

# Lesson 1

## The Sound System and Writing

### 1. Introduction

Carrier makes use of quite a few sounds that are unfamiliar to speakers of English. Most of these sounds are not difficult to learn, but a few will probably take some practice. The silver lining is that Carrier spelling is much easier than English spelling because it is much simpler and more systematic. In Carrier, each sound is spelled just one way, and each letter or sequence of letters represents just one sound. There are no ambiguities or irregularities of the sort so common in English.

There are no silent letters in Carrier. Thus, the word *dune* “man, person” consists of two syllables *du* and *ne* (pronounced rather like *duh-nay*, rather than the single syllable of the English word *dune* (which might also be written *doon*)).

The writing system used here is the Carrier Linguistic Committee writing system, which was developed in Fort Saint James in the 1960s. It is the writing system used by most Carrier people who can read and write in Carrier, and in which most materials are printed.

### 2. Vowels

Carrier has six vowels: *a*, *e*, *i*, *o*, *oo*, and *u*. The sounds themselves are very similar to sounds found in English.

**a**

This has the sound of the *a* of English *Pa* or the *o* of English *pod*, never the sound of the *a* of English *pat*.

**e**

This has the sound of the *e* of English *pen* or the *ai* *pain* depending on the context. It is never silent as in English *pine*.

**i**

This has the sound of the *ee* of English *seen* or the *i* of English *sin*, depending on the context. It never has the sound of English *sign*. At the beginning of a word it tends to sound as if it has a soft *y* before it.

**o**

This has the sound of the *oa* of English *boat*.

**oo**

This has the sound of the *oo* of English *boot*. At the beginning of a word it tends to sound like it has a soft *w* before it.

**u**

This has the sound of the *u* of English *but*. It never has the sound of the *u* of English *flute*; that sound is represented by *oo*.

There are also three diphthongs, two of which are familiar:

**ai**

This diphthong is usually written in English with an *i* followed by a single consonant and then a silent *e*, as in words like *mine*. The Carrier word *mai* sounds almost the same as the English word *my*.

**aw**

This diphthong sounds like the vowel part of English *pow* and *wow*. The Carrier word *'aw* “not” sounds almost the same as the English expression of pain *ow*.

**ui**

This diphthong is similar to *ai* but begins with the vowel of English *but*. It has no counterpart in standard English. You are likely to encounter some variation in which words contain this diphthong and in how it is written. At one point, all dialects had this diphthong in a certain set of words. This diphthong merged with *i* (that is, all instances of *ui* came to be pronounced *i*) except after the velar consonants *k*, *g*, *k'*, *kh*, and *gh*. In some dialects it has gone on to merge with *i* even after velar consonants. In others, such as Lheidli dialect, it remains after velar consonants. To further complicate matters, some speakers of dialects that retain *ui* after velar consonants have it in some words but have *i* in other words. Lheidli dialect is unique in having this diphthong in a few words in contexts where it does not follow a velar consonant. Because the status of this diphthong has not been well understood, there is some variability in its spelling. In this textbook we always spell it *ui*, but elsewhere you may see it confused with *ai* or spelled *i*.

The diphthong *ew*, which is similar but begins with a vowel like the *e* of English *bet*, occurs in one word *wedlew* “sandpiper”.

The vowel sequence *aoo* often becomes the diphthong *aw* in fast or casual speech. You may therefore occasionally see *aw* written when you would expect *aoo*.

