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## SINGING PORTUGUESE NASAL VOWELS: PRACTICAL STRATEGIES FOR MANAGING NASALITY IN BRAZILIAN ART SONGS

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SINGING PORTUGUESE NASAL VOWELS:  
PRACTICAL STRATEGIES FOR MANAGING  
NASALITY IN BRAZILIAN ART SONGS

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DMA PROJECT

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A document submitted in partial fulfillment of the requirements for  
the degree of Doctor of Musical Arts in Voice Performance in the  
College of Fine Arts at the University of Kentucky

By

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Lexington, Kentucky

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2017

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## ABSTRACT

### SINGING PORTUGUESE NASAL VOWELS: PRACTICAL STRATEGIES FOR MANAGING NASALITY IN BRAZILIAN ART SONGS

The articulation of Portuguese nasalized vowels poses some articulatory problems accompanied by negative acoustic effects for the performance of Brazilian art songs. The main objective was to find strategies that permit the singer conciliate an idiomatic pronunciation of these vowels with a well-balanced resonance, a desirable quality in classical singing. In order to devise these strategies, the author examined sources dealing with nasalized vowels from varied perspectives: acoustic properties of vowel nasalization, phonetic and phonological aspects of Brazilian Portuguese (BP), historical views on nasality in singing, and recent vocal pedagogy research. In addition to the overall loss of sonority, the main effect of nasalization is felt mainly in the first formant (F1) region of oral vowels, due to the introduction of nasal formants and antiformants, and to shifts in the tongue posture. Several sources report the existence of a nasality contour in BP, by which a nasalized vowel starts with an oral phase and transitions gradually to a nasal phase. The author concludes that the basic approach to sing nasalized vowels in BP is (1) to find the tongue posture corresponding to the oral vowel congener (the “core vowel”), and (2) to adjust the nasality contour in such a way that the oral portion remains prominent in order to keep the resonance balance consistent during the emission of the vowel. Once the core vowel is determined, standard vowel modification choices can be made according to voice type and the musical context in which the vowel is being sung. Some challenging excerpts from Brazilian art songs are examined, with suggestions for the application of the discussed strategies.

**KEYWORDS:** Brazilian Art Song, Nasality, Brazilian Portuguese,  
Nasalized vowels, Resonance strategies

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April 21, 2017

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## TABLE OF CONTENTS

ACKNOWLEDGEMENTS .....	iii
LIST OF TABLES .....	vi
LIST OF FIGURES .....	vii
LIST OF MUSICAL EXAMPLES .....	ix
INTRODUCTION .....	1
CHAPTER 1 – ACOUSTICS OF VOWEL NASALIZATION .....	5
1.1 Introduction .....	5
1.1.1 Spectral analysis of nasalized vowels .....	5
1.2 Anatomical inconsistency of the nasal tract .....	7
1.3 Summary of Source-Filter Theory .....	10
1.4 The Nasalization of Vowels .....	16
1.4.1 Side-branch effect .....	16
1.4.2 Antiformants .....	17
1.4.2.1 Antiformants in nasal stops .....	19
1.4.2.2 Antiformants in nasalized vowels .....	21
1.5 Nasalized vowels as dynamic gestures .....	24
1.6 Spectral characteristics of nasalized vowels (visual cues) .....	25
1.6.1 Summary of the acoustic properties of nasalized vowels .....	26
1.7 Additional remarks .....	30
1.7.1 Sinuses .....	30
1.7.2 Perception of nasal vowels .....	30
CHAPTER 2 – NASALITY IN SINGING AND VOCAL TRAINING: HISTORICAL TEACHERS AND MODERN RESEARCHERS .....	33
2.1 Sung versus spoken vowels .....	33
2.2 Aesthetic parameters .....	35
2.3 Nasality in the Vocal Pedagogy literature .....	36
2.3.1 Historical views on nasality .....	38
2.3.2 Nasality in the perspective of contemporary voice science .....	43
CHAPTER 3 – SINGING BRAZILIAN PORTUGUESE NASALIZED VOWELS .....	50
3.1 Overview of the pronunciation of nasal vowels in Portuguese .....	50
3.1.1 Nasal vs. nasalized vowels (distinction) .....	50
3.1.2 Oral and nasalized vowel congeners .....	51
3.2 Spelling of Portuguese Nasalized Vowels .....	53
3.2.1 Monophthongs .....	53
3.2.2 Diphthongs .....	55
3.2.3 Triphthongs (occurring only after q or g) .....	56
3.3 Articulatory gestures .....	57



3.3.1 Nasality contour/dynamic gesture.....	58
3.4 Singing BP Nasalized Vowels .....	60
3.4.1 Using the Nasality Contour.....	60
3.4.2 Using the core vowel .....	65
3.4.2.1 <i>The front vowels</i> [ĩ, ê] .....	66
3.4.2.2 <i>The back vowels</i> [õ, û] .....	66
3.4.2.3 <i>The central vowel</i> [ẽ] .....	68
CHAPTER 4 – EXAMPLES FROM THE REPERTOIRE.....	71
4.1 Resonance strategies .....	71
4.1.1 Male voices .....	72
4.1.2 Female voices.....	74
4.2 Some challenging excerpts from Brazilian art songs.....	75
4.2.1 "Canção de amor" .....	75
4.2.2 "Estrela do mar" .....	80
4.2.3 "Azulão" .....	83
4.2.4 "Quem sabe?" .....	85
4.2.5 "Modinha" .....	87
CONCLUSION.....	89
PART II.....	93
RECITAL I .....	94
RECITAL II .....	108
RECITAL III (LECTURE).....	124
BIBLIOGRAPHY – PART I (MONOGRAPH).....	141
BIBLIOGRAPHY – PART II (PROGRAM NOTES) .....	146
VITA.....	148

## LIST OF TABLES

Table 3-1: Nasalization of vowels in stressed open syllables preceding nasal consonant. .....	51
Table 3-2: Oral and nasalized vowels of Portuguese.....	53
Table 3-3: Assimilation of nasal consonants (Old Portuguese) by vowels (modern Portuguese). ....	57
Table 3-4: Spoken and sung pronunciation of BP nasalized front vowels .....	66

## LIST OF FIGURES

Figure 1-1: Mid-sagittal (top) and coronal (bottom) sections of the nasal cavity. By Henry Vandyke Carter - Henry Gray (1918) <i>Anatomy of the Human Body: Gray's Anatomy</i> , Plate 859, Public Domain, <a href="https://commons.wikimedia.org/w/index.php?curid=566793">https://commons.wikimedia.org/w/index.php?curid=566793</a> .....	9
Figure 1-2: Simulation of the glottal spectrum slope.....	11
Figure 1-4: Effect of the filtering curve of the vocal tract on the source spectrum. The vocal tract is here conceived as a uniform tube of approximately 17 cm. $F_0 = 100$ Hz. ....	15
Figure 1-5: Spectrograms (top) and FFT spectra (bottom) showing the location of nasal formants and antiformants in nasal stops [m] (left) and [n] (right). ....	20
Figure 1-6: Shifting patterns of oral formants (open circles), nasal formants (filled circles), and antiformants (crosses) as a result of increasing VPO size (in $\text{cm}^2$ ). The frequencies correspond to average formant values for the vowel [ɔ]. Larger circles correspond to higher amplitudes (Maeda 1993). ....	22
Figure 1-7: Acoustic effects of nasalization on the vowel [a]. (a) FFT spectrum and spectrogram of the vowel [a] taken from a recorded sample of the Portuguese word <i>tato</i> . (b) FFT spectrum and spectrogram showing the nasalized counterpart, taken from the Portuguese word <i>tanto</i> . ....	24
Figure 1-8 (a–e): FFT spectra comparing the vowels [a, ɛ, i, ɔ, u] with their nasalized counterparts.....	29
Figure 3-1: Schematic representation of the nasality contour showing (a) overlapping of articulatory gestures in regular speech, and (b) the synchronized articulation of the velum in skillful singing, eliminating the unintentional nasal tail that usually occurs just before the consonant. ....	60
Figure 3-3: Excerpts from “Una furtiva lagrima” (L’elisir d’amore) and “Come scoglio” (Così fan tutte); on the right side, approximate F1 locations for the vowels [u] and [o] transposed to musical notation, based on Doscher (1994, 152).....	68
Figure 4-1: Typical F1 location by vowel in male voices, based on Bozeman (2013). Average locations will be higher for tenors and lower for basses. ....	72
Figure 4-2: Typical F1 locations by vowel in the average soprano voice, based on Bozeman (2013). Locations will be lower for mezzo-sopranos and altos. ....	74
Figure 4-3: Spectrogram (left) of the phrase “Tão longe assim de ti” (Villa-Lobo’s “Canção de Amor”), sung by Bidú Sayão. FFT spectra of the vowel [õ] just after its onset (top right) and a few milliseconds later (bottom right). ....	79

Figure 4-4: Spectrogram (left) of the excerpt “Suportar a dor cruel com...” (Villa-Lobo’s “Canção de Amor”), sung by Bidú Sayão. FFT spectra of the modified vowel in the word com (to right) compared to the unmodified vowel in the word longe (bottom right)..... 80

## LIST OF MUSICAL EXAMPLES

Example 4-1: Heitor Villa-Lobos, “Canção de Amor” from Floresta do Amazonas, mm. 1–12.....	77
Example 4-2: Marlos Nobre, “Estrela do Mar” from Beiramar op. 21, mm. 9–12. ....	81
Example 4-3: Marlos Nobre, “Estrela do Mar” from Beiramar op. 21, mm. 49–56. ....	82
Example 4-4: Jayme Ovalle, “Azulão”, mm. 5–14.....	84
Example 4-5. Carlos Gomes, “Quem sabe?”, mm. 8–12.....	85
Example 4-6: Heitor Villa-Lobos, “Modinha” from Serestas, mm. 9–17. ....	87

## INTRODUCTION

If somebody asks the average Brazilian "How many vowels are there in Portuguese?", a probable answer would be "Five: *a, e, i, o, u.*" Some could even wonder if the nasal vowels should be included, but "Aren't they just variations of the regular vowels?" After all, there are twenty-six letters in the alphabet, but only five of them are vowels. This hypothetical situation illustrates the customary lack of awareness concerning the phonemic inventory of the Portuguese language. Yet, many native singers, whose profession depends also on the familiarity with the sounds of languages, often surprise themselves when learning that Brazilian Portuguese has actually twelve vowel phonemes. That said, this elucidation of the actual number of distinct vowels is not enough: if it is not accompanied by an improvement of the kinesthetic awareness, i.e. the understanding of how the articulators move to produce each sound.

Singing in Portuguese is challenging for non-native speakers because of the complexity of the phonetic system of the language, the articulation of nasal vowels being the most difficult aspect. The abundance of nasal vowels in Portuguese can present a problem for native speakers as well, for an inappropriate articulation of such vowels may counteract the singer's efforts to achieve optimal resonance.

When plunging into the task of learning the words of a Brazilian art song, the performer must be aware that nasality is a distinctive feature of Portuguese, i.e., the nasal vowels and their oral counterparts form contrasting pairs, so that the substitution of one for another can change the meaning of the word. Compare, for example, *mudo* 'mute, silent' [mudo] vs. *mundo* 'world' [mũdo]. The only difference in these two words is the

contrast between oral and nasal /u/. In the first word, the letter *n* is not pronounced, but its nasality is assimilated by the previous vowel.

Good pronunciation alone, however, is not the sole ingredient of good singing. Sometimes a perfectly spoken vowel will lack acoustic energy when sung, and the resulting timbre is imbalanced. One of the challenges of singing in Portuguese is to maintain the integrity of the nasal vowels without losing resonance power, since excessive nasality affects the functioning of the resonator in a negative way. Classical singing requires a raised soft palate in order to adjust throat space for efficient resonance. The problem with Portuguese is that, with so many nasal vowels and diphthongs, the singer's soft palate will be lowered many times during an average sentence. Take for instance these well-known lines from *Quem sabe?*, a song by Brazilian opera composer Carlos Gomes:

*Tão longe, de mim distante,*  
[t̃õu 'lõzɪ dʒɪ mĩ dʒis'tẽtʃɪ]

*Onde irá teu pensamento?*  
['õdʒi'ra teu pẽsa'mẽtu]

There are sixteen vowel sounds (including diphthongs) in these two lines, of which seven are nasal. An inexperienced soprano will most likely let the sonority of the nasal vowels influence the surrounding oral vowels, resulting in an overnasalized timbre lacking the desirable acoustic energy for singing. Improper articulation of soft palate does not allow for adjustment of throat space, which in turn may cause vocal fatigue as a consequence of the singer's efforts to compensate by “pushing” the sound instead of availing herself of the acoustical advantages of the vocal tract.

Since the language is pervaded by nasal sounds, a consistently raised soft palate might feel unnatural for the native speaker. Consequently, the nasality of the language affects not only the performance of pieces in vernacular but also in foreign languages. In a hypothetical situation, a young voice student sees the Italian word *tanto* on the paper: the tendency is that he or she will sing a nasalized open-mid central vowel, not the more frontal Italian vowel [a]. The similarity with other Romance languages requires even more careful attention with apparently equivalent sounds. Awareness of articulatory characteristics of one's own language is essential in order to find the nuances of other languages. Nasality might be the source of difficulty for BP speakers when they have to perform repertoire in other languages. This problem could also be related to a failure to recognize subtle differences in vowel quality across other Romance languages. In any case, excessive nasality might be the cause of a "lazy" soft palate, which is contrary to the principles of advanced vocalism in classical singing.

In this study, we suggest ways to enable the singer to conciliate good diction and optimal resonance as regarding the nasal sounds of Portuguese. We present an articulatory strategy that the singer can use in conjunction with the standard vowel modification strategies with which most voice pedagogues are currently familiar. Articles and manuals have been written which focus on good pronunciation and diction rules for singing, but most of them do not present a detailed explanation of articulation processes for singing based in acoustic reality, nor they take into consideration the dynamics of the singing voice (variants such as pitch, tessitura, voice type, etc.). It is necessary a study or a guide that goes beyond IPA symbols and grammar rules. There needs to be a connection with physiological aspects of the production of the phonemes (movement of the articulators). Portuguese grammars usually concentrate on phonological aspect,



i.e. on the abstract quality of sounds, rather than on the purely physical properties of the language. In sum, a precise description of the Portuguese nasal vowels in terms of acoustic properties is required.

In order to devise a feasible acoustic-articulatory approach, we started with a discussion of the acoustic properties of nasalized vowels. Familiarity with the acoustic signals and the spectral modifications associated with vowel nasalization provides the means to better utilize the visual feedback from spectrographic software such as *Vocevista*. Next, we defined the aesthetical parameters that limit our acoustic-articulatory choices to classical singing and voice building. Then, we focused on some phonetic-phonological aspects of BP that further informs the implementation of the suggested procedures. Finally, we used some excerpts from Brazilian art songs to offer practical examples of the application of such procedures.

## CHAPTER 1 – ACOUSTICS OF VOWEL NASALIZATION

### 1.1 Introduction

#### *1.1.1 Spectral analysis of nasalized vowels*

In order to become familiar with the acoustic characteristics of nasalized vowels and the visual cues that show up in spectrographic analyses, we will briefly examine the acoustic theory of vowel nasalization. Understanding the general acoustic properties associated with such vowels will benefit those who already utilizes computer software (or wishes to do so) that provides visual feedback in the voice studio. Many voice teachers and graduate voice students are able to interpret spectrographic signals at least at an elementary level. This basic ability would consist mainly of recognizing the location and behavior of harmonics, and their interaction with formants. With this kind of information in hand, it is possible to evaluate the efficiency of the sound just produced, and then decide if what is seen on the computer matches one's aesthetic ideals. The singer can also use real-time spectrograms to observe other parameters such as rate of vibrato, control of legato, cleanness of the attack or onset, and so forth. This knowledge, however, is often limited solely to spectral characteristics of oral vowels, which are relatively simpler to analyze for the purposes of vocal training.

The phenomenon of vowel nasalization (as any other category of speech sounds) can be observed from three perspectives: articulatory action, acoustic signals, and auditory perception. It is not entirely possible to focus on one or another of these aspects separately. In oral vowels, for example, the cause-effect relationship between articulatory stimulus and auditory perception is fairly consistent and predictable: changes in the shape of the

resonator through the action of articulators (tongue, lips, and jaw) will produce distinct timbres that are perceived as different vowels by listeners. Of course, vowels do not have a specific or fixed location within the spectral space, otherwise we would perceive a distinct vowel for every smallest articulatory modification. Vowels move rather within a continuum. They stretch up to a threshold, at which vowel distinctions overlap, and finally “become” another vowel<sup>1</sup>. For example, if we continually move the tongue from the forward position of the vowel [i], letting it go slightly back and lower, we will finally get to the point where we start to hear [e]. Experienced voice teachers and well-trained singers are particularly attuned to the smallest variations of frequency (i.e. the changes in the relationship between formants) within each vowel continuum resulting from subtle articulatory maneuvers. This articulatory-perceptual relationship is directly translated in the acoustic data of oral vowels, specifically with regard to the behavior of the first and second formants, which have their frequencies shifted as the articulators move. Singers use primarily the tongue to change the resonator shape and thus “tune” the formants to achieve the desired resonance balance.

In the case of nasalized vowels, the matter is somewhat more complicated. While the cause-effect relationship between physiological and perceptual aspects of vowel nasalization seems to be quite straightforward — i.e. the articulatory action of soft palate in order to open the access to the nasal passages matches a perceived change in timbre that is easily recognizable by the listeners as having a nasal quality, regardless of the vowel being nasalized —, the acoustic consequences in terms of spectrographic signals are rather

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<sup>1</sup> These distinctions vary, of course, depending on the individual systems of different languages and dialects.

complex. The spectral effects of velum lowering on different types of vowels are far from uniform.

## 1.2 Anatomical inconsistency of the nasal tract

Part of the reason for this inconsistency of spectral results originates from anatomical variations such as surface length, width, shape, and left-right asymmetry of the nasal cavity observed across different speakers. Figure 1-1 shows a coronal and mid-sagittal view of the nasal tract. The nasal cavity starts at the velar opening to the nasopharynx, whose area is adjustable through the movement of the soft palate. Next, the nasal tract bifurcates into two asymmetrical branches divided by the nasal septum. Each branch contains three conchae or turbinates, which are curved bony structures protruding from the lateral walls. The air flows slower<sup>2</sup> through the curvy pathways (meatuses) created by the conchae, whose function is to increase the surface area of the nasal tract so that a greater volume of inhaled air can be humidified before entering the lower respiratory system. Connected to the main nasal tract are the sinuses, through which the nose drains unwanted material. The presence of mucous fillings produced by the sinuses alters the volume of these paranasal cavities. Therefore, we cannot rely on a fixed measurement for calculating resonance properties of the sinuses<sup>3</sup>. At the frontal end of the nasal tract, the

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<sup>2</sup> This is one of the reasons why some pedagogues often recommend that the student breath through the mouth before the emission of a singing sound.

<sup>3</sup> "The volume of the sinuses appears to play an important role in determining the lowest natural frequency of the vocal tract. (...) Each sinus constitutes a resonator that is coupled through a narrow opening to the nasal tract proper (...)" (Stevens 1998, 190)

nostrils narrow the cavity output in a similar function to what lip rounding does to the oral tract, lowering the resonant frequencies in general.

Additionally, the changeability of the nasal tract resonator due to mucous fillings and illnesses can change the spectral results of the same speaker when measurements are taken at different times. Since we cannot change shape and volume of the nasal cavity as we can with the oropharynx, we would expect the nasal cavity to have constant acoustic features if we disregard the aforementioned circumstantial variations. Even if that was the case, all things being equal, the complexity of the spectrographic analysis of nasal vowels arises essentially from the complicated interplay of resonances generated by the oral tract and by the nasal tract.

As we will discuss later, the size of the opening to the nasal passages — the velopharyngeal opening (VPO) — also has a decisive influence on the spectral shape, so that, for any given oral vowel, there will be a different distribution of resonances in their nasalized counterparts depending on the degree of nasalization. In other words, changing the amount of nasalization affects how the resonances are arranged, thus changing the quality of the vowel. Consequently, the spectrum of nasalized vowels results mostly from the combination of the oropharynx shape and the velopharyngeal port area. Examining the nature of the modifications that occur in different vowels during nasalization will help us devise specific resonance strategies for managing possible negative effects of nasal resonance in singing.

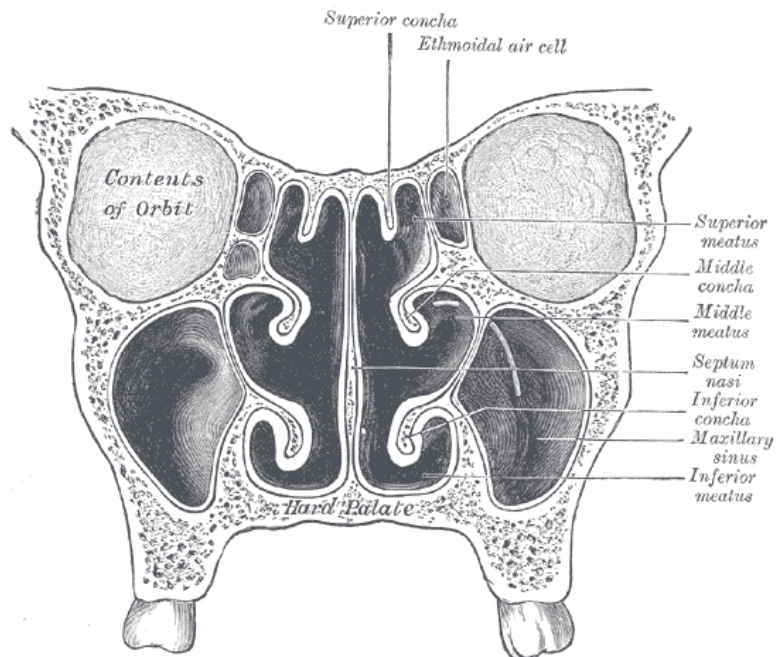
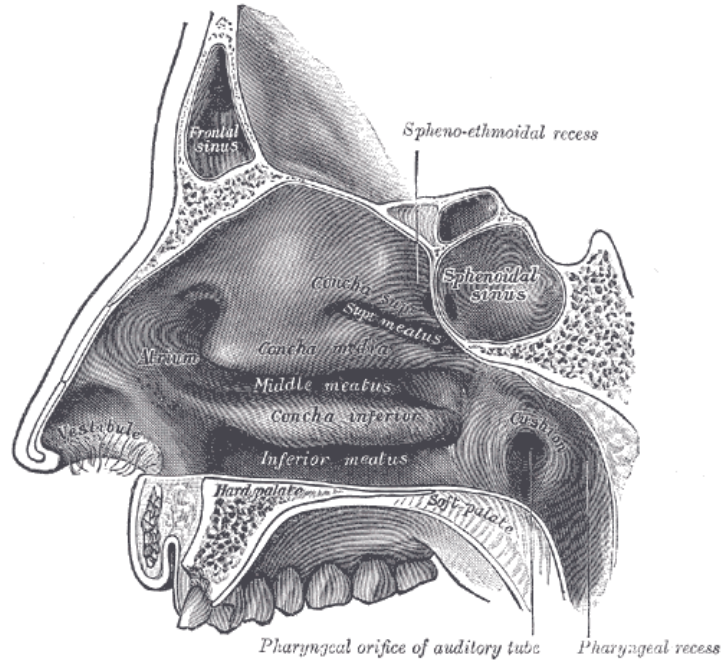


Figure 1-1: Mid-sagittal (top) and coronal (bottom) sections of the nasal cavity. By Henry Vandyke Carter - Henry Gray (1918) *Anatomy of the Human Body*: Gray's Anatomy, Plate 859, Public Domain, <https://commons.wikimedia.org/w/index.php?curid=566793>

### 1.3 Summary of Source-Filter Theory

Our discussion of the acoustic properties of nasalized vowels is based on the Source-Filter Theory of vowel production, developed by Fant (1960). In a nutshell, the theory states that the basic sound generated at a source (the glottis) is transmitted through a filter (the vocal tract) and transformed into the various sounds of speech. The sound produced by the activation of the vocal folds consists of complex periodic vibrations, and as such it comprises a fundamental frequency —the pulsing rate per second that we perceive as pitch — and a number of harmonic components or overtones. The sum of all the components forms the source spectrum. As the frequency of the harmonics increase, their amplitude decreases at a rate of -12dB per octave in average, if we consider just the source spectrum by itself before the filtering action of the oral cavity. This spectrum slope corresponds to a smooth speech production. Figure 1-2 illustrates the unfiltered spectrum from the glottal source with a decrease in amplitude at a rate of 12 dB/octave. The first harmonic at 100 Hz (the fundamental frequency or F0) has an amplitude of 60 dB; the second harmonic (H2) an octave higher (200 Hz) measures about 48 dB; if we leap to the octave above we find the fourth harmonic (H4 at 400 Hz) with approximately 36 dB of amplitude. The actual rate of laryngeal amplitude loss as a function of frequency can vary depending on the effort employed by the vocal folds in generating the sound.

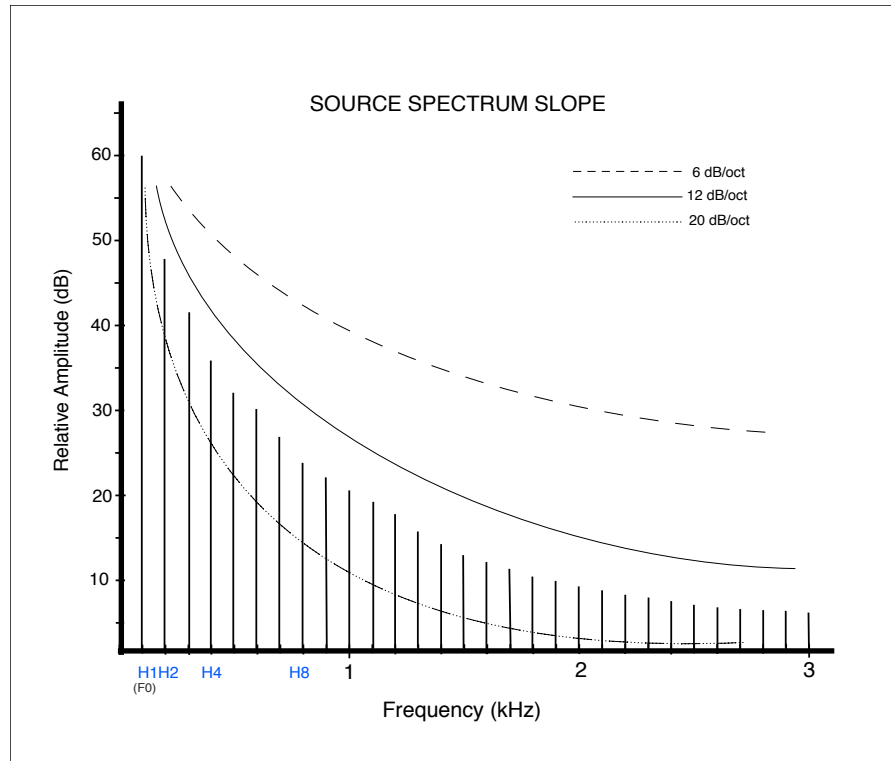


Figure 1-2: Simulation of the glottal spectrum slope.

The vocal tract can be modeled as a tube and as such it possesses certain critical frequencies that will resonate when stimulated. These are known as resonant frequencies, i.e. the frequencies of the oral cavity that are more likely to respond to laryngeal frequencies. If a source harmonic is at or near the resonant frequencies of the vocal tract, it will be amplified, while the others will tend to be damped the farther they get from the resonant peaks. The position of tongue and lips gives the vocal tract a certain shape and length, therefore determining the frequency location of the resonant peaks, which in speech and singing are also called *formants*. The movement of the articulatory structures changes the configuration of the vocal tract, thus determining diverse resonance characteristics that correspond to distinct vowels. If we calculate the natural resonances of the oral cavity when



it assumes a certain vowel shape and then imagine a line connecting the formants of that vocal tract configuration, we obtain the filtering curve of the vowel resulting from that articulatory position. Applying the filtering curve of the vocal tract to the source spectrum generates the actual vowel spectrum. In a neutral vowel such as /ə/, for instance, the oral and pharyngeal cavities have roughly the same space. In this non-constricted configuration, the vocal tract can be modeled as a uniform tube with resonance peaks occurring at regular intervals. For a tube length of 17.5 cm, the formants will be around 500 Hz, 1,500 Hz, 2,500 Hz, etc. (cf. Figure 1-4). These resonances will modify the source spectrum amplifying the components that fall in nearby frequencies. It is important to notice that the spectral characteristics of the source sound remain the same for all the vowels, whose different spectral patterns are only possible because of the adjustable filtering characteristics of the tract. As follows, instead of a constant downward slope of the source spectrum, the excitation of the resonant frequencies alters the original amplitude relationship between harmonics, providing a unique spectral output that shows both peaks and valleys according to the characteristics of the vowel.

When the tongue adds a constriction at any point of the tube, we can adjust the vocal tract model to comprise two subcavities. The output of the back cavity (pharynx) is the tongue constriction, which can be located at various points within the vocal tract, thus changing the relative length and volume of the two cavities. The output of the front cavity is the lips, which can be controlled to assume varied sizes. D. Miller (2008, 29) notes that the first two formants are responsive to the dimensions of the cavities and the size of their respective outputs. F1 is related primarily with the size of the pharynx, whereas F2 responds to adjustments in the frontal space. Moreover, large outputs tend to yield higher

formant frequencies. In the vowel /i/, as an example, the tongue bunches up against the hard palate, creating a narrow constriction in the front cavity. This narrow opening combined with the large space formed in the back results in a very low F1, while the small front cavity and the unrounded lip position produce a high F2.

