IPA Handbook for Singers

Second Edition

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The *IPA Handbook for Singers* is a compilation of the enunciation instructions found in the *English, Italian, German, French,* and *Advanced French Lyric Diction Workbooks*. Standard textbook instructions by Madeleine Marshall, Evelina Colorni, Dr. William Odom, Thomas Grubb, and Eileen Davis are referenced throughout.

The International Phonetic Alphabet (IPA) provides a general guide to pronunciation but the exact sounds vary from language to language. This text defines the sounds as they apply to the English, Italian, German, and French languages.

Dictionary transcriptions represent the spoken form of a language. Adjustments to the IPA are necessary for singing. The phonetic indications given within the *IPA Handbook for Singers* are designed for sung application.

This text functions like a dictionary. Each phoneme is listed on a separate page. Sample English, Italian, German, and French words are provided at the top of the page. The field is left blank if the sound does not exist in the particular language. Pronunciation is defined first for English, then further defined for the Italian, German, and French languages. The vowels are located on the odd pages and the consonants are located on the even pages. Tabs with gray shading indicate the highlighted sound providing convenient access to all symbols.

Phonetic Readings for Lyric Diction works with this text to provide additional enunciation and English transcription exercises. *Phonetic Transcription for Lyric Diction* works with this text to provide a concise approach to teaching transcription rules.

Spoken and sung examples of each symbol are available on the listening page at www.stmpublishers.com.

The *IPA Handbook for Singers* serves as a complementary resource for Oxford's *Exploring Art Song Lyrics* by Jonathan Retzlaff with IPA transcriptions by Cheri Montgomery. The Oxford publication provides phonetic readings for over 750 Italian, German, and French art songs and includes new English translations. The reader may refer to the appendix of the Oxford text for a discussion of my method of transcription and choice of phonetic symbols.

It is my hope that the user-friendly format of this book helps students unlock the lovely sounds that are uniquely designed for the human voice.

CM

The voice is a phonetic instrument. The sounds of languages help us explore the function of the voice. Applying this belief is an integral part of my daily teaching routine. As soon as a voice student is ready to learn a new concept, we slow things down, analyze the articulatory process, and discover what is beneficial and appropriate for the student's unique structure, strengths, and abilities. The development of a teacher's voice pedagogy is an ever-evolving process. The concepts gained in my experience as a voice and diction instructor are included with this edition.

The newly added QR codes with each IPA symbol give students instant access to recordings of native speakers enunciating sample words. The links provide examples of American English, British English, Italian, German, and French pronunciation. IPA symbols must be defined for each language, then further defined for lyric diction. The links provide a starting point and basis for comparison of the sounds as they apply to the respective language. The adjustments needed for singing are further described in the written instructions.

It is interesting to note that vowel classifications by the International Phonetic Association are not observed by standard lyric diction textbook authorities. Adjustments to the vowel chart are needed for lyric diction. The IPA was created by linguists and intended for speech. Singers adopted the IPA for lyric diction. The articulators are in close proximity for speech (tongue slope is imperceptible). When slope of the tongue is not apparent, tongue height becomes the most obvious landmark feature. As a result, the official IPA vowel chart indicates numerous tongue heights. Companion vowels are not clearly distinguished. The [i], [ɪ], [u], [ʊ], [y], and [ʏ] are all classified as closed vowels. This text agrees with standard lyric diction textbook authorities by classifying [ɪ], [ʊ], and [ʏ] as open vowels.

This text uses the term *central vowel* when referring to the [ʌ], [ɑ], [a], and [æ] vowels. *Central vowel* is used in favor of *low vowel*. Wording that might suggest a low placement or pitch should be avoided for lyric diction. The International Phonetic Association classifies [ʌ] and [ɑ] as back vowels and [a] and [æ] as front vowels. The tongue arch for central vowels is indistinguishable in the space required for singing. Central vowels are clarified by means of resonance rather than formation. A central classification agrees with the organization of transcription rules. Take the German ich-Laut rules, for example. The transcription of *ch* is dictated by the tongue position of the preceding sound. If [a] were truly a

front vowel, then we would articulate *ach* as [aç] instead of [aχ]. Standard lyric diction textbook authorities are reluctant to assign a front or back designation to the [a] and [ɑ] vowels. These vowels are typically referred to as bright [a] and dark [ɑ].

Vowel classifications for lyric diction require a customized approach. This text organizes vowels into categories that best suit the needs of a lyric diction study.