### 3. Consonants

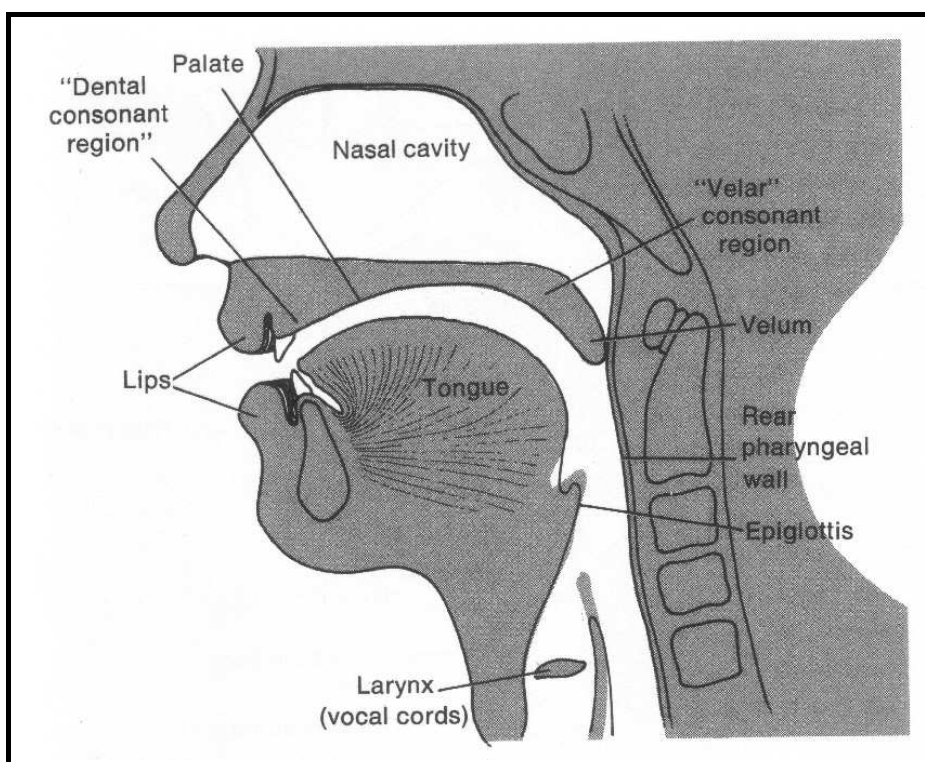
While Carrier has only six distinct vowels, it has over forty consonants.

Here is a chart showing the consonants of Carrier arranged by type. The labels on the columns are the point of articulation, that is, where in the mouth the sound is made. The rows represent the different ways of making consonants. *f* and *r* are in parentheses because these sounds are not native to Carrier but are found in words

borrowed from other languages, such as *lugafi* “coffee” and *lugarat* “carrots”. *ghw* is in parentheses because for most speakers this sound has changed into *w*. Some older speakers still pronounce it *ghw*.

Manner/POA	Labial	Fronted	Alveolar	Lateral	Palatal	Velar	Labiovelar	Glottal
Voiceless stop			t			k	kw	'
Voiced stop	b		d			g	gw	
Glottalized stop			t'			k'	kw'	
Voiceless affricate		ts	ts	tl	ch			
Voiced affricate		dz	dz	dl	j			
Glottalized affricate		ts'	ts'	tl'	ch'			
Voiceless fricative	(f)	s	s	lh	sh	kh		
Voiced fricative		z	z			gh	(ghw)	
Nasals	m		n		ny	ng		
Voiced Glide/Liquid	w		(r)	l	y			
Voiceless Glide	wh							h

The labels in this chart are terms used by linguists. If you are already familiar with them, they will help to identify the sounds of Carrier for you. If you are not familiar with them, do not be concerned. These are defined in the appendix on terminology. At some point you may wish to refer back to this section as some of the grammatical explanations in future chapters use some of these terms to refer to groups of sounds.



**The Vocal Tract**

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### 3.1. Familiar Consonants

The following consonants are just about the same as in English though they may be spelled differently.

ch	as in	cheese
d	as in	day
f	as in	foe
g	as in	gay
gw	as in	guava
h	as in	hay
j	as in	jay
k	as in	key
kw	as in	queen
l	as in	lay
m	as in	may
n	as in	nay
r	as in	ray
s	as in	say
sh	as in	shoe
t	as in	tea
w	as in	way
y	as in	yes
z	as in	zoo

### 3.2. Unfamiliar Consonants

Almost half of the consonants of Carrier are unfamiliar to speakers of English. We review them in roughly increasing order of difficulty.

