

ワラヤガナドウ[hwærj' gənədu]?

～ Why don't English speakers say what they are supposed to say? ～

英語音の特徴：本当はどうなっているの？

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1. Introduction

Assimilation 同化現象: Some basics

- (1) a. laughed, hoped, kicked, reached: [t] voiceless 無声音 (no vocal cords vibration)
b. waved, robbed, begged, judged, played: [d] voiced 有声音 (with vocal cords vibration)
- (2) a. roofs, maps, streets, cakes: [s] voiceless 無声音
b. waves, mobs, roads, legs, teams: [z] voiced 有声音

(3) Why? → _____

When the last sound of the word is voiceless, the past tense marker is the voiceless [t].

When the last sound of the word is voiceless, the plural marker is the voiceless [s].

When the last sound of the word is voiced, the past tense marker is the voiced [d].

When the last sound of the word is voiced, the plural marker is the voiced [z].

Assimilation: Japanese too!

(4) Voicing assimilation in the Japanese past tense marker

- a. 食べた [tabe-ta]、見た [mi-ta]、晴れた [hare-ta]: [ta] (voiceless [t])
'ate' 'saw' 'turned to be sunny'
- b. 死んだ [sin-da]、読んだ [yon-da]、遊んだ [ason-da]: [da] (voiced [d])
'died' 'read' 'played'

(5) When is it the voiceless [t] and when the voiced [d]?

Hint: [n] is a voiced consonant.

Japanese [ta] becomes voiced [da] when it appears right after a voiced consonant.

However,

- (6) a. 書いた [kai-ta]、抜いた [nui-ta]、掃いた [hai-ta] (voiceless [t])
'wrote' 'pilled out' 'swept'
- b. 嗅いだ [kai-da]、脱いだ [nui-da]、剥いだ [hai-da] (voiced [d])
'sniffed' 'took off' 'stripped'

Why?

(7) *Japanese past tense marker rule*

Japanese past tense marker [ta] becomes voiced [da], when the last sound of the verb in its dictionary form is a voiced consonant.

(8) **Tips for Japanese learners of English pronunciation (I)**

Don't worry too much about the English assimilation phenomena. You can do it if you practice a lot because you are already doing the similar (or sometimes more complicated) assimilation naturally and unconsciously in Japanese.

The Purpose of the talk

- To go beyond the subject/impressionistic perspective of English phonology.
- To learn that English phonological alternations are rule-governed.
- To learn some interesting differences and similarities between English and Japanese phonology:

What is actually happening? 本当はどうなっているの?

2. Syllable Types

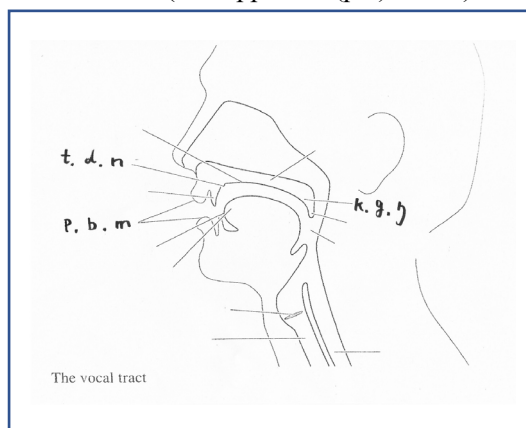
- (9) a. English is a closed-syllable language.
b. Japanese is an open-syllable language.
- (10) a. English has a lot of words which end in a consonant: *kick, bag, set, touch*, etc.
b. Japanese words end in a vowel (except for ん [n]):
キック[kikku], バッグ[baggu], セット[setto], タッチ[tatti]
- (11) Consequences of (9b): (i) avoid CC sequence, and avoid C ending in Japanese. (C = consonant 子音)
a. extra V insertion (V = vowel 母音)
try, play, roommate, whiteboard
トライ, プレイ, ルームメート, ホワイトボード
[torai] [pulei] [ruumu meeto] [howaito boodo]
- b. C to V alternation
dictionary form: kak + ta
↓ [k] to [i] alternation to avoid [k-t] sequence
pronunciation: kai + ta (書いた)
- dictionary form: kag + da ←by Japanese rule (7).
↓ [g] to [i] alternation to avoid [g-d] sequence
pronunciation: kai + da (嗅いだ)

- (12) Consequence of (9): (ii)
Japanese students are not accustomed to phonological rules applying to C-C sequence in English.

