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Japanese Sequential Voicing - Rendaku

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Abstract

This presentation details rendaku, a morpho-phonological process in Japanese. According to this process, the initial sound of the second word in a compound (i.e. a word that is made up of two or more words) is altered depending on several constraints in the language. This process can be seen in the word [tegami] 'letter', which is a compound comprised of the words [te] 'hand' and [kami] 'paper'. The [k] in [kami] becomes [g] when combined with [te]. In this presentation, a number of constraints and conditions that determine whether or not rendaku will occur within a compound will be described. This includes whether the word is native to Japanese or borrowed from other languages, and constraints on word reduplication. This study concludes that, although there are very specific constraints on the morpho-phonological system in Japanese, rendaku is still a highly irregular process.

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.

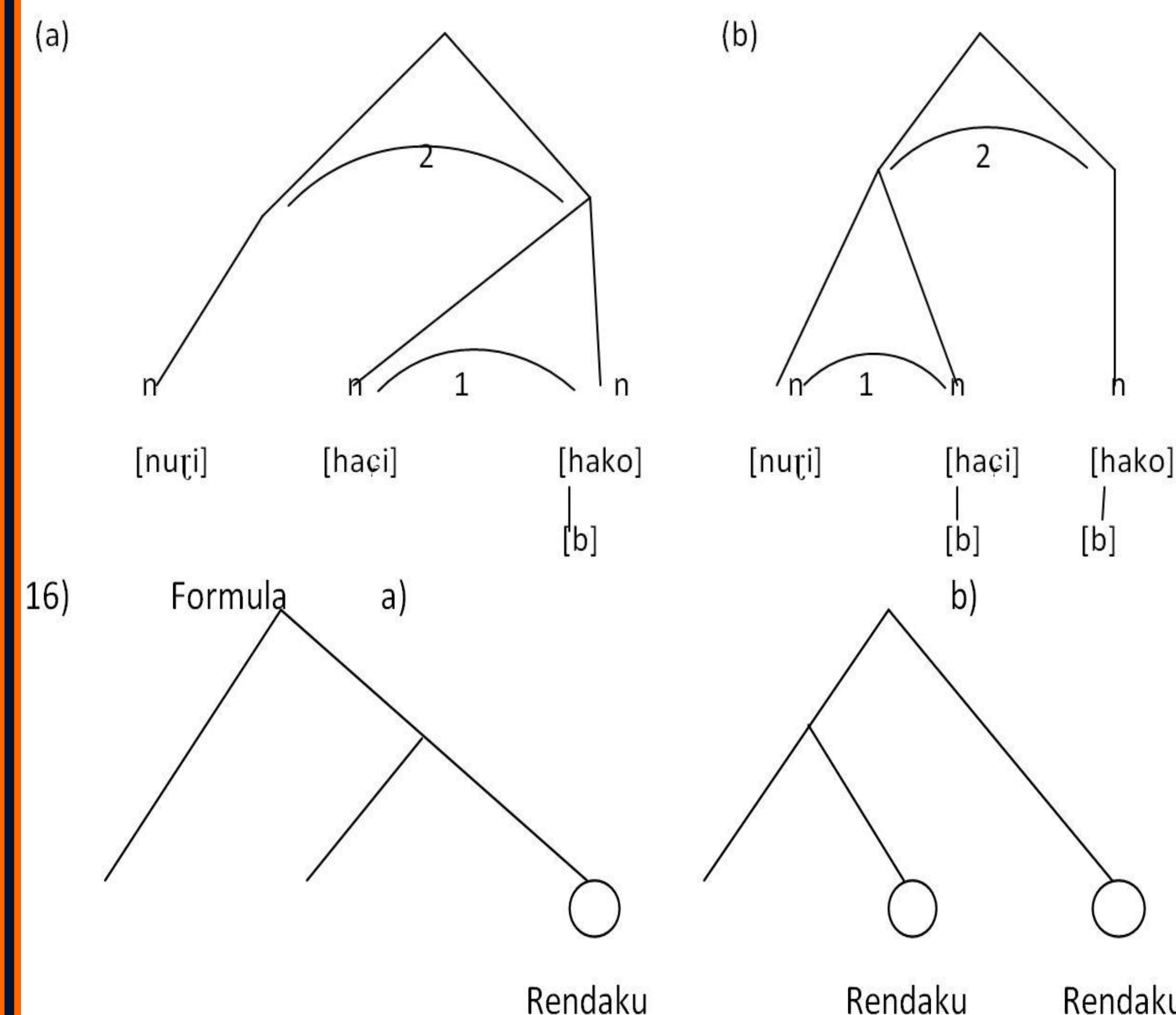
Lyman's Law

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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