#### 3.2.1. *kh* and *gh*

These sounds are produced in the same way except that *kh* is voiceless (produced without vibration of the vocal cords) while *gh* is voiced (produced with vibration of the vocal cords). They are produced in the same position in the mouth as *k* and *g*, that is, with the back of the tongue lifted toward the back of the palate. *k* and *g* are produced with the tongue actually touching the palate, so that the vocal tract is completely closed off. In contrast, *kh* and *gh* are produced by narrowing the vocal tract instead of closing it off completely. In this sense, *kh* is to *k* as *s* is to *t*, and *gh* is to *g* as *z* is to *d*. *kh* is the sound spelled *ch* in German *bach*.

#### 3.2.2. *wh*

Another sound that does not occur in English is *wh*, the voiceless counterpart of *w*. It sounds somewhat like an *h* followed by a *w*. Although it is unfamiliar,

you will probably not find it too difficult to learn. English used to have this sound. Words like *who* and *why* are spelled with *wh* because they were once pronounced with a sound like that of Carrier *wh*. In most dialects of English this sound has merged with *w*, but you can still hear it in some dialects, for instance, in parts of New England.

### 3.2.3. *lh*

This sound does not occur in English. It is produced by raising the tongue against the roof of the mouth and lowering one side, so that there is a gap on one side through which air can flow. It is similar to an *l* but does not involve vibration of the vocal cords. You may find that it sounds a bit like *thl*.

This is the sound spelled *ll* in Welsh. The reason that English has both *Floyd* and *Lloyd* as equivalents of the Welsh name *Lloyd* is that these represent two different attempts by English speakers to approximate the unfamiliar Welsh sound.

The best way to learn this sound is to listen to it and try to imitate it. It isn't too hard to learn to recognize it but it may take some practice before you are comfortable making it. Most people seem to find it easier to make at the end of a syllable than at the beginning, so you may wish to practice with words like *bilh* "net" and *sulh* "with me" before moving on to words like *lhi* "dog". A particularly good word with which to practice is *lhulh* "with me".

### 3.2.4. *ny*

This is a palatal nasal, that is, a sound similar to *m*, *n* and *ng* but produced with the tongue in the same position as for *y*. It is the sound at the beginning of British English *neut* or *news*. This sound does not occur in ordinary words in the speech of most Canadian and American English speakers, but it is found in the taunting expression *nyah-nyah*. Some speakers of Carrier, have a palatal nasal in the word *nyun* "you (one person)" and in certain related prefixes.

