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# Japanese Sequential Voicing - Rendaku

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# Japanese Sequential Voicing Rendaku



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## Language Background

Japanese is spoken by the entire population of Japan, roughly 121 million speakers. There are some language communities in Hawaii, South America, and North America

## Japanese Phonology

Japanese has sixteen consonants in its phonemic inventory.

	Bilabial	Labiodental	Dental	Alveolar	Post alveolar	Palatal	Velar	Glottal
Plosive	p b			t d			k g	
Nasal	m			n			ŋ	
Flap					ɾ			
Fricative				s z				h
Affricate				ts				
Approximant						j	w	

## What is Rendaku?

•Rendaku is a morpho-phonological process present in both historical and modern Japanese that involves the voicing of a morpheme-initial voiceless obstruent.

•This process occurs when the affected obstruent is followed by a vowel (and optional glide [j]) and is preceded by either a vowel or a nasal.

[-sonorant] → [+voice] / [-cons] \_\_\_ ([j]) [-cons]  
or  
[-sonorant] → [+voice] / [+nasal] \_\_\_ ([j]) [-cons]

•The following are some examples of Rendaku occurring in Japanese-

[ɾo̞ten] + [ɸuɾo] = [ɾo̞tenbuɾo]  
*Roofless Bath outdoor bath*

[hana] + [tɕi] = [hanadɕi]  
*nose blood nosebleed*

## Lexical Categories

### What categories of words are effected by this process?

Word compounds consisting of noun, adjective, and verb combinations have the potential to portray Rendaku.

#### Nouns

**Noun + noun**  
[gom] + [hako] = [gomibako]  
*trash box trashcan*

**Adjective + noun**  
[naga] + [kutsu] = [nagagutsu]  
*long shoes boots*

**Verb + noun**  
[ike] + [hana] = [ikebana]  
*go flower flower arrangement*

#### Adjectives

**Adjective + adjective**  
[ao] + [ciɾoi] = [aoziɾoi]  
*blue white pale(face)*

**Noun + adjective**  
[oku] + [ɸukai] = [okubukai]  
*beyond deep Deeper meaning*

**Verb + adjective**  
[tabe] + [tsuɾai] = [tabedzurai]  
*eat difficult difficult to eat*

#### Verbs

**Noun + verb**  
[tabi] + [tatsu] = [tabidatsu]  
*Journey stand begin a journey*

**Adjective + verb**  
[waka] + [kaeru] = [wakagaeru]  
*Young return to look young*

*verb + verb compounds are resistant to Rendaku.*

## Conditioning Factors

### What determines when it occurs?

There are numerous factors that try to determine the conditions under which Rendaku can and can not manifest. A few of the more major are Lyman's Law, Right Branch Conditioning, Native vs. Non Native, and Repetition.