CM

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VOWEL TERMS

Front vowels are also called tongue vowels. They require a front arch of the tongue. There are two fundamental closed front vowels: [i] and [e]. Each closed vowel has a corresponding open vowel form:

closed [i] *see* < open [ɪ] *bit*
closed [e] *chaos* < open [ɛ] *said*

Back vowels are also called lip vowels. They require lip rounding and a back tongue arch. There are two fundamental closed back vowels: [u] and [o]. Each closed vowel has a corresponding open vowel form:

closed [u] *blue* < open [ʊ] *look*
closed [o] *provide* < open [ɔ] *ought*

Mixed vowels require lip rounding and a front tongue arch. There are two fundamental closed mixed vowels with a corresponding open vowel form:

[i] tongue + [u] lip = closed [y] *früh, une*
[ɪ] tongue + [ʊ] lip = open [ʏ] *Glück*
[e] tongue + [o] lip = closed [ø] *schön, yeux*
[ɛ] tongue + [ɔ] lip = open [œ] *möcht, cœur*

Central vowels do not require lip rounding. There are four central vowels: dark [ɑ] *father*, bright [a] *voila*, [æ] *hat*, and [ʌ] *up.* The [ɒ] vowel, as in *hot*, is between [ɑ] and [ɔ] ([ɒ] is not applied in this text). There are two *r*-colored vowels: English [ɜ] as in *bird*, and German [ʁ] as in *der*. The [ɝ], [ɚ], and [ɐ] vowels represent spoken practice and are not suitable for lyric diction. The schwa [ə] is an undefined vowel sound in an unstressed syllable. Pronunciation must be assigned.

Slope refers to the pitch of the tongue arch. Slope or pitch of the tongue is more apparent in the low jaw position required for singing. Phoneticians do not consider slope when charting vowels. *Steep* vowels have a sharply sloped tongue position. The [i] and [ɪ] vowels have a steep slope, the [e] and [ɛ] vowels have a *moderate* slope, and the [æ] and [a] vowels have a *mild* sloping of the tongue toward the front of the mouth. The [u] and [ʊ] vowels have a *steep* slope, the [o] and [ɔ] vowels have a *moderate* slope, and the [ɒ] and [ɑ] vowels have a *mild* sloping of the tongue toward the back of the mouth. The [ʌ] vowel has no tongue slope. The mild and non-sloped vowels are classified as central vowels due to the low tongue position needed for singing. Central vowels are clarified by resonance rather than tongue formation.

Nasal vowels resonate in the height of the yawn space with a small amount of shared resonant space in the nasal cavity. French has four nasal vowels: [ã], [ɛ̃], [õ], and [œ̃].

Vowels	Consonants
[ɑ]	[b]
[a]	[ç]
[æ]	[d]
[ã]	[dʒ]
[e]	[f]
[ɛ]	[g]
[ɜ]	[h]
[ɛ̃]	[k]
[ə]	[l]
[i]	[m]
[ɪ]	[n]
[j]	[ɲ]
[o]	[ŋ]
[ɔ]	[p]
[ø]	[r]
[œ]	[ɹ]
[õ]	[ɾ]
[œ̃]	[s]
[ʁ]	[ʃ]
[u]	[t]
[ʊ]	[ʧ]
[ʌ]	[v]
[w]	[ʍ]
[y]	[χ]
[ʏ]	[ʎ]
[ɥ]	[z]
[']	[ʒ]
[:]	[θ]
Diph.	[ð]
Terms	[ʔ]

CONSONANT TERMS

VOICING

Voiced consonants engage the voice. Voiceless consonants engage the breath without vocalized tone. For example, voiced [z] can only be sung while voiceless [s] can only be whispered.

POINT OF ARTICULATION

Bilabial: refers to the lips: [b], [m], [p], English [ʍ], and English, Italian, and French [w]
Labiodental: involves the lower lip and the upper row of teeth: [v], [f]
Dental: involves the tip of the tongue and the back of the upper row of front teeth: English [ð] and [θ], Italian and French [d], [n], [t], [l], [z], [s], [ɾ], Italian [r], German [l], [z], and [s]
Alveolar: involves the tongue tip and the ridge behind the upper teeth: English [d], [n], [t], [l], [z], [s], [ɾ], [ɹ], and German [d], [n], [t], [ɾ]
Prepalatal: involves the tip of tongue and the area between the alveolar ridge and hard palate: [ʃ], Italian and French [j], English and French [ʒ], English, Italian, and German [ʧ], French [ɲ] and [ɥ], Italian [ɲ] and [ʎ], and English and Italian [dʒ]
Palatal: involves a front arch of the tongue and the hard palate: English and German [j], German ich-Laut [ç]
Velar: involves a back arch of the tongue and the soft palate: [g] and [k], German ach-Laut [χ], English, Italian, and German [ŋ]
Glottal: involves the air flow and the opening between the vocal cords: English and German [ʔ] and [h]

MANNER OF ARTICULATION

Stop: a momentary closure of the air flow passage: English and German [b], [d], [g], [p], [t], [k], [ʔ]
Plosive: a momentary closure of the air flow passage that releases without aspiration: Italian and French [b], [d], [g], [p], [t], [k]
Fricative: produced by directing the air flow past a set of articulators: [ʍ], [v], [f], [ð], [θ], [z], [s], [ʒ], [ʃ], [ç], [χ], and [h]
Affricate: a stop that is followed by a fricative: [dz], [ts], [dʒ], [ʧ], [pf]
Nasal: produced by directing vocalized tone through the nasal passages: [m], [n], [ɲ], [ŋ]
Lateral: produced by directing vocalized tone laterally over the sides of the tongue: [l] and [ʎ]
Glide: produced by directing vocalized tone past a set of articulators without friction: [w], [j], and [ɥ] (also classified as semiconsonants)
Trill: formed by taps with the tip of the tongue against the alveolar ridge or upper front teeth: rolled [r] and flipped [ɾ]
Retroflex: produced with tongue tip curled up: English [ɹ]

CENTRAL DARK [ɑ]

ENGLISH	ITALIAN	GERMAN	FRENCH
father		Abend	âme
[ˈfɑðə]		[ˈʔɑːbənt]	[ɑmə]

Description. Phoneticians classify [ɑ] as a back vowel but the tongue arch for central vowels is scarcely apparent in the space required for singing. The dark [ɑ] vowel is clarified by means of resonance rather than formation. The lips are neither rounded nor spread.

