

G-DELETION IN CANADIAN DIALECTS OF ENGLISH

Brenda Murray

Dialects differ in many ways. Canadian dialects differ among themselves. An example of this is in the presence or absence of a rule. We have an example of this in a rule that is illustrated in the following example.

Phoneme	/long/	/longer/	/strong/	/stronger/	/rag/	/bag/
Phonetic Form	[lɔŋ]	[lɔŋgə]	[strɔŋ]	[strɔŋgə]	[ræg]	[bæg]

We can see from the above examples that the /g/ deletes in some of the phonetic forms. The environment in which it deletes is the end of the word after /ŋ/. These examples give rise to the rule we will call G-Deletion, where /g/ is deleted at the end of the word.

G-Deletion

g --> Ø / ____ #

This rule has to be paired with another rule that will change n to ŋ. These rules must be ordered so that the "eng-rule" comes before "g"-deletion, because to change the /n/ to /ŋ/ we need a velar following the /n/.¹ Therefore we cannot delete the /g/ until we have the /ŋ/.

Eng-Rule

n --> [+velar] / ____ [+velar]

By this rule n changes to /ŋ/ before a velar. The rules are ordered in the following way:

Eng-Rule

G-Deletion

Let's try these rules with the above examples to see if they will give us the phonetic form from the above phonemes.

Phoneme	/long/	/longer/	/strong/	/stronger/	/rag/	/bag/
Eng-Rule	ŋ	ŋ	ŋ	ŋ	--	--
G-Deletion	Ø	--	Ø	--	--	--
Phonetic form	[lɔŋ]	[lɔŋgə]	[strɔŋ]	[strɔŋgə]	[ræg]	[bæg]

As we can see the above rules do give us the correct phonetic form. They delete the 'g' in the words where it is not pronounced while retaining it in words where the 'g' is pronounced.

One would almost wonder -- why go to the bother of formulating all these rules to explain the absence of the /g/ in the words like long and strong? It would be easier to eliminate the /g/ in the phoneme representation and replace the /n/ with /ŋ/ in the phonemic representation. We probably would assume that there was an ^{*}/n/, rather than /ng/, in the phonemic representation if it were not for the words longer and stronger. These words both retain the /g/ in the phonetic form. These words are pairs with long and strong as they share the same morpheme. Because of the shared morpheme, they retain the /g/ in the phonemic form, as we assume the phonemic form of a morpheme to be the same everywhere, generally speaking.

Another dialect of Canadian English, one we will label Dialect II, differs from the above dialect in that the rule of G-Deletion is optional: see below

	A		B	
Phoneme	/long/	/strong/	/long/	/strong/
ŋ-Rule	ŋ	ŋ	ŋ	ŋ
G-Deletion	Ø	Ø	---	---
Phonetic Form	[lɒŋ]	[strɒŋ]	[lɒŋ]	[strɒŋ]

We can see from the above examples that the optionality of the rule of G-Deletion gives us two sets of phonetic forms -- A and B. When the rule is not used (case B above) the /g/ is retained in the phonetic form, i.e. it is pronounced. In dialect II, the /g/ is optionally retained in the phonetic form and thus both derivations A and B are acceptable.²

The rule of G-Deletion appears to be obligatory, sometimes, in dialect II. An example of this is the adjective cunning.

	Dialect I	Dialect II
Phoneme	/kʌnɪŋ/	/kʌnɪŋ/
ŋ-Rule	ŋ	ŋ
G-Deletion	Ø	Ø
Phonetic form	[kʌnɪŋ]	[kʌnɪŋ]

In both dialects, the rule of G-Deletion appears to be obligatory at least some of the time. This presents a problem in expressing the rule for dialect II as the rule of G-Deletion is in general optional for this dialect. We could assume that the rule is only obligatory for the word cunning in dialect II, but this would be inconsistent with the observation that G-Deletion is optional, in general, for that dialect. There is an alternative solution, however. We have no phonetic form of the word cunning that contains a [g] phonetically. There is no comparative form of the word that uses '-er': i.e. *cunninger is ungrammatical. As the word is absent we are unsure of what the phonetic form would even be if it did exist. We would surmise that it would be one of the following: *[kʌnɪŋer] or *[kʌnɪŋər]. Because we are unsure of what the phonetic form is, because the word is nonexistent, we are unable to find any supporting evidence for a phonemic /g/ in the word. There is no direct phonetic evidence for it. We can assume the absence of /g/ in the phonemic form of the adjective, and the presence of a phonemic /ŋ/, to avoid the explanation of the obligatory g-deletion in dialect II.