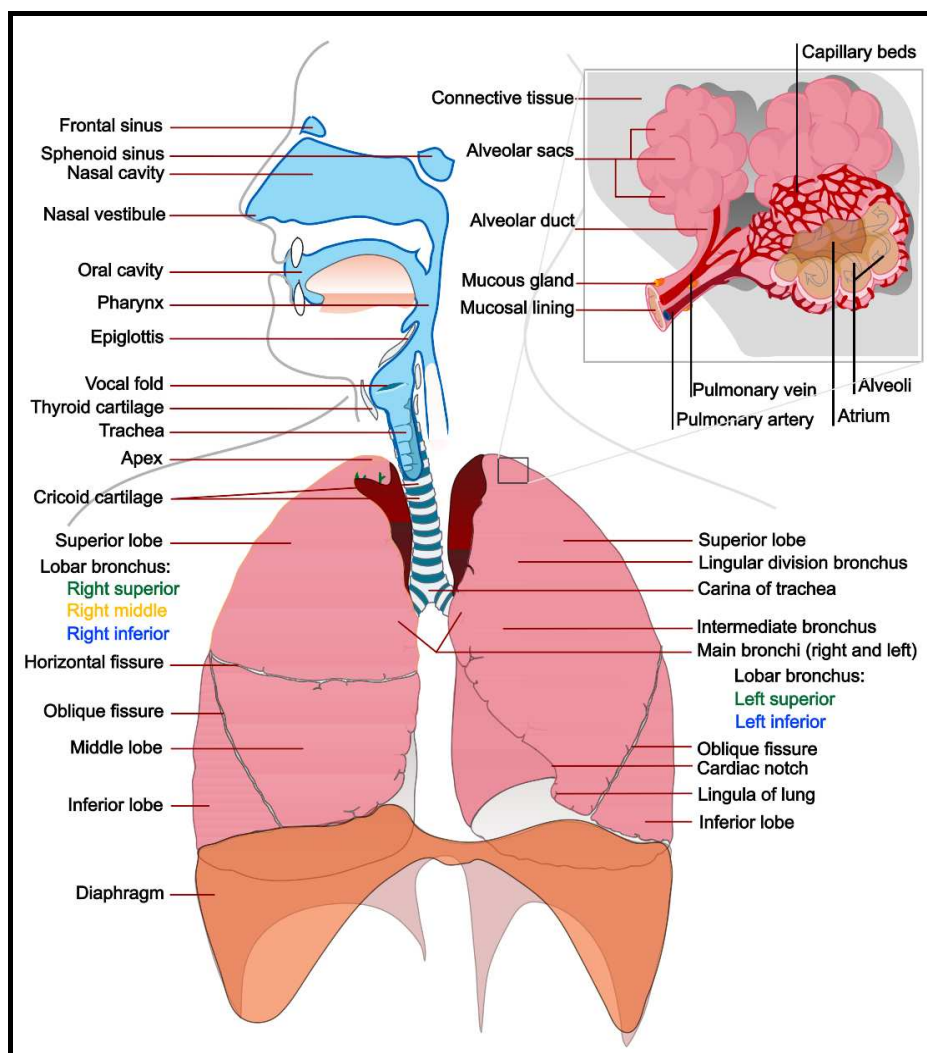
In most cases, the sequence of letters *ny* in Carrier does not represent a palatal nasal. It usually represents a syllabic *n* followed by a *y*. Thus, the word *nyoh* "your building" consists of two syllables, a syllabic *n* followed by *yoh*.

### 3.2.5. Glottalized Consonants

The most unfamiliar sounds are probably the *glottalized consonants*.<sup>1</sup> One way to generate air pressure is with the lungs. When you produce a *t*, as in English *top*, you close off your vocal tract by pressing the tip of your tongue against your alveolar ridge (the ridge behind your upper teeth). You then generate air pressure with your lungs and pull your tongue away from your alveolar ridge, thereby releasing the closure. This produces a little explosion as the trapped air rushes out.

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<sup>1</sup> These are also called *ejectives* by linguists.



## The Respiratory System

This source of air pressure is used in all human languages. In many languages, including English, it is the only source of air pressure. There are, however, other ways of producing air pressure. One of them is to close the *glottis*, the opening in your windpipe as it passes through the larynx. This is done by bringing the vocal cords tightly together. If you close the vocal tract somewhere farther up, at the lips, or between your tongue and your palate, you will have trapped air between the two closures. If you then raise your larynx a bit (about 1cm), you will compress the air trapped between the two closures, thereby generating positive air pressure. If you then release the closure farther forward, the result will be burst of air. Consonants made in this way are called *glottalized consonants*.

You will probably not find it too difficult to identify glottalized sounds. They have a distinctive “tense” or “popping” sound. You will have to practice to learn to produce them. In Carrier, the glottalized stops and affricates are found only at the beginning of a syllable.

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### 3.2.6. Labiovelar Consonants

A labio-velar sound is like a velar but with rounding of the lips as well. This is essentially the same as producing a velar followed by a *w*, which is how these sounds are written. Carrier *kw* is therefore pronounced about the same as the *qu* of English *quick*. Carrier *gw* is pronounced about the same as the *gw* of English *Gwen*. Unlike English, Carrier also has the glottalized *kw'*. Once you learn to make glottalized consonants, you should have no difficulty in making *kw'*.