In addition to vocal tract filtering, the vowel spectrum responds to two variants of the glottal source sound: the pitch and the amount of vocal effort (Pickett 1999, 60). The pitch or fundamental frequency, which is regulated largely by vocal fold elongation and mass, and by subglottic pressure, determines the spacing of the harmonics. For example, if the fundamental frequency is 250 Hz, the harmonics are spaced 250Hz apart. In this case, there are four harmonics in the range up to 1,000 Hz (at 250, 500, 750, and 1,000Hz). If the pitch is 100Hz, there will be ten harmonics within the same range. This means that in low pitches there are more harmonics under influence of the formants. Although altering the pitch affects the frequency positions of the individual harmonics, it does not affect the overall shape of the spectrum (otherwise we would hear a different vowel for different pitches). It is a matter of which harmonics end up falling within the reach of formants.

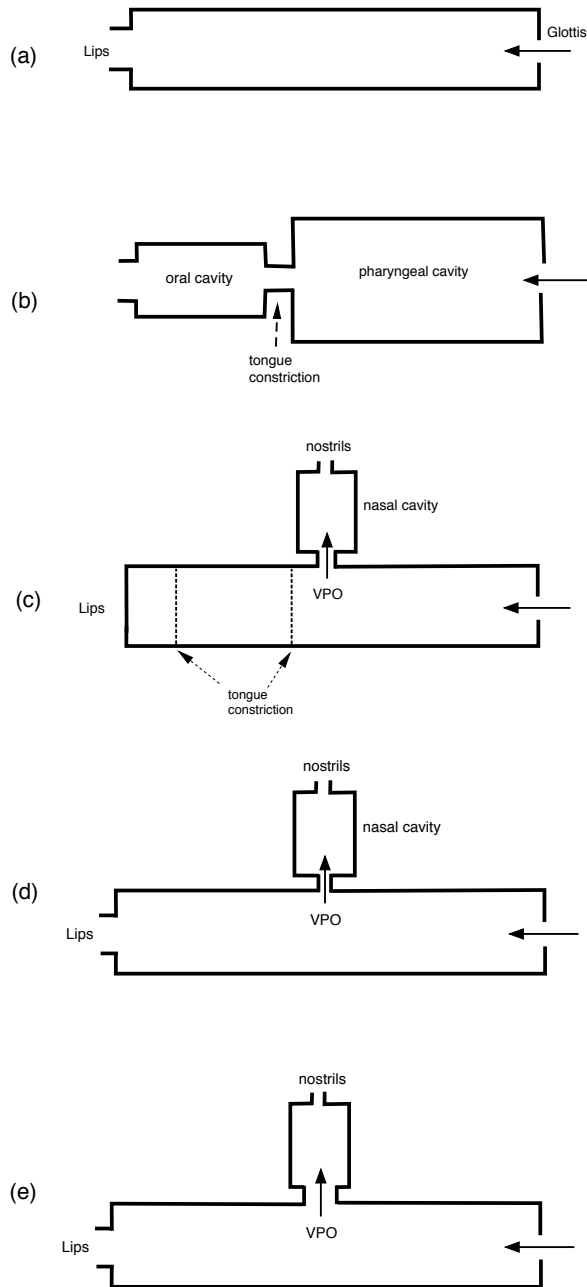


Figure 1-3: Simplified models of the vocal tract: (a) uniform tube, as in a schwa; (b) with a tongue constriction dividing the oral tract in two (here as in a front vowel); (c) configuration of nasal stops, with a side branch added to the oral cavity; (d) configuration of nasalized vowels; (e) nasalized vowel with a larger VPO. Based on D. Miller (2008) and Stevens (1998).

As for the amount of effort employed in vocal production, in more relaxed phonation modes the spectrum slope is deeper (about -15dB/octave) and the amplitude level of harmonics is lower. When the effort is higher, the spectrum slope becomes shallower (-9dB/octave) and the higher frequencies gain in amplitude (Pickett 1999, 61). The formants might become louder than the fundamental frequency then.

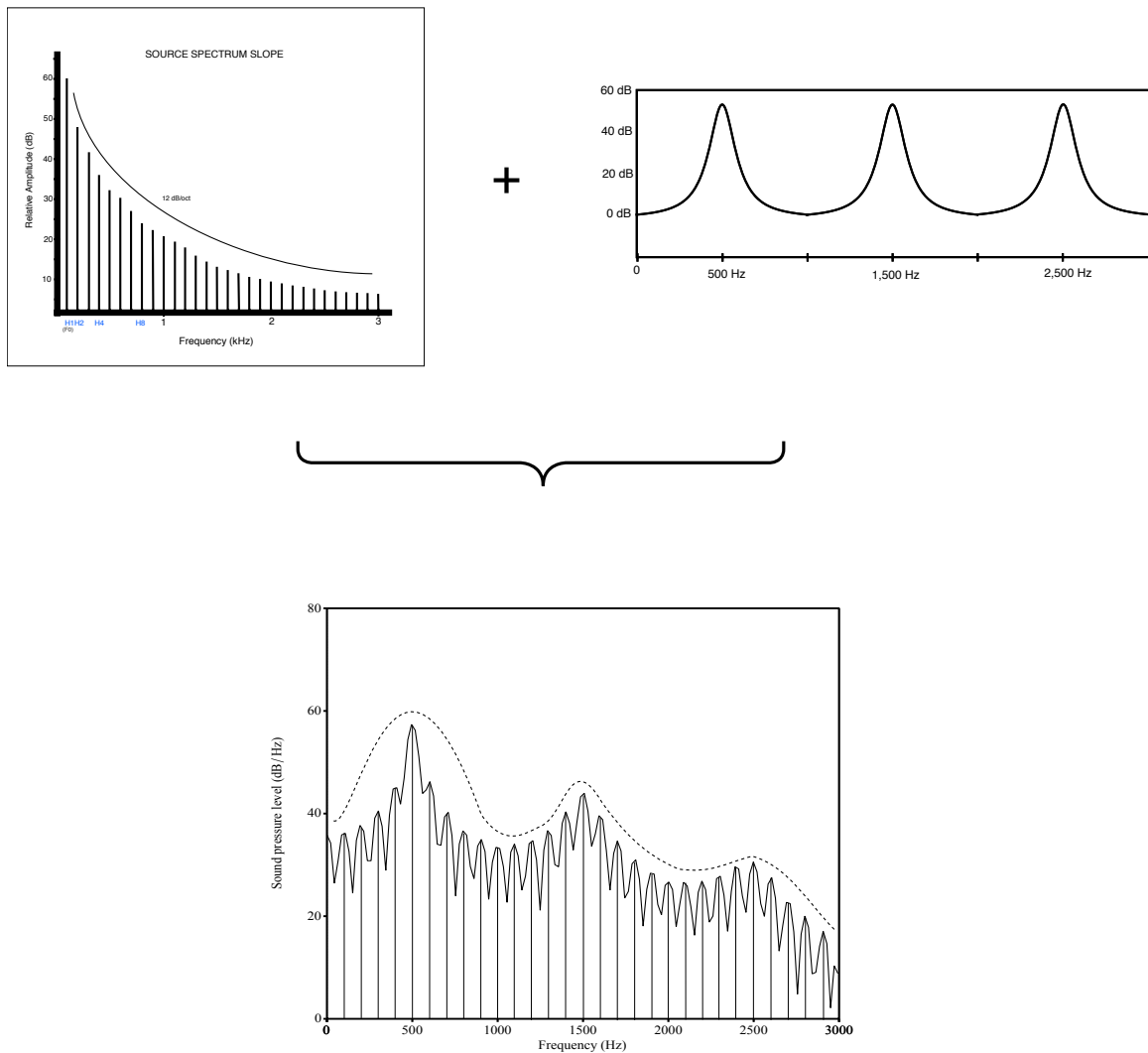


Figure 1-4: Effect of the filtering curve of the vocal tract on the source spectrum. The vocal tract is here conceived as a uniform tube of approximately 17 cm.  $F_0 = 100$  Hz.

To summarize, the adjustable vocal tract imposes its filtering features on the basic spectrum from the glottal source, thereby amplifying some of its harmonic components and generating diverse vowel spectra.

## 1.4 The Nasalization of Vowels

### *1.4.1 Side-branch effect*

During the production of a nasalized vowel the nasal tract interacts with the oral tract to create a complex resonating system consisting of the glottal source, the pharynx, the velum (which functions as a shunt dividing the acoustic path between the two cavities) and two outputs (mouth and nose). This structure contrasts with the vocal tract configuration of oral vowels, which has a single acoustic path from the source through the mouth output, and of nasal consonants. During the production of nasal consonants, the two cavities interact as in nasalized vowels, but the nose becomes the single output due to the oral closure caused by the contact between the tongue and the roof of the mouth. When two cavities are coupled to each other, however, one of them will function as the main tube and the other will serve as a side branch. The categories of speech sounds that are produced with this type of structure include not only nasal consonants, but also lateral and retroflex consonants.

One of the consequences of coupling the nasal cavity to the main vocal tract is the noticeable reduction of acoustic energy. Some degree of sonority loss is expected anyway in regular vowels because the soft walls of the vocal tract produce a damping effect on the resonances and increase their bandwidth (the energy becomes more diffuse). The inertia of the air inside the mouth (and just outside of it as well) also contributes partially to the

absorption of energy of the sound waves. When the nasal cavity becomes part of the total resonating system, the surface area of the overall structure is much greater, as is the volume of inert air that resists the glottal source energy, thus increasing the rate of acoustic loss for nasal sounds (Johnson 1997). Nevertheless, nasalized vowels still achieve considerably more sonority when compared to nasal consonants. Since the coupling to the atmosphere is greater with the mouth than with the nose, the oral cavity still stands as the main resonator.

#### *1.4.2 Antiformants*

Nasalization of vowels creates perhaps the most complex structure of the vocal tract in terms of acoustic-articulatory correlation, i.e. the acoustic consequence of an articulatory gesture. As we have already noted, the effect of velum lowering, which is the articulatory gesture of nasalization, is different for each vowel because the total resonating system does not filter the source sound in the same way as in the simple tube configuration of oral vowels. Nasal coupling brings about two acoustic systems working simultaneously, in which the pharynx and the mouth cavity form the main resonant structure (in vowels) while the structure comprising the nasopharynx and the nasal cavity functions as a side branch. When the velopharyngeal port is opened, the natural resonances of the nasal tract become available and have an influence on the total spectrum output. A nasalized vowel will therefore exhibit more resonance peaks. Nonetheless, contrary to what we might expect this abundance of formants will not necessarily lead to more acoustic energy.

Furthermore, the order of natural resonance frequencies of the coupled system from low to high frequencies is not simply the result of juxtaposing the natural frequencies of

each branch taken separately, because the individual resonances may shift when acoustic coupling between the oral and nasal tract occurs (Stevens 1998, 142). It is difficult to predict the formant frequencies of the nasal cavity because of the differences across individuals and the variations within the same speaker, as we stated above, but research on the subject has arrived at general estimates, which will be discussed later in this paper. Those estimates and the general acoustic patterns of nasalization could help us to find effective resonance strategies for vocal training. In any case, we can anticipate that the effect of lowest natural resonance of the nasal cavity (which cannot be modified at will) is felt mainly on the low part of the spectrum of oral vowels. In general, it tends to appear below F1 for low vowels such as [a], but above F1 for high vowels such as [i] (Maeda 1982).

In addition to acoustic damping, the major effect of the addition of a side branch to the resonating system is the appearance of antiresonances in the acoustic output. While the spectral shape of an uncoupled tube is defined only by formants, the spectrum of a coupled system is affected by antiresonances (also called *antiformants*) produced by the side cavity. These antiformants occur in the vicinity of the nasal formants, so that they show up as a pair in the spectrum of a nasalized vowel. They exist because the coupled vocal tract creates a condition of high impedance for particular frequencies from the source signal that are near the frequencies of the side branch. In this sense, antiresonances are the opposite of resonances, which are possible for frequencies with low resistance (impedance) to the matching source frequency components. In other words, the interference between the two cavities of this compound resonating system causes a reduction in amplitude for some frequencies that would otherwise resonate.

#### 1.4.2.1 Antiformants in nasal stops

It is easier to understand what antiformants are and how they can affect the sound spectrum by first examining their behavior in nasal consonants. For the bilabial nasal stop [m], for example, the mouth cavity assumes a specific shape, volume and length that will facilitate resonance of certain frequency components. Since the cavity is open at one end (uvula) and closed at the other (lips), it can be considered a Helmholtz resonator. As such it has natural resonating frequencies, which can be excited when there is a match with harmonics from the source. When these source frequencies are nearby the resonances of the oral branch, they will resonate only within the side cavity, in this case the mouth. These resonances, therefore, end up being absorbed within the side branch. Because the cavity has no output, the resonances are trapped inside, and they cannot be radiated through the mouth (Johnson 1997, p. 147). Consequently, these resonances will not show up in the spectrum as peaks (formants), but as prominent valleys (antiformants).

With that in mind, it is important to realize that antiresonances are not merely lack of resonance. The latter occurs because of the filtering properties of the resonator, while the former can be regarded as potential resonances that are cancelled out. Since they are the reverse of what a resonance is (a “negative peak”) they are called *antiresonances* or *antiformants*. Figure 1-5 illustrates the effect of antiresonances on the sound spectrum. The lowest nasal formant shows up in the same region (around 300 Hz), since the nasal tract cannot be altered.<sup>4</sup> Conversely, the frequency location of antiformants in nasal stops is variable and depends on the length of the resonating tube. These frequencies will be therefore lowest for [m] and will rise as the point of oral closure moves back, thus

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<sup>4</sup> The samples were taken successively.



diminishing the length of the tube, as in [n], and [ŋ]. In our example, the lowest nasal formant and oral antiformant are at approximately 300 Hz and 700 Hz respectively. Looking at the spectrograms, we can notice that A1 descends as a result, we assume, of gradual velum raising for the formation of the vowel [a]. A1 is more or less in the same frequency of the F1 of the subsequent vowel, and completely disappears when the VPO is closed. In the case of [n], the shorter oral cavity causes A1 to shift up to 1,100 Hz. Another consequence of this upward shift is the larger bandwidth of F<sub>n1</sub>, although it maintains the same center frequency.

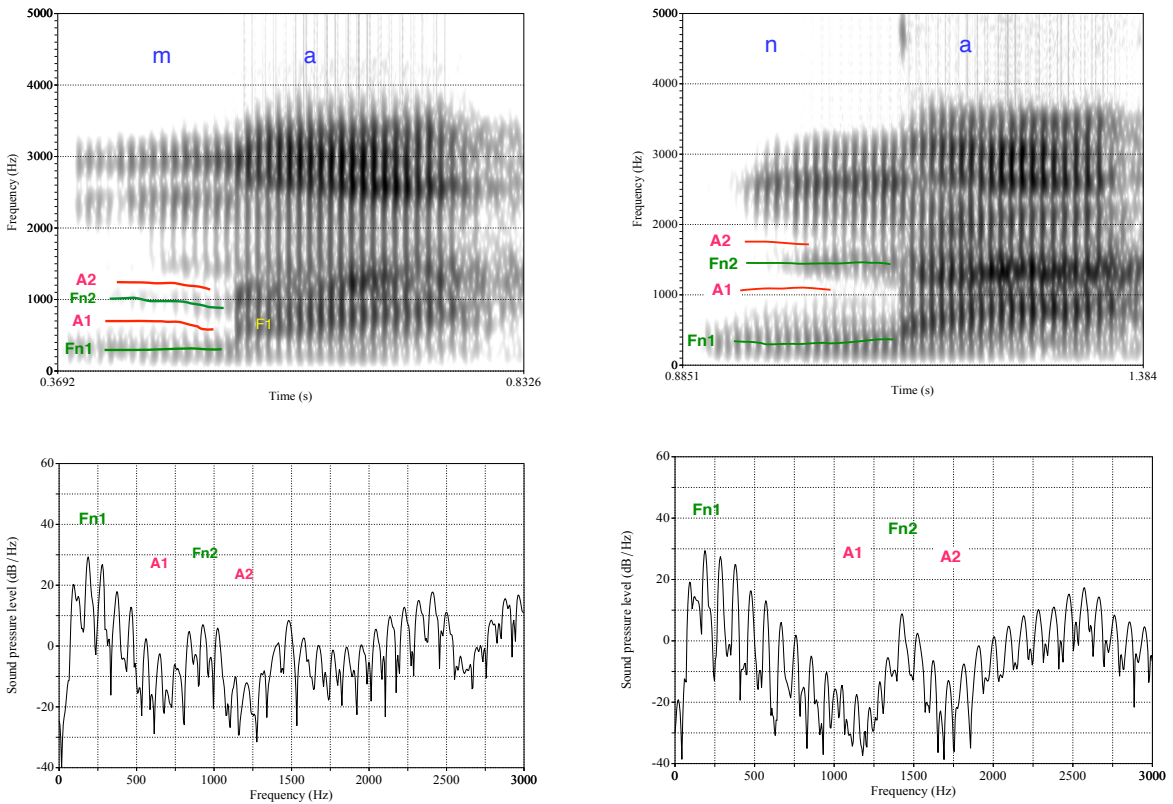


Figure 1-5: Spectrograms (top) and FFT spectra (bottom) showing the location of nasal formants and antiformants in nasal stops [m] (left) and [n] (right).

#### *1.4.2.2 Antiformants in nasalized vowels*

Things become still more complex in the case of vowels given the presence of two outputs for the sound. While the spectrum of nasal stops shows only nasal formants and antiformants, nasalized vowels also contain oral formants. The main spectral consequences of nasal coupling are related to changes in the F1 region of oral vowels: increased bandwidth, reduced amplitude, and shifts in the resonance peak frequencies. All of these visual cues are explained by the presence of formant-antiformant pairs plus the greater damping properties of the nasal tract. Regardless of vowel quality, the overall vowel spectrum visibly flattens (Maeda 1993), i.e., the spectral peaks become broader because of the agglutination of nasal and oral formants within a short frequency range. Also, the amplitude of oral formants lowers because of the presence of antiformants nearby. As a result, the acoustic energy is diffused in the F1 range.

Another difference between nasal consonants and vowels is that in the latter the antiformants can shift in frequency within the same vowel. While the movement of the articulators alters the formant frequencies of the oral cavity, the articulation of the soft palate is directly linked to the location and shifting patterns of the antiformant frequencies in nasalized vowels. As a rule, the frequency location of antiformants is a function of the nasal coupling magnitude. In the two extreme coupling configurations (small or large VPO), the antiformants may weaken or cancel formants. On the one hand, if there is only a slight degree of coupling the first antiformant may nullify the effect of the first nasal formant, thus making its presence negligible. If, on the other hand, the coupling magnitude is higher, then the antiformant may cancel an oral formant above it. Figure 1-6 plots the frequency of antiformants as a function of the size of the VPO.

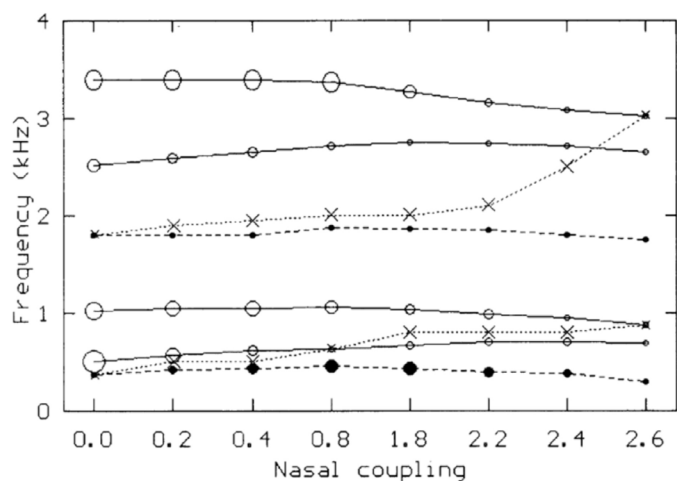


Figure 1-6: Shifting patterns of oral formants (open circles), nasal formants (filled circles), and antiformants (crosses) as a result of increasing VPO size (in  $\text{cm}^2$ ). The frequencies correspond to average formant values for the vowel [ɔ]. Larger circles correspond to higher amplitudes (Maeda 1993).

Furthermore, both nasal and oral formants can shift<sup>5</sup> in either direction but their order will not be altered — a nasal formant cannot meet or overtake an oral formant and vice-versa. An antiformant, however, can meet and cross a formant. This is more likely to happen in heavily nasalized vowels (Maeda 1993). To put it another way, the resonance *distribution* remains the same independently of the amount of velum lowering, and the antiresonances navigate around them. As general rule, the greater the velopharyngeal opening, the higher the antiformant frequency will raise, and the more the amplitude of oral formants above will be reduced.

<sup>5</sup> Even though a given nasal tract has fixed natural resonances, the interplay with oral resonances in a coupled tract cause slight shifts.

Since the antiformants are paired<sup>6</sup> with the nasal formants, their actual frequency location depends on the natural resonance frequencies of the nasal tract considered individually. The various types of spectral modification resulting from nasal coupling are related to different possible ways the resonances of the coupled tract can be ordered. The specific distribution of nasal and oral formants depends primarily on vowel quality, since the resonances of the nasal tract are fixed for a particular nasal cavity. Thus the lowest resonance of a coupled system can have either nasal or oral origin. Most studies show that the lowest nasal resonance is situated around 250 – 300 Hz<sup>7</sup>. This means that the lowest spectral peak in most nasalized vowels comes from the nasal tract, except for vowels with a very low F1, such as [i]. Because an antiformant predictably raises its frequency as coupling is increased, it only weakens or annihilates an oral vowel's F1 above it. In Figure 1-7, we can observe the effects of nasalization on the vowel [a], whose first two formants are situated around 700 Hz and 1,200 Hz (Fig. 1-7a). In the nasalized version, we detect not only an overall reduction of acoustic energy on the spectrogram (Fig 7-b, right), but also a concentration of energy at the low end of the spectrum due to the addition of the nasal formant ( $F_{n1}$  at  $\cong 290$  Hz). Right above it, we see the effect of A1 on the third harmonic ( $H3 \cong 375$  Hz) and on the vowel's F1, which shifts downward below 500 Hz. Consequently,  $F_{n1}$  becomes the main prominence in the F1 area. This is the main acoustic cause of the change in timbre from one vowel to another. Additionally,  $F_{n2}$  is

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<sup>6</sup> "any anti-resonance due to a shunting side branch is always paired with a resonance ... " (Fant 1960, p. 149).

<sup>7</sup> Hattori et al. (1958); Fant (1960); Fujimura and Lindqvist (1971); Lindqvist-Gauffin and Sundberg (1976); Feng and Castelli (1996).

considerably weaker, but its effect can be noticed through the attenuation and flattening of the F2 area. Note also the distortion of the harmonics around 1,000 Hz.

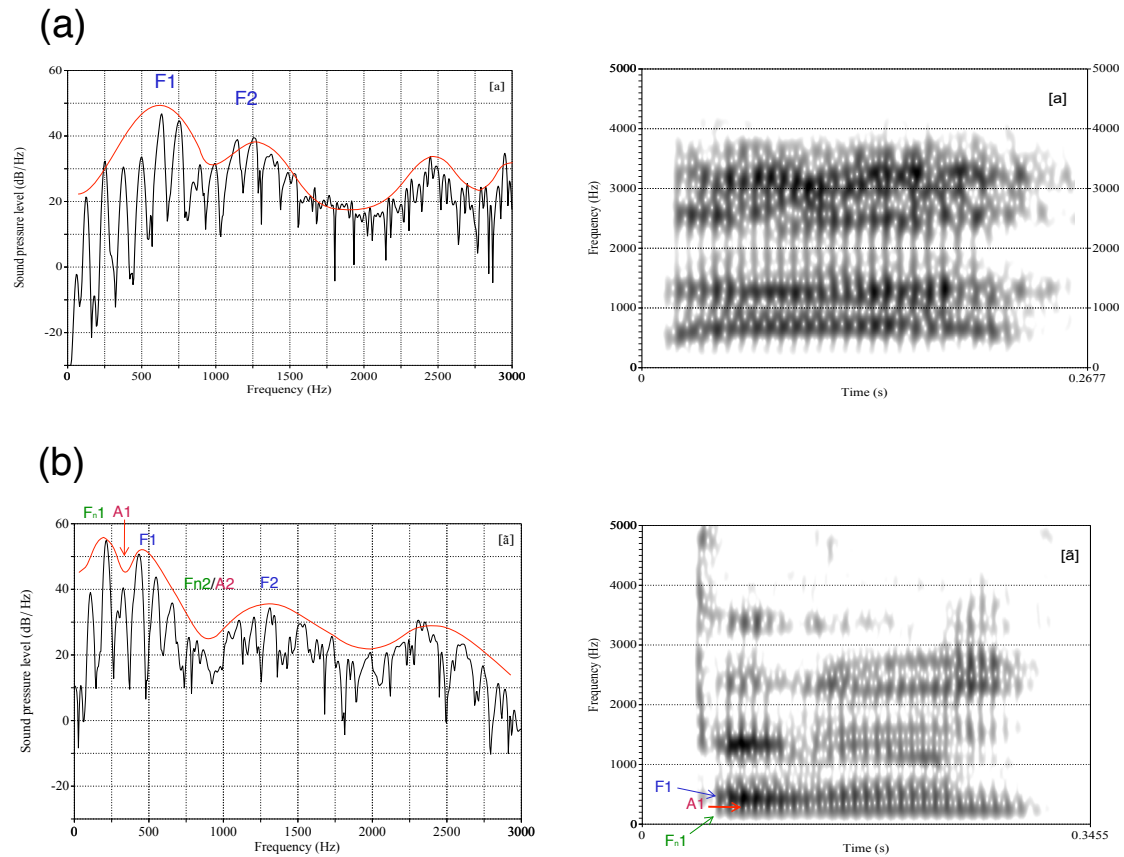


Figure 1-7: Acoustic effects of nasalization on the vowel [a]. (a) FFT spectrum and spectrogram of the vowel [a] taken from a recorded sample of the Portuguese word *tato*. (b) FFT spectrum and spectrogram showing the nasalized counterpart, taken from the Portuguese word *tanto*.

### 1.5 Nasalized vowels as dynamic gestures

We can also regard nasalized vowels as an intermediary gesture between an oral vowel and an  $\eta$ -like configuration, which is equivalent to the pharyngeal-nasal tract. The lowest two resonances of this configuration emerge around 300 Hz and 1,000 Hz (Feng

and Castelli 1996). We know that each vowel quality has a particular F1/F2 relationship that is responsible for vowel identity. The various degrees of nasalization would then be considered gestures that shift from the resonance distribution of a particular oral vowel toward the “target” resonance peaks of the pharyngeal-nasal tract. During this process the addition of nasal resonances and antiresonances cause the oral formants to shift or disappear. The way those shifts occur depend on vowel quality. As an example, if a vowel such as [i] has F1 at around 250 Hz and F2 at 2,200 Hz, as the degree of nasality increases with the gesture towards the  $\eta$ -like configuration, F1 becomes the low nasal formant and F2 is annihilated by the evolution of the first antiformant. Feng and Castelli (1996) explain the unifying pattern behind all the diverse spectral modifications: “The addition of so-called ‘nasal poles’ (a high one for [i], a low one for [a]), the evolution of the second pole (lowering of ‘F2’ for [a], elevation of ‘F2’ for [u]) are consistent only when considered as one trend toward a single objective: the acquisition of the two essential nasal target poles.” Considering that the “goal” of nasalization is to arrive at the resonance distribution of the  $\eta$ -like configuration (which contains only nasal formants after the elimination of oral formants), we can assert that the greater the nasalization, the more consonant-like the sound becomes.

### 1.6 Spectral characteristics of nasalized vowels (visual cues)

As we have said, the total effect of nasal coupling is the result of the combined natural resonances of the two acoustic chambers. One can modify these resonance frequencies through the movement of the articulators — the tongue and the lips change the

formant frequencies in the mouth cavity, while adjustments in the shape of the pharynx<sup>8</sup> affect resonances of the side branch (Johnson 1997, p. 157).

The diversity of spectral results due to nasal coupling is explained by the combination of many factors; vowel quality, degree of coupling, characteristics of individual speakers:

(a) given the same degree of coupling, the effects of nasalization will be different for different vowels;

(b) given the same vowel, the results will vary with the degree of coupling;

(c) given the same degree of coupling and the same vowel, the effects will be different across different speakers depending on the size of the nasal cavity;

(d) results may also vary for the same speaker at different moments if a nasal congestion, for instance, affects the volume and damping characteristics of his/her nasal cavity.

### *1.6.1 Summary of the acoustic properties of nasalized vowels*

Notwithstanding these complications, we can delineate general patterns and rules for the acoustics of nasalized vowels, based on what we have discussed so far.

- A. The spectral output of a nasalized vowel results from the combination of two types of formants: nasal and shifted oral formants.
- B. The nasal formants are paired with antiformants, which will shift between the two types of formants depending on the coupling magnitude.

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<sup>8</sup> If we consider the pharyngeal-nasal tract, instead of just the nasal cavity (cf. Feng and Castelli 1996).