/kʌnɪŋ/ --> [kʌnɪŋ]

There would be no application of G-Deletion as there is no /g/ in the phonemic form. Both dialects I and II would have the same phonemic and the same phonetic form as no rules apply. This is a logical explanation as we have no evidence for a phonemic /g/, but it doesn't discredit the optionality of the rule of g-deletion for dialect II, as far as other words go.

We have further evidence for our hypothesis in the way that the g-devoicing rule interrelates with the other rules.

G-Devoicing Rule

g --> [-voi]/[+nasal]___[-voi]

That is, /g/ becomes voiceless [k] before a voiceless consonant and after a nasal, this rule being optional in some words, and inapplicable in others: note the ill-formed derivations, according to dialect II, in set B when g-devoicing is applied.

Dialect II:

A:

	/yʌŋstər/	/lengθ/	/strengθ/
G-Devoicing	k	k	k
ŋ-Rule	ŋ	ŋ	ŋ
	[yʌŋkstər]	[lɛŋkθ]	[streŋkθ]

OR B:

	/yʌŋstər/	/lengθ/	/strengθ/	
G-Devoicing	---	---	---	(rule not applied)
ŋ-Rule	ŋ	ŋ	ŋ	
	[yʌŋstər]	[lɛŋθ]	[streŋθ]	

B:

	/gangstər/	/songstər/	/kɪŋʃɪp/
G-Devoicing	---	---	---
ŋ-Rule	ŋ	ŋ	ŋ
G-Deletion	∅	∅	∅
	[gʌŋstər]	[sɒŋstər]	[kɪŋʃɪp]

	/gangstər/	/songstər/	/kɪŋʃɪp/
G-Devoicing	k	k	k
ŋ-Rule	ŋ	ŋ	ŋ
G-Deletion	---	---	---
	[*gʌŋkstər]	[*sɒŋkstər]	[*kɪŋkʃɪp]

We can see from the above examples that the rule of G-Devoicing does not apply in set B but it applies optionally in set A. One difference is that there is phonetic evidence for a /g/ in the words in group A but not in group B. The morphemes contained in the words in group A are adjectives, and there is phonetic evidence for a phonemic /g/ in their comparative forms:

i.e. [yʌŋgər] [lɒŋgər] [strɒŋgər].

In set B, the morpheme is a noun and there is no phonetic evidence for a phonemic /g/. There is no comparative form for nouns, no phonetic form at all containing a /g/.

We can see from this that the G-Devoicing rule cannot apply where a /g/ cannot be motivated in the phonemic form such as in the case of the nouns in set B. The G-Devoicing rule is only able to apply in dialect II, in Set A where there is independent evidence for a phonemic /g/. We must have a phonemic /g/ so that it can devoice to a [k]. This really calls into question the phonemic forms assumed for set B: /gangstər/, /songstər/, kɪŋʃɪp/. An alternative solution is to assume no underlying /g/ in the words, and to suppose the phonetic [ŋ] derives from phonemic /ŋ/: /gʌŋstər/, /sɒŋstər/, /kɪŋʃɪp/. Now we can permit G-Devoicing to be optional for all words if there is no phonemic /g/ as in Set B now the rule is unable to apply and we cannot obtain a [k].

There is another group of words, nouns and verbs, where a /g/ is perhaps expected but is absent phonetically, in both dialects I and II. We expect the /g/ in some words because there is an [ŋ] and by the original hypothesis we need a velar, presumably /g/ to trigger the eng-rule. Under the original hypothesis, we assume the following phonemic forms.

	/king/	/kings/	/sing/	/sings/	/singer/	/ring/	/rings/	/ringer/
ŋ-Rule	ŋ	ŋ	ŋ	ŋ	ŋ	ŋ	ŋ	ŋ
G-Deletion	∅	∅	∅	∅	∅	∅	∅	∅
	[kiŋ]	[kiŋs]	[siŋ]	[siŋs]	[siŋər]	[riŋ]	[riŋs]	[riŋər]

We can see that the /g/ is phonetically absent in all these cases. As previously discussed, the rule of G-Deletion specifies the environment at the end of the word. In the above examples /g/ is absent even in the middle of some words. Maybe our rule of G-Deletion is faulty.