Enunciation. Release and lower the jaw. Find the space of *ah* without rounding or spreading the lips. Allow two finger widths of space between the teeth. The anterior edge of the tongue contacts the lower row of teeth and lies low and flat on the floor of the mouth. Raise the soft palate and direct vocalized tone toward the upper front teeth.

Warnings. The lips must not spread or cling to the teeth. They should remain released. Do not cover the tone. Avoid a placement that lies low or nasal. Maintain one articulatory position throughout vocalization.

English exercise: *odd, lark, flock, garden, swallow, honor*

GERMAN

A distinction for German [ɑː] is made by deliberately lengthening the vowel sound. Do not weaken the clarity of [ɑː] in unstressed syllables: *Balsamduft* [ˈbalzɑːmdʊft].

German exercise. Contrast the following English/German words by lengthening the German [ɑː]: *father/Vater* [ˈfɑːtɐ], *sock/sag* [zɑːk], *mock/mag* [mɑːk], *calm/kam* [kɑːm]

FRENCH

Do not articulate a glottal stop before initial vowel words: *âge* is [ɑʒə] not [ʔɑʒə]. Do not weaken the clarity of [ɑ] in unstressed syllables: *pâquerette* [pakərɛtə].

French exercise. The vowel of the stressed syllable is long in French. Contrast the following English/French words and lengthen the French dark *a*: *pass/passe* [pɑsə], *task/tâche* [tɑʃə], *glass/glas* [glɑs]

BRITISH ENGLISH

Specified spellings that have an [æ] sound in American English are pronounced with a dark [ɑ] for British English. The spellings *a* + [f], [s], [nʧ], [ns], and *th* require a dark [ɑ] pronunciation (Memory aid: *After class Blanch danced rather fast*). Specified words require a dark [ɑ] pronunciation: *command, demand, reprimand, can't, shan't, aunt, advantage, chant, enchant, grant, plant, sample,* and *example*

Vowels / Consonants

[ɑ]	[b]
[a]	[ç]
[æ]	[d]
[ã]	[ʤ]
[e]	[f]
[ɛ]	[g]
[ɜ]	[h]
[ɛ̃]	[k]
[ə]	[l]
[i]	[m]
[ɪ]	[n]
[j]	[ɲ]
[o]	[ŋ]
[ɔ]	[p]
[ø]	[r]
[œ]	[ɹ]
[õ]	[ɾ]
[œ̃]	[s]
[ʁ]	[ʃ]
[u]	[t]
[ʊ]	[ʧ]
[ʌ]	[v]
[w]	[ʍ]
[y]	[χ]
[ʏ]	[ʎ]
[ɥ]	[z]
[ˈ]	[ʒ]
[ː]	[θ]
Diph.	[ð]
Terms	[ʔ]

VOICED BILABIAL STOP [b]

ENGLISH	ITALIAN	GERMAN	FRENCH
beauty	bella	Bild	beauté
[ˈbjutɪ]	[ˈbɛlla]	[bɪlt]	[bote]

Description. The [b] sound has the same point and manner of articulation as the [p] sound. The [b] is voiced while the [p] is voiceless. Voiced [b] is classified as a plosive in Italian and French.

Articulation. Relax the lips with inside edges barely touching. The lips should feel loose and buoyant. Raise the soft palate and release the jaw. Vocalized tone is added while the lips pop open to form the following sound. This action releases the sound and allows the consonant to project. Note: [b] has a rounded lip formation when followed by a rounded vowel.

Warnings. Compressed lips muffle the consonant sound and constrict the vocal apparatus. Do not press the lips together or curl them outside in.

Exercise 1: *babble, bubble, blackbird* / round the lips for: *boat, born, bold*

Exercise 2. Place your thumb and fingertips on either side of the throat. Notice how the muscles are adversely affected by singing with tightly compressed lips: *bright, blue, bird*. Sing the words again articulating the initial consonants with the lips barely touching. Observe the clarity of the consonant and the corresponding ease of vowel production that accompanies a released vocal mechanism (Marshall 40).

Exercise 3. Enunciate words with *mb*: *somber, remember, embrace*. Next, articulate [b] without adding a [m] sound: *bright, blessed, breath*.

FINAL [b]

Description. Final *b, d,* and *g* are articulated with an added shadow vowel. This is not permitted for any other consonant. The final *b, d,* and *g* would be silent without the added vowel sound.

Articulation. Assume the lip formation of [b]. Upon drop of the lip, enunciate a shadow vowel on the same pitch as assigned to the final syllable of the word (Marshall 80-81).