- C. The smaller the VPO is, the closer to each other the nasal formant and antiformant will be. Their effect is less strong (mutual canceling) as the degree of coupling approaches zero.
- D. The lowest nasal resonance is located around 300 Hz. We can expect a large range of variation across individuals though.
- E. The lowest resonance in the spectrum of a nasalized vowel can be either a nasal or a shifted oral formant. It will depend on the actual F1 frequency of the correspondent nonnasalized vowel.
  - a. If F1 is higher than the nasal resonance, the lowest formant comes from the nasal cavity
  - b. If F1 is lower than the nasal resonance, it is the shifted oral formant.
- F. The frequencies of nasal formants are determined by the natural resonance frequencies of the nasal cavity, which depend on the anatomical measurements of the subject.
- G. The formant distribution remains the same regardless of the shifting, i.e. a formant cannot meet or overtake another.
- H. Antiformants can meet and cancel formants in hypernasalized vowels.

These characteristics can be visualized with the spectra shown in Figure 1-8, where the five cardinal vowels of Portuguese are compared to their nasalized congeners. The vowels were extract from the word pairs (a) *tato/tanto*, (b) *teto/tento*, (c) *pito/pinto*, (d) *soda/sonda*, and (e) *tuba/tumba*. We can notice that in the nasalized versions (lower spectra), the nasal formant takes over the low end of the spectrum around 300 Hz. The red



lines demonstrate the flattening of the formant curve, the addition of antiformants, and the weakening of resonance peaks.

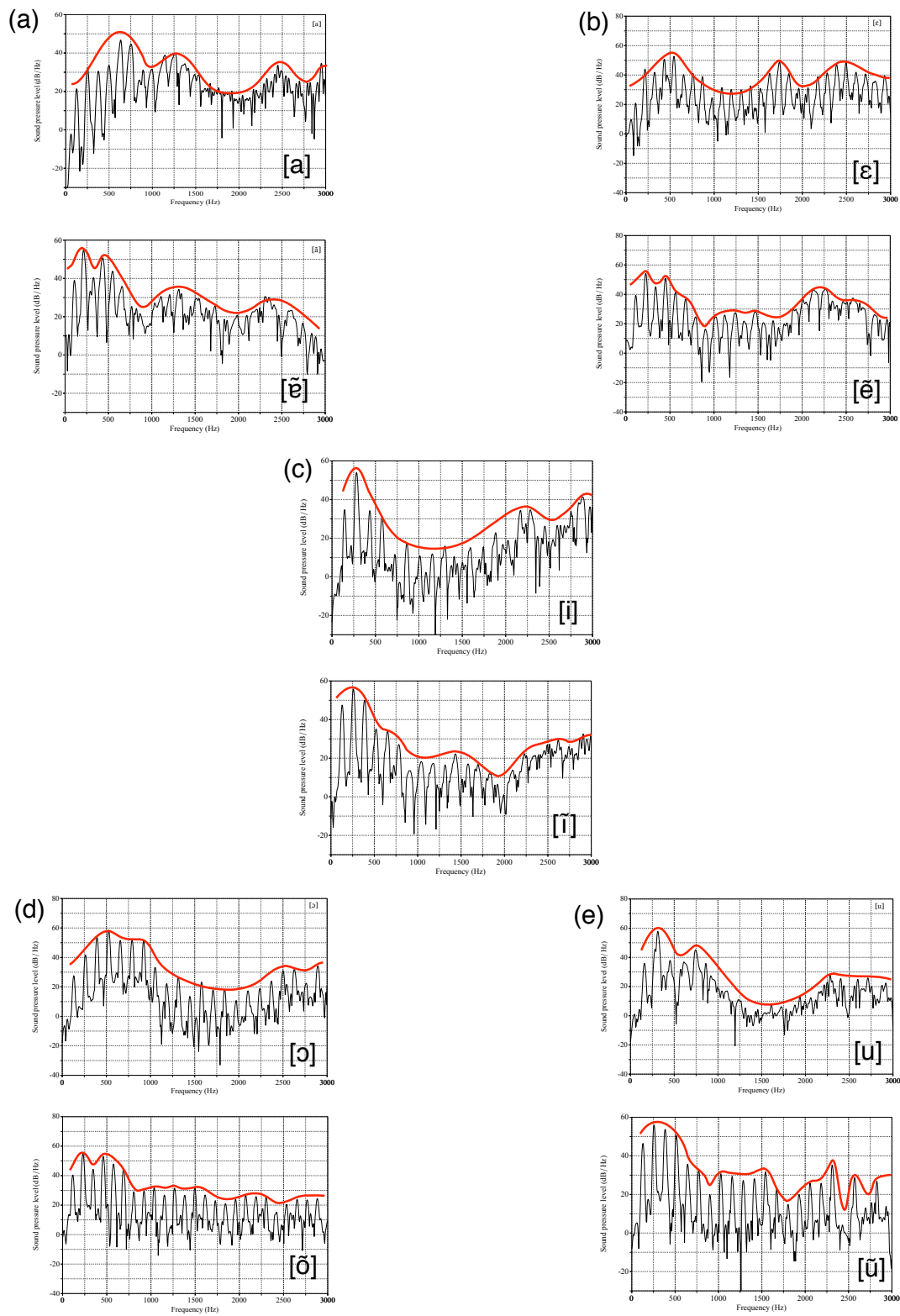


Figure 1-8 (a–e): FFT spectra comparing the vowels [a, ε, i, ɔ, u] with their nasalized counterparts.

## 1.7 Additional remarks

### *1.7.1 Sinuses*

The intricate anatomical structure of the nasal tract contributes to the complicated acoustic features of the cavity. First, the sinuses (especially the maxillary) function as a side branch to the nasal cavity, causing the addition of extra resonance/antiresonance pairs in the spectrum. Second, because of the bifurcation, the left and right sides may have a mutual branching effect: the greater the asymmetry the greater the production and shifting of resonances/antiresonance pairs (Lindqvist and Sundberg 1972). Lastly, the complex cross-section shapes of the cavity affect the way the sound waves flow and can also cause a side-branch effect, thus creating even more resonance/antiresonance pairs around the 3,000 Hz region (Suzuki et al. 1996). Lindqvist and Sundberg (1972) estimated the possible range of resonance for the maxillary (200 – 800 Hz) and the frontal sinuses (500 – 2,000 Hz).

### *1.7.2 Perception of nasal vowels*

The tongue position and the amount of velum lowering are closely related when it comes to the perception of nasality. The maximum possible amount of velum lowering depends on tongue position. With the high back tongue posture of [u], for instance, there is less space for the articulation of the soft palate. Thus the VPO area is only as large as the pharyngeal space allows for any vowel articulation (Maeda 1993). When the F1 of a nonnasalized vowel is high, the VPO needs to be larger in order for an antiformant to cancel F1. This applies especially for low vowels such as [a], which require greater velum lowering in comparison to high front vowels to have a similar degree of perceptible

nasalization (Maeda 1982). The reason is that the primary acoustic stimulus responsible for the perception of nasalization is the spectral modification in the F1 region. Such adjustment reinforces the nature of the relationship between tongue height and soft palate lowering. When coupling is small, the antiformant appears at a low frequency. So if F1 is high, there needs to be a larger upward shift of the antiformant so that the vowel formant can be weakened or annihilated. Consequently, more velum lowering is needed to nasalize low vowels. A constricted pharynx and the use of extra muscles to assist the velum could result in some tension. In some languages, speakers intuitively employ an articulatory shift in order to avoid excess velum lowering. In front vowels such as [i], [e], [œ], etc., F1 is already in the region of the lowest nasal resonance peak. Just the presence of an extra resonance prominence, even with a small degree of coupling, is enough to prevent the dominance of a single spectral peak. These vowels require less articulatory action of the soft palate to achieve perceptual nasality. It is very common, then, that in low vowels, nasalization comes with a downward shift of F1.<sup>9</sup> This articulatory shift acts as a compensatory gesture, by which speakers tend to lower F1 of the nonnasalized version of the vowel so that they do not have to lower the soft palate exaggeratedly. The lowering of F1 enhances the perception of nasality for these vowels. According to Beddor (1993), the spacing of low spectral peaks is essential for vowel distinction:

The perceptual distinction between the class of nasal vowels and that of oral vowels, and perceptual distinctions among the class of nasal vowels, correlate with the shape and overall frequency of the F1 region of the vowel spectrum. The oral-nasal distinction in vowels

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<sup>9</sup> For example, the basic quality of the French [ɑ̃] is sometimes perceived as [ɔ̃] (Maeda 1993). In Portuguese, the oral posture of the nasalized [ã] shifts to a more neutralized configuration as in [ɐ, ʌ, ə].

correlates primarily with broadening and flattening of the prominence of the F1 region due to nasalization. Distinctions within the class of nasal vowels (compared to the corresponding oral vowel distinctions) are affected by the proximity of formants in the F1 region, which influences the center of gravity of the low-frequency spectral prominence.

The articulatory shift in nasalized low vowels achieves the approximation of the formants and the flattening of the spectrum at the F1 region, thus increasing the perception of nasality. *This perceptual phenomenon leads us to assume that we can play with the perception of nasality by means of vowel modification. Our premise is: by finding the appropriate interplay of nasal and oral formants the singer can avoid too much velum lowering.*

## CHAPTER 2 – NASALITY IN SINGING AND VOCAL TRAINING: HISTORICAL TEACHERS AND MODERN RESEARCHERS

This chapter puts aside the acoustic properties of nasalized vowels for the moment and shifts the discussion to the aesthetic parameters that guide the approach to singing such vowels in art songs. The use of resonance strategies with the aid of spectrographic feedback only makes sense when oriented by specific aesthetic goals.

### 2.1 Sung versus spoken vowels

Vowels are produced differently for singing and speech. Singers are constantly making adjustments to create a different type of space in the vocal tract, converting it into a musical instrument. In classical singing, one way of achieving this is by lowering the larynx, a maneuver that increases the length of the tube, which in turn affect the average location of formants. The higher intensity of vocal fold action also changes the filter response to the source sound by elevating the amplitude of the higher harmonic partials. Other factors such as the pre-established rhythms with stylization of stress patterns, the longer duration of vowels and the presence of vibrato can also interfere in our perception of sung vowels in comparison to spoken ones. The major difference, though, lies in the loss of intelligibility at higher frequencies, especially in female voices, when the fundamental frequency becomes higher than the F1 of most vowels. Successful singers always resort to some kind of vowel adjustment as pitch goes up, be they aware or not that they do it. Even if a soprano maintains that she sings only "pure vowels" (in compliance with the Italian motto *si canta come si parla*), it would be impossible for her to sing in a high tessitura

using a vocal tract shape that has the same average formant frequencies of normal speech. The higher the pitch the harder it is to sing the so-called pure vowels<sup>10</sup> and the more difficult to understand the words too, because the elimination of F1 makes vowel identity impossible. So, in extremely high ranges the voice becomes essentially a musical instrument. Not by coincidence, much of the soprano coloratura repertoire is sung in a register traditionally named “flute” or “whistle” register.

In opera, what the audience sometimes hear is an illusion. In very high notes the singer often replaces the vowel she is supposed to sing with a vowel sound that is more comfortable, but the audience is able, sometimes, to hear the correct vowel. The reason why the words can be “understood” in higher pitches is that the singer shifts the vowel formants to track the harmonics of the pitch being sung. This is best achieved by moving to a “neighbor” vowel (e.g [ɑ] becomes [ʌ]), so that the listener can hear both the “right” vowel and a sound that is musically pleasant. For efficient vowel adjustment, the classical singer shifts one of the vowel formant frequencies (F1/F2) placing it near specific harmonics, depending on vocal context. At the same time, they make vocal tract adjustments that reinforce the spectral region ranging from 2,500 – 3,500 Hz, also known as the singer's formant cluster (F3–F5), which enables them to produce a sound that can be heard above the orchestra.

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<sup>10</sup> This is one of those recurrent expressions that can cause confusion in the mind of the student, who then struggle to identify the actual source of impurity affecting their vowels. The expression is usually related to the common fault of transforming the Italian vowels [e] and [o] into diphthongs, but it could also mean anything also, such as a vowel with a “pure” timbre, without noises, or a vowel that is “purely” produced with the mouth instead of the nose.

In order to sing nasalized vowels while remaining true to the aesthetic goal of maintaining consistent resonance balance regardless of vowel quality, some sort of modification is also necessary. From the information presented in the last chapter we gather that the singer can control two types of adjustments: (1) the degree of nasal coupling and (2) articulatory shifts within the oropharynx space that accompany velum lowering in the formation of nasalized vowels.

## 2.2 Aesthetic parameters

Before defining precisely what kind of approach to take when dealing with sung nasal vowels, it is necessary to draw a clear picture of the aesthetic principles that guide timbre choices. Although we have the classical style in mind, the nature of the choices might differ depending on the subgenre, i.e. concert or chamber repertoire. A great deal of the available repertoire in BP is written for voice and piano. Examples of operatic repertoire are rare, but there are important works written for voice and orchestra, such as the soprano solos in Villa-Lobos' *Floresta do Amazonas*. The different kinds of musical texture or even the size of the hall should affect the amount of nasality to be used by the singer.

First of all, we need to decide whether to use nasality with the objective of adding a variety of "colors" in the voice, as it is sometimes encouraged even when singing non-nasal sounds. "Color" is a usual metaphor for vocal timbre, which is defined by vowel quality, so when a tenor nasalizes the sound, he is altering the timbre of the vowel. The motivation to employ this device might be linked either to dramatic/expressive choices or to technical demands (to navigate better through the *passaggio*, for instance). Furthermore, nasality is often associated with a faulty vocal production, when the undeveloped singer



does not possess a perfect control of the soft palate and the surrounding musculature, thus unconsciously rendering the sound nasal.

In singing or voice training, the advocates of nasality often employ it in two ways: (1) through the use of nasal consonants to improve resonance of vowels, and (2) through the nasalization of vowels, which purportedly adds “ring”, a habit cultivated especially by tenors who confuse nasal resonance with *squillo*. Aesthetic principles are not uniform throughout the ages and across different teaching methods or schools of singing, so it is understandable that the approach to nasality has been rather heterogeneous. Nevertheless, we can guide our examination of the extant literature on the issue with the following questions: (a) Is the presence of nasality in the sung voice acceptable (i.e. not necessarily considered a technical fault)? (b) If it is not considered a defect, could it be a desirable quality? (c) Under what circumstances is it allowed or even encouraged? (d) Is it regarded as an essential or an accessory feature? (e) Finally, could it be beneficial or harmful when used in vocal training? Throughout the literature for the singing voice, we might encounter one or more of these issues addressed at some point. After a brief review of what has been written about nasality in singing, we expect to find some guidelines that will inform our decisions on this matter.

### 2.3 Nasality in the Vocal Pedagogy literature

The topic of nasality in singing is surrounded by much misunderstanding and is still likely to raise controversies among pedagogues and performers. Most of the time the confusion arises not only because of the impreciseness of the terminology but also, perhaps, because many voice teachers lack a refined mapping about the anatomical structures of the

vocal tract. Insufficient understanding of the physiological and acoustic processes occurring in nasal sounds only adds to the problem. Misinterpretation of cause and effects can lead to false notions about the role of nasality in singing. During the production of vocal sounds that are efficiently radiated through the mouth, it is not uncommon for the singer to experience vibratory sensations in the bones of the face. Some singers falsely assume that such vibrations are a sign of nasal resonance, or that they are “placing the voice in the mask”, and consequently they associate efficient singing with the presence of nasality. Putting the voice in the nose may generate a pleasant feeling of vibration and fullness of sound, but these sensations are likely to be felt exclusively by the singer, and not necessarily translated into the external sound quality perceived by the listener. Conversely, if the velum is raised, there is no nasal coupling and no nasal resonance, obviously, but the singer may still feel sympathetic vibrations in the facial bones. The mask resonance in this case is a deception, or an effect associated with the wrong cause. Miller (1996) points out how the semantic confusion is related to poor knowledge of the vocal instrument:

There are teachers of singing who insist on distinguishing between "nasal resonance" and "nasality." They are convinced that when the harmonic spectrum is in good balance — having strong first and third formants (*chiaroscuro* timbre) — it is because some degree of nasality is always present. Most probably this perception on the part of singers is due not to nasality but to frontal vibratory sensations that are conveyed from the buccopharyngeal resonator by means of the hard palate and by the bony structures of the head. Such sympathetic vibration registers subjectively as "mask brilliance" associated with "forward placement" concepts. In actuality, because some of the acoustic properties of nasal phonemes induce sensations similar to well-balanced timbre that is devoid of nasality, confusion often abounds as to when the sound is nasal and when it is not.

Simply put, nasal resonance is a pre-requisite for nasality. Nasality is a term that describes the perception of a vocal timbre, whereas nasal resonance refers to acoustic properties of the sound independently of how it is perceived. We could add that a sound can have nasal resonance without being perceived as nasal. But, strictly speaking, we can only say that a sound is nasal if there is nasal resonance. In other words, nasal resonance is not necessarily regarded as a bad element in the sound, but the adjective “nasal” usually has a negative connotation when referring to the tone quality.

### 2.3.1 Historical views on nasality

We can trace pedagogical recommendations about nasality at least as early as the seventeenth century, when the Italian master Pier Francesco Tosi (c.1653-1732) already advised against using the nasal cavity in singing in no uncertain words:

Let the master attend with great care to the voice of the scholar, which, whether it be *di petto* or *di testa* should always come forth neat and clear, without passing through the nose or being choked in the throat (which are the two most horrible defects in a singer, and past all remedy if once grown into a habit. (Galliard 1968, p.22)

Pedagogies based on the Italian school of singing traditionally encourage open throat sensations (*gola aperta*) with the objective of producing a fully resonating sound and well-formed vowels. Setting the vocal tract in such manner is only possible by keeping the soft palate raised and avoiding tongue depression. Up to the twentieth century, it used to be the customary advice to deliberately raise the soft palate to open the throat. Manuel Garcia (1894, p. 17) considered nasal sounds one of the most striking vocal faults, as did Lablache

(1873, 5), for whom the undesirable nasal sound is associated with pushing the sound into the nasal cavities.

Francesco Lamperti (1864) includes the nasal timbre within the category of defective timbres, nevertheless a less “incompetent” one. He recommends the vowel 'ah' for everyday practice, as it is the vowel in which the throat is most open<sup>11</sup>. As Coffin (1989, 60) notices, he was opposed to exercises with *bocca chiusa* (humming, or literally “shut mouth”) because they could tire the pupil's voice very easily and also introduce problems with intonation. Giovanni Battista Lamperti (Lamperti and Brown 1980) associated the presence or absence of vibratory sensations in the sinuses with the efficiency of the attack: "The various sinuses in head and cheek-bones, ‘shed’ vibration, if the initial tone (pulsation of the glottis) is intense enough to start them echoing. You cannot blow your voice into these cavities, nor pull your tone from them. The ringing in these chambers depends on the instinctiveness of the initial tone in the throat, and not on your efforts to ‘place’ the voice." From the statements above we understand that, for G.B. Lamperti, resonance in the sinuses is desirable because it stands as an evidence of a well-executed onset. It is not, however, something that should be forced, but it must happen passively. The issue of nasality in the tone is not discussed, neither is a lowered soft palate explicitly dismissed as a technical fault. We could conjecture if he meant that having some degree of velum lowering is not only allowed but also necessary in order to stimulate resonance in the sinuses. Moreover, it is possible that he might have mistaken sympathetic vibrations from the hard palate felt in the cheekbones for sinus resonance.

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<sup>11</sup> The vowel [a] is the most centralized in Italian, with a configuration that is closest to a uniform tube, in which the pharyngeal and mouth subdivisions have more or less the same volume. The vowel [i], obviously, is the one that opens the throat the most.

It is implied from his maxims that nasality is undesirable (at least when in excess), as he suggests curious tricks to attenuate the nasality of nasal stops: "To cure the 'nasality' of the consonant 'm,' cross it with 'b', as if you had a cold in the head. ... Think 'd' while pronouncing 'n', and the twang disappears." (Lamperti and Brown 1980, 72-3)

With the increasing scientific discoveries about the anatomy and functioning of the vocal instrument in the rise of the twentieth century, pedagogues tended to mix up the newly acquired information with long-standing pedagogic traditions that were frequently based on idiosyncrasies and arbitrary imagery. Illustrations containing anatomical depictions the vocal organs, with arrows indicating the right spots where to place the voice are not uncommon. Proved facts were often mixed with fantasies, but the new terminology certainly conveyed an impression of authority on the subject.

While in the Italian school the nasal tone should be avoided, in France it seemed a natural or even desirable quality. "Hang the breath in the masque," advises Lamont (1936, 15). Contrary to what the Italians taught, he believed that the breath was controlled by "properly established resonance," not the opposite (for the Italians, in general, a well resonating tone starts with the perfect attack). This switched notion of voice production results in instructions such as "Sing from the "point between the eyes, down through the various cavities in the masque — and the tone will be resonant and free." Of course, nobody can initiate the sound from the frontal sinuses, but it is hard to judge whether Lamont, in this case, was just using imagery or if he had a twisted concept of the physiology of singing. Even nowadays it is not unusual to witness voice teachers instructing their students to sing from the "third eye."

Another great advocate of nasal resonance was the tenor Jean de Reszke (1850–1925). Probably the most renowned tenor in the operatic world before Caruso, De Reszke became an influential teacher as well. Skilled use of nasal resonance was in the core of his methods. According to him, "the soft palate and uvula were the factors which chiefly determined the quality of the voice by controlling the passage to the nose" (Johnstone-Douglas 1925). It is hard to understand what he means exactly when he emphasizes the importance of "mask resonance," and at the same time preventing the student from directing the sound into the nose. It might be a matter of degree, so that a slight level of nasalization is not only desirable, but also essential for the production a "colorful" and fully resonating sound:

An element of great importance was the "mask" tone, to get the maximum resonance and ring in the voice, second only in importance to the support. To obtain this the uvula was held poised (i.e., in not so exaggerated a position as when working at the "education of the palate")<sup>12</sup>, so as to give just room enough for the tone to be thrown up into the resonating spaces behind the nose, using the sound of the French "-an-" as in "souffrance." If the sound did not strike behind the uvula it would go into the nose and produce a very ugly quality of sound, almost invariably flat. (Johnstone-Douglas 1925)

It is not possible to know when the vogue for vocal exercises employing nasals started, but it certainly gained momentum under the influence of Dr. Henry Curtis, a ENT specialist who was greatly interested in the functioning of the singing voice. He also

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<sup>12</sup> "The education of the palate was arrived at by the following means: — 'Draw back the palate till it feels as if it was on the level of your ears, hear the pitch of the note mentally, and then strike as if you were trying to focus your voice on to the two sides of the pharynx at once.'" (Johnstone-Douglas 1925)

worked as a voice therapist to several Metropolitan Opera singers. Friends with Jean de Reszke, whom he helped recover after a voice injury, he developed a "new method of relieving injured vocal cords by tone exercises" laid out in his 1896 book titled *Voice Building and Tone Placing*. Curtis was a fierce critic of the method of Manuel Garcia, particularly with regard to the controversial *coupe de glotte*, which he regarded as "death to the voice" and "born of ignorance" (Curtis 1973, 159). Nasal resonance had such an important role in his methods that de Reszke wrote him convinced that "the great question of the singer's art becomes narrower and narrower all the time, until I can truly say that the great question of singing becomes a question of the nose."

Another notorious singer who ventured a teaching career was Lilli Lehman (1848–1929). She included a chapter dealing exclusively with nasal resonance in her book *Meine Gesangkunst*, translated as *How to Sing* in English. According to her, nasality could be used to build vocal technique, including the blending of registers, and to improve those "voices that are not sufficiently nasal [and thus] sound colorless, clear, and expressionless" (Lehmann 1934, 77-8). It becomes clear, as we read her rationale, that her concept of the conditions for efficient resonance was inaccurate. She regards the larger area made available by opening the nasal passages as an acoustic advantage:

The French, on the contrary, always sing and speak nasally — with the pillar of the fauces raised high, and the back of the tongue high against it — and not seldom exaggerate it. On account of the spreading of the soft palate, which, through the power of habit, is cultivated especially by the French to an extraordinary degree, and which affords the breath an enormous space as a resonating surface to act upon, their voices often sound tremendous. (77)

This faulty understanding is evidenced in passages of pure contradiction: "Blind voices are caused by the exaggerated practice of 'nasal singing' which the singers concerned do not sufficiently diminish in the head voice, drawing the pillars of the fauces too far toward the wall of the throat and so closing off the passage toward the head cavities" (81-2).

### *2.3.2 Nasality in the perspective of contemporary voice science*

The work of William Vennard in the twentieth century paved out the path toward a deeper understanding of the functioning of the singing voice and, consequently, a more precise terminology. Regarding the use of nasals, he pointed out the benefit of such exercises from an articulatory point of view. He observes that using nasals to initiate the phonation relaxes the swallowing muscles, so that, when the singers proceed to articulate the vowels, the soft palate has more freedom to raise and bring the faucial pillars into position (Vennard 1968). When it comes to the potential use of the nasal cavity as a resonator, his opinion is clear: "While the [nasal] passage is ideally suited to its function (filtering and warming incoming air), it is a poor means of taking breath quickly, and it is a poor resonator for either improving or building the tone. For these reasons, most singers both inhale and sing through the mouth" (1968, 93).

Although he maintains that the nasal timbre is inadmissible in singing ("it should be eliminated entirely"), he concedes that nasality is desirable in some cases:

Of course, a small seasoning of nasality is sometimes desirable to give the voice a "velvety" quality. It is the sine qua non of the French nasal vowels, though the rest of the language is no more nasal than any other. Also, nasality is characteristic of certain consonants,



represented by the letters 'm', 'n', and 'ng.' Teachers frequently make use of these consonants to 'place the vowels in vocalizing. But here the nasality is a means to an end and should not persist in the tone. Jean de Reszke is said to have remarked, 'The tone should be in the nose, but the nose should not be in the tone.' I take this to mean that a good tone will be felt in the nose but that it should not be nasal. The sensations which give rise to the illusion of 'placement' may be based upon sympathetic vibration in the nose and/or the sinuses, but this is not the same as resonance which enhances the acoustical product of the instrument. (1968, 94)

Along the same lines, Richard Miller advocates the pedagogical use of the nasals [m, n, ŋ, ɲ] for strengthening resonance balance in several of his books. He recommends, nonetheless, that “nasality should not invade well-produced vowels” (Miller and McIver 1995). In vocal exercises using nasal stops combined with vowels, such as [mi me ma mo mu], how would nasal consonants generate any benefits regarding resonance balance in the vowels? According to the authors, nasals encourage the introduction of acoustic energy in to the spectrum so that vowels would have stronger upper partials. The authors do not exactly explain how that actually happens. The truth is that as soon as the velum shuts off the nasal passage, the nasal resonances become unavailable, unless the velum stays minimally lowered — this configuration keeps the nasal passages available without generating a perceived nasal tone. The antiformant interference would be negligible in this case, but their interplay with the vowel formants probably generates some benefit. This assumption, however, needs to be confirmed (or rejected) through further research.

Nix (1999) claims that the use of nasals in voice training should be limited in order to avoid the dangers associated with the practice, namely “muscular habits that limit vocal freedom, but also acoustical tuning problems.” He suggests, instead, that voice teachers use lip trills and raspberries, as these exercises would induce not only sensations of

"forward placement" or "mask resonance" — sensations often associated with nasal resonance — but also “functional freedom and a steady air flow.”

Gregg (1999) holds a more neutral opinion and believes that an incomplete closure of the velopharyngeal port is not essentially detrimental. She proposes that voice teachers should focus on more important matters.

Bloem-Hubatka (2012, p. 65) strongly opposes the use of nasals in vocal exercises. After reviewing the written records of renowned Italian teachers of past centuries, she observes that those masters focused the vocal training on the establishment of a good attack (onset). The attack is the unifying element in a singer’s vocal technique because it is only possible with *appoggio* (which implies optimal body alignment associated with efficient breath management) and the emission of pure, well-formed vowels (which implies proper adjustments of the resonators). Using consonants to propel the sound would only delay the acquisition of the perfect attack on a vowel, because students become too much dependent on such devices. It would be better if the student learned to achieve resonance produce well-formed vowels by means of an efficient attack. This skill demands more practicing time from the students before they acquire control, but it yields long-lasting results in conjunction with other aspects of voice building, such as breathing and resonance. She states that the use of nasality to improve resonance may actually harm the voice, and that the ensuing vowel sounds result impure and deformed by influence of nasal resonance: “The masters of the Old Italian School scorn the modern practice of humming through the nose with the aim to acquire the head sound. True head sound, according to them, can only be acquired by means of a fully developed pharynx. The practice of humming does not contribute to opening the throat; on the contrary; it keeps the tone throaty” (2012, 66).

An experiment conducted by Austin (1997) investigated the potential benefits of an open velopharyngeal port in classical singing, and showed that the port tends to be closed for a longer period in singing as compared to normal speech production. Also, the higher the pitch the more the singers tend to keep velum raised. He ponders that in search for a certain tonal ideal and for a sound that cuts through loud orchestras, singers make special adjustments in the vocal tract in order to maintain an open throat, whose area is diminished when the velum is lowered. From an acoustical standpoint, nasality interferes with that tonal ideal for two main reasons. As we discussed previously, on the one hand the introduction of antiformants in the spectrum weakens the acoustic strength of nearby formants. On the other hand, the shifting of oral formants caused by nasal coupling upsets the ideal of well-formed vowels, thus affecting text intelligibility. The author concludes that acoustic coupling with the nasal tract does not aid in creating resonance balance.

Austin (2000) also offers a plausible explanation for the persistence of the idea of nasal resonance as beneficial among voice professionals: "There is a tremendous amount of energy that is created within the vocal tract when the voice is well produced. Only a part of the energy that is produced at the vocal folds and resonated by the vocal tract actually escapes the lips to be heard by our adoring fans. The rest remains inside and is bouncing and reflecting back and forth within the confines of the vocal tract. With all this energy in the vocal tract it is not surprising that many singers report sensations of vibrations in many parts of their body. Sensations may be localized on the chest wall, in the head; particularly in the front of the face or "the mask." It may be that strong sensations of secondary vibrations have led many to confuse it with nasalization. In fact, they are two very different things."

