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# Articulation

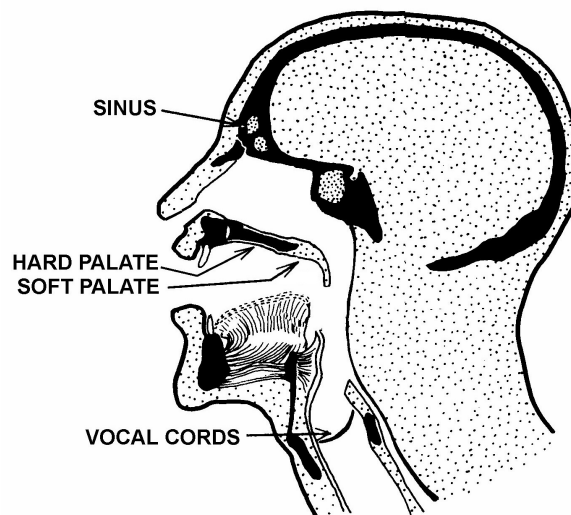
(Techniques CD – track 12-13, 20-21 / DVD chap 5-6)

## Vowel Sounds

Vowel sounds are the sustained, free-flowing vocal tones. They are formed by shaping the mouth space, using the articulators: tongue, lips, jaw, teeth, hard palate and soft palate.

The hard palate is the roof of the mouth behind the top front teeth. The soft palate is the soft area behind the hard palate at the back of the roof of the mouth.

The tip of the tongue should rest behind the lower teeth on all the vowel sounds, moving only to articulate consonants and quickly returning to its resting place. If the tongue pulls back, it blocks the throat passage, interfering with resonance and possibly with focus as well.



In the following progression, the tongue lowers from its highest position for "ee" (as in see) to its lowest position for "uh" (as in up). For "aw" (as in dawn) "uu" (as in book) and "oo" (as in soon), the lips form the vowel sounds for each and are most rounded for "oo". The tip of the tongue rests behind the lower teeth for all the vowels.

	I.P.A.*
"ee" as in <u>see</u>	[ i ]
"ih" as in <u>it</u>	[ I ]
"eh" as in <u>end</u>	[ ε ]
"aa" as in <u>at</u>	[ æ ]
"a" as in <u>park</u>	[ a ] **
"ah" as in <u>far</u>	[ ɔ ]
"uh" as in <u>up</u>	[ ʌ ]
"aw" as in <u>dawn</u>	[ ɔ ]
"uu" as in <u>book</u>	[ U ]
"oo" as in <u>soon</u>	[ u ]

\* I.P.A.: International Phonetic Alphabet

\*\* "a" as in the bright Boston vowel ( `paaahk the caaaah' )

The mouth, widened toward a smile, helps to activate the 'mask resonance' (see page 17, 47, 50) producing overtones that give the voice richness throughout its range. Let your eye teeth show slightly but be careful not to wrinkle your nose or tense your lips unnaturally.

When singing on a low pitch, you can brighten your vowel sound by widening your mouth position horizontally, as in a smile. This helps to emphasize the upper resonances and keep the mask placement. If the expression of a word indicates sorrow, the eyes communicate the emotion and the

mouth can still widen, especially on higher and/or louder tones. Notice that in both crying and smiling, the expression of the mouth is similar.

For the vowels: "**ee**" (as in see), "**ih**" (as in it) and "**oo**" (as in soon), there is a tendency to close the jaw and throat space.

The tongue forms the "**ee**" sound. The sides of the middle tongue lightly touch the upper molars; the tip rests behind the lower teeth. High and loud tones need more resonating space to sound free and easy. Because of the more open space, the vowels become slightly modified. When the "**ee**" vowel occurs on a high note, it is best to relax the tongue slightly as in "**ih**" and open the jaw a little more in order to produce a free and open vowel. At the same time you should try to keep the "**ee**" as true as possible. This method applies to louder tones throughout the range, especially if the chest resonance is emphasized (see page 47).

The *lips* form the "**oo**" sound by moving forward and rounding while the tongue remains relaxed low in the mouth. For both high pitches and louder tones, relax the jaw more open than when you say "**oo**" in the speaking range. But even when the jaw is more open, try to keep a true "**oo**" vowel by rounding the lips. At first this may feel a little awkward, but with practice it will feel more natural and the result will be a more open, natural and rich vocal quality.

## EXERCISES:

1. Open your mouth about an inch and a half, that's about two finger widths, and touch your fingertips against your chin to help your jaw stay open and say:

**ah ... ah (as in far) ... eeeeeeeeee (as in see).**

Notice the tendency to close the jaw on the "**ee**" vowel sound.

2. Repeat, keeping the same open space you feel on the "**ah**" vowel right through the "**ee**" vowel. Say the "**ee**" with the tip of the tongue touching the backs of the lower front teeth.

3. Repeat the exercise for both the "**ih**" and the "**oo**" vowels sounds.

**ah ...ah ... iiiihih (as in it)**

**ah ...ah ... oooooooo (as in soon)**

For the singer who sings primarily in head voice or upper register, the following exercises will be helpful in developing a clear and well-projected tone. The upper register or head voice (falsetto for the male voice) also plays a valuable role in the development of the lower register or chest voice.