Warnings. Avoid a breathy articulation of [b]. Do not omit final [b].

Exercise. Fully voice final [b] in the following words: *web, sob, shrub*

ITALIAN AND FRENCH

Description. Voiced [b] is classified as a plosive in Italian and French. There is no audible release of breath for the plosive consonants.

Articulation. Three articulatory movements are involved: 1. The articulators contact. 2. The flow of breath is stopped. 3. The tone is released without aspiration. This action introduces (and merges with) the articulation of a following vowel or consonant sound. Note: [b] has a rounded lip formation when followed by a rounded vowel.

Italian exercise. Contrast the following English/Italian words: *brief/breve* [ˈbrɛve], *bold/baldo* [ˈbaldo], *blessed/beato* [beˈato]

French exercise: *boat/barque* [baʁkə], *baby/bébé* [bebe], *bye/bois* [bwɑ]

ENGLISH	ITALIAN	GERMAN	FRENCH
sigh	caro	allein	voilà
[sai]	[ˈkaɾo]	[ʔalˈlaen]	[vwala]

Description. English does not have a pure bright [a] vowel. An approximation of the sound is found in the diphthong of the words *sky* and *night*. The [ai] transcription represents spoken pronunciation. An [ɑɪ] transcription is recommended for lyric diction.

Enunciation. Release and lower the jaw. Find the space of *ah* without spreading the lips. Allow two finger widths of space between the teeth. The anterior edge of the tongue contacts the lower row of teeth. Imagine smiling with just the cheeks and eyes but do not spread or tense the lips. Raise the soft palate and direct vocalized tone toward the upper front teeth. Think *bright eyes* when considering the resonance for [a]. The sound is midway between the [æ] of *sat* and [ɑ] of *father*.

Warnings. Do not cover the tone. Avoid a placement that lies low or nasal. Do not replace [a] with [ɑ] or [æ]. Avoid an on or off-glide of the vowel by preparing the vowel early and by maintaining the position of the jaw, lips, and tongue during phonation. Avoid a spread or rounded lip formation.

ITALIAN AND FRENCH

Diphthongization of the bright [a] monophthong is to be strictly avoided. Do not articulate a glottal stop before initial vowel words. For example, the Italian word *alma* is [ˈalma] not [ˈʔalma]. Do not weaken the clarity of [a] in unstressed syllables. Italian example: *angelico* [anˈdʒɛliko] French example: *humanité* [ymanite]

Italian exercise. Contrast the following English/Italian words: *follow/farfalla* [farˈfalla], *cart/carta* [ˈkarta], *honest/amenità* [ameniˈta]

French exercise. Contrast the following English/French words: *charm/charme* [ʃaɾmə], *calm/calme* [kalmə], *image/image* [imaʒə]

GERMAN

German bright [a] functions as a monophthong in the words *Land* and *Tanz,* or as the first vowel of a diphthong in the words *Mai* and *Zeit*. Diphthongization of the bright [a] monophthong is to be strictly avoided. Do not weaken the clarity of [a] in unstressed syllables: *Werkstatt* [ˈvɛɾkʃtatt].

German exercise. Contrast the following English/German words: *man/man* [man], *fast/fast* [fast], *nightingale/Nachtigall* [ˈnaχtɪgall]

Vowels

[ɑ] [a] [æ] [ɑ̃] [e] [ɛ] [ɜ] [ɛ̃] [ə] [i] [ɪ] [j] [o] [ɔ] [ø] [œ] [õ] [œ̃] [ʁ] [u] [ʊ] [ʌ] [w] [y] [ʏ] [ɥ] [ˈ] [ː] Diph. Terms

Consonants

[b] [ç] [d] [dʒ] [f] [g] [h] [k] [l] [m] [n] [ɲ] [ŋ] [p] [r] [ɹ] [ɾ] [s] [ʃ] [t] [tʃ] [v] [ʍ] [χ] [ʎ] [z] [ʒ] [θ] [ð] [ʔ]

ENGLISH	ITALIAN	GERMAN	FRENCH
huge		Licht	
[çjudʒ]		[lɪçt]	

Articulation. Raise the soft palate and release the jaw. The tongue tip contacts the lower front teeth while the front of the tongue arches toward the palate. The articulatory formation is similar to the tongue arch of a [j] glide, as in *year* or *Jahr*. Allow space between the articulators and direct a voiceless stream of air through the narrowed passageway.

Warnings. The voiceless [ç] sound is difficult to project. A vigorous release of air is needed to effectively articulate the consonant sound. Do not allow the articulators to touch. Contact between the tongue arch and palate would produce a [k] sound. Do not replace the ich-Laut with a prepalatal fricative [ʃ] formation (as in *she*). Maintain a clean aspiration of the ich-Laut without any interfering liquid sounds.

Exercise: *ich* [ʔɪç], *gleich* [glaeç], *ewig* [ˈʔeːvɪç], *ruhig* [ˈɾuːɪç]

CONSONANT CLUSTERS

Maintain an unimpeded flow of air to avoid altering the pronunciation to a [k] sound. Do not omit the ich-Laut in consonant groups. Merge the consonants within in the cluster by whispering an elongated [ç]. Repeat the process with a quick articulation of the consonants in the cluster.