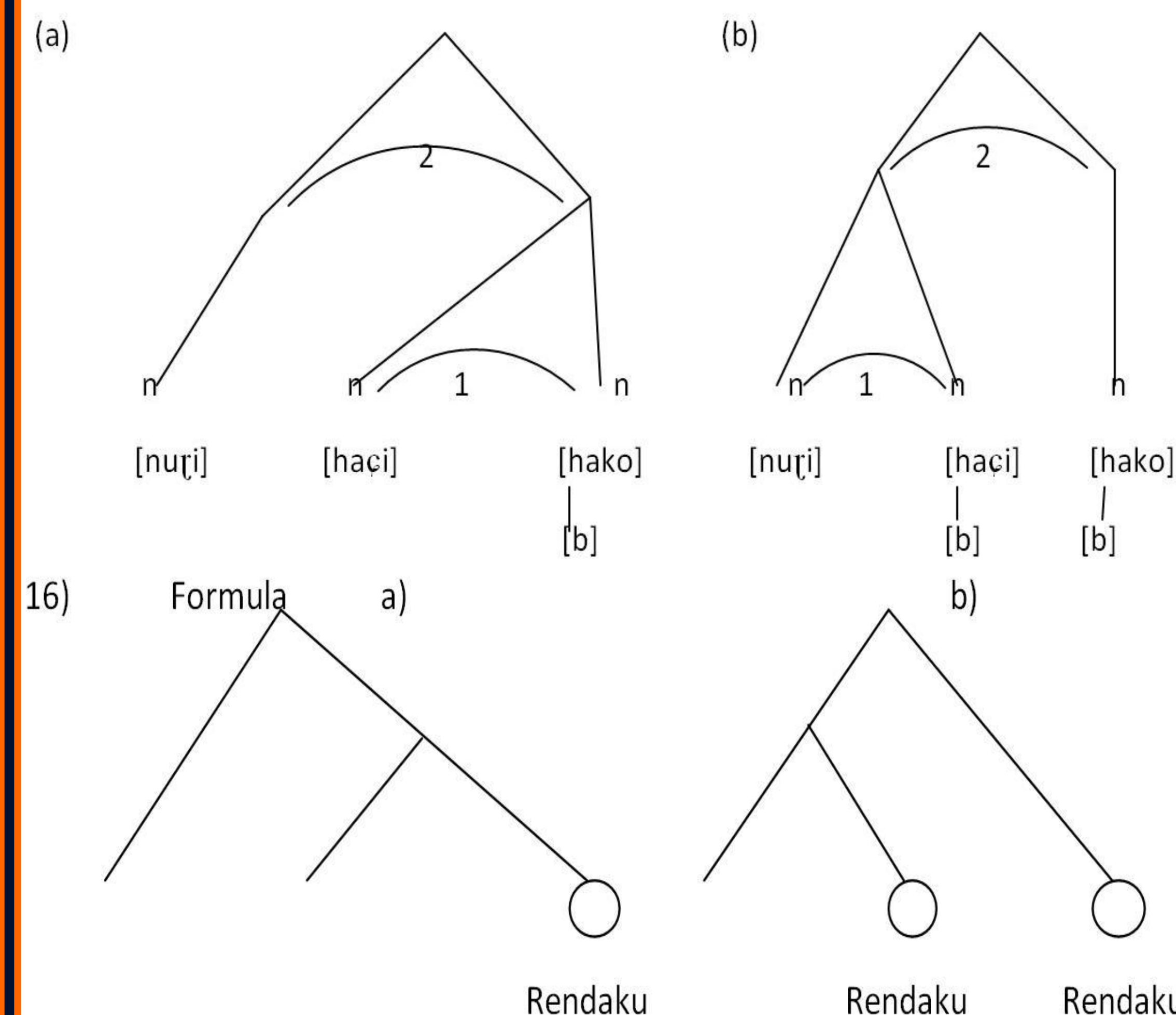
#### Lyman's Law

In order for Rendaku to occur, there can be no voiced obstruent in the second constituent of a word compound. If this condition is met then the voiceless obstruent of the second constituent in the word compound is voiced.

[haiɾu] + [kutɕi] = [ɾigutɕi]  
*Enter mouth entrance*

#### Right Branch Conditioning

Right Branch Conditioning deals with compounds that have more than two elements and states that Rendaku can not take place unless the effected element is a right branch constituent.



## Conditioning Factors Cont.

### Native vs. Non Native

Words affected by Rendaku must be of native Japanese origin, and not of Sino-Japanese or western origin. However, non native words can trigger Rendaku in native words.

[guɾasu] + [to] = [guɾasudo]  
*glass gate glass door*

### Repetition

Word repetition in Japanese can trigger Rendaku.

[ɕito] + [ɕito] = [ɕitobito]  
*person person people*

## Conclusion

### Irregularity in the process

Despite numerous conditioning factors that attempt to determine or lend some kind of discernable pattern to Rendaku, there is none, and the process is fundamentally sporadic.

This can be seen in the following examples, which despite abiding by conditioning factors, still resist Rendaku.

[soko] + [tsutɕi] = [sokotsutɕi]  
*bottoms oil sub soil*

[kutsu] + [ɕimo] = [kutsuɕimo]  
*shoe string shoelace*

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