ 'to be fixed'	[tɔqtɔ-χɔ]	[təqtə-rə]	[tɔqtɔ-bu-χa]	[tɔqtɔ-bu-rə]
/ta/ 'to be caught'	[ta-xa]	[ta-ra]	[ta-bu-χa]	[ta-bu-rə]
/te/ 'to live (somewhere)'	[tə-xə]	[tə-rə]	[tə-bu-xə]	[tə-bu-rə]
/tutçi/ 'to come out'	[tut¢i-kə]	[tut¢i-rə]	[tut¢i-bu-kə]	[tut¢i-bu-rə]
/ili/ 'to stand'	[ili-χa]	[ili-rə]	[ili-bu-χa]	[ili-bu-rə]
/gasχυ/ 'to take an oath'	[Gasχυ-χa]	[Gasχυ-rə]	[gasχυ-bu-χa]	[Gasχυ-bu-rə]

	[-]	HI]	[+HI]		
[+ATR]	э	o	i	u	
[-ATR]	a	э	I	υ	

The specification in stems affects ATR harmony, but is neutralized in pronunciation. A phase head forces spell-out: early neutralization; [+ATR] in high vowels

Phonological Rules (Phase or word end): 1) Vowel Harmony (rightward)

2) [+HI] > [+ATR]

stem only

contains

<i> and

<u> vowels

stem

ends in

< oC(C)(C)o>

stem ends

in <a>

last vowel

other than

<i> or <u>

is <e>

no

no

no

Check

Dictionary

for HA

form

<he>

<re>

<ro>

<re>

yes

**Phonetic Rules (At end of word):** 3) Lowering after uvulars

Implicit Teaching: Vowels are taught as three classes: Yin, Yang, and transparent Neutral vowels. Anything which does not conform to direct VH is irregular. Pedagogies differ on groupings.

	ə	u	i	a	υ	э
De Harlez 1884:13; Haenisch 1961:33	weak		strong/hard		ng/hard	
Adam 1873:15, Paskov 1963:16, Lie 1972:33,	yin/weak	n/weak neutral/soft		yang/strong/hard		
Jì et al. 1986:86, Liu et al. 1997:87						
Aisin Gioro 1983:24	yin neutral		yang			
Dresher and Zhang 2003:4	+ATR		-ATR			

**Explicit Teaching**: Either treating -HA and -rA as having the same or different VH rules, 8 - 13 rules are employed to describe all the possible combinations, still with exceptions.

The flow chart created based on our analysis is able to simplify teaching and learning of -HA/-rA conjugation by unifying -HA/-rA conjugation. The number of irregular conjugations compared to traditional teachings is largely reduced.

Examples of verbs traditionally considered irregular:

fali-xa / fali-rə to tie gasχυ-χa / gasχυ-rə to swear dzo-ya / dzo-rə to cut

Fenger (2020) argues that Japanese aspect marker te is a phase head, which forces pitch accent (lowering of pitch) to apply prematurely.

	be.distant-	PASS-	PRS
	(hedata-	rare	ru)
Pitch Accent	(hèdátá-	ráré	rù)
	ha distant	Lan	nn a
	be.distant-	ASP-	PRS
	((hedata-	te)	ru)
Pitch Accent	((hèdátá-	tè)	ru)
Pitch Accent	((hèdátá-	tè)	rù)

The Manchu imperfective works similarly with vowel harmony. However the spell out domain contains the phase head in Japanese but not in Manchu.

report- CAUS- PFV- REL

	(ala-	bU-	HA-	lA)
Vowel Harmony	(ala-	bu-	χа-	la)
[+HI] > [+ATR]	(ala-	bu-	χа-	la)
Lowering	(ala-	bu-	χа-	la)
				1
	report-	CAUS-	IPFV-	REL
	((ala-	bU-)	rA-	<sup>1</sup> lA)
Vowel Harmony	((ala-	bu-)	rA-	lA)
[+HI] > [+ATR]	((ala-	bu-)	rA-	1A)
Vowel Harmony	((ala-	bu-)	rə-	lə)

((ala-

((ala-

Selected Works: Fenger, P. (2020) Words within Words: The Internal Syntax of Verbs. University of Connecticut. || Aisin Gioro, U. (1983) Grammar of Manchu. Hohhot: Inner Mongolia People's Press. || Liu, J., Zhao, A. and Zhao, J. (1997) Manju gisun-be hendu sibkihe bithe Haerbin: Heilongjiang Chaoxian minzu chubanshe. | Dresher, B. E. and Zhang, X. (2003) 'Phonological Contrast and Phonetics in Manchu Vowel Systems', Annual Meeting of the Berkeley Linguistics Society, 29(1), pp. 485-497

bu-)

bu-)

rə-

lə)

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[+HI] > [+ATR]

Lowering

