

Compounds and *rendaku*

Data largely from Ito & Mester (1986)

I. Many compounds in Japanese undergo a process called *rendaku* (連濁)

(1) Reminder: A **compound** is a word that contains more than one root

(2) Examples of the basic *rendaku* pattern

/e/	'picture'	+	/tako/	'kite'	→	[edako]	'picture kite'
/juw/	'hot water'	+	/toohu/	'tofu'	→	[juudoɔɸu]	'boiled tofu'
/iro/	'color'	+	/kami/	'paper'	→	[irogami]	'colored paper'
/de/	'going out'	+	/kuɽi/	'mouth'	→	[deguɽɕi]	'exit'
/mak-i/	'rolling'	+	/susi/	'sushi'	→	[makizuɕi]	'rolled sushi'
/mizu/	'water'	+	/seme/	'torture'	→	[mizuɽeme]	'water torture'

- Describe what happens when *rendaku* occurs. (How is the surface form of the compound different from what we would have expected, based on its parts?)

(3) What is particularly interesting about the first two cases here?

/hana/	'nose'	+	/ti/	'blood'	→	[hanad̥zi]	'nosebleed'
/kokoro/	'heart'	+	/tuɽkaw-i/	'usage'	→	[kokoroɽuɽkai]	'consideration'

compare:

/inu/	'dog'	+	/sin-i/	'death'	→	[inud̥zini]	'useless death'
/mak-i/	'rolling'	+	/susi/	'sushi'	→	[makizuɕi]	'rolled sushi'

- What consequences do these forms have for the system of segmental rules in Japanese?

(4) Now consider one more complication

/tabi/	'journey'	+	/hito/	'person'	→	[tabibito]	'traveler'
/hanas-i/	'talking'	+	/heta/	'poor (at)'	→	[hanaɕibeta]	'poor talker'
/ike-/	'arranging'	+	/hana/	'flower'	→	[ikebana]	'ikebana'
/suɽna/	'sand'	+	/hokori/	'dust'	→	[sunabokori]	'cloud of dust'
/kake-/	'covering'	+	/huɽɽɽɽ/	'futon'	→	[kakebuɽɽɽɽ]	'top futon'

- What is unexpected here?
- Is this related to anything we have seen elsewhere?

II. Systematic conditions governing when *rendaku* does and does not occur

(5) A **semantic** condition on the application of *rendaku*

/moraw-i/	+	/ko/	[moraigo]		/oja/	+	/ko/	[ojako]
'receiving'		'child'	'adopted child'		'parent'		'child'	'parent & child'
/jama/	+	/tera/	[jamadera]		/jama/	+	/tera/	[jamatera]
'mountain'		'temple'	'mtn. temple'		'mountain'		'temple'	'mtn. & temple'

- What is the meaning difference between the two patterns?
Rendaku is blocked when ...
- Can we prove that this is not a phonological restriction on *rendaku*?

(6) A **phonological** condition on the application of *rendaku*: “Lyman's Law”

/kami/	'deity'	+	/kaze/	'wind'	→	[kamikaze]	'divine wind'
/mono/	'thing'	+	/sizuuka/	'quiet'	→	[monosizuuka]	'tranquil'
/siro-/	'white'	+	/tabi/	'J. socks'	→	[sirotabi]	'white <i>tabi</i> '
/maru-/	'round'	+	/hadaka/	'naked'	→	[maruhadaka]	'completely naked'
/tai-kuutu/	'boredom'	+	/sinog-i/	'endurance'	→	[taikutsuuginogi]	'killing time'

- What's different phonologically about these examples, that might account for why *rendaku* is blocked? Note the following minimally different examples:

/nuuri-/	'lacquer'	+	/huta/	'lid'	→	[nuuri h uta]	'lacquered lid'
/nuuri-/	'lacquer'	+	/huda/	'sign'	→	[nuuri h uda]	'lacquered sign'
/o-haraw-i/	'purification'	+	/kuusi/	'comb'	→	[ohara i uuci]	'purification comb'
/o-haraw-i/	'purification'	+	/kuuzi/	'ticket'	→	[ohara i kuu z i]	'purification ticket'

- **Lyman's Law:** *Rendaku* is blocked when...

(7) Given the data in (6), why are these next examples interesting?

/kuuzu/	'rubbish'	+	/kago/	'basket'	→	[ku z ukago]	'wastebasket'
						*[ku s ukago], *[ku z uka k o]	
/geta/	'clogs'	+	/hako/	'box'	→	[getabako]	'shoe cupboard'
						*[ketabako], *[getahako]	

(8) **Morphological** conditions on rendaku

- (a) *Rendaku* generally affects only “**native**” morphemes, not Sino-Japanese or foreign
- Can you think of exceptions to this generalization? (There are some...)
 - What are the implications of such exceptions? (Is the literal *history* of morphemes something we would expect to find included in speakers’ mental grammar?)
- (b) *Rendaku* has **idiosyncratic exceptions**
- Many morphemes that we would expect to undergo *rendaku* just don’t (and a smaller number that we would expect not to undergo it actually do)
 - See Irwin (2009), Kawahara (2015) for additional discussion

III. Some more-complex compounds

(9) What accounts for this difference?

/nuuri/ + /hasi/ + /hako/ ‘lacquer’ ‘chopstick’ ‘box’

→ [nuuri**h**aɕi**h**ako] ‘box for lacquered chopsticks’

→ [nuuri**h**aɕi**h**ako] ‘chopstick box which is lacquered’

For more about *rendaku*:

Itô, Junko, and R. Armin Mester. 1986. The phonology of voicing in Japanese: Theoretical consequences for morphological accessibility. *Linguistic Inquiry* 17: 49-73.

Irwin, Mark. 2009. Prosodic size and rendaku immunity. *J of East Asian Linguistics* 18: 179-196.

Kawahara, Shigeto. 2015. Can we use rendaku for phonological argumentation? *Linguistic Vanguard*. Online publication. Draft available at:

[<http://user.keio.ac.jp/~kawahara/pdf/RendakuArgumentationFinal.pdf>]

Vance, Timothy J. 2015. Rendaku. In Haruo Kubozono (ed.), *Handbook of Japanese Phonetics and Phonology*, 397-441. Berlin: de Gruyter. [On e-reserve for this course.]