

Assimilation and elision

by Jonathan Marks

Summary: *Assimilation* is the process by which a sound changes to become more similar – or even identical – to a neighbouring sound. *Elision* is the process by which a sound ‘goes missing’: it isn’t pronounced, although it would be pronounced in a very slow, careful style of speech. This article explains the most common types of assimilation and elision, gives examples, and briefly considers the significance of these two processes for learners and teachers.

Introduction

When I walk, I walk one step at a time. But this doesn’t mean that I take one step, then stop, then take another step, then stop, then take another step, and so on. As I’m putting one foot on the ground, I’m already starting to lift the other one. The muscle actions involved are coordinated and overlapping, and result in smooth forward movement, which contrasts with the awkward movement of very young children learning to walk for the first time, or older people getting back into the habit of walking after a long period of immobilization through illness or accident. The feature of overlap gives us speed and efficiency, and can be observed in any physical activity that we have learned to perform automatically.

What’s all this got to do with pronunciation? Well, speaking is also a physical activity which involves complex sequences of muscle actions. So it’s not surprising that there’s a similar kind of overlap. The sounds, or *phonemes*, of a language are officially called ‘segments’, which suggests an image of building blocks with clearly-defined edges, lined up one after another. But speech isn’t like that: it’s a continuous stream of sound – the ‘stream of speech’ – in which neighbouring sounds merge into each other and influence each other.

Assimilation

Assimilation due to different places of articulation

If you say *ten people* very slowly and carefully, perhaps with a slight pause between the two words, you’ll hear the /n/ at the end of *ten* and the /p/ at the beginning of *people*. But very often, if it’s said faster, something changes: *ten* sounds like *tem*: *tem people*. Why does this happen?

The /p/ sound is a *bilabial* sound (bilabial = two lips). It’s produced by closing the lips and then opening them with a sudden release of air. But /n/ is an *alveolar* sound, produced with the tongue-tip against the alveolar ridge just behind the top teeth, and the lips open. In fluent speech, we tend to anticipate the bilabial articulation of /p/ by pronouncing /m/, also a bilabial sound, instead of /n/. /m/ is produced with closed lips and without the alveolar tongue contact, so all you need to do to produce /p/ is to open the lips and release the air. In other words, you’ve achieved speed and efficiency by reducing the number of separate movements you need to make. The result is that one sound, in this case /n/, becomes more similar to another, in this case /p/, and hence the name *assimilation*.

Similarly, if you say *ten grand* (this is an informal way of saying £10,000) very carefully, you’ll hear /n/ followed by /g/, but if you say it faster, you’ll find that the /n/ tends to change to /ŋ/. The reason is assimilation again: /ŋ/ and /g/ are both pronounced with contact between the back of the tongue and the soft palate – they’re *velar* sounds – and there’s a tendency to anticipate the velar pronunciation and change /n/ to /ŋ/. So the phrase sounds like *teng grand*.

The alveolar sounds /t/, /d/ and /n/, when followed by non-alveolar sounds, tend to be particularly subject to assimilation.

Common types of assimilation

/t/ → /p/ before bilabials /p/, /b/ and /m/

night porter

get bored

hot meal

/t/ → /k/ before velars /k/ and /g/

white cat

let go

/d/ → /b/ before bilabials /p/, /b/ and /m/

bad press

red bag

wide margin

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/d/ → /g/ before velars /k/ and /g/	<i>good coffee</i>	<i>solid gold</i>	
/n/ → /m/ before bilabials /p/, /b/ and /m/	<i>gone past</i>	<i>done better</i>	<i>in music</i>
/n/ → /ŋ/ before velars /k/ and /g/	<i>fan club</i>	<i>kitchen gadget</i>	

/s/ → /ʃ/ before /ʃ/ and /j/	<i>less sure</i>	<i>miss you</i>
/z/ → /ʒ/ before /ʃ/ and /j/	<i>use shampoo</i>	<i>those years</i>

Notice that /p/, /k/, /b/ and /g/ resulting from assimilation of /t/ and /d/ are not released – this is also true in other cases of /p/, /k/, /b/ and /g/ + /p/, /b/, /m/, /k/ and /g/, such as *stop pulling*, *like beer*, *Rob Miller*, *big garden*.

So far, all the examples of assimilation have been across the boundary between two words. But the results of assimilation can also be heard within individual words. The word *input*, like the phrase *ten people*, contains /n/ + /p/, and as a result of assimilation often sounds like *imput*. In words like *bank*, the standard pronunciation /bæŋk/ reflects assimilation of /n/ to /ŋ/.

Coalescence

In a particular type of assimilation called *coalescence*, or *coalescent assimilation*, two sounds combine to form one:

/t/ + /j/ → /tʃ/	<i>gotcha</i> (an informal spelling of <i>got you</i>)
/d/ + /j/ → /dʒ/	<i>would you</i> /'wʊdʒə/
/s/ + /j/ → /ʃ/	<i>miss you</i>
/z/ + /j/ → /ʒ/	<i>is your...</i>

Assimilation due to differences of voicing

When a voiced consonant is followed by a voiceless one, the first one often loses its voicing, as the voicing is 'switched off' prematurely in anticipation of the voiceless sound to follow. So, for example, *have to* tends to sound like *haff to*. /v/ and /f/ have the same place of articulation (*labio-dental*) but they are distinguished by voicing vs. lack of voicing. Because one sound changes to become more similar to another – /v/ loses its voicing to become more similar, identical in fact, to /f/ – this is also considered to be a case of assimilation.

