

How to Make Yourself Understood

English I Online Materials

Tips for English Speech Sounds

Unit 3

Beware of Sound Change – Part 1



キーワード (key words)

音韻変化 (sound change) 発音記号 (phonetic alphabet) 同化現象 (assimilation)
弱化母音 (vowel reduction) 母音脱落 (vowel drop)

Tips for English Speech Sounds

Unit 3 Beware of Sound Change – Part 1

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“ham’n eggs” / “Tom’n Jerry”

Satoshi Oku and Jeff Gayman

Scripts and Annotations (スクリプトと解説)

Hello everyone. I'm Peter Richardson. I'm from Birmingham, UK, and have been teaching at Hokkaido University since 2013. Today, we are going to learn about some of the most interesting and challenging aspects of foreign language learning: namely, sound change.

In English, as well as in Japanese, when two or more words are put together, the whole chunk is often pronounced in a different way than it is when pronounced separately.

Warming Up Quiz: How to Pronounce Japanese Compounds?

Let us first consider the following Japanese example: かいしゃ (会社). How do you pronounce this? If you are a native speaker of standard Japanese, you would probably read this with a high pitch prosody all the way through like:

● ● ●

かいしゃ (会社)

OK? Next, how about this? かんり (管理). Again, in standard Japanese, it is read with a high-low-low prosody like:

●
● ●

かんり (管理)

Notice now that if we put these two words together, something very interesting happens. First, かいしゃ (会社) becomes がいしゃ. Further, the entire prosody also changes. We do not pronounce this complex word, retaining the original intonations as:

● ● ● ● ● ●

かんり がいしゃ
(管理) (会社)

rather the whole chunk is pronounced as:

● ● ● ● ● ●

かんり がいしゃ
(管理) (会社)

This reflects the unconscious phonological rules of native speakers of Japanese.

Points

- ・ここでの日本語の**音韻変化 (sound change)** は、実際に日本語で見られる音韻変化のごく一部
 - ➔ 通常は無意識
 - ・どの言語でも、個々の単語は文中で実際に使われると、辞書形とは異なる発音に変化する場合あり
 - ➔ 規則的なパターン
 - ・外国語の場合、そのようなパターンの基本的なものをいくつか意識的に学び、練習する必要あり
 - ➔ 発音・聴き取りとも上達する（「英語は速い」は錯覚だとわかる）
-

Sound Changes in English

English is no exception. When two or more words are put together, various types of sound change may happen. In other words, words in a row may NOT be always pronounced as their dictionary forms. Hence, when learning a foreign language, it is very important to learn patterns of sound change in the target foreign language you are trying to learn. Today, we are going to learn some of the representative examples of English sound changes.

Let us consider the first type of English assimilation.

Assimilation 1

When the last sound of the word is [s] sound like *miss*, and the next word starts with [j] sound like *you*, [s] and [j] get mixed together and, like a chemical reaction, they become a [ʃ] sound, like *miss you*.

I will miss you

[s] [j]
V
[ʃ]

Points

- ・発音記号 (phonetic alphabet) に慣れよう

[ʃ]: 日本語の「シュ」に近い音

[dʒ]: 日本語の「ジュ」に近い音

[tʃ]: 日本語の「チュ」に近い音

[ʒ]: 日本語の「ジュ」に近いが、音を出す瞬間に、舌を口の天井につけないように

Let us look at a few more examples: *It is warm in May this year*. In this sentence, the [s] sound in *this* and the [j] sound in *year* get together and turn out to be a [ʃ] sound, as in *this year*.

It is warm in May this year

$$\begin{array}{c} [s][j] \\ \vee \\ [\text{ʃ}] \end{array}$$

A similar pattern is observed in the following examples: *Jeff is busy, as you know*. In this sentence, the [z] sound in *as* and the [j] sound in *you* get together and become the [ʒ] sound, like *as you know*.

Jeff is busy, as you know

$$\begin{array}{c} [z][j] \\ \vee \\ [\text{ʒ}] \end{array}$$

Likewise, *you cannot use your hands in this sport*. The [z] sound in *use* and the [j] sound in *your* become a [ʒ] sound, like *use your hands*.