As we will discover, the upper register may be used as an upward extension of the chest voice quality, which we call the "**upper mix**" (see page 59). Use these exercises to strengthen your upper register. "**ee**" is a good practice vowel for this purpose. (**Tech CD track 9**)

## EXERCISES:

1. On a siren-like "**ee**" sound, try this:

**ee ... ee ... eeeeeeeeeeeeeeeeeeeeeeee**

**slide up - slide down**

2. Now follow the "**ee**" vowel with other vowel sounds beginning with "**eh**" (as in end), like this:

(**Tech CD track 9**)

ee ... ee ... eeeh (as in hen)  
 ee ... ee ... eeah (as in hot)  
 ee ... ee ... eeuh (as in love)  
 ee ... ee ... eeaw (as in dawn)  
 ee ... ee ... eeuuh (as in book)  
 ee ... ee ... eeoo (as in you)

3. Now, using what we know about breath, support, focusing and open space, make the scale part of the following exercise as smooth as the slide that precedes it.

**Sing: (Tech CD track 10)**

(as in at)



4. Repeat the above exercise, using "aa" on the slide and the following vowel sounds on the scale.

(slide) a-a-a-a ... (scale) a-a-a-a-ah (as in hot)  
 (slide) a-a-a-a... (scale) u-u-u-u-uh (as in love)  
 (slide) a-a-a-a... (scale) a-a-a-a-aw (as in dawn)  
 (slide) a-a-a-a... (scale) u-u-u-u-uh (as in book)  
 (slide) a-a-a-a... (scale) o-o-o-o-oo (as in you)  
 (slide) a-a-a-a... (scale) e-e-e-e-eh (as in hen)  
 (slide) a-a-a-a... (scale) e-e-e-e-ee (as in he)

Be sure that you keep the focus and the forward placement that you feel on the "aa" sound in the vowel sound that follows it.

5. Now try it in the head voice range.

**Sing: (Tech CD track 11)**



6. Beginning one half step higher each time, follow the "ee" vowel with "oo" (as in you) then "aw" (as in dawn) and "ah" (as in hot) and work through this list.

**Diphthongs (double vowel sounds) (Techniques CD – track 20-21)**

A diphthong is a combination vowel, actually two vowel sounds back to back. For singing, the I.P.A. symbols used here reflect vowel sounds that are slightly modified from those used in speech.

	<u>I. P. A.</u>
<b>My ...</b> (M/ah/ee) (ah/ee) ... ah (as in <u>f<u>a</u>r</u> ) / ee (as in <u>s<u>ee</u></u> )	[ ai ]
<b>Day ...</b> (D/eh/ee) (eh/ee) ... eh (as in <u>e<u>n</u>d</u> ) / ee (as in <u>s<u>ee</u></u> )	[ ɛi ]
<b>Boy ...</b> (B/aw/ee) (aw/ee) ... aw (as in <u>d<u>a</u>wn</u> ) / ee (as in <u>s<u>ee</u></u> )	[ i ]
<b>Now ...</b> (N/aa/oo) (aa/oo) ... aa (as in <u>g<u>a</u>t</u> ) / oo (as in <u>s<u>oo</u>n</u> )	[ au ]
<b>Go ...</b> (G/uh/oo) (uh/oo) ... uh (as in <u>u<u>p</u></u> ) / oo (as in <u>s<u>oo</u>n</u> )	[ ʌu ]

For singing, "y" is pronounced as "ee" (as in see). For example: "you" is pronounced, ee-oo.

The "w" is pronounced as "oo" (as in soon). For example: "want" is pronounced, oo-ah-nt.

The voiceless "wh" sound (as in where) works better for singing as the voiced "w" ("oo").

NOTE: In some Pop styles, the last part of the diphthong may be held longer. In Country music, for example, the word "day" may sometimes be sung as - **deheeee**. In many cases, we recommend softening the "ee" at the end of the word by pronouncing "ih" (as in it) instead of "ee" (as in see). For example: **d-eh-ih**. You may choose to soften the "oo" in "Go" (G-uh-oo) by pronouncing it "uu" (as in book) instead of "oo" (as in soon). It really depends on the style of vocal music you are singing as well as your personal style.

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## Consonants

Consonant sounds are formed by the movement or position of the articulators. They help make words clear, but if you don't articulate them properly they interfere with the focus of the vocal cords and forward placement, blocking the free flow of sound.

### Voiced and Voiceless Consonants

Place your fingertips at the front of your throat and say "zzzz" (as in zoo), with a strong buzzing sound. That vibration you feel against your fingertips is from your vibrating vocal cords. The voiced consonant requires the vocal cords to focus and vibrate producing the voiced sound.



Now, with your fingertips at the front of your throat and say "ssss" (as in song), with a good, strong hissing sound. Notice there is no vibration against your fingertips. Voiceless consonants require the vocal cords to open and not vibrate. (“**voiceless**”)

Voiceless consonants create a gap in the stream of vocal tone by requiring the vocal cords to part. With your fingertips at your throat, say "the zoo" and then say "with Sue". Notice the interruption of vibration during the "ssss" in "Sue". The vocal cords un-focus for voiceless consonants.