Exercise: *mächtig* [ˈmɛçtɪç], *Bächlein* [ˈbɛçlaen], *nichts* [nɪçts], *Tränchen* [ˈtrɛːnçən], *Blümchen* [ˈblyːmçən], *Veilchen* [ˈfaelçən], *Liebchen* [ˈliːpçən], *Mädchen* [ˈmɛːtçən], *durchs* [dʊɾçs], *Ständchen* [ˈʃtɛntçən]

ALTERNATE MANNER OF AIR FLOW

Articulate a well-aspirated [ʃ] with the tongue tip placed just behind the lower front teeth. This produces a suitable ich-Laut replacement when the consonant needs additional carrying power.

CENTRAL [æ]

ENGLISH	ITALIAN	GERMAN	FRENCH
glad [glæd]			

Description. The [æ] vowel does not exist in Italian, German, or French. Central [æ] is clarified by means of resonance rather than formation. The lips are neither rounded nor spread.

Enunciation. Release and lower the jaw. Find the space of *ah* without spreading the lips. The formation of [æ] is a delicate adjustment of the sides of the tongue. "The production of [æ] should be governed by the ear, rather than by mechanical means" (Marshall 133). Lift the soft palate and direct vocalized tone toward the upper front teeth. Maintain one articulatory position throughout vocalization.

Warnings. The central [æ] sound is a characteristic color of the English language. It should not be masked, covered, or replaced with dark [ɑ] (see exceptions on page 3). Avoid a nasalized tone.

Exercise 1. Compare the vowel sounds in the words *seed* [sid] and *sand* [sænd] by singing them on a sustained pitch. Next, sing *heart* [hɑt] and *hand* [hænd]. Central [æ] requires the space of [ɑ] with the height and forwardness of [i].

Exercise 2: *add, lamb, sad, magic, happy, battle*

Vowels

[ɑ]
[a]
[æ]
[ã]
[e]
[ɛ]
[ɜ]
[ɛ̃]
[ə]
[i]
[ɪ]
[j]
[o]
[ɔ]
[ø]
[œ]
[õ]
[œ̃]
[ʁ]
[u]
[ʊ]
[ʌ]
[w]
[y]
[ʏ]
[ɥ]
[ˈ]
[ː]
Diph.
Terms

Consonants

[b]
[ç]
[d]
[dʒ]
[f]
[g]
[h]
[k]
[l]
[m]
[n]
[ɲ]
[ŋ]
[p]
[r]
[ɹ]
[ɾ]
[s]
[ʃ]
[t]
[tʃ]
[v]
[ʍ]
[χ]
[ʎ]
[z]
[ʒ]
[θ]
[ð]
[ʔ]

VOICED ALVEOLAR STOP [d]

ENGLISH	ITALIAN	GERMAN	FRENCH
dance [dɑns]	donna [ˈdɔnna]	Dank [daŋk]	désir [dezir]

Description. The [d] sound has the same point and manner of articulation as the [t] sound. The [d] is voiced while the [t] is voiceless. Voiced [d] is classified as a dental plosive in Italian and French.

Articulation. Raise the soft palate and release the jaw. Place the tongue tip against the alveolar ridge. Exert a slight amount of resistance between the articulators. Add vocalized tone as the tongue tip flips downward. Note: [d] has a rounded lip formation when followed by a rounded vowel.

Exercise 1: *deed, damp, doubt* / round the lips for: *duty, daughter, dome*

Warning. Partial aspiration of [d] would result in a [t] sound.

Exercise 2. Voiced [d] is often partially aspirated. Enunciate the following words with a fully voiced articulation of [d]: *debt, deliver, dance, determine, distant, drain, drama, drink, decided, dignity, divine*

FINAL [d]

Description. Final *b, d,* and *g* are articulated with an added shadow vowel. This is not permitted for any other consonant. The *b, d,* and *g* would be silent without the added vowel sound.

Articulation. Assume the tongue position of *d.* Upon drop of the tongue, enunciate a shadow vowel on the same pitch as assigned to the final syllable of the word (Marshall 80-81).

Warnings. Avoid a breathy articulation of [d]. Do not omit final [d].

Exercise. Fully voice final [d] in the following words: *bird, wind, shade*

ITALIAN AND FRENCH

Description. Voiced [d] is classified as a dental plosive in Italian and French. There is no audible release of breath for the plosive consonants.

Articulation. Place the tongue tip against the inside of the upper front teeth. Exert a slight resistance between the articulators for voiced [d]. Three articulatory movements are involved:

1. The articulators contact.

2. The flow of breath is stopped.

3. The tone is released without aspiration. This action introduces (and merges with) the articulation of a following vowel or consonant sound. Note: [d] has a rounded lip formation when followed by a rounded vowel.

Warnings. Do not allow the tongue to thicken or movement to become sluggish. The articulation of dental consonants should be quick in order to "release and give impulse to the vowel that follows" (Colorni 55).