However,

- (13) Assimilation (in terms of place of articulation): (調音点)同化現象
- | | | |
|---|---------------------------------------|-------------------------|
| im possible, im balanced; | int olerant, ind irect; | in come, English |
| [m] [m] | [n] [n] | [ŋ] [ŋ] |
- (see Appendix (p.6) below)

- (14) Allophones of Japanese ん [n]
- a. あんぴ [ampi] あんば [amba]
b. あんた [anta] あんど [ando]
c. あんか [anka] あんごう [angou]



- (15) Exactly the same assimilation (in terms of place of articulation) is happening!

- (16) Consequence of (9a): (iii)
 Consonant drop: one C of the [C-C] sequence is virtually dropped in casual speech.
good job, big game, take care, roommate, whiteboard, etc.

Because of (16) and because of (9b), Japanese students feel that speakers of English speak too fast and/or do not pronounce the words as they are written.

- (17) Consequence of (9a): (iv)
 liaison: the last sound of the first word is pronounced as if it is the first sound of the second.
turn in, get on, look around

Because of (17) and because of (9b), Japanese students feel that speakers of English speak too fast and/or do not pronounce the words as they are written.

- (18) Unconscious phonological rules in Japanese (I)
- a. consonant drop and vowel nasalization: 全員 [zenin] → [zeɲ̃ in]
 - b. consonant adding: 反応 [han + oo] → [han n̩oo]
 山王 [san + oo] → [san n̩oo]

Tips for Japanese learners of English pronunciation (II)

Don't worry too much if you feel English speakers speak very fast. They are just following some English phonological rules (not changing their pronunciation at random). You will be get used to it if you practice a lot because you are already dealing with a lot of (sometimes more complicated) phonological rules naturally and unconsciously in Japanese.

3. Accent Types

Let's read aloud: 握手 (あくしゅ)、北 (きた)、菊池くん (きくちくん)、来ました (きました)

- (19) a. English is a stress-accent language: the contrast is a strong-weak type
 b. Japanese is a pitch-accent language: the contrast is a high-low type

- (20) Consequence of (19a): (i) Vowel Reduction in English
 Unstressed vowels tend to be a reduced vowel or schwa [ə]. (「曖昧母音」)
- a. cámara [kæməɾə]
 - b. Cánada → Canáđian [kænada] [kəneidian]

- (21) Consequence of (19b): (ii) No change of [a, i, u, e, o] quality of Japanese low pitch vowels
- a. 雨 [ame] 'rain' 飴 [ame] 'candy' H = high
 H L L H L = low
 - b. 雨季 [uki] 'rainy season' 浮き [uki] 'float (for fishing)'
 H L L H

- (22) Weak Vowels in Japanese: 「い」「う」 devoicing phenomenon
- a. 握手 [akuʃu] 'handshake' → [akuʃu]
 - b. 北 [kita] 'north' → [kita]
 - c. 菊池くん [kikutikun] → [kikutikun]
 - d. 来ました [kimaʃita] → [kimaʃita]

- (23) High vowels [i][u] in Japanese become voiceless when they appear between voiceless consonants.

(24) **Weak Vowel Drop**

Weak vowels sometimes get deleted in casual speech in both English and Japanese.

(25) English

- | | | | |
|----|--------------------|----|--|
| a. | cámera
[kæməɹɑ] | b. | Cánada → Canáđian
[kænada] [kəneɪdian] |
| | ↓ | | ↓ |
| | ϕ | | ϕ |

(26) Japanese

- | | | | |
|----|---------------------------------|----|-------------------------------|
| a. | sentakuki 洗濯機 ‘washing machine’ | b. | hikakuyuu 比較級 ‘comparative’ |
| | ↓ | | ↓ ← High vowel devoicing |
| | sentak <u>u</u> ki | | hikak <u>u</u> kyuu |
| | ↓ | | ↓ ← weak vowel drop |
| | sentaḳki | | hikaḳkyuu |

Both English and Japanese have weak vowels; both English and Japanese have weak vowel drop.

The only difference: English weak vowel is schwa [ə]: Japanese weak vowels are voiceless [i][u].

(27) Even though Japanese is a CV structure language (9b) and thus Japanese students are not accustomed to C-C sequences in English, some English CC sequence is very easy for Japanese students to pronounce because of high vowel devoicing and weak vowel drop in Japanese.

- | | | | |
|----|------------------|----|-------------------------------|
| a. | スター sutaa ‘star’ | b. | ステイ sutei ‘stay’ |
| | ↓ | | ↓ ← High vowel devoicing |
| | sutaa | | sutei |
| | ↓ | | ↓ ← weak vowel drop |
| | sutaa | | sutei |

(28) **Tips for Japanese learners of English pronunciation (III)**

Some English pronunciation is easy because you can just follow Japanese phonological rules you are already using naturally and unconsciously.