In English *kw* (spelled *qu*) can occur only at the beginning of a syllable. In Carrier *kw* can occur at the end of a syllable as well, as in *ndukw* “it is short”. You probably will not find it too difficult to learn to make *kw* at the end of a syllable, but it can be difficult to hear.

### 3.2.7. Plain Affricates

An affricate is a sequence of a stop consonant (a sound produced with a complete closure of the vocal tract) and a fricative (a sound produced with a substantial narrowing, but incomplete closure, of the vocal tract). The sound at the beginning and end of English *church* is an affricate. Although spelled *ch*, it is a sequence of *t* and *sh*. Similarly, the sound spelled *j* in *judge* is an affricate consisting of *d* followed by the sound spelled *s* in *measure*.

Carrier has these two familiar affricates, spelled *ch* and *j* as in English. It also has some unfamiliar affricates. *ch'* is the glottalized counterpart of *ch*. Carrier also has a series of alveolar affricates *ts*, *dz* and *ts'*, and a series of fronted affricates *ts̺*, *dz̺* and *ts̺'*. With the exception of a few instances of *ts*, affricates are found only at the beginning of a syllable in Carrier.

### 3.2.8. Lateral Affricates

The lateral affricates are like the plain affricates in that they begin with a stop sound and end in a non-stop sound. However, instead of ending in a fricative like *s* or *z*, they end in a lateral, that is *l* or *lh*. English does not allow such sequences of consonants. The lateral affricates in Carrier are *tl*, *dl*, and *tl'*.

### 3.2.9. Fronted Consonants

Carrier has two sets of consonants similar to English *s*, *z* and so forth. The plain alveolars *s* and *z* are the same as in English. *ts*, *dz*, *ts'*, which do not occur in English, are produced in the same way, that is, with the tip of the tongue against or near the alveolar ridge, behind the upper teeth.

The fronted consonants *s̺*, *z̺*, *ts̺*, *dz̺*, *ts̺'* are similar to the alveolars, but they are made with the tip of the tongue coming farther down, behind the upper teeth, so that the blade of the tongue rather than the tip lies along the alveolar ridge

and upper gum. The technical linguistic term for the fronted sounds of Carrier is *lamino-dental*.

The contrast between the plain and fronted alveolar consonants is difficult to hear, and most younger speakers of the language do not have the fronted consonants. They pronounce them the same as the plain alveolars.

### 3.3. Glottal Stop

Another unfamiliar sound is the *glottal stop*, written with an apostrophe. This sound is made by bringing the vocal cords tightly together. At the beginning of a syllable, pressure is generated by the lungs, and the vocal cords are then pulled apart, resulting in a little explosion. This sound actually occurs in English, but English speakers are usually not aware of it because its occurrence is automatic. In English there are no words that truly begin with a vowel. Whenever a word would begin with a vowel, English inserts a glottal stop.

Try saying the English word *eye*. If you pay attention to what is happening in your larynx, you should feel yourself closing your vocal cords. Try saying *eye* and *hi* one after the other. You should feel your vocal cords opening for the *h* of *hi*, then closing for the unwritten glottal stop at the beginning of *eye*.

In Carrier, the occurrence of the glottal stop is not automatic. It makes a difference whether it is present or not. For example, 'a, with a glottal stop, means “fog” or “quickly”. *a*, without the glottal stop, means “yes”.

Glottal stop may also occur at the end of a syllable. For example, 'uk'o means “fat”, while 'uk'o', the same but for the addition of a glottal stop at the end, means “hunchback”.

You already know how to produce a glottal stop, but you will have to learn to leave it out when it should not be present in Carrier. You will also have to learn to hear when it is present and when it is not.

### 3.4. Syllable Final *h*

One sound that is familiar from English is *h*. In English, *h* occurs only at the beginning of a syllable. In Carrier, *h* is also found at the end of syllables, as in *yoh* “building”. You will need to learn to produce and hear these. Syllable-final *h* is often quite difficult to hear.