You cannot use your hands in this sport

$$\begin{array}{c} [z][j] \\ \vee \\ [\text{ʒ}] \end{array}$$

Next, let us consider the following example: *You like apples, don't you?* This time, focus on the last sound of *don't*. This [t] sound gets together with the following [j] sound of *you*, and another chemical reaction is observed. They become a [tʃ] sound, as in *don't you*.

You like apples, don't you?

$$\begin{array}{c} [t][j] \\ \vee \\ [\text{tʃ}] \end{array}$$

In the same vein, the [d] sound of *did* and the [j] sound of *you* get together and are pronounced as a [dʒ] sound, like *did you*.

Did you go to the concert?

[d][j]
V
[dʒ]

OK. Let us wrap up the points so far. There are many words in English which end with an [s] sound, a [z] sound, a [t] sound, or a [d] sound. Also, English has many words which start with the [j] sound, as in *you*, *your*, *year*, *yet*, *yellow*, *yeast*, and so on. Therefore, the chemical reaction, or assimilation, of the types we have just seen can be observed everywhere in natural English speech. Let us practice a bit. Repeat after me.

miss you
[ʃ]

as you see
[ʒ]

not yet
[tʃ]

did you
[dʒ]

Good! How was it? Sound change is a very natural process in any human language. So if you get accustomed to sound change patterns in English, your pronunciation would be very natural and clear.

Points

miss you
[ʃ]

as you see
[ʒ]

not yet
[tʃ]

did you
[dʒ]

- この4つの音韻変化パターンは頻繁に現れる
➔ 一度しっかり慣れておくと、発音も自然に、聴き取りも楽に

- 他の例

[s][j]
V
[ʃ]

[z][j]
V
[ʒ]

[t][j]
V
[tʃ]

[d][j]
V
[dʒ]

Bless you.

Those unique videos are ...

Who taught t you?

Would d you?

She likes s you.

Raise s your hands.

Nice to meet t you.

Look around d yourself.

six s years

He knows s your mother.

Has he finished d yet?

Has he moved d yet?

Assimilation 2: Voicing Assimilation

OK. Let us next look at one of the most popular sound changes in human language, voicing assimilation. The English regular plural marker is S, but it is pronounced [s], as in *books*, or [z] as in *bags*.

book <u>s</u>	bag <u>s</u>
[s]	[z]

Why is this so? Well, the last sound of *book* is [k], which is a voiceless sound: [k] [k]. Therefore, the following S is also a voiceless [s] sound. On the other hand, the last sound of *bag* is [g], which is voiced: [g] [g].

book<u>s</u>	bag <u>s</u>
[k][s]	[g][z]

Therefore, the following S sound is also voiced: [z] [z]. In other words, the two adjacent sounds become similar to each other in terms of their voicing quality.

The same rule applies to the past tense marker *-ed*. When we add *-ed* to *kick*, it is pronounced as a voiceless [t] sound: *kicked*, *kicked*. And in contrast when *-ed* is added to *beg*, it is pronounced as a voiced [d] sound: *begged*, *begged*.

kicked<u>d</u>	begged<u>d</u>
[t]	[d]

Why? Again, the last sound in *kick* is a voiceless [k] sound. And the last sound in *beg* is a [g] sound, which is voiced.

kicked<u>d</u>	begged<u>d</u>
[k][t]	[g][d]

Points

人間の言語音には、**無声音** (voiceless) と**有声音** (voiced) がある

- ・無声音 : [p][t][k][s]など、声帯を振動させずに発音する音
- ・有声音 : [b][d][g][z]や母音など、声帯を振動させて発音する音

有声音の同化現象 (voicing assimilation)

- ・有声音の隣の音が、有声音になる
 - ・無声音の隣の音が、無声音になる
- ➔ 多くの言語に見られる現象

Here again, the sound quality of the past tense marker becomes similar to the sound to which it is attached. This is another instance of voicing assimilation in English.

It is very interesting, isn't it? Oops, sorry. I dropped the book. Oh, by the way, in pronunciation of human language, a part of word sounds sometimes drops too.