(29) **Coffee Break (I)**

Vowel drop is sometimes optional but sometimes obligatory

- a. 錦織 [nisikiori] vs. [nisikori] ‘person’s name’
- b. 洗濯機 [sentakuuki] or [sentaḳki] ‘washing machine’
- c. 白血球 [haḳ keṭ kyuu] not *[hakuketukyuu] ‘white blood cells’

Coffee Break (II)

Student question: “Sensee, Why do we pronounce *have to* [hæf tə], not [hæv tə]? (どうして「ハフトゥ」?)

Voicing assimilation!

have to

[hæv tə] → [hæf tə]

(voiceless [t] affects/makes the preceding voiced [v] voiceless [f])

4. **Prosody Matters: it is not a pitch (high-low) contrast but a strong-weak contrast in English**

(30) My neighbor is building a desk.

New Information Focus

- (31) Context 1
 - a. What is your neighbor building?
 - b. My neighbor is building [a **desk**]. New Information is in []. Primary Stress is **bold**.
- (32) Context 2
 - a. What is your neighbor doing these days?
 - b. My neighbor is [building a **desk**].
- (33) Context 3
 - a. What is that noise?
 - b. [My neighbor is building a **desk**].

Contrastive Focus

- (34) Context 4
 - a. Has your neighbor bought a new desk?
 - b. No. My neighbor is [**building**] a desk.
- (35) Context 5
 - a. Is your son building a desk?
 - b. No. My [**neighbor**] is building a desk.
- (36) Consequence of (19a).
 - a. Primary stressed word is pronounced most strongly in a sentence.
 - b. Other words are pronounced relatively weakly.
 - c. Pronouns/Auxiliary/Prepositions are pronounced most weakly.

If you put the primary stress on a wrong word, it may convey a different (sometimes unnatural) connotation.

- (37)
 - a. Have you seen the new computers?
 - b. Yeah, I **like**'em. (# Yeah, "**I**" like'em. / #Yeah, I like **THEM**.)
- (38)

Yoko: Hi, isn't it you, Takashi?

Takashi: Oh, Yoko. What a surprise! Long time no see.

Yoko: Yeah, what do you do now?

Takashi: I'm a **school** teacher. (# I **AM** a school teacher)
- (39) Don't forget to **brush** your teeth. (# Don't forget to brush **YOUR** teeth.)

(40) **Tips for Japanese learners of English pronunciation (IV)**

It is a strong-weak contrast (not high-low). You can do it if you practice a lot, because we all can speak a bit louder sometimes and a bit softer sometimes.

5. Special Cases of Common Phonological Rules in English

- (41) a. *gonna*-contraction
 - Auxiliary *going to* is pronounced very weakly.
 - [gouɪŋtu] ← vowel reduction
 - [gəŋtə] ← t-nasalization (assimilation in terms of place of articulation)
 - [gənə]

Appendix: English Consonant Inventory

		Bilabial	Labiodental	Interdental	Alveolar	Alveopalatal	Velar	Glottal
Stops	-voice	p			t		k	
	+voice	b			d		g	ʔ
Fricatives	-voice		f	θ	s	ʃ		h
	+voice		v	ð	z	ʒ		
Affricates	-voice					tʃ		
	+voice					dʒ		
Nasals		m			n		ŋ	
Liquids					l (dark l)			
Glides		w (ʍ)			r (ɹ) (flap t: r)	j		

References

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英語音の特徴

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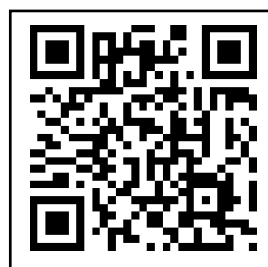
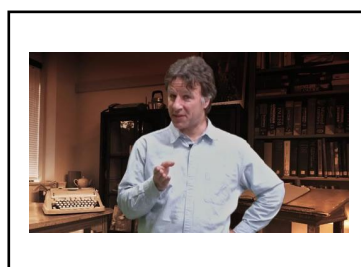
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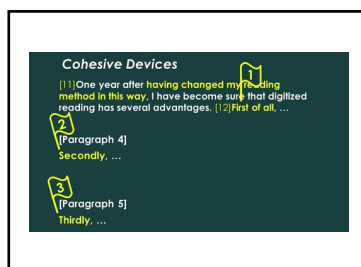
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