This view is in contradiction with the assumptions made by Sundberg et al. (2007) regarding the reason why singers and teachers use nasals in vocal exercises:

Nasal resonance is generally considered an important component in the formation of vowel sounds in classical singing. For example, singing teachers typically use vocal exercises where nasal consonants are interweaved with vowels, such as in /mimamu../. This seems to suggest that singing students are encouraged to sing with a more or less open velopharyngeal port.

The study also evaluates potential benefits of a VPO during singing. A VPO might boost the singer's formant without compromising vowel quality. This interpretation is founded in the difference in amplitude levels of the SFC in relation to F1 (what really happens is a general flattening of the spectrum, with an overall loss of energy). Another suggestion is the possibility of enhancing the fundamental frequency in the range of 300 – 400 Hz, due to the introduction of the nasal resonance. Finally, the authors add that “a VPO would also increase the vocal tract resistance, which, in turn, has been shown to be beneficial for the glottal vibratory system.”

Birch et al. (2002), noticing the frequent use of nasals by singers for voice building, searched for actual benefits of the practice. The authors found evidence that singers may use VPO to fine-tune timbre (the study also showed that the VPO can assume varied shapes), and tenors usually present a VPO in the *passaggio*. They did not see however, any correlation between a VPO and a perceived nasal timbre.

McCoy (2008) opposes the use of nasality even as a pedagogical device for resonance training. In his view, unduly nasality may be “the byproduct of a teaching tool used to induce beneficial resonance sensations”, and maintains that excess nasality should not be encouraged or accepted. The author gives some reasons as to why nasality is

unfavorable for singing. First, it compromises the integrity of vowels and consonants, and above all it alters the intensity and location of vowel formants. Second, the carrying power of the sound can be dramatically reduced. As opposed to Sundberg et al. (2007), McCoy states that “while nasality can give the illusion of increased resonance, it might actually diminish the impact of the singer’s formant,” which loses range and amplitude. Finally, it can diminish vocal beauty according to the aesthetic standards of the operatic tradition: if not linguistically required, nasality is not recommended at all.

Perna (2014) examined the presence of nasalance in resonance strategies used by tenors and its importance in negotiating register transitions in the *passaggio*. He demonstrated that nasalance tends to increase as pitch ascends, contrarily to what happens with female singers as suggested by Austin (1997). The results showed the subjects consistently using nasality through the *passaggio*, which is an indication that they are making subtle adjustments to facilitate the transition to operatic head voice. If that is true, the author asserts, attempts to maintain the soft palate raised during the transition to head voice might not be very useful, and allowing slight lowered velum could help prevent laryngeal tension.

It seems that even with scientific evidence, there is no agreement regarding benefits of nasal resonance in vowel production. Is the issue rather an aesthetic one? Determining if a vowel is “well-formed” or not is an aesthetic issue, and sometimes what is aesthetically pleasing for an individual or a school of singing will be unacceptable in other circles. Even with all the instrumentation available nowadays, the ear always ends up being the final judge.

With regard to exercises employing nasality with the purpose of improving resonance efficacy, experience shows that *bocca chiusa* exercises are difficult for novice students. It takes a certain skill to 'hum' efficiently. Such exercises might be more appropriate for mature voices, not for quickly developing beginner's voices. In the case of nasalized vowels, saying that any amount of nasality is unacceptable seems to be an exaggeration. It might be the case that using the nose as a resonator could work better for some voice types than others, but this would be a subject for further research. If nasal resonance contributes with anything, the benefits are related more to laryngeal registration in the *zona di passaggio* than to resonance balance, as suggested by Sundberg et. al. (2007) and Perna (2008).

At any rate, when singing in languages that have the phonological distinction between nasalized and nonnasalized vowels, nasality is necessary at least to a slight degree, just enough to make a perceptible contrast. Without it, the "flavor" of the language is lost altogether.

## CHAPTER 3 – SINGING BRAZILIAN PORTUGUESE NASALIZED VOWELS

### 3.1 Overview of the pronunciation of nasal vowels in Portuguese

#### 3.1.1 *Nasal vs. nasalized vowels (distinction)*

In Portuguese phonetic studies, authors usually draw a distinction between nasal vowels and nasalized vowels (Kelm 1989; Cristófaró Silva 2015). A brief definition of both is opportune here in order to avoid confusion. *Nasal* vowels are the ones that have nasality as a distinctive feature, i.e., the articulation of a nasal phoneme alters the meaning of the word, as in the pair *lá* (there)/*lã* (wool). *Nasalized* vowels, on the other hand, are those in which nasalization is optional and results mainly from the phonetic context, when a nasal consonant follows an oral vowel. The word *janela*, for instance, might be pronounced [ʒɐ'neɫɐ] or [ʒẽ'neɫɐ]. The nasalization of the first syllable does not change the meaning of the word. Therefore, the presence or absence of nasalization in this case accounts for a dialectal variation. In dealing with the guidelines for sung pronunciation, the term *nasalized vowels* is preferable since we are referring to the more concrete, phonetic aspect of going from an oral configuration to a nasalized one. When we later proceed to the discussion of sung nasalized vowels in singing, we are going to employ the term as a technical maneuver corresponding to a physiological gesture (opening the velopharyngeal port), rather than a phonetic-phonological distinction.

Word stress and syllabification affect the nasalization of Portuguese vowels. It is interesting to notice that *nasalized* vowels, i.e. not phonologically distinctive, usually occur in open unstressed syllables followed by a nasal consonant in the next syllable (*janela*, *camada*). Their nasal pronunciation is optional. Conversely, *nasal* vowels tend to occur in

closed syllables, regardless of word stress (*janta, jantar*). The letters *m* and *n* in this case are the orthographic sign of nasalization, but they are not pronounced<sup>13</sup>. As a rule, *m* and *n* are pronounced only when followed by a vowel. To complicate it further, any vowel occurring in a stressed open syllable and followed by a nasal consonant in the next syllable (*cama, como*) will be pronounced as a nasalized vowel. In this case, the nasal pronunciation is not optional, since it occurs in any dialect. Still, it is not considered a nasal phoneme, but a nasalized allophone of an oral phoneme:

Table 3-1: Nasalization of vowels in stressed open syllables preceding nasal consonant.

Example	Phonological transcription	Phonetic transcription
<b>cama</b> ‘bed’	/ˈka.ma/	[ˈkẽ.mɐ]
<b>como</b> ‘how’	/ˈko.mo/	[ˈkõ.mʊ]

### 3.1.2 Oral and nasalized vowel congeners

The most effective way to learn the pronunciation of nasal vowel is to find the oral vowel that shares a similar tongue posture and then nasalize it by lowering the velum. Brazilian Portuguese has seven oral vowels occurring in stressed syllables [i, e, ε, a, ɔ, o, u]. In addition to these, the vowels [i, a, u] are reduced to [ɪ, ɐ, ʊ] when they occur unstressed position. With the combination of the stressed vowels and the reduced allophones, we can assert that, phonetically, BP has ten oral vowels. If we take the subset

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<sup>13</sup> Research shows that a nasal tail (not a fully pronounced consonant) actually occurs especially before stops and fricatives. This is due to the lag between the velic gesture and the articulation of the oral stop (De Medeiros et al. 2008; Lovatto et al. 2007; Teixeira and Vaz 1999; Gregio 2006). A question arises: should the singer practice synchronizing the closure of the velum with the following consonant, as it is recommended for French diction? Or is the unintentional occurrence of the nasal tail acceptable for Portuguese?



[i, e, ɐ, o, u] from the ten-vowel set, we arrive at the "core" vowels that form the mouth space of nasalized vowels: [ĩ ẽ õ ã].

The distinction between mid-high [e, o] and mid-low vowels [ɛ, ɔ] does not appear in nasalized vowels. We use the same symbol for the nasalized [o] as in French [õ], but the actual height of the tongue dorsum seems to be lower in Portuguese. The core vowel is rather between [o] and [ɔ], while in French it is closer to [u]. The vowel [ẽ] has a slightly lower tongue dorsum compared to its oral counterpart in Portuguese, but it is definitely more closed (higher) than the French [ê].

The vowel [ĩ] is the one that presents the greatest similarity to its oral correspondent. It is also the vowel that requires less velum lowering to perpetrate the effect of nasality, as suggested by Maeda (1993). In comparison, the vowel [ẽ] presents the largest articulatory shift of all vowel in relation to its oral analogue. The tongue dorsum moves forward and up, creating a somewhat uniform cavity that is similar to the configuration of a schwa [ə]. In the back vowels [õ] and [ã], the articulatory shift is smaller. Also, it is not uncommon to have the dorsum of the tongue touching part of the soft palate or the uvula during the articulation of these vowels in normal speech (Greggio 2006; Martins et al. 2008), which is something that should be avoided in singing.

The following table summarizes the correspondence between oral and nasalized vowels:

Table 3-2: Oral and nasalized vowels of Portuguese.

	<b>ORAL</b>	<b>NASALIZED</b>	
high front	<b>i</b>	<b>ĩ</b>	high front
mid-high front	<b>e</b>	<b>ẽ</b>	mid front
mid-low front	<b>ɛ</b>		
low central	<b>a</b>	<b>ã</b>	mid central
mid-low back	<b>ɔ</b>	<b>õ</b>	mid back
mid-high back	<b>o</b>		
high back	<b>u</b>	<b>ũ</b>	high back

### 3.2 Spelling of Portuguese Nasalized Vowels

It is a useful skill for the singer to recognize when the nasal sounds occur just by looking at the way the word is spelled on the score. In general, but not always, vowels are pronounced nasal when followed by the nasal consonants *m*, *n*, and *nh*. In some cases the tilde (˜) is put above the vowel letters *a* and *o* to indicate their nasal pronunciation when these letters are not followed by nasal consonants. We have listed the possible spellings for each nasalized vowel sound below.

#### 3.2.1 Monophthongs

When analyzing the correspondence between spelling and pronunciation of the following vowels, we can notice fairly predictable patterns related to the stress and the position of the vowel in the syllable:

**[ɛ̃]** – *ã, am, an, a-m, a-n, a-nh*

-*ã* (stressed or unstressed) — *maçã, lã, órfã*

-*am* (syllable final, preceding *p* or *b*) — *campo, acampar, samba*

-*an* (syllable final, preceding any other consonant) — *canto, encantado, dando,*  
*rancho*

-*a* (stressed, preceding *m, n* or *nh* in the next syllable) — *cana, cama, sanha*

**[ẽ]** – *em, en, e-m, e-n, e-nh*

-*em* (syllable final, preceding *p* or *b*) — *sempre, lembra*

-*en* (syllable final, preceding any other consonant) — *sente, dengues, lenda, lenço*

-*e* (stressed, preceding *m, n* or *nh* in the next syllable) — *cena, geme, tenha*

**[ĩ]** – *im, in, i-m, i-n, i-nh*

-*im* (syllable final, preceding *p* or *b*) — *ímpio, timbre*

-*im* (word final) — *capim, serafim, interim*

-*in* (syllable final, preceding any other consonant) — *sinto, cinco, lindo, finjo*

- *i* (stressed, preceding *m, n* or *nh* in the next syllable) — *cima, sina, minha, the*

diminutive suffix *-inho*.

**[õ]** – *om, on, o-m, o-n, o-nh*

-*om* (syllable final, preceding *p* or *b*) — *comprar, pomba*

-*om* (word final) — *bom, com*

-*on* (syllable final, preceding any other consonant) — *conta, monstro,*

-o (stressed, preceding *m*, *n* or *nh* in the next syllable) — *como*, *sono*, *sonho*

[ũ] – *um*, *un*, *u-m*, *u-n*, *u-nh*

-*um* (syllable final, preceding *p* or *b*) — *cumprir*, *tumba*

-*um* (word final) — *um* (and derivatives *algum*, *nenhum*), *álbum*

-*un* (syllable final, preceding any other consonant) — *mundo*, *triunfo*, *inundar*

-*u* (stressed, preceding *m*, *n* or *nh* in the next syllable) — *uma*, *duna*, *unha*

### 3.2.2 Diphthongs

In normal pronunciation of nasal diphthongs, both the labial-velar glide [w] and the palatal glide [j] are nasalized. Rising diphthongs<sup>14</sup> occur less often in Brazilian Portuguese, and only after *q* or *g*<sup>15</sup>:

[w̃ẽ] – uan after *q* or *g* — *quando*, *minguante*

[w̃ê] – uen after *q* or *g* — *frequente*, *aguento*

[w̃ĩ] – uin after *q* or *g* — *arguindo*, *equino*

The falling diphthongs are five:

[ẽw̃] – ão, am — *pão*, *eram*

[ẽj̃] – ãe, ãi — *mãe*, *cãibra*

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<sup>14</sup> In words like *criança* and *ruim*, the adjacent vowels may be pronounced as rising diphthongs ([j̃ẽ] and [w̃ĩ] respectively), by the poetic device known as *sineresis*, by which a hiatus becomes a diphthong.

<sup>15</sup> Cristófaró Silva (2015) argues that there are no rising diphthongs in Portuguese. According to her, the glide preceding the vowel is actually coarticulated with the velar stops [k] and [g], forming what she calls “complex consonants” that are phonetically represented as [k<sup>w</sup>] and [g<sup>w</sup>].

[ễj] – ém, êm, em, en(s) — *quem, ontem, têm, tens*

[õj] – òe — *põe*

[ũj] – ui in the words *mui, muito*

### 3.2.3 Triphthongs (occurring only after *q* or *g*)

[w̃ẽw̃] – uam, uão — *mínguam, quão*

[w̃êj] – uem — *enxáguem*

[w̃õj] – uõe — *saguões*

We can notice from the examples above that the main orthographic indicators of a nasalized vowels are the letters *m* and *n* following a vowel. The tilde occurs less often, only in diphthongs and triphthongs, and in the monophthong *ã*. Its use as a diacritical mark of nasality in the Portuguese stems from the medieval practice of abbreviating words in manuscripts (Sampson 1999, 39). It evolved from a superscript *n* that later became a mark of vowel nasality, indicating that a nasal stop had been absorbed by the vowel at some point of the development of the language. Its use is comparable to the use of the *Umlaut* in German to omit the letter 'e' in the vowel combinations *oe* (= ö), *ae* (= ä), and *ue* (= ü). The same phenomenon occurs with the circumflex in French to suppress the letter 's', as in the words *hostel* (*hôtel*) and *chastel* (*château*). Similarly, in old Portuguese words the elements *-one*, *-ano* and *-am* become the diphthong *-ão*, and the plural *-ones* becomes *-ões*.

Table 3-3: Assimilation of nasal consonants (Old Portuguese) by vowels (modern Portuguese).

Old Portuguese	Modern Portuguese
<b>tam</b> ‘so’	<i>tã</i>
<b>can</b> ‘dog’	<i>cã</i>
<b>non</b> ‘no’	<i>nã</i>
<b>leon</b> ‘lion’	<i>leã</i>
<b>leones</b> ‘lions’	<i>leões</i>

The use of *-am* or *-ã* indicates not only the word stress but also the tense of some verb forms. The diphthongization of *-am* in a final stressed syllable is manifested in the change of spelling to *-ã*. Unstressed *-am*, however, maintains the spelling: *amarã* ‘they will love’ [ɐmɐˈrãw̃] differs from *amaram* ‘they loved’ [ɐˈmarẽw̃]. With knowledge of these patterns in hand, any singer that has some familiarity with the morphology of Italian, French or Spanish can recognize a greater number of cognate words in Portuguese and know its right meaning and pronunciation just by looking at the score.

### 3.3 Articulatory gestures

As we mentioned earlier, we can regard nasalized vowels as a dynamic gesture starting in an oral configuration towards a nasal one that corresponds to the pharyngonasal tract (Feng and Castelli 1996). This process helps explain the articulatory shifts and the differences in the amount of velum lowering across different vowels. In other words, some vowels possess an acoustic landscape that is close to the nasal target such that little velum lowering and small tongue adjustments are required to convey nasality. The vowel [i] is an example: only a small amount of velum lowering is necessary to nasalize it because its low F1 (≈250 Hz) is most easily affected by the low nasal resonance that is introduced at around 300 Hz. In addition, the small distance between tongue dorsum and the roof of the

mouth makes this configuration very close to the consonantal target. The vowel [a] on the contrary has a lower tongue dorsum in relation to the soft palate so that the distance to the nasal configuration is greater. Thus, in addition to a larger velum lowering, the tongue moves to a more centralized and higher posture. This gesture lowers the frequency of the first vowel formant and brings it closer to the nasal formant.

### 3.3.1 Nasality contour/dynamic gesture

Phonemic nasalization evidences the existence of a nasal consonant that has been assimilated by the vowel along the development of the language. The gesture remains there but only partially fulfilled. In some dialects the presence of a quick, unintentional nasal element is common at the final part of the nasal vowel (Cristófaró Silva 2015, 92). The word *sim* ‘yes’ is commonly pronounced as [sĩ<sup>n</sup>], for example.

Research has shown that in Portuguese the nasalized vowels in normal speech are not static<sup>16</sup>, but behave along the lines of the dynamic gesture described above. The nasality contour, as it has been called (Teixeira and Vaz 1999), is comprised of an oral phase followed by a nasal phase, forming a biphonemic sequence (V<sup>ñ</sup>). Some authors<sup>17</sup> report the presence of a nasal tail preceding stops and fricatives (e.g. *canto* [ˈkẽ<sup>n</sup>to], *canço* [ˈkẽ<sup>m</sup>po]), which results in a tripartite gesture (V<sup>ñ</sup>N) consisting of an oral onset, a nasal phase, and finally the maximum VPO configuration with closure of the oral cavity resulting in a nasal murmur. A reasonable explanation for this is that the movement of the soft palate is not synchronized with the movement of the other articulators (Medeiros et al. 2008). The

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<sup>16</sup> Silva et al (2013); Teixeira and Vaz (1999); Lovatto et al. (2007); Gregio (2006); Oliveira and Teixeira (2007); Medeiros et al. (2008); Cristófaró Silva (2015).

<sup>17</sup> Lovatto et al. (2007); Gregio (2006).

result is an overlapping of three articulatory gestures, namely the vocalic (V), the velic (Ṽ), and the consonantal gestures (N, C). The velum is activated during the vowel gesture and is superimposed on the consonantal gesture. Gregio (2006) observes that vowels with high tongue position take less time in the oral portion of the gesture, possibly because of the action of the *palatoglossus* muscle, which has the dual function of lowering the velum and elevating the tongue.

In the process of becoming comfortable with singing in French, the singer practices the synchronization of those gestures in order to avoid the unintentional pronunciation of *m* or *n* after a nasal vowel in words like *chanter* and *empire*. Grubb (1979, 56) stresses that “Like any other vowel formed in accordance with the principle of legato, the nasal vowel must fill the duration of its assigned note-value, unaltered and unshortened. There may very well be a consonant-sound following the nasalized vowel, but it will probably be in the following word or syllable.” Figure 3-1 shows a schematic design comparing the overlapping of gestures that generates the nasality contour described above with the synchronization between the moment the soft palate closes the VPO and the articulation of the ensuing consonant. This synchronization reduces the overlapping of gestures and eliminates the nasal tail that is commonly produced by voice students that are new to the French repertoire. The same procedure can be adopted for Portuguese, at least initially, for the purpose of refining the articulation of the soft palate. The pronunciation of the nasal tail is not forbidden in Portuguese as it is in French (cf. Kayama et al. 2007; Herr 2009).



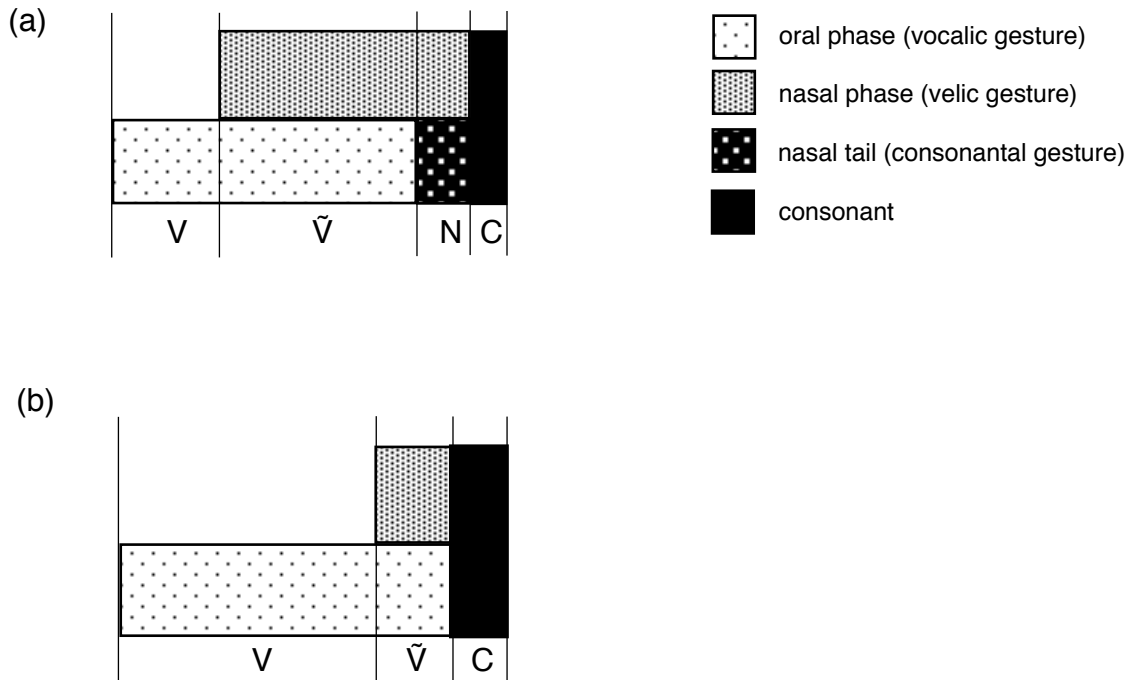


Figure 3-1: Schematic representation of the nasality contour showing (a) overlapping of articulatory gestures in regular speech, and (b) the synchronized articulation of the velum in skillful singing, eliminating the unintentional nasal tail that usually occurs just before the consonant.

### 3.4 Singing BP Nasalized Vowels

#### 3.4.1 Using the Nasality Contour

Considering the aspects of vowel nasalization discussed so far, namely (1) the acoustic characteristics of nasalized vowels, (2) the aesthetic issues involving nasality in singing, and (3) the phonetic-phonological characteristics of nasal vowels in Portuguese, we should be able to outline a set of practical strategies for singing Brazilian art songs efficiently, i.e. with an aesthetically pleasing, resonating voice associated with a distinct pronunciation of the text. The ultimate goal is not to eliminate nasality of the vowels entirely, for this would compromise the "flavor" of the language and render the diction

unnatural or even incomprehensible. The objective is to attenuate the effects of nasalization on a well-balanced vocal instrument. To this end, the idea of a nasality contour could be adapted for singing in BP, provided some adjustments in comparison to regular speech are made.

The main alterations would be the elimination of the nasal tail, and the rearrangement of the proportional duration of the oral and nasal phases during the nasalization gesture. The longer duration of the vowels in singing allows for better control of refined articulatory gestures, so that the vowel can have a longer oral phase. The nasal phase is shortened in such a way that the velic gesture is activated at the very end of the vowel being sung, close to the incoming consonant. This strategy allows for more stability in the location of formants, since the varying degrees of velum lowering affect the frequency of the vocal tract resonances. In addition, the general amplitude loss caused by nasalization is left to the very end of the vowel emission, in compliance with the principle that puts vowels as the main carrier of the vocal instrument, with "crisp and quick" consonants helping with text intelligibility<sup>18</sup>. By the same token, the quick nasalized portion is often enough to convey the desired timbre of the vowel.

It could be argued that the oral phase in the emission of the vowel might distort the pronunciation of the word. This is not the case for two main reasons. First, the modification of the vowel in its F1 region is often enough to influence the perception of nasality. This

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<sup>18</sup> In his vocal method, Vaccaj (1894) altered the standard syllabification of the Italian text to demonstrate the aesthetic preference for vowel prominence in the duration of a given note. For instance, the phrase "Manca sollecita, più dell'usato" is syllabified as: "Ma-nca so-lle-ci-ta più de-llu-sa-to." He states that "the presentation of unusual syllable combinations is given to be a guide to the pupil in the proper pronunciation. The vowel receives its full-time value of one or more notes, the consonant is to be drawn over to the succeeding syllable. This facilitates the acquiring of the legato in singing".

is especially true for the vowel [ẽ], which is the most discrepant in relation to its oral congener among the Portuguese nasalized vowels. But even for the other vowel pairs, there are slight shifts in tongue position that accompany the velum lowering gesture in the formation of the vowels. As we pointed out above, the vowels [ẽ] and [õ] tend to assume an intermediary position in relation to their respective pairs of mid-high and mid-low congeners. This kind of fine-tuning is an essential element of high-level training, and the subtleties can be picked up by trained ears.

The second reason why it is acceptable to elongate the oral phase of a nasalized vowel is that, because of the very nature of musical rhythm, the listener makes sense of the words only *a posteriori*. Thus, even if the oral phase of the vowels happens to create some confusion, the introduction of the nasal resonance at the end of the vowel segment makes up for any misunderstanding. At any rate, the words in the example above will be fully heard, hence fully processed in the listener's mind, after the enunciation of the last sound of the word, be it nasal or not. The point is, the proportion of the oral and nasal phases of the vowels is less relevant in singing than in speech, where the degree of nasal coupling increases gradually from the onset of the vowel to the articulation of the coda of the syllable. In the case of longer notes, it would be difficult to manage a note that is nasalized for about half of its duration. So, between nasalizing the vowel during a large portion of the note, on the one hand, and maintaining resonance balance for as long as possible, on the other hand, the latter option is aesthetically preferable. Of course, the amount and duration of nasal coupling depends on the duration of the notes. Vocal production for singing is radically different from regular speech anyway. There is some sort of

“suspension of disbelief” that enables us to appreciate words being declaimed with predetermined pitches and rhythmic patterns.

Yet another reason for utilizing the nasality contour is linked to the phonological structure in which nasalized vowels occur. Mattoso Câmara (1972) supported the argument that Portuguese has no phonologically distinct nasal vowels: “Phonologically, Portuguese nasal vowels consist of a vowel accompanied by a syllable-closing nasalization that cannot be distinguished from the vowel articulation itself. This sort of nasalization is quite different from the pure assimilative type that occurs with vowels in position before a syllable beginning with a nasal consonant”. Also, according to Cristóvão Silva (2015), what we perceive as nasal vowel are biphonemic structures comprised by an oral vowel combined with the nasal archiphoneme /N/. An archiphoneme is a phonological term used in a situation where two or more phonemes are neutralized in certain positions. That is the case for the nasal stops in languages like Portuguese, Spanish, and Italian, and it occurs when the nasal consonant appears before an oral stop [p,t,k ...]. In this position, nasal stops are not contrastive, and their place of articulation becomes the neutralized feature. In their actual phonetic realization, the nasal archiphoneme assimilates the place of articulation of the stop: [mp], [nt], [ŋk]. The archiphoneme /N/ indicates the essential feature of the nasal stops [m, n, ɲ, ŋ], i.e. nasalization, disregarding their concrete places of articulation (labial, dental, etc.). According to this perspective, the five Portuguese nasal vowels [ẽ, ê, ĩ, õ, ũ] are represented phonologically as five combinations of oral vowels with the archiphoneme /N/: /aN, eN, iN, oN, uN/. This is certainly a more abstract notion, because in Portuguese the nasal consonant after the vowel is not phonetically manifested (at most, only a brief nasal element is perceived, as we discussed above). Nevertheless, this theory demonstrates

that nasalized vowels occur essentially in a closed syllabic structure /VN/, i.e. a syllable that ends in a consonant, as it used to be in Old Portuguese before the assimilation of the nasality feature by the vowels.

Accordingly, the evolution of phonemic nasal vowels in Portuguese further supports the strategy of singing nasalized vowels by emulating the gesture from the oral vowel configuration toward a consonantal target. As a cross-language example, the word *manco* can be represented phonologically as /maNko/ both in Spanish and in Portuguese, but it is realized phonetically as [maŋko] and [mẽko] respectively. Phonetically the Spanish word has five sounds. In the Portuguese version of the word, however, the assimilation of the nasal consonant by the preceding vowel reduces our perception to four sounds. If this word in Spanish appears in a musical setting, the singer would distribute the sounds of the first syllable in such a way that the vowel takes up as much of the note value as possible. Our proposal is that a similar device could be used in Portuguese. Figure 3-2 compares the hypothetical setting of this word in Portuguese and Spanish. The oral component of the vowels remains the core of the syllable and occupies most of the musical note duration. The nasal component added at the end of the note should be treated as a consonant, just as in a closed syllable structure (as if singing the word *marco*). The major difference, then, is in the size of the gesture from the oral vowel to the consonantal segment. In the case of nasalized vowels, the gesture should be more delicate, not achieving full closure of the oral tract. Given the language's phonological attributes above mentioned, this device is not unnatural as it might seem because it is rooted in the evolution of the nasal vowels in Portuguese.

man - - - co

<i>Spanish</i>	[ma——ɲ ko]
<i>Portuguese</i>	[mẽ——(ũ) ku]

Figure 3-2: Comparison between the Spanish and Portuguese pronunciation of the word *manco* in a hypothetical musical setting.