Vowel Drop: Japanese

Let us look at Japanese examples first: *たいいく* (体育). In careful speech, this word is pronounced as *たいいく*, which is the dictionary form. However, in casual speech, many Japanese actually pronounce this word as *たいく*, dropping one of the [i] sounds, as in

たい く かん (体育館)
↓
い

たい くのひ (体育の日).
↓
い

Likewise, *せんたくき* (洗濯機). In careful speech this word is pronounced as *せんたくき*, which is the dictionary form. In casual speech, however, almost every Japanese actually pronounces this word as:

せんたつき (洗濯機)
sentak ki
↓
u

dropping the [u] vowel between two [k] sounds: *せんたつき*. This is again an instance of vowel drop, which can be seen occasionally in standard Japanese.

Vowel Drop: English

Vowel drop is observed very frequently in English as well. Let us consider the following examples.

Canada
[kæ̃nədə]

Here, the first vowel receives the main stress, like *Canada*. However, the position of the main stress moves as in

Canadian
[kən̩eɪdiən]

Now, the first vowel is reduced and very weak, and thus in casual speech it is often dropped, and the word is pronounced as

Canadian
[k_néidiən]
↓
ə

Let us take a look at a few more popular examples of vowel drop in English.

family	percent	camera
[fæməli]	[pəsént]	[kæməɾə]

In their dictionary forms, there is a reduced vowel which is very weak but is supposed to be pronounced in careful speech. In casual speech, however, these reduced vowels are often dropped and they sound more like

family	percent	camera
[fæm li]	[p sént]	[kæm rə]
↓	↓	↓
ə	ə	ə

Points

弱化母音 (vowel reduction) と母音脱落 (vowel drop)

・英語の[ə]: 曖昧母音 (schwa)

➔ 強勢を受けず、弱く発音される

➔ 直前または直後に強勢音節があり、子音に挟まれていると、脱落する場合あり

・母音脱落は、一つの単語内だけでなく、単語が並ぶことによっても起こる

例: **go to school**

[tu] → [tə] → [t] (母音なしで、[t]とだけ発音される)

ham and eggs

[ænd] → [ən] → [n] ([d]も脱落し、[n]とだけ発音される)

I am a student

[æm] → [əm] → [m] (母音なしで、[m]とだけ発音される場合が多い)

発音に合わせて、I'm a student と書くことも多い

* am が文末に現れる場合、母音脱落は起こらない

Yes, I am.

✗ Yes, I'm.

He is nice

[iz] → [əz] → [z] (母音なしで、[z]とだけ発音される場合が多い)

発音に合わせて、He's nice と書くことも多い

*is が文末に現れる場合、母音脱落は起こらない

Yes, he is. ~~Yes, he's.~~

You are right

[ar] → [ər] → [r] (母音なしで、[r]とだけ発音される場合が多い)

発音に合わせて、You're right と書くことも多い

・弱化母音の脱落：英語で頻出する普通の現象

→ 単語・句の全体の音価（母音の数）が、辞書形より少なくなる

このパターンに慣れておかないと、実際の英語の発話がとても「速く」聞こえてしまう

→ 何度も練習をして慣れてくると、通じやすい発音になり、聞き取りも楽に

Summary

OK? Well, let us summarize today's lesson.

Sound change is quite common in natural languages. When words are put together to make phrases and sentences, it is seldom the case that they are pronounced in their exact dictionary forms. Therefore, it is very important to understand sound change patterns in the target foreign language you are trying to learn. Knowing and practicing typical sound change patterns in English will make your pronunciation clear and natural. And it will improve your listening comprehension as well!