Italian exercise. Contrast English/Italian words: *divine/divino* [diˈvino], *diamond/diamante* [diaˈmante], *distant/distanza* [disˈtantsa]

French exercise. Contrast the following English/French words: *delicate/délicat* [delika], *decide/décider* [deside], *dance/danser* [dɑ̃se]

ENGLISH	ITALIAN	GERMAN	FRENCH
			enfant [ãfã]

NASAL VOWELS

Nasal vowels are enunciated with vocalized tone flowing simultaneously through cavities of the nose and mouth. Resonant space is behind the nose, in the height of the yawn space. Over-nasalization must be avoided (Grubb 55).

Enunciation. Release and lower the jaw. Find the space of *ah*. The anterior edge of the tongue contacts the lower row of teeth. Direct vocalized tone through the cavities of the nose and mouth simultaneously. Dark [ɑ] is the primary vowel sound enhanced by a tall, nasal resonance. The French speaker's mouth is acclimated toward a rounded lip position. It is accurate to protrude and round the lips for [ã]. Eileen Davis, author of *Sing French* (with foreword by Thomas Grubb), recommends an open [ɔ] pronunciation: "There are many instances when a singer may need to cut down on nasality and replacing /ã/ with /ɔ/ may provide a reasonable alternative for certain areas of the vocal range" (Davis 100).

Warnings. Do not allow the tone to resonate primarily in the nasal cavities (no more than 10% nasal space). Maintain an unaltered formation of the vowel throughout vocalization. Do not articulate a glottal stop before initial [ã]: *vingt ans* is [vɛ̃tã] not [vɛ̃t ʔã]. Do not articulate a [n] or [m] sound following the nasal vowel. Do not weaken the clarity of [ã] in unstressed syllables: *splendeur* [splãdœr].

Exercise. Here is the process for discovering the [ã] of *chant*:
1. Pronounce [ʃɔ] with the lip rounding of [ɔ] in the [a] space. Form the lip rounding before articulating the initial [ʃ].
2. Pronounce [ʃã] with the lip rounding of [ɔ]. The shared points of resonance are in the nasal cavities and in the height of the yawn space. Form the lip rounding before articulating the initial [ʃ].
3. Pronounce the word *chante* [ʃãtə]. Be careful not to articulate a [n] sound following the nasal [ã] vowel.

Vowels
[ɑ] [a] [æ] **[ã]** [e] [ɛ] [ɜ] [ɛ̃] [ə] [i] [ɪ] [j] [o] [ɔ] [ø] [œ] [õ] [œ̃] [ʁ] [u] [ʊ] [ʌ] [w] [y] [ʏ] [ɥ] ['] [ː] Diph. Terms

Consonants
[b] [ç] [d] **[dʒ]** [f] [g] [h] [k] [l] [m] [n] [ɲ] [ŋ] [p] [r] [ɹ] [ɾ] [s] [ʃ] [t] [ʧ] [v] [ʍ] [χ] [ʎ] [z] [ʒ] [θ] [ð] [ʔ]

ENGLISH	ITALIAN	GERMAN	FRENCH
judge [dʒʌdʒ]	gioia [ˈdʒɔja]		

Description. The [dʒ] sound has the same point and manner of articulation as the [ʧ] sound. The [dʒ] is voiced while the [ʧ] is voiceless. The [dʒ] and [ʧ] sounds are cognates.

Articulation. Lift the soft palate. The sides of the tongue touch the edges of the upper molars. The tongue tip contacts the area between the hard palate and alveolar ridge. Release a sufficient amount of vocalized tone to open a narrow passage then buzz the tongue tip against the palate to form [ʒ]. The [dʒ] has a rounded lip formation when followed by a rounded vowel.

Note. It is not possible to articulate a [dʒ] sound with a lowered jaw.

Warnings. Do not separate the [d] and [ʒ] sounds. The sounds are merged to create one unit (Marshall 117). Avoid a partially aspirated articulation of [dʒ]. Both consonants are to be fully voiced. Partial aspiration of the [dʒ] would result in a [ʧ] sound.

Exercise: *gem, gentle, just* / round the lips for: *June, joy, juice*

FINAL [dʒ]
Fully voice final [dʒ] without adding a shadow vowel following the [dʒ] sound: *age, village, hedge, bridge, lodge, edge*

ITALIAN
Articulation. Articulate the voiced consonant sounds simultaneously.

Warning. Do not omit [d] from the articulation of [dʒ]. This would produce a [ʒ] sound. The [ʒ] sound does not exist in Italian.

Italian exercise: *già* [dʒa], *oggi* [ˈɔddʒi] / round the lips for *giorno* [ˈdʒorno], *raggio* [ˈraddʒo]

Italian double consonants. Double consonants require a deliberate lengthening of the consonant sound. Time for length is taken from the preceding vowel. Plosive consonants require a complete stoppage of the sound. The continuants are sustained. Plosive: *addio* [adˈdiːo] Continuant: *essere* [ˈɛssere]

ENGLISH	ITALIAN	GERMAN	FRENCH
chaotic	perché	Erde	été
[keˈɑtɪk]	[perˈke]	[ˈʔeːɾdə]	[ete]

Description. English does not have a pure [e] vowel. An approximation of the sound is found in words of foreign origin and in the unstressed or secondary stressed syllable of a few words: *café, nativity, debut.*

Enunciation. Release and lower the jaw. Find the space of *ah* without spreading the lips. The tongue tip touches the lower front teeth, the front of the tongue arches forward, and the sides of the tongue contact the upper molars. Raise the soft palate and direct vocalized tone toward the upper front teeth. Maintain an unaltered formation throughout vocalization.