### 3.5. Syllabic Nasals

The nasals *m*, *n* and *ng* may be syllabic in Carrier, that is, they may form the core of a syllable, as vowels usually do. The syllabic nasals are written the same as their non-syllabic counterparts. In English, the 'em in *keep 'em coming* represents a syllabic *m*. The same sound is heard in Carrier in *mbat* “your mittens”. The *on* in *button* is syllabic. The same sound is heard in Carrier in *ndek'a* “your tobacco”.



The sound represented by *in* in a casual pronunciation of *income* is a syllabic *ng*. The same sound is heard in Carrier in *ngan* “your arm”.

#### 4. Summary of the Alphabet

Here are examples of each of the sounds of Carrier and how they are written.

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'	'a	fog
a	a	yes
b	bat	mittens
ch	chunih	marten
ch'	ch'okw	porcupine quill
d	dune	man
dl	dlooncho	packrat
dz	dzoot	coat
<u>dz</u>	<u>dzulh</u>	mountain
e	'uke	a foot
g	goh	rabbit
gh	'ugha	fur
gw	gwuzeh	Whiskey Jack
h (initial)	hoonliz	skunk
h (final)	yoh	outbuilding
i	ti	road
j	jenyo	bull moose
k	kesgwut	moccasin
k'	k'a	cartridge
kh	khoh	goose
kw (initial)	kwun	fire
kw (final)	lhukw	fish
kw'	kw'usul	beads
l	lasyet	plate
lh	lhulh	with each other
m	musdus	cow
m (syllabic)	mbat	your mittens
n	noostel	wolverine
n (syllabic)	ndek'a	your tobacco
o	goh	rabbit
oo	too	water
s	sa	sun
<u>s</u>	<u>se</u>	belt
sh	shas	grizzly bear
t	talukw	salmon
t'	t'ugicho	mallard duck
tl	dutleh	it is soft
tl'	tl'o	grass
ts	tsa	beaver
ts'	ts'i	canoe
<u>ts</u>	<u>tse</u>	rock
<u>ts'</u>	<u>ts'al</u>	diaper moss
u	sus	black bear
w	wedlew	sandpiper
wh	whudzih	cariboo
y	ya	sky
z	gwuzeh	Whiskey Jack
<u>z</u>	<u>buzek</u>	his mouth

The letters *p*, *q*, *v* and *x* are not used to write Carrier words although you may find them in English words such as names included in Carrier sentences. The letter *c* is used only in the compound letters *ch* and *ch'*. It is never used to write the *k*-sound as in “coal” or the *s*-sound as in “city”.

## 5. Minimal Pairs Illustrating Difficult Contrasts

Most of the sounds of Carrier are not difficult to learn, but there are a few distinctions that at first may seem very subtle. Here are examples of some potentially difficult contrasts. The pairs of words are chosen so that they differ only in one place.

Contrast	Word A	Gloss	Word B	Gloss
0/' (initial)	a	yes	'a	quickly
'/h	'uk'o'	hunchback	'uk'oh	tracks, footprints
t/t'	dutai	it is thick	dut'ai	bird
kw/kw'	kwus	cold (disease)	kw'us	cloud
kh/h	khoh	goose	hoh	while
l/lh (final)	hodul'eh	he is learning	hodulh'eh	he is teaching
z/dz	buzi	his corpse	budzi	his heart
s/ṣ	yus	wolf	yuṣ	snow

## 6. Examples of Difficult Clusters

Carrier allows certain *clusters* (sequences of sounds) that may seem difficult at first. Here some examples. Listen to them and try to produce them yourself. You should not expect to be able to produce these well at first. If you find them difficult, come back to them later.

Cluster	Example	Gloss
stl'	stl'o	my grass
lhch'	lhch'atsetselh	double-headed axe
lhgh	lhghuhusduke	they are married to each other
lhk'	lhk'utdunghi	eight