### 3.4.2 Using the core vowel

In order to successfully apply the nasality contour then, the singer must find the modified oral congeners, which will function as the core vowel. Once this vowel is determined, any vowel modification strategies should follow the parameters discussed in abundance by researchers in recent vocal pedagogy literature. The diverse strategies vary mainly according to the voice type and the musical context in which the the vowel is being sung, such as tessitura, pitch, duration, intensity, and even musical style. Then, whatever adjustments are made to the core vowel, a slight velum lowering gesture should be enough to convey the impression of a nasalized vowel.

The amount of the velum gesture to be imposed on the core vowel is another aspect the singer should be able to fine-tune. Concerning the regulation of VPO size throughout the vocal range, as a general rule the amount of nasalization (duration of the nasal phase) and the degree of velum lowering should diminish as the tessitura gets higher. For pitches

above the *passaggio*, nasalization could be discarded altogether, since any small alteration in the vocal tract space can disturb the resonance balance.

### 3.4.2.1 The front vowels [ĩ, ê]

These vowels seem to be the easiest to sing because they require the least amount of velum lowering to be nasalized. The singer should keep the sensation of an open throat by avoiding hypernasalization. In addition, care must be taken to avoid the open pronunciation of [ê], which would result in a sound similar to the French [ɛ̃].

In the spoken pronunciation of nasalized front vowels, a diphthongization may occur, in some dialects, as part of the gesture towards the nasal tail. In the performance of Brazilian songs, this practice becomes a pitfall that can be avoided by maintaining the mouth space open. The only exception is the letter combination *-em* in final position:

Table 3-4: spoken and sung pronunciation of BP nasalized front vowels

Example	Spoken	Sung
<i>sempre</i> ‘always’	[ˈsẽ̃mpɾi], sometimes [ˈsẽ̃ĩmpɾi]	[ˈse(ẽ)ɾi]
<i>tento</i> ‘I try’	[ˈtẽ̃ntu], sometimes [ˈtẽ̃ĩntu]	[ˈte(ẽ)tu]
<i>fim</i> ‘end’	[fĩ̃ <sup>n</sup> ], sometimes [fĩ̃ĩ <sup>n</sup> ]	[fi(ĩ̃)]
<i>sem</i> ‘without’	[sẽ̃j <sup>n</sup> ]	[se(ẽ)j]

### 3.4.2.2 The back vowels [õ, û]

The most important thing for the young Brazilian student is to develop awareness of an open vocal tract and keep the oral passage open when nasalizing the back vowels [o, u] and the central vowel [ɐ]. Very often the vocal tract acquires the configuration of a

consonant during the production of those vowels. If this happens, the pharyngonasal tract becomes the main resonator while the oral cavity introduces antiformants in the sound spectrum as the result of side-branch effect. The singer loses acoustic energy and the ability to maintain a consistent resonance balance within the musical phrase. An instinctive reaction might include pushing the sound to compensate for resonance loss causing straining of the laryngeal muscles thus reducing the efficacy of the phonatory mechanism. This might actually be the cause of the fatigue often reported by beginners after performing exercises that involve humming nasal stops. For the same reason, singing nasal back vowels becomes gradually more difficult as the pitch goes up. The solution is to attack the note with the correspondent oral vowel in order to have an open throat space that allows optimum resonance.

This speech habit might influence negatively even the performance of foreign language pieces. A hypothetical young Brazilian tenor trying to sing the aria “Una furtiva lagrima” from Donizetti’s *L’elisir d’amore* (Figure 3-2) might attempt to sing the first [u] vowel, which is set to an F above middle C, with the nasal vowel [ũ] instead of the “pure” Italian vowel. The vowel [u] is optimal for the male voice in that tessitura, which calls for a more convergent resonator, but nasalization distorts the throat space and creates a consonant-like sound equivalent to humming. In the vowel [u], F1 and F2 are usually close enough to each other as to form a low formant cluster. With nasalization, and consequently the introduction of the low nasal formant/antiformant pair in the vowel spectrum, the acoustic energy in that frequency region is dissipated and the bandwidth is widened, causing the distortion of the vowel. Similarly, if some unwary Brazilian soprano begins the aria “Come scoglio” (from Mozart’s *Così fan tutte*) with [õ] instead of [o], the tone is likely



to lose the *chiaroscuro* quality (i.e. a tone with well defined vowel formants and strong formant cluster in the 3000 Hz region) that is desirable in the operatic performances, especially when the voice is so exposed as it is in Mozart arias. In this particular example, the vowel [o] is set to a B $\flat$ 4 (466 Hz), whose first harmonic is likely to be enhanced by F1<sup>19</sup>. The second harmonic (B $\flat$ 5) would be reinforced by F2. The introduction of the nasal formant/antiformant pair right above the first harmonic and within the range of the first vowel formant would disturb the optimal configuration achieved by singing the vowel [o] at (B $\flat$ 4).



Figure 3-3: Excerpts from “Una furtiva lagrima” (L’elisir d’amore) and “Come scoglio” (Così fan tutte); on the right side, approximate F1 locations for the vowels [u] and [o] transposed to musical notation, based on Doscher (1994, 152).

### 3.4.2.3 The central vowel [ɘ]

Since this vowel undergoes the largest articulatory shift in relation to its oral pair, just the core vowel would be enough to emulate the desired nasalized vowel. Consequently,

<sup>19</sup> “...the natural head register gravitates toward the F1/H1 strategy (the ‘hoot’) in seeking resonance. This gives the close vowels, particularly [i], and advantage in the middle register, where H1 is within easy range of F1”. (D. Miller 2008, 90)

the singer can eliminate the nasal phase entirely and still preserve the effect of nasality. This is possible because the vowel [ɐ] does not contrast with any other vowel in BP<sup>20</sup>. It is an allophone of /a/ occurring in unstressed position.

Some students might not be familiar with the IPA symbol [ɐ], but if the singer has at least a basic proficiency in reading IPA transcriptions, the schwa symbol [ə] could be used, and the instructor should recommend the pronunciation of an “*a*-colored” schwa. The two sounds are actually not far apart from each other in the vowel space, [ɐ] being slightly lower than [ə]. There has been a wide variety of symbols used for this particular vowel, such as [ẽ, ẽ̃, ɰ̃, ẽ̃, ẽ̃, ẽ̃]. Any of those symbols could be informally used if they help the singer achieve the desired vowel quality, but [ɐ] and [ə] seem to represent the core vowel better.

Acoustically, this is an excellent vowel for the female upper voice. The forward shift of the tongue creates some space in the pharynx and brings F1 to a lower frequency in as compared to the approximate F1 frequency in [a]. The location of F1 for the vowels [ɐ] or [ə] will be around 700 Hz for most female singers, where it will bolster the H1 of those pitches in the upper register transition (F5 at 698 Hz, F #5 at 740 Hz, and G5 at 784 Hz), resulting in a F1/H1 tracking, which is the best resonance strategy in that area.

In summary, the most efficient way to sing BP nasalized vowels is to use the articulatory gesture that shapes the nasality contour (oral to nasal) and use whatever resonance strategy that works better for specific voice types and musical contexts. This approach to singing nasalized vowels in Portuguese is based not only on the acoustic

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<sup>20</sup> This is not the case in European Portuguese, in which /a/ and /ɐ/ form a minimal pair. Cf. *falamos* [fɐˈlamuʃ] ‘we speak’ vs. *falámos* [fɐˈlamuʃ] ‘we spoke’.

characteristics of these vowels, but also on their phonetic and phonological structure. It is important to remember that the choices made by the singer in order to achieve resonance power are based on the aesthetic ideals of classical singing. Other musical styles might employ different strategies in compliance with their own tonal ideals.

## CHAPTER 4 – EXAMPLES FROM THE REPERTOIRE

### 4.1 Resonance strategies

The general procedure for singing nasalized vowels has been described as consisting of a sequence of gestures, as opposed to the overlapping gestures occurring in regular speech. The singer can adjust the degree of nasalization and the duration of the nasal phase depending on musical context, on a specific color or timbre desired for a particular expressive purpose, and on individual taste. For training purposes, however, it is best to keep nasal resonance interference as minimal as possible as long as diction is not compromised. Therefore, the resonance strategies summarized below will only apply to the oral vowel congeners that are used as the basic vowel quality of nasalized vowels. Successful resonance strategies for classical singing have been presented by authors like Coffin (1980), D. Miller (2008), and Bozeman (2013). When singing BP nasalized vowels, these strategies will be employed on the oral phase, before the velum lowering gesture, so that resonance balance is ensured prior to the nasal phase of the note being sung. It should be added that any formant values used here are only general estimates within each *Fach*. In the actual studio environment, the instructor eventually needs to make adjustments for specific individuals.

Certain conditions must be met in order to optimize any resonance manipulations. First of all, an efficient phonation is necessary to ensure the sound has strong harmonic partials. If the phonation is too breathy, the spectral slope will be steep and the partials will be weak. If too pressed, the harmonics will be louder, resulting in a shrill sound. Second, the singer should strive to maintain a stable laryngeal position and, consequently, a steady

tube length across most part of the range. This will stabilize the general location of formants, especially the singer's formant cluster. Finally, a *chiaroscuro* timbre must be encouraged by means of a convergent resonator shape, which implies an open throat (pharyngeal space), relatively fronted tongue, and lifted velum.

#### 4.1.1 Male voices

For the male singer, one of the challenges in the path to acquiring consistency of timbre needed for classical style is to avoid F1/H2 coupling as pitches raise. Giving up this acoustic coupling seems counterintuitive for the beginner voice student because the natural impulse is to maintain the loudness level of the resonances. But maintaining the F1/H2 coupling by raising the larynx as pitch goes up will shorten the tube and raise F1, causing an unpleasant, "yelled" sound. The basic strategy in the *zona di passaggio* is to abandon the F1/H2 interaction and allow H2 to surpass F1. This strategy is accomplished by maintaining tube length and larynx stability across range. The vowels naturally switch to a close timbre with the desirable *chiaroscuro* quality.

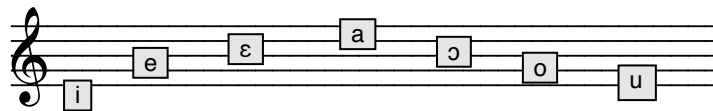


Figure 4-1: Typical F1 location by vowel in male voices, based on Bozeman (2013). Average locations will be higher for tenors and lower for basses.

The pitch where H2 surpasses F1 will of course be different for each vowel. Vowels with low F1, such as [i] and [u], will switch to close timbre at a lower pitch. For example, if a baritone's [i] vowel has an F1 at E4, the pitch at which the voice switches to a close

timbre, i.e. the pitch at which H2 rises above F1, will be at about an octave lower at E3 or F3, since the first two harmonics (H1/H2) are an octave apart. This will happen provided the resonator shape remains stable in that transition area. For vowels with a high F1 the transition happens at a higher pitch. The vowel [a] remains in open timbre for a larger part of the range. If, for the same baritone, this vowel has an F1 at D5, the voice will move to a close timbre at around D4/Eb4. Perceptually, it sounds like the vowel is being modified to a close neighbor, from [a] to [ɔ], although the vocal tract is relatively stable. Front vowels will also "close", but they may also sound slightly centralized or neutralized (Bozeman 2013, 49). This passive vowel modification occurs due to the changing formant/harmonic interactions. They are not the result of intentional changes in the resonator shape.

The singer can also use active vowel modification to change the formant location in order to track resonances, but tube length should be maintained to ensure the availability of the singer's formant. Also, when H2 is above F1, there might not be any harmonics available for resonance, especially in a high range. In this case, F2 can assist in reinforcing higher harmonics to compensate for the weaker F1.

Trusting passive vowel modification might be a challenge for inexperienced students that are unaccustomed to the kinesthetic and auditory sensations of such timbral shifts. If the vocal tract remains stable during an ascending scale, for instance, the student might hear a "different" vowel and judge it incorrect. The vowel [a] might sound as [o] as the voice moves to a close timbre. The tendency is to disrupt tube stability (usually by raising the larynx and opening the jaw too much) in order to maintain the familiar timbre in his inner ear.

#### 4.1.2 Female voices

Acoustic adjustments in the lower range of the female voice are more complicated than in the male voice. In addition to the changing harmonic/formant interactions, there is a shift of laryngeal registration by which the vocal folds switch from vibrational mode one ("chest" dominant) to vibrational mode two ("head" dominant). Both factors (formant tuning and vocal fold function) will result in less options regarding resonance strategies for the female voice. On the one hand, the higher pitches sung by women offer a lesser quantity of harmonics available for enhancement, and the broader spacing of harmonics make it harder to match them with formants. On the other hand, in vibrational mode two the thinner, more stretched vocal folds generate a steeper spectral slope, yielding weak higher harmonics. Therefore, women must rely primarily on a F1/H1 tuning strategy. As pitches get higher, this is accomplished primarily by vowel opening. Tube shortening, i.e. raising the larynx, should be saved for extremely high notes (ca. B5 and above).

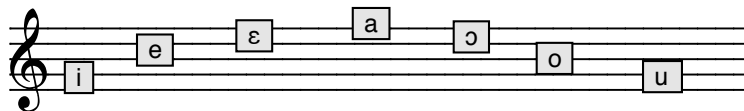


Figure 4-2: Typical F1 locations by vowel in the average soprano voice, based on Bozeman (2013). Locations will be lower for mezzo-sopranos and altos.

Brazilian art songs are usually written in a medium range, so we will focus our attention primarily resonance strategies for the female middle voice. In general, the female lower middle voice requires a more convergent resonator shape. To that end, the singer should prioritize close vowels, especially front vowels such as [e] and [i], which are easier in this range because their low F1 is able to resonate the H1 of low pitches. Open

vowels, especially [a], will sound weaker once the vocal folds switch to vibrational mode two (thinner, stretched shape). To assist the emission of more open vowels in the lower tessitura, a soprano can lower F1 through active vowel modification, bringing it closer to the low H1. As for the upper middle voice, once the pitch is about to surpass F1, the vowel needs to open in order to keep F1/H1 coupling.

In short, women need to open the vowels once H1 approximates the vowel's F1, in order to maintain "whoop" timbre (head voice). In the lower range, actively lowering F1 (by increase tube length and closing the vowels) is a good strategy to assist the laryngeal registration shift to mode two (thinner, stretched vocal folds). For men, the best procedure is to keep tube stability in order to allow passive vowel modification that results from formant/harmonic interactions. Any modifications should occur in the direction of appropriate "acoustic neighbor" vowels, except in women's top high voice, where all vowels modify actively towards [a].

## 4.2 Some challenging excerpts from Brazilian art songs

### 4.2.1 *Canção de amor*

Composer: Heitor Villa-Lobos (1887–1959)

Words: Dora Vasconcellos (1910–1973)

Year: 1958

Larger Work: *Floresta do Amazonas* (concert version of the film score for the movie *Green Mansions*)

Voice type: Soprano

In the first stanza there are several examples of vowels followed by nasal consonants. The first thing to do is to determine whether those vowels will be nasalized or not:



*Sonhar na tarde azul  
Do teu amor ausente  
Suportar a dor cruel  
Com esta mágoa crescente  
O tempo em mim agrava  
O meu tormento, amor!*

In the case of *sonhar* and *amor*, the nasalization in spoken pronunciation is optional, i.e., it varies according to regional accents (more often in the northeast of Brazil). Since nasalization is not essential here, not affecting the meaning, we suggest that the vowel should be pronounced completely orally. Notice that these vowels occur in pre-stressed position and that the nasal consonants belong to the next syllable. If a native voice student has the tendency to nasalize those words, it is the job of the instructor to make her aware of this speech habit and suggest adjustment needed for this kind of repertoire. Furthermore, the middle low tessitura (ex. 4-1), just past the lower *passaggio* point in the soprano voice, calls for a more collected mouth posture (*bocca raccolta*) with more space in the pharynx, thus forming a convergent resonator. Lowering the soft palate would diminish pharyngeal space and add a bifurcation to the air stream, causing the vocal instrument to lose its resonant potential.

The other words in the example also containing a VN sequence should have pronounced nasalized vowels (*ausente, com, crescente, tempo, em, mim, tormento*). The amount of nasalization in each case will be determined according to the musical context. It may also vary with personal interpretation, with regard to the "color" the singer wants add to her sound. Care must be taken in order to avoid diphthongization of *-en* in *ausente*, which is set on a long note. The performer must resist the tendency to initiate the gesture towards the consonant [t] before the appropriate time. In other words, the gesture targeting the dental stop should be synchronized with the onset of the next note. If the gesture starts too

early, the open VPO will cause the appearance of a nasal glide, thus creating a diphthong [aʊ'zẽĩfĩ]. The suggested pronunciation in this particular musical context is [aʊ'ze:ẽĩfĩ].

The next nasalized vowel, in the word *com*, occurs at the climax of the musical phrase on a high G. Here, not only nasalization should be discarded, but the core vowel would have to be modified most likely towards [a] in order to couple H1 with F1. This is necessary because the fundamental frequency is higher than the F1 of [o]. Therefore, it is appropriate that the singer raises F1 by means of a lower tongue dorsum and a slightly more open mouth.

So - nhar na tar - de\_a - zul \_\_\_\_\_ do teu a - mor au - sen - te Su - por -  
 [o] [ɐ] [e→(ẽ)]

5 tar a dor cru - el **com** es - ta má - goa cres - cen - te O tem - po em mim a - gra - va\_o meu tor -  
 [ʌ] [e→(ẽ)] [ẽ] [wẽj] [ĩ]

9 men - to\_a - mor Tão **lon** - ge\_as - sim de ti \_\_\_\_\_ ven - ci - da pe - la... etc.  
 [e(ẽ)] [o→õ]

Example 4-1: Heitor Villa-Lobos, “Canção de Amor” from Floresta do Amazonas, mm. 1–12.

We can verify the application of this approach by looking at spectrograms of professional singers. Figure 4-3 displays a spectrogram (top and bottom left) of the line “Tão longe assim de ti” sung by the Brazilian soprano Bidú Sayão. The cursor (green vertical line) is placed just after the onset of the vowel [õ] (2545 milliseconds) in the upper spectrogram, and a few milliseconds later in the lower one. On the right side, the power spectra compare these two moments within the pronunciation of the vowel, namely the oral

phase (top right) and the nasalized phase (bottom right). This comparison offers a useful insight on Sayão's approach to singing nasalized vowels, and supports what we have been suggesting so far. The upper spectrum reveals that she chose to tune F1 to H1 (at 392 Hz, or G4 in musical notation) as the primary resonance strategy, without relying so much on the singer's formant cluster. The predominance of mouth resonance at this point of the note results in narrow, well-defined harmonic peaks throughout the spectrum, the first three harmonics being the strongest. Conversely, the lower spectrum reveals the consequences of a skillful velum lowering employed by the singer. The harmonic peaks are broader and the overall spectrum is flatter, especially at the F1's region. With the addition of the nasal formant and antiformant at around 300–350 Hz, F1 is split in two less well-defined peaks, generating a larger bandwidth. Notice also that the nasal formant is somewhat pulls the center of gravity of the  $F_n/F_1$  cluster down, below the frequency of the pitch being sung. Furthermore, while during the oral phase H1 had the prominence in the low end of the spectrum, the reduction of the amplitude level of H1 due to nasal resonance makes the first three harmonics more or less equal in intensity. Although the acoustic energy becomes somewhat dissipated during the nasalized phase, the amplitude level of the lower harmonics is still high enough to maintain efficient resonance. These harmonics are sufficiently enhanced, while the changes in the F1 region accounts for the noticeable difference in timbre between the subsequent phases. The spectrogram further reveals that the singer chose to use a nasal murmur before the consonant [ʒ], which results in a three-phase gesture, instead of the two-phase gesture recommended in this paper.

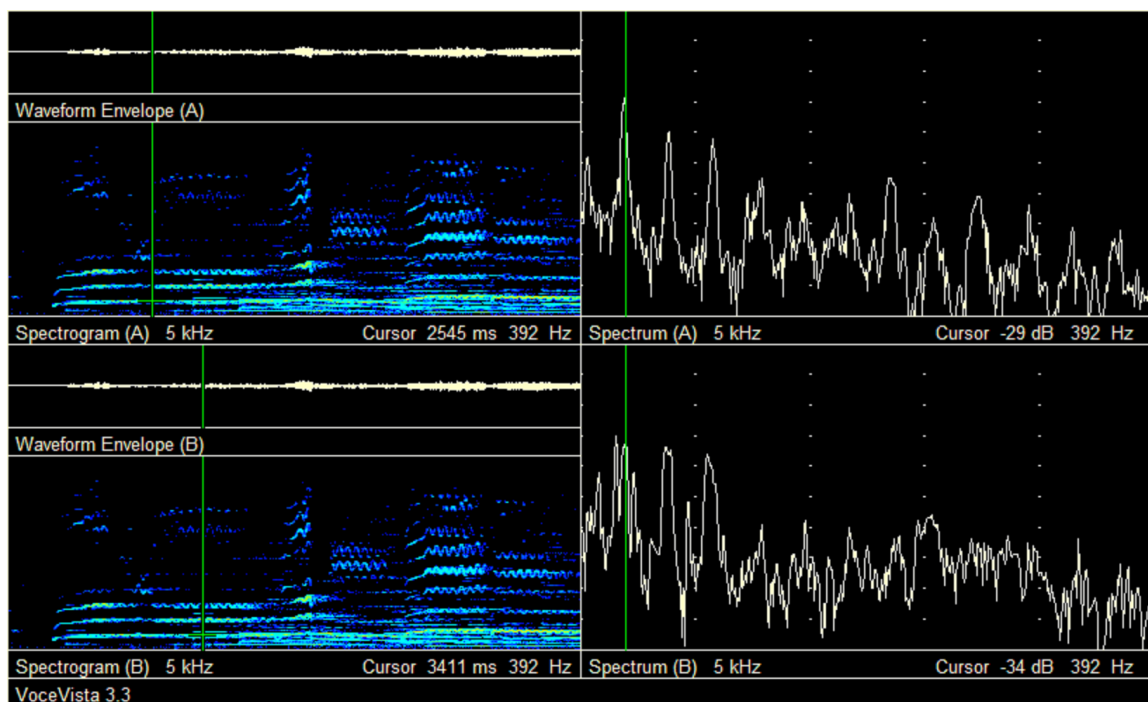


Figure 4-3: Spectrogram (left) of the phrase “Tão longe assim de ti” (Villa-Lobo’s “Canção de Amor”), sung by Bidú Sayão. FFT spectra of the vowel [õ] just after its onset (top right) and a few milliseconds later (bottom right).

The appearance of the same nasalized vowel an octave higher also provides a valuable opportunity to compare how the singer produced this vowel at different tessituras. The spectrograms in Figure 4-4 once again confirm the strategy suggested above, by which nasality should be discarded in the higher range, and vowels should be opened in order to raise F1. In the upper portion, the cursor is positioned on the vowel sound of the word *com* in the spectrogram, and on the first harmonic at 784 Hz (G5) in the power spectrum. Given that the F1 of the vowel [o] is a little less than octave below this pitch, if the singer kept the same vowel posture the resulting sound would be incapable of cutting through the orchestra due to lack of resonance. Ms. Sayão predictably raised F1 to track H1. In fact, she modified the vowel toward some variety of the vowel [a].

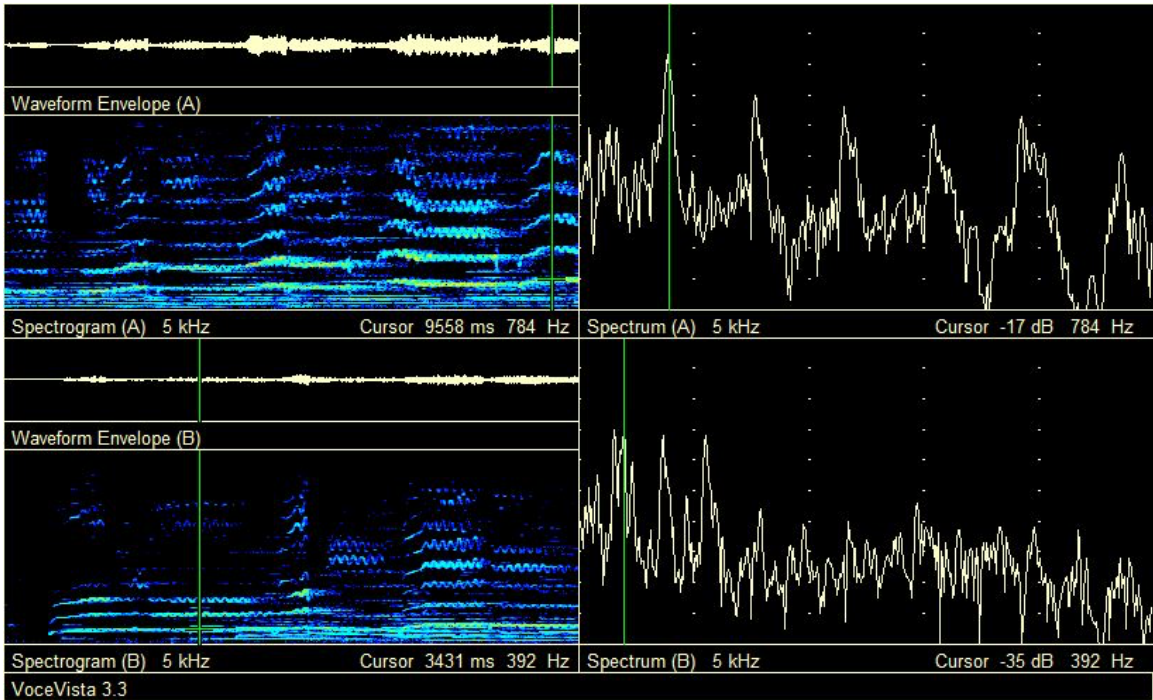


Figure 4-4: Spectrogram (left) of the excerpt “Suportar a dor cruel com...” (Villa-Lobo’s “Canção de Amor”), sung by Bidú Sayão. FFT spectra of the modified vowel in the word com (to right) compared to the unmodified vowel in the word longe (bottom right).

#### 4.2.2 Estrela do mar

Composer: Marlos Nobre (b. 1939)  
 Larger work: *Beiramar*, Op 21. #1  
 Year: 1966  
 Words: Folk origin (State of Bahia, Brazil)  
 Voice type: Bass or Baritone

This song starts in a comfortable tessitura for the baritone voice, but despite the proximity to the normal speech range, the singer should maintain the soft palate actively raised as much as possible during the execution of the musical phrase. The teacher of a beginner student may have to advise him against overnasalization of the vowel [ẽ] in the word *Iemanjá*, which might create problems of intonation. This precaution must be taken

because the musical line is already constructed in such a way that the downward half-step motion from F3 to E3 naturally creates a tendency to flatness. An exaggerated nasal sound would only increase the probability of faulty intonation. The solution is to use the oral version of the vowel and only add the nasal component in conjunction with the following consonant. At the same time, perfect control of legato must be encouraged and the feeling of the upward gesture of the initial arpeggio can be kept in the descending semitone in order to avoid "pressing down" the sound. Following that comes a consecutive pronunciation of the diphthong [ẽĩ] in the words *quem vem*. The vowel [ẽ] is less problematic than [ẽ̃], but the singer still needs to maintain an appropriate lift by using an intermediary oral configuration between [ɛ] and [e], closer to the latter.



Example 4-2: Marlos Nobre, “Estrela do Mar” from *Beiramar* op. 21, mm. 9–12.

Later in the song, the same diphthong is set to a D4, a pitch that lies in the vicinity of what has been traditionally labeled as the *secondo passaggio* of the bass/baritone voice. In the excerpt the proximity of the vowels [ɛ] and [ẽ] on the same pitch offer a good opportunity for comparison:

Example 4-3: Marlos Nobre, “Estrela do Mar” from *Beiramar* op. 21, mm. 49–56.

The approximate F1 frequency of the vowel [ɛ], as in the word *quero*, is somewhat lower for basses (around 880 Hz or A5) as compared to baritones (around 987 Hz or B5). As a result, different formant strategies should be used by different singers. For basses in general, the second harmonic of D4 will be above F1. An [ɛ] vowel on that pitch will have a close timbre (provided tube length is stable and vocal tract shape is consistent). This vowel is optimal for this formant/harmonic configuration, since H2 on the right skirt of F1, which prevents yelling (when F1 overtakes H2) and helps keeping the more robust quality required in this excerpt.

For baritones, H2 is likely to be boosted by F1. As this combination will probably result in an unpleasant yelled timbre, the singer must decide between open (F1 above H2) or close timbre (F1 below H2). If choosing an open timbre, he needs to raise F1 by modifying the vowel slightly towards [æ]. If opting for a close timbre, he will have to lower F1 by moving to a closer acoustic neighbor or even neutralize the vowel to some degree. Another option is to use a second formant strategy by lightly employing some lip rounding, as in [œ]. This gesture lowers both formants., which permits F2 to reinforce H4, compensating for F1 moving away from H2.

The vowel [ẽ], as in the word *vem* is also set on D4, but the approach to sing it is different. As mentioned in the last chapter, the basic oral configuration for this vowel is a little less close than [e]. In this example H2 will likely have crossed F1 in both voice types on D4, since F1 is lower for this vowel. As long as the singer maintains tube length, he can vary the degree of vowel closeness to adjust the timbre for his specific needs. Active vowel modification is hardly necessary here because [e] is an optimal vowel for this musical context. Again, the need for a more radical vowel modification will depend on the individual singer and the formant location of his vowels. Nasalization should be added only as the singer closes the diphthong, so that the word becomes [ve:ẽ̃].