Well, how was today's lesson? I hope you enjoyed it. Note, however, that the examples of sound change patterns in English that we have just seen were only a very limited sample. Please try to learn and practice more. Okay, that's all for today. Good luck, and keep practicing. See you next time!

~~~~~

**Further Tips (1)**

**have to と of course のなぞ**

熟語の have to が[hæv tə]ではなく[hæf tə]と発音されること、不思議に思ったことはありませんか？あるいは、中学生に質問されて説明に窮した経験は？これは、実は同化現象が起こっているのです。熟語としてひとまとま

りの単語のように発音されるため、隣り合った音同士がお互いに影響を受けやすくなっています。

|             |   |           |
|-------------|---|-----------|
| <b>have</b> |   | <b>to</b> |
| [hæv]       | + | [tə]      |
| 有声音         |   | 無声音       |
| ↓           |   |           |
| [hæf]       | + | [tə]      |
| 無声音         |   | 無声音       |

[v]は有声音（声帯が振動している）、[t]は無声音（声帯が振動しない）です。この場合は、有声音[v]が、無声音[t]と同化して、無声音[f]に変化しています。同様に、熟語 of course は、多くの場合[əv kɔ:rs]ではなく、[əf kɔ:rs]と発音されます。つまり、of の[v]が無声音の[f]と発音されるわけです。これも同化現象によるものです。

|           |   |               |
|-----------|---|---------------|
| <b>of</b> |   | <b>course</b> |
| [əv]      | + | [kɔ:rs]       |
| 有声音       |   | 無声音           |
| ↓         |   |               |
| [əf]      | + | [kɔ:rs]       |
| 無声音       |   | 無声音           |

有声音[v]が、直後の無声音[k]の影響を受けて、無声音[f]に変化しています。これらは、決して「無秩序に」「ランダムに」発音が「くずれて」いるわけではなく、きちんとした音韻規則（「有声音同化規則」）に従っているわけです。

## Further Tips (2)

### 錦織は「ニシキオリ」それとも「ニシコリ」

弱化母音が脱落した形が、辞書形（常にそのように発音される形）になっている例もあります。「ハムエッグ」という料理名の意味での ham and eggs は、これでひとまとまりの単語のようになっており、and は[n]としか発音されません。ham'n eggs. （「ハムエッグ」という料理名ではなく、「スーパーでハムと卵を買った」のように、普通の句として使われる場合の and は、[ənd]と発音されます。）同じように、アメリカの人気アニメ『トムとジェリー』も、これでひとまとまりの固有名詞なので、Tom and Jerry の and は[n]となり、Tom'n Jerry と発音されるのが普通です。

日本語にもあります。たとえば、「錦織」という名字は、「ニシキオリ」という一族もいれば、「ニシコリ」という一族もいますね。いったい何が起きているのでしょうか。

ニシキオリ  
[nishikiori]  
母音脱落 ↓  
[i]      ニシコリ  
→ [nishikori]

[i]が脱落すると「ニシコリ」になります。これは、脱落した形と脱落していない形の両方が共存している例です。

一方、母音が脱落した形が、辞書形になっている（母音脱落していない形では使われない）例もあります。「白球」は、どんなに丁寧な発話であっても、[ハクキュウ hakukyu]ではなく、真ん中の[u]が脱落して[ハッキュウ hak\_kyu]と発音されますね。

類例： 決闘 [ケットウ ketutoo] ではなく、真ん中の[u]が脱落して[ケットウ ket\_tool]  
一階 [イチカイ ichikai]ではなく、真ん中の[i]が脱落して[イッカイ ich\_kai]、など多数

これらの例でも、[u]や[i]が無声音の子音にはさまれているから脱落現象が起こっているのもあって、後ろの子音が有声音であれば、母音の脱落は起こりません。決断 [ケツダン ketudan]、一概 [イチガイ ichigai]

有声音なので、前の母音[u]や[i]の脱落起こらず

英語でも日本語でも

- (1) 丁寧な発話では辞書形、カジュアルな natural speed の発話では、変化形で発音されるパターン
- (2) 変化形が辞書形となり、常に変化した後の形で発音されるパターン

があります。

単語や句はいつでも「目で見た通り」に発音されるわけではない、同化や脱落などの音韻変化を受ける場合がある、それもランダムな発音の「くずれ」などではなく、音韻規則に従ったパターンである、ということを意識しておく、外国語の学習も楽しくなるでしょう。自分の母語（日本語）についての楽しい発見も。

右の写真はアメリカの Shopping Mall。「リネン製品と雑貨」のお店のサインですが、真ん中の「N」は and のこと。実際の発音では[n]と発音されるので、その発音のままの表記を採用しているわけです