Warnings. Form [e] with the tongue arch (not by spreading the lips). Do not replace [e] with an open [ɛ] vowel. Closed [e] is closer in sound to a closed [i] vowel.

ITALIAN

The Italian [e] is not as tightly closed as the German [eː]. The vowel sound is similar to a French semi-closed [(e)] (see description below). Avoid a glottal stop before initial [e]: *ella* is [ˈella] not [ˈʔella]. Do not diphthongize [e]: *pace* is [ˈpaʧe] not [ˈpaʧei], *core* is [ˈkɔre] not [ˈkɔrei]. Do not weaken the clarity of [e] in unstressed syllables: *pietosamente* [pjetozaˈmente]

Italian exercise. Contrast the following: *say/se* [se], *day/vede* [ˈvede], *twenty/venti* [ˈventi], *fresh/fresca* [ˈfreska], *destiny/destino* [desˈtino]

GERMAN

Do not diphthongize the German [eː] vowel. German closed vowels require a deliberate lengthening of the vowel sound. Lengthening an unaltered vowel formation will help the singer avoid a diphthong. Do not weaken the clarity of [eː] in unstressed syllables: *Weltmeer* [ˈvɛltmeːɾ].

German exercise. Contrast the following English/German words: *state/stet* [ʃteːt], *way/weh* [veː], *gate/geht* [geːt], *sail/Seele* [ˈzeːlə]

FRENCH

Do not articulate a glottal stop before initial [e]: *hélas* is [elɑs] not [ʔelɑs]. Do not diphthongize [e]: *toucher* is [tuʃe], not [tuʃei]. Do not weaken the clarity of [e] in unstressed syllables: *mystérieux* [misteɾjø].

Semi-closed [(e)] is a sound between [e] and [ɛ]. It is an ever-so-slightly released [e]. The [(e)] is used to indicate vocalic harmonization. Vocalic harmonization occurs when a normally open [ɛ] is adjusted toward the quality of a closed front vowel in a following syllable or word. Dictionaries do not specify pronunciation of vowels affected by vocalic harmonization.

French [e] exercise. Contrast the following English/French words: *pray/prés* [pɾe], *desire/désir* [deziɾ], *serenade/sérénade* [seɾenadə]

French [(e)] exercise. Contrast the following: *pleasure/plaisir* [pl(e)ziɾ], *cease/cessé* [s(e)se], *essential/essentiel* [(e)sɑ̃sjɛl]

Vowels	Consonants
[ɑ]	[b]
[a]	[ç]
[æ]	[d]
[ã]	[dʒ]
[e]	**[f]**
[ɛ]	[g]
[ɜ]	[h]
[ɛ̃]	[k]
[ə]	[l]
[i]	[m]
[ɪ]	[n]
[j]	[ɲ]
[o]	[ŋ]
[ɔ]	[p]
[ø]	[r]
[œ]	[ɹ]
[õ]	[ɾ]
[œ̃]	[s]
[ʁ]	[ʃ]
[u]	[t]
[ʊ]	[ʧ]
[ʌ]	[v]
[w]	[ʍ]
[y]	[χ]
[ʏ]	[ʎ]
[ɥ]	[z]
[ˈ]	[ʒ]
[ː]	[θ]
Diph.	[ð]
Terms	[ʔ]

ENGLISH	ITALIAN	GERMAN	FRENCH
faith	fiore	Fest	fois
[feɪθ]	[ˈfjoɾe]	[fɛst]	[fwa]

Description. The [f] sound has the same point and manner of articulation as the [v] sound. The [v] is voiced while the [f] is voiceless. The [f] and [v] sounds are cognates.

Articulation. Raise the soft palate and release the jaw. Place the tongue tip against the lower front teeth. Release any lip tension by manually pinching and moving the lower lip from side to side. The inside of the lower lip lightly touches the front edge of the upper front teeth. Articulate a well-aspirated stream of air through the narrowed passageway. The [f] has a rounded lip formation when followed by a rounded vowel.

Note. Relaxation of the lips while forming labiodental consonants allows the singer to project the sound with clarity. It also promotes ease in the production of a following vowel or consonant sound.

Warnings. Do not curl the lower lip in to meet the bottom ridge of front teeth. Do not press, tense, tighten, or bite the lower lip. This would constrict the air flow and muffle the consonant sound.

Exercise: *face, fit, fire /* round the lips for: *first, forth, food*

SPECIAL INSTRUCTION FOR [f]

The voiceless [f] sound is difficult to project. Light contact between the articulators and a vigorous release of air are needed to effectively articulate the consonant sound (Marshall 48-49).