#### 4.2.3 *Azulão*

Composer: Jayme Ovalle (1894–1955)

Words: Manuel Bandeira (1886–1968)

Voice type: all

This brief, charming song is one of the most frequently performed among the Brazilian repertoire. The short poem, the simplicity of the melodic line, the medium tessitura, plus the lulling accompaniment evoking a guitar accompaniment, all make it a favorite among voice teachers looking for repertoire that is suitable for their beginner students.



Vai, A - zu - lão, A - zu - lão, com - pa - nhei - ro, vai! Vai ver

mi-nha\_in - gra - ta Diz que sem e-la\_o ser - tão não é mais ser - tão! Ai!

voa, A - zu - lão, vai con - tar, com - pa - nhei - ro, vai!

Example 4-4: Jayme Ovalle, “Azulão”, mm. 5–14.

Albeit seemingly easy, it presents interesting challenges for any voice type. The diphthong *-ão* appears in the words *azulão*, *não* and *sertão*. For a female singer, the words *sertão*, *azulão* on Gb4 lie just above the *passaggio*. The best procedure is to maintain the resonator more close at the front so that the first formant remains low enough to resonate the pitch being sung. At the leap to Db5, however, the singer might have to open the vowel, so that F1 can accompany the raising pitch. In the male voice the opposite strategy works better. The singer should keep the lower pitch (Gb3) in open timbre, and when singing the Db4, he can allow the vowel to move to close timbre by maintaining tube stability. In this configuration, the resulting sound might resemble the vowel [ʌ]. Right after closing the diphthong, the melody moves a step up to an oral diphthong [aj]. This interval might be difficult especially for low male voices. The best approach in this case is not to nasalize the diphthong *-ão* at all, and use the second element [o] to induce the shape of the vowel [a] on Eb4, which has to be modified in this crucial tessitura of the bass/baritone voice.

#### 4.2.4 *Quem sabe?*

Composer: Carlos Gomes (1836–1896)  
Words: F. L. de Bittencourt Sampaio (1834–1895)  
Year: 1859  
Voice type: Soprano

This is one of the few songs in Portuguese set by Carlos Gomes. He is most known for his Italian operas, highly influenced by the style of Verdi. As an experienced opera composer, he certainly knew what kind of vowels worked best across each voice type's range. In this song he circumscribed all nasalized vowels to a medium or low tessitura, while almost all the high notes are ascribed to open oral vowels.



The image shows two staves of musical notation in G major, 4/4 time. The first staff contains the melody for the first line of the song, with lyrics: "Tão lon - ge, de mim dis - tan - te On - de\_i-". The second staff continues the melody, with lyrics: "rá, on de\_i rá teu pen - sa - men - to? Tão etc.". The lyrics are written in a mix of lowercase and uppercase letters, with some vowels nasalized (indicated by a tilde over the 'i' in 'de\_i' and 'de\_i').

Example 4-5. Carlos Gomes, “Quem sabe?”, mm. 8–12

The challenge for a soprano resides in the nasalized vowels that, in this song, concentrate around the approximate register transition for most female singers (E4-F4). The composer outlines a descending arpeggio on the words “Tão longe, de mim distante.” As a suggestion, the singer can realize the text as following: [tɐʊ lo:(õ)ʒɪ dʒɪ mi:(ĩ) dʒistɐ:tʃɪ]. Again, the vowel [ɐ], requires minimum or no velum lowering to be perceived as nasal. This approach helps with keeping a feeling of “lift” in the voice in order to avoid a collapse of the resonant space. The vowels [õ] and [ĩ] need to be initiated with the oral gesture ([o]/[i]), so that the voice can find the appropriate space before nasalization.

The next fragment (*Onde irá teu pensamento?*) starts with the nasalized [o], whose basic oral shape (rounded lips and high tongue dorsum forming a convergent resonator) is appropriate in this tessitura. The only problem is that the F1 of this vowel (around Bb4) is located in the gap between the first and second harmonics (between the pitches F4 and F5). Two options are available: the soprano can either close the vowel towards [u], thus bringing F1 down nearer to H1, or she can adjust the laryngeal registration in such a way that vibrational mode one (thicker shorter vocal folds) is not completely abandoned. The first choice is less desirable, since it would cause an unnecessary alteration of the vowel quality, and diction would be affected. As for the second choice, the singer generates stronger harmonic partials by means of a more complete glottal closure. With stronger harmonics available, she can resort to a resonance strategy by which the second formant reinforces a higher harmonic, possibly H3.

#### 4.2.5 Modinha

Composer: Heitor Villa-Lobos (1887–1959)  
Words: Manduca Piá (pseudonym of Manuel Bandeira)  
Year: 1925  
Larger work: *Serestas*  
Voice type: tenor or baritone

Although this song is frequently performed by any voice type, the predominance of closed front vowels at a medium-high tessitura makes it more suitable for male voices. In speech, the vowel [i] in the word *minha* is normally nasalized in all dialects, but since it is not phonologically nasal, discarding nasalization will not affect the meaning of the word. Also, because the vocal tract configuration of [ĩ] is not much different from that of [i], except for the lowered velum, it is preferable to use the nonnasalized version to avoid resonance imbalance.

The image shows a musical score for the song "Modinha" by Heitor Villa-Lobos. It consists of three staves of music in 4/4 time, with a key signature of one flat (B-flat). The lyrics are in Portuguese. The first staff starts with a treble clef and a 4/4 time signature. The second staff begins with a measure rest of 4 measures. The third staff begins with a measure rest of 7 measures. The lyrics are: "Na so - li - dão da mi - nha vi - da Mor - re - rei, que - ri - da, do teu de - sa - mor. Mui - to em - bo - ra me des - pre - zes, Te, a - ma - rei cons - tan - te sem que a ti dis - tan - te Che - gue a lon - ge e tris - te voz do tro - va - dor." The score ends with "etc." and a long note.

Example 4-6: Heitor Villa-Lobos, “Modinha” from *Serestas*, mm. 9–17.

In this particular example, this vowel occurs on F4, right at the *secondo passaggio* of most tenor voices, and upper voice for most baritones. For the vowel [i] in this tessitura, male singers need an F1 that is strong enough to resonate H1, which needs to remain slightly above

the formant. The addition of the nasal formant would weaken the F1 region, and the singer would lose his main acoustic enhancing element.

Assuming the singer maintains the oral configuration, he has two main resonance strategies from which to choose. If he maintains the vowel quality, the low F1 of [i] might be tuned to H1, an acoustic configuration mostly used by women throughout their range. In male voices, the F1/H1 coupling is associated with the falsetto timbre. Furthermore, the laryngeal registration events taking place at F4, i.e. the transition from vibrational mode one ("chest") to mode two ("head") also contribute to a lighter, headier timbre. Conversely, if the singer chooses to keep a more virile sound, he needs to raise F1 above the pitch being sung while seeking an F2 tuning with higher harmonics. In other words, he needs to open the vowel, in this case from [i] toward [ɪ]. Light tenors with a relatively higher F1 might not need to open the vowel at all and still obtain a fuller sound. More dramatic voices (heavier tenors, baritones) need appropriate vowel modification to maintain consistency of timbre. Nasalization of this vowel could lower the "center of gravity" of the F1 region, thus undermining this strategy.

In the case the singer chooses to use F1/H1 tuning, he should also modify the vowels of the preceding notes, otherwise the high note will stick out with a discrepant quality. This means that the vowel [a] on the word *da* would have to be sung with a softer, less chesty production in order to facilitate the transition to [i].

## CONCLUSION

We have suggested efficient ways of singing nasalized vowels of Brazilian Portuguese without letting nasality interfere with the optimal resonance balance that is desirable in the performance of art songs. The abundance of nasalized vowels in Portuguese poses a problem for the singer, who is often reminded to seek appropriate throat space in order to shape a convergent resonator, a configuration that is harder to achieve when the soft palate is constantly required to be lowered for the production of these vowels as it is in BP. Since excess nasality is considered a technical fault and generates an unpleasant tone quality, how can the performer preserve the integrity of the nasalized vowels and the characteristic "flavor" of the language while maintaining acoustic efficiency necessary for a fully ringing sound? In order to find a feasible strategy to manage this problem we resorted to extant knowledge on seemingly disparate fields of knowledge, such as acoustic phonetics, aesthetics, and Portuguese phonology, which nevertheless converged to support our approach.

The acoustic properties of nasalized vowels were discussed in Chapter 1. Understanding these properties is useful for those who make use of visual feedback in the voice studio through spectrographic analysis in order to evaluate the effectiveness of vocal tract adjustments. Because of the anatomical complexity of the nasal tract, its asymmetry and inconsistent measurements, it is difficult to predict the spectral consequences of nasalization with precision, but for our purposes some general characteristics are sufficient. The main spectral cue indicating the presence of nasal resonance is the modification in the F1 region of vowels: lower amplitude of harmonics, increased bandwidth of formants, and

overall flattening of the formant curve. These effects are produced by the addition of nasal formants and antiformants into the spectrum when the nasal tract functions as an acoustic side-branch. Some studies indicate that the perception of nasalized vowels depends not only on velum lowering, but also on the occurrence of articulatory shifts in the oral tract configuration. Our approach capitalizes on this latter aspect in order to minimize the need of velum lowering during singing.

Considering that the resonance strategies we propose are intended for the performance of art songs, Chapter 2 was devoted to the aesthetic discussion of nasality within the confines of classical singing. Throughout the history of vocal pedagogy, nasality has been traditionally regarded as a technical fault, especially by advocates of the Italian school. In the late nineteenth century, nasalization started to be accepted as an expressive tool that allowed for variation of timbre. Nasal consonants were also being increasingly used in vocal exercises as to boost the resonance of the ensuing vowels. While there is still little agreement on the actual benefits of nasality in singing, authors generally concede that nasalization of vowels should be subtle, and should only occur when linguistically necessary.

Chapter 3 narrowed the discussion down to the phonetic and phonological aspects of Brazilian Portuguese. Several scholars reported the existence of a nasality contour, by which the nasalized vowels in Portuguese comprise an oral onset, followed by a nasal phase, and sometimes a nasal element at the coda of the syllable. In a phonological perspective, this articulatory gesture indicates that nasalized vowels occur in closed syllables, namely a vowel followed by the nasal archiphoneme /N/. In modern Portuguese, the nasal stops have been assimilated by the vowels, but the gesture from the oral

configuration toward a consonantal configuration remains there, only partially fulfilled. This important characteristic of vowel nasalization in Portuguese permits an articulatory strategy for singing nasalized vowel that consists of modifying the proportional duration of the oral and nasal phases within the rhythmic value assigned for the syllable. Despite being an artificial, stylized device, the elongation of the oral phase for most of the note's duration is necessary in order to maintain the relative strength of the vowel formants. The shorter nasal phase should then be articulated as if it were the final consonant of a closed syllable, thus realizing the nasality contour. Carefully implementing this dynamic gesture allows the singer to minimize the effects of nasal coupling on the F1 region of vowels.

Once this articulatory procedure is established, vowel modification choices will depend on the specific musical context and on vowel quality. The five BP nasalized vowels are [ĩ], [ẽ], [ẽ̃], [õ], and [ũ], but the vowel adjustments should be planned with their oral counterparts in mind: [i, e, ɐ, o, u]. In Chapter 4, we used some examples from the Brazilian art song repertoire to demonstrate possible resonance strategies that could be employed with different voice types.

The strategies presented in this paper can help Brazilian voice students and performers sing in their native language more efficiently. Many of them are unaware of how their own speech habits affects their singing, so it is understandable that any departure from everyday speech patterns might feel unnatural at first. The application of the articulatory-acoustic strategies offered here are intended to help native singers lessen the influence of long-standing speech habits and increase the resonance efficiency in the performance of Brazilian art songs. We also hinted at the possible influence of the student's native language on building vocal technique in general. Whether this negative influence



can actually delay the acquisition of the necessary skills for an operatic career and how these issues could be addressed by voice teachers is an interesting idea for further investigation. Future prospects for this paper's topic include a perceptual study in order to evaluate the efficacy of these strategies in relation to the audience's response, which involves understanding of the text, quality of performance, and other variables.

PART II

PROGRAM NOTES OF RECITALS

RECITAL I

The University of Kentucky  
School of Music

Presents

André Campelo  
In a DMA Voice Recital

with Cliff Jackson  
Piano

Monday, December 1<sup>st</sup>, 2014  
Singletary Center for the Arts Recital Hall  
6:00 p.m.

PROGRAM

*SCHWANENGESANG*  
Franz Schubert (1797-1828)

*Poems by Ludwig Rellstab (1799-1860)*

1. Liebesbotschaft
2. Kriegers Ahnung
3. Frühlingssehnsucht
4. Ständchen
5. Aufenthalt
6. In der Ferne
7. Abschied

— Intermission —

*Poems by Heinrich Heine (1797-1856)*

8. Der Atlas (Heinrich Heine)
9. Ihr Bild (Heinrich Heine)
10. Das Fischermädchen (Heinrich Heine)

11. Die Stadt (Heinrich Heine)
12. Am Meer (Heinrich Heine)
13. Der Doppelgänger (Heinrich Heine)

*Poem by Johann Gabriel Seidl (1804-1875)*

14. Die Taubenpost

This recital is presented in fulfillment of the requirements of the DMA in Voice Performance. André Campelo is a student of Dr. Noemi Lugo.

#### PROGRAM NOTES

The death of Franz Schubert on 19 November 1828, before the publication of his last songs, raises many questions regarding the composer's intentions for this group of songs. The manuscript version, dated August 1828, contains thirteen songs on poems by two contemporary poets: Heinrich Heine and Ludwig Rellstab. Schubert did not give a title to the group, nor did he number the songs, as in his two previous cycles, *Die schöne Müllerin* and *Winterreise*. It is not absolutely evident if he wanted to publish the songs as a cycle, if the seven poems by Rellstab and the six by Heine were to be published separately or together. Did they complement each other in Schubert's view? Although this collection of songs is often performed as a whole, Reed (1985) defends that the Rellstab and Heine songs should be treated as separate groups because Schubert had a different style for different poets. He notices that "The Rellstab songs are more lyrical and expansive than the Heine set, and lack the aphoristic sharpness and economy of the latter." In any case, Schubert's brother, Ferdinand, sold the manuscript, plus a fourteenth song (on a poem by Johann Gabriel Seidl) and the last three piano sonatas, to the Viennese publisher Tobias Haslinger, who provided the title *Schwanengesang* to the collection of songs.

Within these fourteen songs, we experience a wide range of emotions and poetic images that are expressed through some of the major themes of German Romantic poetry: the evocative world of nature, the heightened individuality, and the ironic longing for the unattainable. With his renowned ability for word painting, Schubert transports us to the worlds (both internal and external) he erects in each of these fourteen songs.

In the lighthearted *Libesbotschaft* (“Message of Love”), we can hear the murmuring brooklet and the echo from the mountains responding to the impatient words of the young lover. Like the stream of water that connects distant places, the accompaniment figure imitates the noise of the brooklet and serves as the unifying element of the song. Even when the tonal design goes far apart from the tonic in the third stanza, in a chromatic-third relationship (from G to B), the figure remains there. The music of the first two stanzas returns in the last one and the song goes back to the tonic, outline a ternary form, as the sender of the message remains at the same place.

In *Kriegers Ahnung* (“The Warrior’s Foreboding”), the gunfire in the present reminds the poet of the cozy fireplace, whereby he embraced his beloved in the past. Schubert’s immediately carries our imagination between the two scenes with ingenious manipulations in the accompaniment. The music for each stanza is progressively dramatic, as the poetic persona goes back and forth between the memory of the past and the darkness of the present, surrounded by the foreboding of an imminent fatality.

*Frühlingssehnsucht* (“Spring Longing”) puts us in the middle of the exhilaration brought by the arrival of spring. The restlessness of the accompaniment emulating the excitement of the breezes are only brought to a halt by the subject’s unanswerable, questions. In those moments, the chromatic inflections in the melody simply, but

effectively embody the German Romantic feeling of *Sehnsucht*, which can only be badly translated as ‘yearning’, or ‘longing’.

This kind of unfulfilled desire is expressed by the major-minor mode ambiguity, a device that also depicts the lover’s hope mixed with insecurity in the well-known *Ständchen* (“Serenade”). The piano introduction perfectly sets the situation of courtship, but the minor mode and the delicate staccato (certainly imitating the idiom of stringed instruments) convey a depth of feeling that makes this serenade completely distinct of the Italian type (usually in major mode, and very optimistic). This piece goes beyond the purely physical desire and expresses the true sense of yearning (*Sehnsucht*) which involves the whole being. The embodiment of this idea is realized in the song of the nightingale.

*Aufenthalt* (“Resting Place”) and *In der Ferne* (“In the Distance”) present the suffering of the *Wanderer*, one of the main poetic archetypes in German Romanticism, which highlights the individuality of the poetic persona. Though both pieces have the same poetic idea, the first one translates the anger and despite of the outcast figure, while the latter transpires his resignation as the fugitive bears the weight of loneliness.

We can hear throughout *Abschied* “Farewell”, the last song of the Rellstab group, the horse’s steady trotting in the accompaniment, as well as the gradual distancing of the protagonist by the way Schubert wanders through distant key areas in his tonal scheme for this song. It is precisely the tonal variety of the song that compensate for the steadiness of the rhythmic motion.

The Heine songs bring dramatic intensity to its highest levels. The poems are taken from a collection titled *Die Heimkehr* (“The Homecoming”), published in 1826, two years before the presumed composition of the songs. The titles of these songs were provided by

Schubert, not by Heine, and the order of the songs diverges from the order in which the poems appeared in Heine's publication.

A thick, heavy tremolo in the lower octaves of the piano in *Der Atlas* ("Atlas") depicts the inner struggles of the man who carries "a world of pain" on his shoulders. Even though the poem is comprised of two stanzas, Schubert sets the song in a tripartite structure by repeating the initial text and duplicating words as he judged necessary in order to round off the formal scheme. The initial melodic theme played by the piano and then carried out by the voice will return in the following song (*Ihr Bild*) and be further modified in the last of the Heine songs, *Die Doppelgänger*.

In *Ihr Bild* ("Her Portrait"), we enter the distorted world of dreams. When the beloved's portrait comes alive, the single line shared by voice and piano blossoms into a bright chorale texture in major mode. The painful return to reality is fulfilled by a forceful cadence in the minor mode. After the overwhelming, powerful texture of the previous song, here the feeling of estrangement is translated into music by the unison melody shared by voice and piano. Brief alternations to the major mode and back effect symbolizes the portrait, an image from the past, coming to life once more. The economy of resources is outstanding and is noticeable in the introduction: a single repeated note that unravels into a chromatically inflected melody.

Water images unify the themes of encountering and losing love in the following three songs. In *Das Fischermädchen* ("The Fisher Girl"), Schubert chooses to paint the carefree life of the fisher girl, instead of focusing on the impossibility of such love. In a certain way, the song provides a dramatic relief to the unbearable yearning that pervades Heine's poetry. *Die Stadt* ("The City") opens with a chilling *pianissimo* octave tremolo

that paints the mysterious and misty sight of the city. The way Schubert sets the mood in anticipation for the poet's cry of despair is extraordinary in its parsimony and mastery of harmonic devices. The movement of the grey water stirred by the rowing strokes could not be better painted than by the softly arpeggiated diminished seventh chords. The major mode returns in *Auf dem See* ("By the Sea"). Here, when the voice sings about the peaceful scenario, the piano shadows its melody in thirds, or rather, the voice shadows the piano melody: instead of the usual modal ambiguity, we observe a melodic ambivalence. This parallelism is broken when the poem the scene is altered to more turbulent actions of nature. The snow storm, flood, and wild flight of the seagulls anticipated Heine's typical, enigmatic irony: "from your eyes, filled with love, / tears dropped down." The supernatural confrontation between two sides of the same persona in *Der Doppelgänger* ("The Double") is expressed with quasi-recitativo style in the vocal part and an ostinato harmonic pattern in the piano. Yet with such simple materials, this is one of the most powerful and dramatic songs of the *Lied* repertoire. Seidl's "The Pigeon Post" closes the cycle and helps to alleviate the tension from the previous songs in a bittersweet mood: "Longing is the messenger of faithfulness".

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## TRANSLATIONS<sup>21</sup>

### SCHWANENGESANG

#### 1. Liebesbotschaft

Rauschendes Bächlein,  
So silbern und hell,  
Eilst zur Geliebten So  
munter und schnell?  
Ach, trautes Bächlein,  
Mein Bote sei du;  
Bringe die Grüße Des  
Fernen ihr zu.

All ihre Blumen,  
Im Garten  
gepflegt, Die sie so  
lieblich Am Busen  
trägt, Und ihre  
Rosen In purpurner  
Glut, Bächlein,  
erquicke Mit  
kühlender Flut.  
Wenn sie am Ufer,  
In Träume versenkt,  
Meiner gedenkend Das  
Köpfchen hängt, Tröste  
die Sü.e  
Mit freundlichem Blick,  
Denn der Geliebte  
Kehrt bald zurück.

Neigt sich die Sonne  
Mit rötlichem Schein,  
Wiege das Liebchen  
In Schlummer ein.  
Rausche sie  
murmelnd In sü.e  
Ruh,  
Flüstre ihr Träume  
Der Liebe zu.

#### 2. Kriegers Ahnung

In tiefer Ruh liegt um mich her Der  
Waffenbrüder Kreis;  
Mir ist das Herz so bang und  
schwer, Von Sehnsucht mir so heiß.

### SWAN SONG

#### 1. Message of Love

Murmuring brooklet,  
So silvery and bright,  
Do you hurry to my  
sweetheart So lively and fast?  
Ah, dear brooklet,  
Be my messenger,  
Bring to her the greetings  
From the distant one.

All her flowers,  
Cultivated in the  
garden, Which she so  
adorably Carries at her  
bosom, And her roses  
In purple glow  
Brooklet, refresh them  
With cooling tides.

When at the bank  
She sinks into dreams,  
Thinking of me  
She hangs her little  
head, Comfort the sweet  
one With a friendly  
look, For her beloved  
Returns soon.

As the sun sets With  
reddish light, Lull my  
sweetheart Into  
slumber. Murmuring,  
rustle her Into sweet  
rest, Whisper dreams  
Of love to her.

#### 2. The Warrior's Premonition

In deep repose lies around me  
The circle of brothers in arms;  
My heart is so scared and heavy,  
So hot from ardent longing.

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<sup>21</sup> Translations by Martin Chusid (2000), with slight alterations.

Wie hab ich oft so sü. geträumt  
An ihrem Busen warm!  
Wie freundlich schien des Herdes  
Glut, Lag sie in meinem Arm!

Hier, wo der Flammen düstrer  
Schein Ach! nur auf Waffen spielt,  
Hier fühlt die Brust sich ganz allein,  
Der Wehmut Träne quillt.

Herz! Daß der Trost dich nicht  
verläßt! Es ruft noch manche Schlacht.  
Bald ruh ich wohl und schlafe fest,  
Herzliebste - gute Nacht!

### 3. Frühlingssehnsucht

Säuselnde  
Lüfte wehend  
so mild  
~~Blumiger Dülte~~  
Wie haucht ihr mich wonnig begrü. end  
an!  
Wie habt ihr dem pochenden Herzen  
getan?  
Es möchte euch folgen auf luftiger  
Bahn! Wohin?

Bächlein, so munter  
rauschend zumal,  
Wollen hinunter  
silbern ins Tal.  
Die schwebende Welle, dort eilt sie  
dahin!  
Tief spiegeln sich Fluren und  
Himmel darin.  
Was ziehst du mich, sehrend  
verlangender Sinn,  
Hinab?

Grü.ender Sonne  
spielendes Gold,  
Hoffende Wonne  
bringest du hold!  
Wie labt mich dein selig begrü.endes  
Bild!  
Es lächelt am tiefblauen Himmel so mild  
Und hat mir das Auge mit Tränen  
gefüllt! Warum?

Grünend umkränzet

How often have I so sweetly  
dreamed At her warm bosom!  
How friendly shone stove's glow  
When she lay in my arms!

Here, where the gloomy light of  
flames, Ah, only plays on weapons,  
Here my heart feels totally alone,  
The tears of sadness flow.

Heart! Don't let solace abandon  
you! Many a battle calls.  
Soon I will rest and sleep deeply,  
Dearest beloved—good night!

### 3. Spring Longing

Whispering breezes  
Blowing so mild  
Fill my breathing  
With the fragrance of flowers!  
How you greet me with a blissful  
blow! What have you done to my  
throbbing heart?  
It wants to follow you on the airy trail!  
Where to?

Brooks, so lively  
Rustling especially,  
Wants to go downward  
Silvery to the valley.  
The floating wave hastens down there!  
The meadows and sky are mirrored  
deep within.  
Why do you draw me, longing, yearning  
senses,  
Down there?

Playful gold  
Of the greeting sun,  
Hopeful bliss  
you bring so sweet!  
How your joyfully greeting image  
refreshes me.  
It smiles so gently in the dark blue  
sky And has filled my eye with tears!  
Why?

Forests and hills Adorned with  
green! Shimmering gleam

Wälder und Höh!  
Schimmernd erglänzet  
Blütenschnee!  
So dränget sich alles zum bräutlichen  
Licht;  
Es schwellen die Keime, die Knospe  
bricht;  
Sie haben gefunden, was ihnen  
gebricht: Und du?

Rastloses Sehnen!  
Wünschendes Herz,  
Immer nur Tränen,  
Klage und Schmerz?  
Auch ich bin mir schwellender  
Triebe bewußt!  
Wer stillt mir endlich die drängende  
Lust?  
Nur du befreist den Lenz in der  
Brust, Nur du!

#### 4. Ständchen

Leise flehen meine Lieder  
Durch die Nacht zu dir;  
In den stillen Hain  
hernieder, Liebchen, komm  
zu mir!  
Flüsternd schlanke Wipfel  
rauschen In des Mondes Licht;  
Des Verräters feindlich Lauschen  
Fürchte, Holde, nicht.

Hörst die Nachtigallen  
schlagen? Ach! sie flehen dich,  
Mit der Töne sü.en Klagen  
Flehen sie für mich.

Sie verstehn des Busens  
Sehnen, Kennen Liebesschmerz,  
Rühren mit den Silbertönen  
Jedes weiche Herz.

Laß auch dir die Brust  
bewegen, Liebchen, höre mich!  
Bebend harr' ich dir entgegen!  
Komm, beglücke mich!

#### 5. Aufenthalt

Rauschender Strom,  
Brausender Wald,

Snowy blossoms!  
Everything presses towards the  
nuptial light;  
The seeds are swelling, the buds are  
opening;  
They have found what opens them:  
And you?

Restless longing!  
Yearning heart,  
Ever only tears,  
Laments, and pain?  
I too am aware of swelling impulses!  
Who will finally quiet my pressing  
desire?  
Only you can release the spring in  
my breast,  
Only you!

#### 4. Serenade

Softly my songs implore  
through the night to you;  
Down into the quiet  
grove, Sweetheart, come  
to me!  
Whispering slender treetops rustle In  
the moonlight;  
Do not fear the hostile  
eavesdropping Of betrayers, my  
dearest.  
Do you hear the nightingales  
singing? Ah, they implore you,  
With the sweet lament of the notes  
They're imploring for me.

They understand the heart's  
longing, They know the pain of  
love,  
They touch with the silvery notes  
Every tender heart.  
Let your breast be moved as  
well, Sweetheart, listen to me!  
Trembling, I await you!  
Come, make me happy!

#### 5. Resting Place

Raging torrent,  
Roaring forest,

Starrender Fels  
Mein Aufenthalt.

Staring rocks,  
My resting place.

Wie sich die Welle  
An Welle reiht,  
Fließen die Tränen  
Mir ewig erneut.

As one wave roll  
After the other,  
My tears flow  
Eternally renewed.

Hoch in den Kronen  
Wogend sich's regt,  
So unaufhörlich  
Mein Herze schlägt.

High in the treetops  
raging it stirs,  
Just as unceasingly  
Beats my heart.

Und wie des Felsen  
Uraltes Erz,  
Ewig derselbe  
Bleibet mein Schmerz.

And as the mountain's  
Ancient ore,  
Eternally the same  
Remains my pain.

### **6. In der Ferne**

Wehe dem Fliehenden,  
Welt hinaus ziehenden! -  
Fremde durchmessenden,  
Heimat vergessenden,  
Mutterhaus hassenden,  
Freunde verlassenden  
Folget kein Segen, ach!  
Auf ihren Wegen nach!

### **6. In the Distance**

Woe to the fugitive,  
Roaming out in the world!  
Crossing foreign places,  
Forgetting his homeland,  
Hating his mother's house,  
Leaving his friends  
Ah, no blessing follows  
on his way.

Herze, das sehrende,  
Auge, das tränende,  
Sehnsucht, nie endende,  
Heimwärts sich wendende!  
Busen, der wallende,  
Klage, verhallende,  
Abendstern, blinkender,  
Hoffnungslos sinkender!

Heart that yearns,  
Eye that weeps,  
Longing that never ends,  
Homeward turning!  
Breast that stirs,  
Lament that fades,  
Evening star, blinking,  
Hopelessly sinking!

Lüfte, ihr säuselnden,  
Wellen sanft kräuselnden,  
Sonnenstrahl, eilender,  
Nirgend verweilender:  
Die mir mit Schmerze, ach!  
Dies treue Herze brach -  
Grüß von dem Fliehenden,  
Welt hinaus ziehenden!

Breezes, you whispering,  
Waves gently ruffling,  
Sunbeam, hastening,  
Nowhere remaining:  
To her who with agony  
Broke my loyal heart—  
Greet on behalf of the fugitive,  
Roaming out in the world!