Because the vocal cords are open for the voiceless consonants, they have a tendency to stay partially open during the vowel that follows. This creates breathiness and loss of projection and might causes the voice to "crack". A good way to train your self to reduce this tendency is to *think* the voiced consonant counterpart and to immediately focus the vocal cords for the vowel. Think the focused vowel before you pronounce the consonant.

When moving from a vowel to a consonant, do not anticipate the consonant by shortening the duration of the vowel and don't alter the vowel sound as you approach the consonant. Moving the articulators too early toward the consonant position interferes with focus and prematurely closes the resonating space.

## Silent H

"H" is a voiceless consonant that does not require a specific action of the articulators.

The ‘***Silent H***’ is a useful device in avoiding a glottal attack (see page 33).

Below are pairs of voiced and voiceless consonants, matched with respect to the position of the articulators, which are approximately in the same position for each pair.

[Voiced] [Voiceless]

Articulate with the lips.

b (as in bay) p (as in pay) [b] [p]

Articulate with the front of the tongue and upper gum ridge, just behind the upper front teeth.

d (as in do) t (as in too) [d] [t]

Articulate with the back of the tongue and soft palate.

g (as in glue) k (as in clue) [g] [k]

Articulate with the front of the tongue and gum ridge.

g (as in gem) ch (as in chat) [dʒ] [tʃ]

Articulate with the front of the tongue and teeth.

th (as in the) th (as in thanks) [ð] [θ]

Articulate with the upper teeth and lower lip.

v (as in van) f (as in fan) [v] [f]

Articulate with the tongue and teeth.

z (as in zoo) s (as in sue) [z] [s]

s (as in treasure) s (as in insure) [ʒ] [ʃ]

## Other Voiced Consonants

<i>l</i> (as in <u>l</u> ine)	[ l ]
<i>m</i> (as in <u>m</u> ore)	[ m ]
<i>n</i> (as in <u>n</u> ow)	[ n ]
<i>ng</i> (as in <u>l</u> ong)	[ ŋ ]
<i>r</i> (as in <u>r</u> eel)	[ r ]

## Combined Consonants:

I.P.A.

[Voiced] [Voiceless]

*bz* (as in tabs) *ps* (as in taps) [ bz ] [ ps ]

*dz* (as in woods) *ts* (as in cats) [ dz ] [ ts ]

*gz* (as in fogs) *ks* (as in folk)s [ gz ] [ ks ]

Be sure to pronounce combination consonants correctly. For example, usually an "s" following a voiced consonant is pronounced "zz" as in dogs and an "s" following a voiceless consonant is pronounced "ss" as in pets.

## EXERCISES:

1. Make the vowel in the word as well focused as the two that precede it.



**Sing:** (Tech CD track 13)



2. Practice both the chest voice and head voice (*falsetto*).

**Sing:**



eh .....	eh .....	ten
ee .....	ee .....	key
uh .....	uh .....	fun
aw .....	aw .....	stone
ah .....	ah .....	heart
oo .....	oo .....	school

3. You can feel the vocal cords alternately focus and un-focus in the following exercise. Both consonants in each pair require the same position of the articulators. But the voiceless consonants "sss" and "fff" require the vocal cords to be un-focused. Keep a steady flow of air as you alternate between "**zzzzzzzz**" (voiced) and "**sssssss**" (voiceless).

(✓) **zzzzzsssszzzzzsssszzzzzssss**  
 (✓) **vvvvvffffvvvvvffffvvvvffff**

4. In the following exercise, match the focus of "aa" (as in at) in the vowel of the word that follows it.

Don't let the consonant introduce excessive breath into the vocal tone.

**Say:**

aaa ...	aaa ...	haaat
aaa ...	aaa ...	saaad
aaa ...	aaa ...	caaatch
aaa ...	aaa ...	scaaat
aaa ...	aaa ...	chaaat
aaa ...	aaa ...	faaast
aaa ...	aaa ...	shaaack
aaa ...	aaa ...	staaack

5. Using the following pairs of voiced and voiceless consonants, speak, then sing, on a single note.

bay ....	pay.....	bay ....	pay ...
do .....	too .....	do .....	too ...

glue ...	clue .....	glue ...	clue ...
gem ...	check .....	gem ...	check ...
the .....	thanks ...	the .....	thanks ...
van ....	fan .....	van .....	fan ...
zoo ....	Sue .....	zoo .....	Sue ...

6. In the following exercise, focus the vowel immediately. Do not allow the voiceless consonant to introduce excessive breath into the vocal tone. Use "aa" (as in at). On a single note,

**Sing:**

aa ...	ee ...	see
aa ...	ih ...	fit
aa ...	eh ...	ten
aa ...	aa ...	pat
aa ...	ah ...	far
aa ...	uh ...	thumb
aa ...	aw ...	caught
aa ...	uu ...	took
aa ...	oo ...	who