Other examples of this kind of assimilation include:

/b/ → /p/	<i>sub-plot</i>
/d/ → /t/	<i>bad time</i>
/g/ → /k/	<i>eggshell</i>
/z/ → /s/	<i>as cold</i>
/ð/ → /θ/	<i>with salt</i>
/dʒ/ → /tʃ/	<i>large-scale</i>

Assimilation of suffixes –s and –ed

In another instance of assimilation due to differences of voicing, the suffixes –s and –ed are voiced after voiced consonants but voiceless after voiceless consonants:

/p/ + /s/ or /t/	/b/ + /z/ or /d/	<i>laps</i>	<i>labs</i>	<i>ripped</i>	<i>ribbed</i>
/t/ + /s/	/d/ + /z/	<i>chats</i>	<i>Chad's</i>		
/k/ + /s/ or /t/	/g/ + /z/ or /d/	<i>picks</i>	<i>pigs</i>	<i>locked</i>	<i>logged</i>

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/f/ + /s/ or /t/	/v/ + /z/ or /d/	life's	lives	surfed	served
/θ/ + /s/	/ð/ + /z/	mouth's	mouths		
/s/ + /t/	/z/ + /d/			priced	prized
/tʃ/ + /t/	/dʒ/ + /d/			etched	edged

That isn't the end of the story, though. These suffixes can be affected by further assimilation, e.g. in *they served some delicious food*, assimilation of /vd/ + /s/ to /fts/ can make the sentence sound like *they surfed some delicious food!*

Does assimilation only happen in English?

Assimilation is a natural consequence of normal, fluent speech, and is likely to happen to some extent in any language, but the overall amount of assimilation, and the details of the possible types of assimilation, vary considerably between languages.

Elision

Verb: *to elide*

Elision is the process by which sounds disappear – or, more accurately, fail to appear – in fluent speech where they might be expected to appear when a word is spoken in isolation, or in slow, careful speech.

Elision of schwa

The weak vowel /ə/ (*schwa*) is unstable and frequently elided:

potato	/pə'teɪtəʊ/	→	/p'teɪtəʊ/
tomato	/tə'mɑ:təʊ/	→	/t'mɑ:təʊ/
banana	/bə'nɑ:nə/	→	/b'nɑ:nə/
today	/tə'deɪ/	→	/t'deɪ/
police	/pə'li:s/	→	/p'li:s/
connection	/kə'nekʃn/	→	/k'nekʃn/

Note that elision creates some consonant combinations which would normally be considered 'illegal' in English, such as these at the beginnings of words: /pt/, /tm/, /bn/, /td/.

Elision in clusters

Elision often affects consonant clusters. In particular, /t/ or /d/ in the middle of a cluster tend to be elided:

asked	/skt/	→	/st/
walked behind	/ktb/	→	/kb/
helped them	/lptð/	→	/lpð/
next week	/kstw/	→	/ksw/
Christmas	/stm/	→	/sm/

Elision in weak forms

Elision is a feature of many weak forms, such as:

had / would	/d/	I'd rather not
will	/l/	that'll do

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Assimilation and elision combined

Assimilation and elision can combine to produce pronunciations which are significantly different from what would be expected on the basis of written forms. Here, for example, are three possible pronunciations of *bed and breakfast*, the first fairly slow and careful, the second faster and the third as it might be said in the middle of an utterance in a relaxed informal conversation:

/,bedəm'brekfəst/
/,bedm'brekfəs/
/,bem'brekfs/

This degree of simplification of pronunciation is by no means unusual; in fact it's normal in speech which isn't deliberately slow and clear.

Summary

Assimilation is a process by which a sound changes to become more similar – or even identical – to a neighbouring sound. In principle, this process can operate backwards to affect a preceding sound or forwards to affect a following sound. The first type (*regressive* assimilation) is more widespread in English, but the second type (*progressive* assimilation) operates in connection with the *-s* and *-ed* suffixes.

Elision is a process by which a sound is missed out, in a context where it would appear in slow, careful speech.

I've used the words *tend to* and *tendency* repeatedly; these two processes aren't entirely predictable, and are partly a matter of speed and style of speech, and partly a matter of individual variation.

Implications for learners and teachers

Implications for listening

In normal, fluent speech, words are often not pronounced as learners would expect on the basis of their written form or the idealized pronunciation recorded in dictionaries. Assimilation or elision, or both combined, can disguise the identity of words, e.g. *served* can sound like *surfed*, and remove grammatical distinctions, e.g. *walked behind* can sound like *walk behind*.

This suggests a need for guided listening exercises for recognition of words and phrases in natural fluent speech.

Implications for learners' own speech

It is important for learners to be aware of assimilation and elision and for a teacher to draw attention to examples when they come up in class. Should learners try to use the same assimilations and elisions as native speakers? The answer, of course, depends on whether they aspire to a native-like accent. If learners don't aspire to a native-like accent, then there may be no particular reason for them to try to use such assimilation and elision, especially since idealized pronunciations contain more information about the identity of words, and can thus help learners to make themselves understood. For example, if you pronounce a clear /t/ at the end of *walked*, it will be clear that you're using the past tense.

On the other hand, using assimilation and elision can sometimes help learners to pronounce English more easily and more confidently. For example, instead of struggling to pronounce *next week* with /kstw/, they may find it easier to elide the /t/ and only pronounce /ksw/. Or if they have difficulty pronouncing *gone past*, they might welcome the option of using /m/ instead of /n/.