### **7. Abschied**

Ade! du muntre, du fröhliche Stadt, ade!  
Schon scharret mein Rößlein mit lustigen

### **7. Farewell**

Goodbye! You lively, you cheerful  
town, goodbye!

Fuß;  
Jetzt nimm noch den letzten, den  
scheidenden Gruß.  
Du hast mich wohl niemals noch traurig  
gesehn,  
So kann es auch jetzt nicht beim  
Abschied geschehn.

Ade, ihr Bäume, ihr Gärten so grün, ade!  
Nun reit ich am silbernen Strome entlang.  
Weit schallend ertönet mein  
Abschiedsgesang;  
Nie habt ihr ein trauriges Lied gehört,  
So wird euch auch keines beim Scheiden  
beschert!

Ade, ihr freundlichen Mägdlein dort, ade!  
Was schaut ihr aus blumenumduftetem  
Haus  
Mit schelmischen, lockenden Blicken  
heraus?  
Wie sonst, so grü. ich und schaue mich  
um,  
Doch nimmer wend ich mein Rößlein um.

Ade, liebe Sonne, so gehst du zur Ruh,  
ade!  
Nun schimmert der blinkenden Sterne  
Gold.  
Wie bin ich euch Sternlein am Himmel so  
hold;  
Durchziehn wir die Welt auch weit und  
breit,  
Ihr gebt überall uns das treue Geleit.

Ade! du schimmerndes Fensterlein hell,  
ade!  
Du glänzest so traulich mit dämmerndem  
Schein  
Und ladest so freundlich ins Hüttchen uns  
ein.  
Vorüber, ach, ritt ich so manches Mal,  
Und wär es denn heute zum letzten Mal?

Ade, ihr Sterne, verhüllet euch grau! Ade!  
Des Fensterlein trübes, verschimmerndes  
Licht  
Ersetzt ihr unzähligen Sterne mir nicht,  
Darf ich hier nicht weilen, muß hier  
vorbei,  
Was hilft es, folgt ihr mir noch so treu!

My horse paws the ground now with  
playful hoof, Now take my last, my  
parting salute.  
You have never seen me sad before,  
So it cannot happen now at my farewell.

Goodbye, you trees, you gardens so  
green, goodbye!  
Now I ride along the silvery stream,  
My farewell song resounds far and  
wide,  
You have never heard a sad song from  
me,  
So you won't be offered any now at my  
departure.

Goodbye, you friendly maiden there,  
goodbye!  
Why do you look out of your flower-  
perfumed house/ With seducing,  
alluring glances?  
As always I greet you and look around  
But I never turn my horse back.

Goodbye, dear sun, so you go to rest,  
goodbye!  
Now the gold of the twinkling stars  
shimmers.  
How much I love you little stars in the  
sky;  
We traverse the world both far and  
wide,  
Everywhere you are our loyal escort.

Goodbye, you shimmering bright  
window!  
You gleam so cozy with twilight glow  
And invite us so friendly into the  
cottage.  
Ah, I have ridden by here so many  
times,  
And would today be the last time?

Goodbye, you stars, hide yourself in  
gray, goodbye!  
The dim, fading light of the window  
Cannot replace you countless stars,  
I cannot linger here, I must pass here,  
It does not matter if you follow me so  
faithfully!

### **8. Der Atlas**

Ich unglücksel'ger Atlas! Eine Welt,  
Die ganze Welt der Schmerzen muß ich  
tragen,  
Ich trage Unerträgliches, und brechen  
Will mir das Herz im Leibe.

Du stolzes Herz, du hast es ja gewollt!  
Du wolltest glücklich sein, unendlich  
glücklich,  
Oder unendlich elend, stolzes Herz,  
Und jetzo bist du elend.

### **9. Ihr Bild**

Ich stand in dunkeln Träumen  
und starrte ihr Bildnis an,  
und das geliebte Antlitz  
Heimlich zu leben begann.

Um ihre Lippen zog sich  
Ein Lächeln wunderbar,  
Und wie von Wehmutstränen  
Erglänzte ihr Augenpaar.

Auch meine Tränen flossen  
Mir von den Wangen herab -  
Und ach, ich kann's nicht glauben,  
Daß ich dich verloren hab!

### **10. Das Fischermädchen**

Du schönes Fischermädchen,  
Triebe den Kahn ans Land;  
Komm zu mir und setze dich nieder,  
Wir kosen Hand in Hand.

Leg an mein Herz dein Köpfchen  
Und fürchte dich nicht zu sehr;  
Vertraust du dich doch sorglos  
Täglich dem wilden Meer.

Mein Herz gleicht ganz dem Meere,  
Hat Sturm und Ebb' und Flut,  
Und manche schöne Perle  
In seiner Tiefe ruht.

### **11. Die Stadt**

Am fernen Horizonte  
Erscheint, wie ein Nebelbild,

### **8. Atlas**

I, unfortunate Atlas! A world,  
The whole world of pain I must carry,  
I bear the unbearable, and my heart  
Wants to break in my body.

You arrogant heart, you wanted this!  
You wanted to be happy, infinitely  
happy,  
Or infinitely miserable, proud heart,  
And now you are miserable.

### **9. Her Portrait**

I stood in dark dreams  
And stared at her portrait,  
And the beloved face  
Mysteriously came to life.

Around her lips took shape  
A wonderful smile,  
And as if from tears of sadness  
Her eyes gleamed.

My tears also flowed  
Down from my cheeks—  
And ah, I cannot believe,  
That I have lost you!

### **10. The Fisher Girl**

You beautiful fisher girl,  
Row your boat to the shore;  
Come to me and sit down,  
We will cuddle hand in hand.

Lay your head on my heart  
And do not be so afraid;  
You trust yourself careless  
Daily to the wild sea.

My heart is totally like the ocean,  
Has storm and ebb and flow,  
And many a beautiful pearl  
Rests in its depths.

### **11. The City**

On the distant horizon  
Appears, like a misty image,

Die Stadt mit ihren Türmen,  
In Abenddämmerung gehüllt.

The town with its towers  
Shrouded in the in the evening twilight.

Ein feuchter Windzug kräuselt  
Die graue Wasserbahn;  
Mit traurigem Takte rudert  
Der Schiffer in meinem Kahn.

A damp wind draft ruffles  
The gray water path;  
In a sad rhythm rows  
The boatman in my boat.

Die Sonne hebt sich noch einmal  
Leuchtend vom Boden empor  
Und zeigt mir jene Stelle,  
Wo ich das Liebste verlor.

The sun rises once again  
Shining upwards from the earth  
And shows me that place  
Where I lost my beloved.

### **12. Am Meer**

Das Meer erglänzte weit hinaus  
Im letzten Abendscheine;  
Wir saßen am einsamen Fischerhaus,  
Wir saßen stumm und alleine.

### **12. By The Sea**

The sea gleamed far and wide  
In the last light of evening;  
We sat at the lonely fisherman's house,  
We sat silently and alone.

Der Nebel stieg, das Wasser schwoll,  
Die Möwe flog hin und wieder;  
Aus deinen Augen liebevoll  
Fielen die Tränen nieder.

The mist rose, the water swelled.  
The seagulls flew back and forth;  
From your eyes full of love  
The tears dropped deeply.

Ich sah sie fallen auf deine Hand  
Und bin aufs Knie gesunken;  
Ich hab von deiner weißen Hand  
Die Tränen fortgetrunken.

I saw them fall upon your hand  
And fell on my knees;  
From your white hand  
I drank away the tears.

Seit jener Stunde verzehrt sich mein Leib,  
Die Seele stirbt vor Sehnen;  
Mich hat das unglücksel'ge Weib  
Vergiftet mit ihren Tränen.

Since that moment my body pines  
My soul is dying with yearning;  
The wretched woman  
Has poisoned me with her tears.

### **13. Der Doppelgänger**

Still ist die Nacht, es ruhen die Gassen,  
In diesem Hause wohnte mein Schatz;  
Sie hat schon längst die Stadt verlassen,  
Doch steht noch das Haus auf demselben  
Platz.

### **13. The Doppelgänger**

Still is the night, the streets rest,  
In this house dwelt my darling;  
She left the town a long time ago,  
But the house still stands in the same  
place.

Da steht auch ein Mensch und starrt in die  
Höhe  
Und ringt die Hände vor  
Schmerzensgewalt;  
Mir graust es, wenn ich sein Antlitz sehe  
-  
Der Mond zeigt mir meine eigne Gestalt.

A man also stands there, and stares  
upward  
And wrings his hands with the force of  
pain;  
I'm terrified when I see his face—  
The moon shows me my own  
countenance.

Du Doppelgänger, du bleicher Geselle!  
Was äffst du nach mein Liebesleid,  
Das mich gequält auf dieser Stelle  
So manche Nacht, in alter Zeit?

You doppelganger, you pale fellow!  
Why do you mock my love sickness,  
That tormented me at this place  
So many nights, in the past?

#### 14. Die Taubenpost

Ich hab' eine Brieftaub' in meinem Sold,  
Die ist gar ergeben und treu,  
Sie nimmt mir nie das Ziel zu kurz  
Und fliegt auch nie vorbei.

#### 14. The Pigeon Post

I have a pigeon post in my employ,  
That is extremely devoted and true.  
It never stops short of my goal  
And never flies too far.

Ich sende sie viel tausendmal  
Auf Kundschaft täglich hinaus,  
Vorbei an manchem lieben Ort,  
Bis zu der Liebsten Haus.

I send it out many thousand times  
To the clientele every day,  
Past many a lovely place,  
Right to my dearest's house.

Dort schaut sie zum Fenster heimlich  
hinein,  
Belauscht ihren Blick und Schritt,  
Gibt meine Grü.e scherzend ab  
Und nimmt die ihren mit.

It glances through the window secretly  
And watches for her look and step,  
Gives her my greetings playfully  
And brings hers back to me.

Kein Briefchen brauch ich zu schreiben  
mehr,  
Die Träne selbst geb ich ihr,  
Oh, sie verträgt sie sicher nicht,  
Gar eifrig dient sie mir.

I don't need to write letters anymore,  
I give my own tears to it,  
I'm sure they will never go astray,  
It serves me quite zealously.

Bei Tag, bei Nacht, im Wachen, im  
Traum,  
Ihr gilt das alles gleich,  
Wenn sie nur wandern, wandern kann,  
Dann ist sie überreich!

By night, by day, awake, in dreams,  
It's all the same to it,  
If it can only wander and wander,  
Then it is more than rich.

Sie wird nicht müd, sie wird nicht matt,  
Der Weg ist stets ihr neu;  
Sie braucht nicht Lockung, braucht nicht  
Lohn,  
Die Taub' ist so mir treu!

It doesn't get tired, it doesn't get weary,  
The path is always new to it,  
It needs no lure, it needs no pay,  
The dove is so loyal to me!

Drum heg ich sie auch so treu an der  
Brust,  
Versichert des schönsten Gewinns;  
Sie heißt - die Sehnsucht! Kennt ihr sie? -  
Die Botin treuen Sinns.

So I keep it close to my heart  
Assured of the sweetest reward;  
It's called—longing! Do you know it?  
The messenger of faithfulness.



## RECITAL II

The University of Kentucky

School of Music

Presents

André Campelo

### A RECITAL IN ROMANCE LANGUAGES

with Cliff Jackson, Piano

&

Hermelindo Ruiz, Guitar

May 5th, 2016

John Jacob Niles Gallery

5:30 PM

### PROGRAM

#### **I. French**

Chansons de Don Quichotte (1932)

Jacques Ibert (1890-1962)

*Chanson du départ*

*Chanson à Dulcinée*

*Chanson du Duc*

*Chanson de la mort de Don Quichotte*

#### **II. Romanian**

Odinioară (1959)

Felicia Donceanu (b. 1931)

*Proză*

*Note de primăvară*

*Fanfară*

#### **III. Spanish**

Canciones Coloniales

Carlos Guastavino (1912-2000)

*Cuando acaba de llover*

*Prestame tu pañuelito*

*Ya me voy a retirar*

*Las puertas de la mañana*

— INTERMISSION —

**IV. Catalan and Portuguese**

*La Dama d'Aragó*  
*Cançó del lladre*

arr. M. Garcia Morante

*Azulão*  
*Modinha*  
*Viola Quebrada*

Jayme Ovalle (1894-1955)  
H. Villa-Lobos (1887-1959)

*Hermelindo Ruiz, Guitar*

**V. Venetian, Neapolitan, and Italian**

Venezia

*Sopra l'acqua indormenzada*  
*La barcheta*

Reynaldo Hahn (1874-1947)

*A vuchella*  
*L'ultima canzone*

Francesco Paolo Tosti (1846–1916)

This recital is presented in fulfillment of the requirements of the DMA in Voice. André Campelo is a student of Dr. Noemi Lugo.

PROGRAM NOTES

This song recital features eight different Romance languages: French, Italian, Venetian, Neapolitan, Portuguese, Spanish, Catalan, and Romanian. Their similarities allow a native speaker of any of those languages to learn the others with certain ease. But there are more differences than one can imagine at first. Although they might sound or look similar on the page, they have enough disparities so that they are unintelligible even for speaks in the same country (Spanish and Catalan for example).

In addition to the traditional operatic languages – Italian and French – there is a rich song repertoire available in the other Romance languages. With this recital I would like to offer a taste of these languages, their similarities and contrasts, as well as a glimpse of the varied national styles.

## **French**

The set *Quatre Chansons de Don Quichotte*, written in 1932, is the most well known within the rather small song output by Jacques Ibert (1890–1962). They were written for a Don Quixote movie directed by George Pabst and featuring the Russian bass Feodor Chaliapin. Ibert competed with four other composers: Manuel de Falla, Darius Milhaud, Marcel Delannoy, and Maurice Ravel. None of them knew they were part of a secret competition arranged by the movie producers. Ravel took too long to submit his songs, and Ibert's songs were chosen in the end. Ravel's Don Quichotte is more famous and performed more often, but it was Ibert who arguably managed to capture the Spanish musical idiom. The varied textures, the juxtaposition of declamation and cantabile, invite us to the world of the Quixotic episodes. In *Chanson du départ*, the piano accompaniment cleverly emulates the Spanish guitar writing, while the vocal line moves in an improvisatory manner. Don Quixote stops in front of a tavern full of prostitutes and drunkards, but all he sees is a castle in which only virtuous ladies and knights can enter. *Chanson à Dulcinée* shows D. Quixote in his errands, constantly thinking of his "fair lady". *Chanson du Duc* has a richer texture and a lower vocal tessitura, and is the only song with a steady rhythmic character. In *Chanson de la mort*, Don Quixote utters his final words before dying. Even though all his books have been burned, it suffices only one to give him immortality – the book written

about him. The accompaniment alternates a habanera with rolled chords reminiscent of the guitar.

**Chanson du départ de Don Quichotte**

Ce château neuf, ce nouvel édifice  
Tout enrichi de marbre et de porphyre  
Qu'amour bâtit château de son empire  
où tout le ciel a mis son artifice,  
Est un rempart, un fort contre le vice,  
Où la vertueuse maîtresse se retire,  
Que l'oeil regarde et que l'esprit admire  
Forçant les coeurs à lui faire service.

C'est un château, fait de telle sorte  
Que nul ne peut approcher de la porte  
Si des grands rois il n'a sauvé

sa race

Victorieux, vaillant et amoureux.  
Nul chevalier tant soit aventureux  
Sans être tel ne peut gagner la place.

**Chanson à Dulcinée**

Un an me dure la journée  
Si je ne vois ma Dulcinée.

Mais, Amour a peint son visage,  
Afin d'adoucir ma langueur,  
Dans la fontaine et le nuage,  
Dans chaque aurore et chaque fleur.

Un an me dure la journée  
Si je ne vois ma Dulcinée.

Toujours proche et toujours lointaine,  
Étoile de mes longs chemins.  
Le vent m'apporte son haleine  
Quand il passe sur les jasmins.

**Chanson du Duc**

Je veux chanter ici la Dame de mes songes  
Qui m'exalte au dessus de ce siècle de boue  
Son cœur de diamant est vierge de mensonges  
La rose s'obscurcit au regard de sa joue

Pour Elle, j'ai tenté les hautes aventures

**Song of the departure**

This new castle, this new edifice  
all adorned with marble and porphyry,  
this castle, built by love from its empire,  
upon which all of heaven has used its skill,  
is a rampart, a fortress against evil  
where the virtuous mistress retires,  
that the eye observes and the spirit admires,  
bringing hearts to servitude.

It is a castle, built in such a way  
that none can approach the portal  
if he has not saved his lineage from the great  
Kings,

victorious, brave and amorous.  
No knight, however adventurous he may be,  
without being such, can enter the place.

**Song for Dulcinea**

A day lasts a whole year  
if I do not see my Dulcinea.

But, so as to sweeten my languor,  
Love has painted her face,  
in the fountain and the sky,  
in each dawn and each flower.

A day lasts a whole year  
if I do not see my Dulcinea.

Ever close and ever far,  
star of my long paths.  
The wind carries her breath to me  
when it blows across the jasmine.

**Song of the Duke**

I want to sing here of the Lady of my dreams,  
who raises me above this century of mud.  
Her heart of diamond is untarnished by lies.  
The rose pales at the sight of her cheek.

For Her, I have attempted lofty adventures.

Mon bras a délivré la princesse en servage  
J'ai vaincu l'Enchanteur, confondu les parjures  
Et ployé l'univers à lui rendre hommage.

Dame par qui je vais, seul dessus cette terre,  
Qui ne soit prisonnier de la fausse apparence  
Je soutiens contre tout Chevalier téméraire  
Votre éclat non pareil et votre précellence.

#### **Chanson de la mort de Don Quichotte**

Ne pleure pas Sancho,  
ne pleure pas, mon bon.  
Ton maître n'est pas mort.  
Il n'est pas loin de toi.  
Il vit dans une ile heureuse  
Où tout est pur et sans mensonges.  
Dans l'ile enfin trouvée  
où tu viendras un jour.  
Dans l'ile désirée,  
O mon ami Sancho!

Les livres sont brulés  
et font un tas de cendres.  
Si tous les livres m'ont tué  
Il suffit d'un pour que je vie  
Fantôme dans la vie,  
et réel dans la mort.  
Tel est l'étrange sort  
du pauvre Don Quichotte.

My arm has delivered the princess in  
servitude.  
I have conquered the Enchanter, confounded  
the perjures  
and bent the universe to offer her homage.

Lady for whom I, who alone is not a prisoner  
of the false appearance, go over this earth,  
I proclaim, against any rash Knight,  
your unequalled splendour and your  
excellence.

#### **Song of Don Quixote's death**

Do not cry Sancho,  
do not cry, good friend.  
Your master is not dead.  
He is not far from you.  
He lives on a happy isle  
where all is pure and free of lies.  
On the isle at last discovered  
where you will come one day.  
On the desired isle,  
o my good friend Sancho!

The books are burned  
and make a heap of ash.  
If all the books have killed me  
just one is enough for me to live on,  
a ghost in life  
and real in death.  
Such is the strange destiny  
of poor Don Quixote.

## **Romanian**

Felicia Donceanu (b. 1931) is perhaps the greatest Romanian song composer of the all time.

Her compositions are creative, resourceful, and her artistic background (painting, sculpture, theater, poetry) is reflected in the pictorial and kinetic quality of her music.

*Odinioară* (In the Old Days) is her first song cycle, which won honorable mention in the International Composition Competition in Mannheim, Germany in 1961. This cycle

comprises seven poems by the symbolist Romanian poet George Bacovia (1881–1957). Bacovia’s poem *Proză* (Prose) pictures a filthy, disgusting market in a miserable village – this is where where the poetic persona’s beloved lives. An ostinato figure is varied throughout the song depicting the increasing intensity of rainfall. A quotation of *Dies irae* motive is heard in the introductory measures and at the end of the song (in augmented form). In *Note de Primăvară* (Note of Spring) Donceanu utilizes modal scales common to Romanian folk music to match Bacovia’s the folk-like poem. The delicate ornaments in the accompaniment suggest flower blossom and also evoke the panpipe, a traditional folk instrument. In *Fanfară* (Fanfare), a military band walks along the streets playing a gloomy waltz that spread a feeling of *tristesse* around the city.

**Proză**

Plouă...  
 Pe-un târg mizerabil  
 De glod și coceni  
 Pe-un târg necăjit  
 Și plin de dugheni  
 - Și-aici stă iubita...  
 Și ulița-i plină  
 De fân și coceni  
 Și trec cotiugare  
 Cu saci de făină  
 Și plouă mai tare  
 Pe crâșme murdare,  
 Pe-un târg necăjit-  
 - Și-aici stă iubita...  
 Plouă...  
 Pe-un târg necăjit.

**Note de primăvară**

Verde crud, verde crud...  
 Mugur alb, și roz și pur,  
 Vis de-albastru și de-azur,  
 Te mai văd, te mai aud!

Oh, punctează cu-al tău foc,  
 Soare, soare...  
 Corpul ce întreg mă doare,

**Prose**

It rains...  
 On a miserable market  
 of mud and cornstalks  
 On a depressed market  
 full of millet  
 And it is here my beloved lives...  
 And the street is full  
 of hay and cornstalks  
 and the carts pass  
 with sacks of flour  
 and it rains even harder  
 on the dirty taverns  
 on a depressed market.  
 And it is here my beloved lives...  
 It rains...  
 On a miserable market

**Note of Spring**

Raw green, raw green...  
 white bud, pink and pure,  
 dream of blue and azure,  
 I see you again, I hear you again!

Oh, punctuate, with your fire,  
 Sun, sun...  
 my whole body that I is aching

Sub al vremurilor joc.

under the game of times.

Dintr-un fluier de răchită,  
Primăvară,  
O copilă pposită la fântână  
Te îngână  
Pe câmpia clară...

From a panpipe,  
Spring,  
a little girl standing by the well  
mimics you  
on the clear field...

Verde crud, verde crud...  
Mugur alb, și roz și pur,  
Te mai văd, te mai aud,  
Vis de-albastru și de-azur.

### **Fanfară**

Ce tristă operă cânta  
Fanfara militară  
Târziu, în noapte, la grădină...  
Și tot orașul întrista,  
Fanfara militară.

### **Fanfare**

What a sad piece plays  
the military fanfare  
Late at night, in the garden...  
And the whole city is saddened,  
Military fanfare.

Plângeam, și rătăceam pe stradă  
În noaptea vastă și senină;  
Și-atât de goală era strada -  
De-amanți grădina era plină.

They cried, wandered along the street  
In the vast clear night;  
And empty enough was the street –  
of lovers the garden was plenty

Orașul luminat electric  
Dădea fiori de nebunie -  
Era o noapte de septembrie,  
Atât de rece și pustie!

The city's electric illumination  
made the flowers go crazy.  
It was a September night  
Cold enough and deserted!

Și tot orașul întrista  
Fanfara militară...  
Târziu, în noapte, la grădină,  
Ce tristă operă cânta  
Fanfara militară.

And the whole city is saddened,  
Military fanfare  
Late at night, in the garden...  
What a sad piece plays  
the military fanfare

## **Spanish**

The most widely spoken Romance language in the world is represented in its Argentinian variety by *Canciones coloniales*, a set of four songs by Carlos Guastavino (1912–2000) on poems by León Benarós (1915–2012). While most of its compatriots had some European influence in music composition, Guastavino, “a chemist by training who lived in the

provincial city of Santa Fe, seemed less concerned with existing European song models. Instead, he focused on combining original, folk-inspired vocal lines and subtle piano accompaniments in a style very much his own.”<sup>22</sup>

The incorporation of popular rhythms confers a quasi-improvisatory style to the songs. Guastavino’s melodies unfold effortlessly and they have a natural beauty devoid of pretentious artifices. Formal simplicity contrasts with subtle rhythmic complexity.

**Cuando acaba de llover**  
se alegran los arbolitos.  
Verdes se ven y tan frescos  
los trebolitos,  
Todo es de buen parecer  
cuando acaba de llover.

Cuando acaba de llover  
se mecen las campanillas.  
Lindas se ven las retamas,  
tan amarillas.

Cuando acaba de llover  
el alma se me serena  
y siento que me amanece  
la dicha plena.  
Todo es de buen parecer  
cuando acaba de llover.

**Prestame tu pañuelito**  
para secarme los ojos,  
porque llorando me vi  
con tus desdenes y antojos.  
Ay, ay de mí,  
llorando por ti.

Prestame tu pañuelito  
que yo te lo lavaré  
con lágrimas de mis ojos,  
de nieve lo dejaré.

**When it has just stopped raining**  
the little trees are happy  
green and so fresh  
are the little trefoils.  
Everything seems well  
When it has just stopped raining.

When it has just stopped raining  
the bell flowers sway.  
the broom bushes look beautiful,  
so yellow.

When it has just stopped raining  
my soul calms down  
and I feel that complete happiness  
awakens in me.  
Everything seems well  
When it has just stopped raining.

Lend me your handkerchief  
so I can dry my eyes,  
for I caught myself weeping  
because of your disdain and whims.  
Woe of me,  
Weeping for you.

Lend me your handkerchief  
and I will wash it  
with tears from my eyes,  
I will turn it snow white.

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<sup>22</sup> Hoover, Maria (ed.) A guide to the Latin-American Art song repertoire. Indianapolis: Indiana University Press, 2010.



Ay, ay de mí,  
Penando por ti.

Prestame tu pañuelito  
que tiene flores bordadas,  
Que yo te las regaré  
con mis lágrimas lloradas.  
Ay, ay de mí,  
ausente y sin ti.

**Ya me voy a retirar**  
a los campos soledosos  
por ver si puedo olvidar  
aquellos ojos preciosos.  
Aquellos ojos preciosos  
que me miraron  
y que el sueño me quitaron.

Ya me voy a retirar  
donde está la tortolita,  
a ver si puedo encontrar  
lo que mi alma necessita.  
Lo que mi alma necessita  
porque me hirieron  
los ojos que me perdieron.

Ya me voy a retirar  
donde moran los zorzales,  
a ver si puedo encontrar  
remedio para mis males.  
Remedio para mis males  
pues me dañaron  
los ojos que me miraron.

**Las puertas de la mañana**  
abierto se han, vida mía.  
El nácar con el rosado  
alegan trayendo el día.  
El día nuevo  
va comenzando,  
Yo, suspirando.

Las puertas de la mañana  
de par en par, vida mía.  
El alto sol en el cielo  
con plena soberanía.  
El día nuevo  
resplandeciendo.  
Yo, padeciendo.

Las puertas de la mañana

Woe of me,  
Suffering for you.

Lend me your handkerchief  
which has embroidered flowers,  
and I will water them  
with my wept tears.  
Woe of me,  
Suffering for you.

I will draw myself away  
to the lonely countryside  
to see if I can forget  
those precious eyes.  
Those precious eyes  
that looked at me  
and took away my sleep.

I will draw myself away  
where the turtledove is  
to see if I can find  
what my soul needs.  
What my soul needs,  
for I was hurt  
by the eyes that ruined me.

I will draw myself away  
where the fieldfares live,  
to see if I can find  
medicine for my troubles.  
Medicine for my troubles,  
for I was damaged  
by the eyes that looked at me.

The doors of morning  
are open, my darling,  
the nacre and pink  
plead bringing the day.  
The new day  
is starting,  
I, sighing.

The doors of morning  
two by two, my love.  
The high sun in the sky  
in all its splendor.  
The new day  
glowing,  
I, suffering.

The doors of morning

cerrado se han ya, mi amada.  
La tarde invade los cielos,  
la sombra viene callada.  
La estrella de oro  
ya está alumbrando.  
Yo, suspirando.

are closed, my beloved,  
the evening invades the sky,  
the silent shadow comes.  
The golden star  
is already shining.  
I, sighing.

## Catalan

Castilian – the language commonly referred to as Spanish – is characterized by clarity of vowels and soft consonants (perhaps because of the abundance of fricatives). Contrarily, Catalan relies more on its consonants and has many sounds not found in Spanish, such as the schwa and the velarized l [ɫ]. In addition, the Catalan vocabulary is has more affinity with southern French dialects than with Iberian languages.

*La Dama d'Aragó* and *Cançó del Lladre* are two popular Catalan songs commonly performed with guitar accompaniment.

### **La dama d'Aragó**

A Aragó hi ha una dama  
que és bonica com un sol.  
Té la cabellera rossa,  
li arriba fins als talons.

Ai, amorosa Anna Maria,  
robadora de l'amor...  
Ai, de l'amor...

Sa mare la pentinava  
amb una pinteta d'or.  
Sa germana els hi triava  
els cabells, de dos en dos.

Ai, amorosa Anna Maria,  
robadora de l'amor...  
Ai, de l'amor...

Cada cabell una perla,  
cada perla un anell d'or.  
Cada anell d'or una cinta

### **The Lady from Aragon**

In Aragon there is a lady  
as fair as the sun.  
Her flaxen hair flows  
down to her feet.

Ah, the lovely Anna Maria,  
thief of love...  
Ah, of love...

Her mother was combing it  
with a golden comb,  
her sister was braiding it,  
strand by strand.

Ah, the lovely Anna Maria,  
thief of love...  
Ah, of love...

Each hair a pearl,  
each pearl a golden ring,  
each golden ring a girdle

que li volta tot el cos.

Ai, amorosa Anna Maria,  
robadora de l'amor...

Ai, de l'amor...

that wraps around her body.

Ah, the lovely Anna Maria,  
thief of love...

Ah, of love...

### **Cançó del lladre**

Quan jo n'era petitet  
festejava i presumia,  
espartenya blanca al peu  
i mocador a la falsaia.

Adéu, clavell morenet!  
adéu, estrella del dia!

I ara, que ne sóc grandet,  
m'he posat a mala vida.  
Me só posat a robar,  
ofici de cada dia.