Perhaps we could explain the rule by saying that /g/ is retained when an inflection such as the comparative -er in longer is added. We would expand the environment of G-Deletion to include derivations of words, for example singer. The -er in singer and ringer is a derivational affix as these are nouns that contain a verb morpheme, and it is a very different -er than that in longer and stronger, i.e.

	N
V	Agent
sing	-er

The principle of the cycle gets us to apply the rule to the first part of the word so we apply it to sing as a separate part. This way we end up with the /g/ being deleted because it is at the end of the word on the lower cycle and we get the phonetic form [siŋər]. Words like singer and ringer are nouns derived from verbs but words like longer and stronger are still adjectives like the adjective that is the morpheme with them. They are just a comparative form, so the rule of G-Deletion is applied to the whole word and thus the /g/ is retained in the phonetic form. By modifying the environment of G-Deletion to include derivations of words, we get the rule to apply in words like ringer and singer, but not in words like longer and stronger because they are not derivations from another word.

Another problem arises in words such as sings and rings. The /s/ in these words is an inflection like the comparative -er, but since the /g/ doesn't appear phonetically, we have to suppose that it deletes in these words under the original hypothesis. This destroys the hypothesis as it stands. The rule of G-Deletion is inappropriate, as it appears to be obligatory for nouns and verbs in Dialect II. Consider the following derivations, assuming an underlying /ng/, not /ŋ/:

	/kingz/	/ringz/	/singz/
ŋ-rule	ŋ	ŋ	ŋ
g-deletion	---	---	---
	[*kingz]	[*ringz]	[*singz]

The supposedly optional g-deletion rule doesn't apply here, but we get an ungrammatical form.

This can be explained in another manner already indicated. I propose that there has been a reanalysis that has changed the phonemic form for nouns and verbs. We have no phonetic evidence for /g/ in any of the examples of nouns and verbs.

If there is no longer a phonetic /g/ it appears logical that the phoneme has undergone a reanalysis and the /g/ has been eliminated, in the phonemic representation. Instead of applying the rules of g-deletion and the eng-rule to nouns and verbs, we have replaced the /n/ with /ŋ/ in the phonemic representation of these words and removed the /g/. This would allow us to explain why the /g/ is never present in some words; in others it is optionally present because the phonemic form contains /ng/.

I propose then, that a phonemic final /g/ following a nasal (which g-deletion may later delete) is only present where there is phonetic evidence for the /g/ such as in the adjectives longer and stronger. Elsewhere, the /g/ has been removed in the phonemic form and the rule of g-deletion is inapplicable. This hypothesis does not contradict the optionality of the rule for dialect II. There is no /g/ in the phonetic form of nouns and verbs but if it is not present in the phonemic form, the rule of g-deletion would not apply at all. We retain the phonemic /g/ in adjectives like /long/, /strong/ and g-deletion deletes there, either optionally or obligatory, depending on the dialect. Thus, I suggest the following phonemic forms in place of those assumed above.

Phoneme	/kiŋ/	/kiŋs/	/siŋs/	/siŋ/	/siŋər/	/riŋ/	/riŋs/	/riŋər/	/kʌniŋ/
Phonetic form	[kiŋ]	[kiŋs]	[siŋs]	[siŋ]	[siŋər]	[riŋ]	[riŋs]	[riŋər]	[kʌniŋ]

Therefore the dialects I and II, would be the same phonemically as well as phonetically, for nouns and verbs. The two dialects only differ when there is evidence for a phonemic /g/, because this is when the optionality of g-deletion is possible. The difference here is not a phonemic one, however just a phonetic form i.e. deriving from the optionality of g-deletion in dialect II, but its being obligatory in dialect I. The dialects are the same for nouns and verbs where we have no phonetic evidence for a phonemic /g/ and where we could evidently have a phonemic /ŋ/.

We see from the above how much languages can vary within themselves. These dialects differ in the optionality of the rule of g-deletion.

¹These rules are first discussed in Chomsky, Noam and Halle, Morris, The Sound Pattern of English. Harper and Row Company, 1968.

²A variation of this dialect occurs in North-West England in the Manchester and Liverpool areas. The rule of g-deletion is completely lacking here and thus 'g' is always retained in the phonetic form.

Phoneme	/long/	/longer/	/strong/	/stronger/
-rule	ŋ	ŋ	ŋ	ŋ
Phonetic	[long]	[longer]	[strong]	[stronger]