Exercise. Intone the following words with an elongated and whispered articulation of [f]:

Initial [f]	Final [f]
friend	*leaf*
fresh	*strife*
fear	*laugh*
fate	*grief*
false	*life*
faith	*triumph*

ENGLISH	ITALIAN	GERMAN	FRENCH
			humble [œ̃blə]

NASAL VOWELS

Nasal vowels are enunciated with vocalized tone flowing simultaneously through cavities of the nose and mouth. Resonant space is behind the nose, in the height of the yawn space. Over-nasalization must be avoided (Grubb 55).

Enunciation. Replicate the enunciation instructions for [œ]: Release and lower the jaw. Find the space of *ah* without spreading the lips. Enunciate an open front [ɛ] with the lip rounding of an open back [ɔ]. The French [œ] has a hint of [ʊ] color in the sound. The singer must carefully maintain the lip and tongue position of [œ] while applying the [ʊ] color. The shared points of resonance for [œ̃] are in the nasal cavities and in the height of the yawn space. The tone is horizontally focused across the upper front teeth. An open front [ɛ] is the primary vowel sound, enhanced by a tall nasal resonance, and externally affected by lip rounding. The resonance is no more than 10% nasal space. Prepare the lip rounding early, even before the articulation of a preceding consonant.

Warnings. Do not allow the tone to resonate solely in the nasal cavities. Maintain an unaltered vowel formation throughout phonation. Avoid a glottal stop before initial [œ̃]. Do not articulate a [n] or [m] sound following the nasal vowel. Do not weaken the clarity of [œ̃] in unstressed syllables: *triumphant* [trijœ̃fɑ̃].

Exercise. Here is the process for discovering the [œ̃] of *humble*:
1. Pronounce [ɛblə] using the tongue arch of [ɛ] in the [a] space.
2. Form the lip rounding of [ɔ] and pronounce [œblə] using the tongue arch of [ɛ] in the [a] space.
3. Pronounce [œblə] with [ʊ] color. The tone is horizontally focused across the upper front teeth.
4. Enunciate [œ̃blə] with shared points of resonance in the nasal cavities and in the height of the yawn space. Be careful not to articulate a [m] sound following the nasal [œ̃] vowel.

Note. A clear distinction must be made between the [œ̃] and [ɛ̃] vowels. The [œ̃] vowel has an [ʊ] color and is horizontally focused across the upper front teeth. The [ɛ̃] vowel has an [ʌ] color and maintains a vertically centered focus. Example: *un jardin* [œ̃ ʒaɾdɛ̃]

Vowels | Consonants

[ɑ]	[b]
[a]	[ç]
[æ]	[d]
[ɑ̃]	[dʒ]
[e]	[f]
[ɛ]	[g]
[ʒ]	[h]
[ɛ̃]	[k]
[ə]	[l]
[i]	[m]
[ɪ]	[n]
[j]	[ɲ]
[o]	[ŋ]
[ɔ]	[p]
[ø]	[r]
[œ]	[ɹ]
[õ]	[ɾ]
[œ̃]	**[s]**
[ʁ]	[ʃ]
[u]	[t]
[ʊ]	[ʧ]
[ʌ]	[v]
[w]	[ʍ]
[y]	[χ]
[ʏ]	[ʎ]
[ɥ]	[z]
[ˈ]	[ʒ]
[ː]	[θ]
Diph.	[ð]
Terms	[ʔ]

ENGLISH	ITALIAN	GERMAN	FRENCH
sing [sɪŋ]	spesso [ˈspesso]	Wasser [ˈvassəʁ]	soir [swaɾ]

Description. The [s] sound has the same point and manner of articulation as the [z] sound. The [z] is voiced while [s] is voiceless. The [s] and [z] sounds are cognates. Voiceless [s] is classified as dental in Italian, German, and French.

Articulation. Lift the soft palate. The tongue tip is placed just beneath the alveolar ridge. The sides of the tongue contact the upper molars. Direct a voiceless stream of air through the narrowed passageway. The [s] has a rounded lip formation when followed by a rounded vowel.

Note. It is not possible to articulate a [s] sound with a lowered jaw.

Exercise: *sea, song, sail /* round the lips for: *sweet, soon, search*

CONSONANT CLUSTERS

Exercise. Articulate consonant clusters without an intervening pause or vowel sound:

peaceful	*disregard*	*disdain*
ask	*stream*	*disgrace*
whisper	*spring*	*ensnare*

FINAL [s]

Exercise. Avoid adding a vowel sound after final [s]. Articulation should be crisp.

grass	*once*	*makes*
thoughts	*lips*	*false*
harps	*dance*	*banks*

ITALIAN, GERMAN, AND FRENCH

Description. Voiceless [s] is classified as dental in Italian, German, and French.

Articulation. Lift the soft palate. Place the tongue tip lightly against the inside of the upper front teeth. The consonant is articulated by directing a voiceless stream of air through the narrowed passageway. Note: [s] has a rounded formation when followed by a rounded vowel.

Italian exercise. Contrast the following: *sort/sorte* [ˈsɔrte]

German exercise. Contrast the following: *this/dies* [diːs]

French exercise. Contrast the following: *alas/hélas* [elɑs]

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