Adéu, clavell morenet!  
adéu, estrella del dia!

Quan he tingut prou diners,  
he robat també una nina,  
l'he robada amb falsedat,  
dient que m'hi casaria.

Adéu, clavell morenet!  
adéu, estrella del dia!

### **The Thief's Song**

When I was younger  
I went to parties and boasted,  
wore white sandals  
and handkerchief in the pocket.

Goodbye brown clove,  
goodbye star of the day!

Now that I am older  
I enter a bad life,  
I became a thief,  
my everyday profession.

Goodbye brown clove,  
goodbye star of the day!

When I had enough money,  
I also stole a girl for me  
I stole her with falsity,  
saying that I would marry her.

Goodbye brown clove,  
goodbye star of the day!

## **Portuguese**

Portuguese is the sixth most spoken language in the world. Its main phonological characteristic is the abundance of nasal vowels (five) and diphthongs (four). Despite many differences in vocabulary and phonetics, the European and Brazilian varieties are still mutually intelligible.

*Azulão* and *Modinha*, with lyrics by Brazilian poet Manuel Bandeira, are written in a folk-inspired style. *Viola Quebrada* is an arrangement by Heitor Villa-Lobos of a melody

composed by the Brazilian ethnomusicologist and art critic Mário de Andrade. The words are not written in standard Portuguese, but rather in an imitation of the *caipira* accent, characterized by the retroflex r [ɽ].

### **Modinha**

Por sobre a solidão do mar  
a lua flutua  
E uma ternura singular  
palpita em cada coração.  
Só tu não vens trazer alívio ao trovador  
que vai tangendo apaixonado  
as cordas da triste lira  
que suspira desmaiando,  
suplicando o teu amor.

Eu te suplico, te imploro, te rogo,  
prostrado aos teus pés com fervor,  
O teu sorriso de criança...  
Vê! Vou gemendo de dor  
e na esperança de um dia melhor,  
unido a ti,  
Tu és toda a fé que eu perdi.

Mostra o semblante sedutor,  
acalma minh'alma.  
Concede ao menos a este amor,  
a desventura de viver!  
Que o coração, tão infeliz por te adorar,  
perdido embora de desejo,  
bem sabe que não merece a maravilha de teu beijo  
e pede apenas um olhar.

### **Azulão**

Vai azulão, azulão  
Companheiro vai  
Vai ver minha ingrata  
Diz que sem ela  
O sertão não é mais sertão

Ah! voa azulão  
Vai cantar,  
Companheiro,  
Vai

### **Modinha**

Over the solitude of the sea  
the moon hovers  
and a unique tenderness  
throbs within every heart.  
Only you do not bring relieve to the  
troubadour, who plucks passionately  
the strings of a sad lyre,  
which sighs and faints,  
begging for your love.

I beg you, I implore you, I plead you,  
kneeling at your feet with fervor,  
your childlike smile...  
Look! I moan with pain,  
and in hope of a better day,  
united to you,  
you are all the faith that I have lost.

Show your seducing semblance,  
appease my soul.  
At least, concede to my love  
the misfortune of living.  
For the heart, so unhappy from  
adoring you, though lost with desire,  
knows well that it deserves not the  
marvel of your kiss,  
and requests only a look.

### **Bluebird**

Go, bluebird,  
my companion, go!  
Go and see my ungrateful love,  
say that without her  
the countryside is no longer the  
countryside!  
Alas, fly bluebird,  
go and tell her,  
my companion,  
go!

### **Viola Quebrada**

Quando da brisa no açoite a frô da noite se curvô  
Fui s'incontrá com a Maroca meu amô  
Eu tive n'arma um choque duro quando ao muro  
Já no escuro meu oiá andô buscando a cara dela e  
num achô.

*Minha viola gemeu, meu coração estremeceu  
Minha viola quebrou, teu coração me deixou.*

Minha Maroca arresorveu por gosto seu me abandoná  
Porque os fadista nunca sabe trabaiá  
Isso é bestêra que das frô que bria e chêra a noite  
intêra  
Vem pois as fruta que dá gosto saboreá.

Pur causa dela eu sou rapaiz muito capaiz de trabaiá  
E os dia intero, e noite intêra a capiná  
Eu sei carpi purquê minh'arma está arada  
Arroteada capinada c'oas foiçada  
dessa luis do teu oiá...

### **Broken Guitar**

When the breeze bend the night  
flower  
I when to meet Maroca, my  
sweetheart.  
I felt I hard shock in my soul when,  
by the wall, in the dark, my eyes  
sought her face but did not find it.

*My guitar moaned, my heart trembled.  
My guitar broke, your heart left me.*

My Maroca decided to abandon me  
because Fado singers never know how  
to work.  
This is bullshit: from the flowers,  
which shine and smell all night long,  
come later the tasty fruit for to savor.

For her sake I am a guy who is very  
capable to work  
and all day long, all night long to clear  
off weed.  
I can clear weed because my soul is  
ploughed,  
cleared off by the reaping-hook blows  
from your bright eyes...

### **Italian, Venetian, Neapolitan**

This last group of songs also follows the lines of popular and folksongs. Reynaldo Hahn's *Venezia* is a unique group within his song output, given its Italianate melodies and accompaniment style. *Sopra l'acqua indormenzada* (poem by Pietro Pagello) is a simple strophic song that paints a beautiful Venetian night scene. *La Barcheta* (poem by Pietro Buratti) has an accompaniment figure descriptive of the movement of the water as the gondolier oars the boat.

Francesco Paolo Tosti (1846–1916) wrote some of the most loved Italian songs, and his style is considerably indebted to popular Neapolitan songs. The well-known *A Vucchella* (poem by Gabriele D’Annunzio), is written in Neapolitan dialect, in which the vowels, a, e, and o neutralize towards a schwa in unstressed syllables. *L’ultima canzone* (words by Francesco Cimmino) closes the recital featuring Tosti’s typical flowing, lyrical melodism that makes his songs so successful.

**Sopra l’acqua indormenzada**

Coi pensieri malinconici  
 No te star a tormentar:  
 Vien con mi, montemo in gondola,  
 Andaremo fora in mar.  
 Passaremo i porti e l’isole  
 Che circonda la città:  
 El sol more senza nuvole  
 E la luna spuntarà.

Oh! che festa, oh! che spettacolo,  
 Che presenta sta laguna,  
 Quando tuto xe silenzio,  
 Quando sluse in ciel la luna;  
 E spandendo i cavel morbidi  
 Sopra l’acqua indormenzada,  
 La se specia, la se cocola,  
 Come dona inamorada!  
 Ti xe bela, ti xe zovene,  
 Ti xe fresca come un fior;  
 Vien per tuti le so lagrme;  
 Ridiadesso e fa l’amor!

**La barcheta**

La note è bela,  
 Fa presto, o Nineta,  
 Andemo in barcheta  
 I freschi a ciapar!  
 A Toni g’ho dito  
 Ch’el felze el ne cava  
 Per goder sta bava  
 Che supia dal mar.  
 Ah!

Che gusto contarsela  
 Soleti in laguna,

**On the drowsy waters**

Let not melancholy thoughts  
 distress you:  
 come with me, let us climb into our gondola,  
 and make for the open sea.  
 We will go past harbours and islands  
 which surround the city,  
 and the sun will sink in a cloudless sky  
 and the moon will rise.

Oh what fun, oh what a sight  
 is the lagoon  
 when all is silent  
 and the moon climbs in the sky;  
 and spreading its soft hair  
 over the drowsy waters,  
 it admires its own reflection  
 like a woman in love.  
 You are lovely, young  
 and fresh as a flower.  
 Tears will come soon enough,  
 so now is the time for laughter and for love.

**The little boat**

The night is beautiful.  
 Make haste, Nineta,  
 let us take to our boat  
 and enjoy the evening breeze.  
 I have asked Toni  
 to remove the canopy  
 so that we can feel the zephyr  
 blowing in from the sea;  
 Ah!

What bliss it is to exchange  
 sweet nothings

E al chiaro de luna  
Sentirse a vogar!  
Ti pol de la ventola  
Far senza, o mia cara,  
Chè zefiri a gara  
Te vol sventolar.  
Ah!

Se gh'è tra de lori  
Chi troppo indiscreto  
Volessè da pèto  
El velo strapar,  
No bada a ste frotole,  
Soleti za semo  
E Toni el so' remo  
Lè a tento a menar.  
Ah!

#### **A Vucchella**

Sì, comm'a nu sciorillo  
tu tiene na vucchella  
nu poco pocorillo  
appassuliatella.

Meh, dammillo, dammillo,  
- è comm'a na rusella -  
dammillo nu vasillo,  
dammillo, Cannetella!

Dammillo e pigliatillo,  
nu vaso piccerillo  
comm'a chesta vucchella,

che pare na rusella  
nu poco pocorillo  
appassuliatella...

#### **L'ultima canzone**

M'han detto che domani  
Nina vi fate sposa,  
Ed io vi canto ancor la serenata.  
Là nei deserti piani  
Là,ne la valle ombrosa,  
Oh quante volte a voi l'ho ricantata!

Foglia di rosa  
O fiore d'amaranto  
Se ti fai sposa  
Io ti sto sempre accanto.

alone on the lagoon  
and by moonlight,  
to be borne along in our boat;  
you can lay aside your fan, my dear,  
for the breezes will vie with each other  
to refresh you.  
Ah!

If among them  
there should be one so indiscreet  
as to try to lift the veil  
shielding your breast,  
pay no heed to its nonsense,  
for we are all alone  
and Toni is much too intent  
on plying his oar.  
Ah!

#### **To a little mouth**

Yes, like a little flower,  
You have got a sweet mouth  
A little bit  
withered.

Please give it to me  
it's like a little rose  
Give me a little kiss,  
give, Cannetella!

Give one and take one,  
a kiss as little  
as your mouth

which looks like a little rose  
a little bit  
withered.

#### **The last song**

They told me that tomorrow  
Nina, you will be a bride.  
yet still I sing my serenade to you!  
Up on the barren plateau,  
down in the shady valley,  
Oh, how often I have sung it to you!

Rose-petal  
O flower of amaranth,  
though you marry,  
I shall be always near.

Domani avrete intorno  
Feste sorrisi e fiori  
Nè penserete ai nostri vecchi amori.  
Ma sempre notte e giorno  
Piena di passione  
Verrà gemendo a voi la mia canzone.

Tomorrow you'll be surrounded  
by celebration, smiles and flowers,  
and will not spare a thought for our past  
love; yet always, by day and by night,  
with passionate moan  
my song will sigh to you.

Foglia di menta  
O fiore di granato,  
Nina, rammenta  
I baci che t'ho dato!

Mint-flower,  
O flower of pomegranate,  
Nina, remember  
the kisses I gave you!

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<http://www.lieder.net>



RECITAL III (LECTURE)

The University of Kentucky  
School of Music

Presents

André Campelo  
In a DMA Lecture Recital

Cliff Jackson, piano  
Wanessa Campelo, soprano  
Junghyun Lee, soprano

PROGRAM

Dentro da Noite (publ. 1946)	O. Lorenzo Fernandez (1897–1948)
Quem sabe? (1859)	Carlos Gomes (1836–1896)
Matintaperêra (1933) Abaluaiê (1948) Senhora Dona Sancha (1932)	Waldemar Henrique (1905–1995)
Azulão (publ. 1945)	Jayme Ovalle (1894–1955)
Vai, Azulão (1939) Cantiga (1955)	Camargo Guarnieri (1907–1993)
Beiramar (1966) <i>Estrela do mar</i> <i>Iemanjá ôô</i> <i>Ogum de lé</i>	Marlos Nobre (b. 1939)

This recital is presented in fulfillment of the requirements of the DMA in Vocal Performance. André Campelo is a student of Dr. Noemi Lugo.

## PROGRAM NOTES

### **Lorenzo Fernandez**

Oscar Lorenzo Fernandez was the founder of the Conservatório Brasileiro de Música in 1936. The conservatory is located in Rio de Janeiro, his home city. As with most of his contemporaries, his musical style was influenced by the nationalist aesthetic that set the standards for Brazilian music in the last century. He worked as a conductor and composed many important orchestral pieces such as *Imbapara*, a symphonic poem with an Amerindian theme, *Reisado do pastoreio*, another orchestral piece with Afro-Brazilian inspiration, and *Suite Sinfonica*, in which he elaborates on folksong materials. He also composed one opera in Portuguese, *Malazarte*, considered the first successful attempt at a genuine Brazilian opera in every sense: the music, the libretto, and the subject matter. Still, he is more well-known for his art songs.

The short song *Dentro da Noite* is an example of the preference for national themes in vocal music as part of the overall search for a national identity that pervaded the Brazilian culture in the twentieth century. As the central figure here we have the *caboclo*, a person of mixed race (Portuguese and Amerindian) playing the guitar, the most popular musical instrument in Brazil. The piano introduction is clearly written to emulate the guitar idiom. The voice enters with its text descriptive of the dark, starless night that is cut by the sound of someone playing the guitar. An intermediary section introduces a syncopated rhythm usually associated with African influence on Brazilian music. The accompaniment texture remains sparse, guitar-like, with arpeggiated chords forming a compound melody, i.e. with the higher notes in the right hand sticking out to delineate a melody. This melody

in the piano is a counterpoint to the one in the vocal line. The first section then resumes and the song is rounded off in ABA format.

### **Carlos Gomes**

Antonio Carlos Gomes (1836–1896) was the most important Brazilian composer of the nineteenth century and perhaps the most successful non-European opera working in Italy in the Verdi era. His first two operas were set to *libretti* in Portuguese: *A Noite do Castelo* (1861), and *Joana de Flandres* (1863). After that, he earned a scholarship from the Brazilian Emperor D. Pedro II to study composition in Italy, at the Conservatorio di Musica di Milano. His first big achievement was the opera *Il Guarany*, with a libretto based on the novel *O Guarani*, by the Brazilian author José de Alencar. After the premiere in 1870 at the Teatro alla Scala di Milano, the piece was performed to great acclaim in the major European opera houses. He composed eight operas in total, in addition to songs and piano pieces. Most of his vocal compositions are in Italian, where he spent a great part of his life.

The song *Quem sabe?* belongs to the Luso-Brazilian genre called *modinha*, which consisted of an easy, cantabile melody on a text of sentimental character. Even though the *modinhas* were written to be accompanied by a keyboard instrument, the most common instrument used was the guitar, especially in Brazil. In the nineteenth century, composers started to incorporate bel canto mannerisms into these songs, which became more and more complex. This particular example resembles a typical cantabile section from Italian operatic scenes. The accompaniment is simple, similar to the style Bellini used in his arias. The ternary form is framed by the exposition of the main musical theme in the introductory measures, and the codetta that follows the vocal cadence at the end.

## **Waldemar Henrique**

The regional music of the Amazon region in Brazil is the defining element of the song style of Waldemar Henrique. His affinity with popular music is reflected in the simplicity of the melodic lines, avoidance of extreme registers, and emulation of popular rhythmic gestures. The harmonic language is simple yet not devoid of sophisticated devices altogether. Like many other Brazilian composers in the twentieth century, his compositions are a product of the nationalistic aesthetics. Most of his song texts are motivated by Amazonian legends and popular stories, with nature as a constant background. He also composed songs inspired by Afro-Brazilian themes (*Abaluaiê*, *Sem-Seu*) and in urban themes inherited from his Portuguese ancestry. With a father of Portuguese ascendancy and a mother with native Brazilian origins, his own life is a confluence of cultures that transpires in his song output.

The first song is based on the Amazonian legend of Matintaperera, an owl-like bird with an ominous whistle. Every Friday evening, it is transformed into an evil, ugly witch that haunts both children and adults. She wanders through the streets asking for tobacco. She is able to fly in order to quickly find anybody who denies it to her. In this song, a man called Manduca Torquato had promised to give her something to smoke the next day. He is terrified that she might haunt and curse him, give him some disease or even making him disappear. Matintaperera's whistles recurrently appear by means of a short melodic cell written in the Dorian mode, which confers an atmosphere of fear, mystery, or apprehension. Concerning the rhythmic and melodic aspects, the voice part is patter-like and is intended

for declamation. It perfectly conveys the introduced by the piano and is dramatically effective when sung in an agitated manner. As for the text, there are two poetic personas here, the narrator and Manduca Torquato himself. The narrator sings in a repetitive rhythmic pattern characterized by triplets. When Torquato enters, the melody acquires a more legato and sostenuto character. The narrator resumes with his recitation and the piece ends the repetition of the initial whistle figure. Despite the final arpeggio on the D minor chord, the listener is left with a sensation that the piece is left unresolved. Manduca Torquato is still waiting for Matintaperêra to get her tobacco. The reiteration of her whistle and the fact that the voice part never descends to the tonic sustain the premonition of things that are about to happen. The accompaniment shows a variety of patterns that respond to and provide support for the singer's declamation. Especially noteworthy is the predominance of descending gestures, as if to symbolized the bad omen brought by the imminent arrival of the witch.

Abaluaiê is one of the orixás of the Candomblé, an African-Brazilian religion. His name literally means "father and owner of the earth", and he is attributed control of life and death. He is also known as the "physician of the poor", to whom they recur for healing. At the same time, he is extremely feared for bringing diseases as a form of punishment. According to old legends, Abaluaiê, or Obaluaiê, was born with wounds all over his body. Because of that, he covered himself from head to toes with a special clothing made of straw. Because he was ugly and deformed, he was rejected by his mother, who abandoned him at the beach, but then he was adopted by Iemanjá, "the queen of the sea". Considered the 'king of the earth', he is both venerated and feared, as he holds the key to life and death. He is saluted with the expression "Atotô!", which means "calm down!" Waldemar

Henrique chose to emphasize the rhythmic aspect of the accompaniment by emulating the patterns of the *atabaque*, a typical percussion instrument used in the rituals of Candomblé. The harmonic progressions are rather simple, with a predictable alternation of tonic, predominant, and dominant chords. The melody was collected from the rituals taken place in Ilhéus, in the state of Bahia, Brazil. The song ends in recitative style with the salutation to Abaluaiê in Yorubá, a language that contributed to the expansion of the Brazilian Portuguese lexicon.

### **Jayme Ovalle**

With his peculiar, charismatic presence in the artistic circles, Ovalle was an important figure of the Brazilian modernist movement of the first half of the twentieth century, not so much for his artistic production, but for his influence on other artists. Included among his famous friends are the composer Heitor Villa-Lobos and the poet Manuel Bandeira. His name is associated in musical circles with his two most popular songs, *Azulão* and *Modinha*, both with lyrics by Manuel Bandeira. Other than that, his artistic legacy is negligible. He was also known as a poet, but his output, or what he has actually left, is comprised of only 33 songs and a few poems. He was self-taught and his education in music was very informal. As a public employee, he worked for the Brazilian government in New York and London, where he composed most of his songs. None of his poems have been published. Very little is actually known about him, except for statements of his friends. Manuel Bandeira, talking about his importance for the modernist movement in Brazil, wrote: "One talks about influence of this and that, from one or another French,

Italian, or German on the poets of the Generation of '22. Ovalle's influence was much bigger: never of formal appearances, but of soul. [...] What is surprising about Ovalle is that in him coincide such a profound artist, though defectively realized, a lousy bohemian, a model public employee in his honor and competency, a moral being full of tenderness at the same time so fervent and illuminated." (Bandeira *apud* Heringer 2012)

### **Camargo Guarnieri**

A few Brazilian composers have been assigned the "role" of successor to Villa-Lobos. Camargo Guarnieri is one of them. His activity not only as a composer but as a conductor and music educator places him as one of the most influential composers in Brazil. Although his compositional output is mostly born from a search for true national musical identity, which seems to be the eternal concern of Brazilian composers, his work transcends local interest. Guarnieri's early career as a composer was defined by the nationalist aesthetics, to which he was drawn by the influence of Mario de Andrade, a Brazilian anthropologist, and *lato sensu* ethnomusicologist. He moved to Paris in 1938 to study composition, aesthetics and conducting. Like many contemporary composers from around the world, he maintained contact with Nadia Boulanger. After this experience, his conducting activity would only increase. He became the principal conductor of the São Paulo Symphony Orchestra, and throughout his career he made frequent appearances with leading American and European orchestras. In the 1950's he actively stood against atonality and serialism. Later in the 1970's, however, his musical style showed a combination of popular music influences with serial technics. A great deal of his compositional output remains unpublished, especially his songs. His prolific production in this genre (ca. 200

songs) is mostly found in manuscripts, which prevent more frequent performances of his works.

As opposed to Ovalle's *Azulão*, Guarnieri's setting of this short poem transcends the mere imitation of popular song. Here he created a simple melody using the mixolidian mode, typical of northeastern Brazilian folksong. By doing that he transports the listener to the "Sertão", a sub-region of the northeast of Brazil, known for its dry climate and hard living conditions. The syncopated rhythm further helps to identify the vocal line with a Brazilian feeling. The same cannot be said of the piano part, in which he employs a sophisticated writing that could be associated with jazz music. This includes the utilization of chords with added sixths, non-triadic chords, and subtle chromaticism. The harmonies provide the song with a bittersweet feeling right from the beginning. They seem to perfectly translate into music the feeling of "saudade" – a special Portuguese word for 'longing' and 'yearning' for someone. The presence of the beloved is the only thing that softens the hardships of the reality of living in such an inhospitable place.

The words of this song come from a folk poem collected by the poet and literary critic Silvio Romero (1851–1914). The choice of subject matter represents an ongoing interest of the composer on national themes, and as in *Azulão*, this national element is more clearly felt in the vocal part. The piano and voice line together form rather a three-part counterpoint, resulting in a sparse texture. The piano part is set to a continuous, steady stream of sixteenth notes in the right hand (with the exception of a few syncopations). The left hand performs rhythmic figures that recall the bass strings of a guitar. Although the accompaniment is more chromatic than the diatonic voice part, the basic pitch inventory



utilized in this song as a whole is drawn from the mixolidian scale in D-flat. The distinct sections and subsections are framed by the music from the four initial bars, which performs the function of a *ritornello*. Guarnieri chose not to assign a specific key signature, probably to avoid any association with traditional tonal music, even though the music is fundamentally diatonic and gravitates around D-flat.

### **Marlos Nobre**

A native of Recife, Brazil, Marlos Nobre (b.1939) has established an international reputation as a pianist and conductor, but primarily as a composer. His compositions also carry unequivocal national elements mixed with avant-garde techniques, a combination that makes his music appealing. He first pursued his musical studies in São Paulo and went later to Buenos Aires, where he earned a master's degree in composition. In the early 1960's he studied under Koelreutter and Camargo Guarnieri, whose influence is felt in the choice of folk themes and musical style of *Beiramar*. Around that same time, he studied Sociology and Anthropology at the University in Rio de Janeiro. He got further instruction under names like Ginastera, Messiaen, Dallapiccola, Bernstein, Copland. According to Béhague "The influence of Bartók and Lutosławski can be seen in his juxtaposition of diatonic folk material with dissonant harmonies, polyrhythmic structures, rhythmic drive, textual effects and non-traditional scales. A national identity is evident in all his works, though as he does not rely on patterns from folk and popular idioms his music cannot be seen as nationalistic." Marlos Nobre has been engaged as a visiting professor in some American institutions, such as Indiana University, Yale, Juilliard and the University of Arizona.

The three songs of this short cycle are inspired in folk themes collected in Bahia, a state in the northeast coast of Brazil. They are centered in the figure of Iemanjá, mother of the orixás and "Queen of the Sea". As a result of the religious syncretism, the figure of Iemanjá is associated with the Virgin Mary. She is one of the two female orixás that govern water. While Oxum is the queen of the rivers, Iemanjá is the queen of salty waters: the sea, where she lives, and the tears dropped as a mother suffering for her children. According to an African legend, she wept so much after breaking up with her son Oxóssi, who abandoned her, that she melted and turned into a river proceeding toward the sea. Iemanjá is then sought after as a source of solace and tenderness. Fishermen appeal to her in hoping to catch a good quantity of fish. She is frequently depicted as a mermaid ("Sereia do Mar"), with long, loose hair.

The melodic aspect in these songs points to the modalism typical of the folksong of northeastern Brazil. Rhythmically, the three pieces are arranged in a contrasting manner. *Estrela do mar* begins with a very *marcato*, syncopated motive that contrasts with the more *legato* vocal line. The second song, *Iemanjá otô*, presents a rocking, *ostinato* accompaniment that recalls the soft movement of the waves. Similar to a lament, the initial melody is a calling for the "Mother of the Water" to come by the sand and accept all the presents the devotees offer to her. In *Ogum de lê*, the character of both the melody and accompaniment switches to a ruder and more *marcato* quality, that has the purpose of illustrating the vigorous personality of Ogum, one of the descendants of Iemanjá and the divinity associated with war and conquest. But he also seeks comfort in the figure of Iemanjá, and this change of character is felt when the music shifts to a more lyrical tone.

This song cycle was premiered in 1970 in Rio de Janeiro, and since then has remained one of the favorites of the baritone repertoire in Portuguese.

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## TRANSLATIONS<sup>23</sup>

### **Dentro da noite** (Lorenzo Fernandez)

Dentro da noite cor de treva,  
Sem uma estrela cor de leite  
Canta, violão, para eu sonhar!...

Na casa humilde do caboclo,  
Que fica ao fundo do grotão,  
Geme, violão!  
Para eu sonhar na casa humilde do  
caboclo,  
Geme, violão!  
Quero esquecer!

Deixa que durma a natureza  
E nos envolva o seu mistério...  
Chora violão para eu dormir!

### ***Inside the night***

*Inside the dark-colored night,  
Without a milk-colored star,  
Sing, guitar, so I can dream!...*

*In the caboclo's humble house  
Which is at the bottom of the grotto,  
Moan, guitar!  
So I can dream in the caboclo's humble  
house,  
Moan, guitar!  
I want to forget!*

*Let nature sleep  
And let its mystery surround us...  
Weep, guitar, so I can sleep!*

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<sup>23</sup> Translations by André Campelo.

**Quem Sabe?** (Carlos Gomes)

Tão longe, de mim distante,  
Onde irá, onde irá teu pensamento?  
Quisera saber agora  
Se esqueceste o juramento!  
Quem sabe se és constante?!  
S'inda é meu teu pensamento.  
Minh'alma toda devora  
Da saudade, agro tormento.

**Who knows?**

*So far away from me,  
Where, where do your thoughts go to?  
How I wish to know right now  
Whether you have forgotten the promise!  
Who knows if you are constant,  
Whether your thoughts are mine?!  
My souls is entirely devoured  
By this yearning's bitter torment.*

**Matintaperêra** (Waldemar Henrique)

Matintaperêra  
Chegou na clareira  
E logo silvou...  
No fundo do quarto  
Manduca Torquato  
De mêdo gelou  
Matinta quer fumo,  
Quer fumo migado,  
Melôso, melado,  
Que dê muito sumo.  
Torquato não pita,  
Não masca, nem cheira,  
Matintaperêra  
Vai tê-la bonita.

**Matintaperêra**

*Matintaperêra  
Arrived at the glade  
Whistles right away...  
In a bedroom's corner  
Manduca Torquato  
Was freezing from dread.  
Mantinta wants smoke,  
Properly cut smoke,  
moist, succulent,  
With a lot of juice.  
Torquato does not puff,  
Nor chew, or even smell it.  
Matintaperêra  
Will get it for sure.*

Matintaperêra de tardinha vem buscar  
O tabaco que hontem à noite eu prometi.  
Queira Deus ela não venha me agoirar...  
Ah! Matinta, Preta velha, mãi maluca, Pé  
de pato, Queira Deus ela não venha me  
agoirar...

*Matintaperêra, in the evening, will take  
The tobacco that I promised last night.  
God willing, she will not curse me...  
Ah! Matinta, old witch, crazy mother,  
duck feet,  
God willing, she will not curse me...*

Matintaperêra  
Chegou na clareira  
E logo silvou...

*Matintaperêra  
Arrived at the glade  
Whistles right away...*

No fundo do quarto  
Manduca Torquato  
De medo gelou.

*In a bedroom's corner  
Manduca Torquato  
Was freezing from dread.*

Que noite infernal,  
Soaram gemidos,  
Resmungos, bulidos  
Do gênio do mal  
E até de manhã,  
Bem perto da choça  
A fúnebre troça  
Dum vesgo acáuan!

*What a hellish night,  
I heard moaning,  
Growls, stirrings  
From the genie of evil  
and until morning,  
near the shack,  
the macabre mockery  
of a cross-eyed hawk!*

### **Abaluaiê**

Perdão, Abaluaiê, perdão!  
Perdão, ah! Orixalá, perdão!  
Perdão, ah! Meu Deus do céu, perdão!  
Abaluaiê, perdão!

*Forgive me, Abaluaiê, forgive me!  
Forgive me, ah! Orixalá forgive me!  
Forgive me, ah! My God in heaven,  
forgive me!  
Abaluaiê, forgive me!*

Ó Rei do Mundo, perdão, Abaluaiê!  
Êle veio do mar - Abaluaiê!  
Êle é forte, êle veio - Abaluaiê!  
Salvar.

*O King of the Earth, forgive me –  
Abaluaiê!  
He came from the sea – Abaluaiê!  
He is strong, he came to save – Abaluaiê!*

Atôtô lu-Abaluaiê!  
Cambonê sala na muxila gôlô ê!  
Bença meu pai!

*Atôtô lu-Abaluaiê!  
Cambonê sala na muxila gôlô ê!  
The blessing, my father!*

### **Senhora Dona Sancha**

Antigamente, quando eu ainda era criança  
Cantava com os meninos da vizinhança  
alegremente:

### **Mrs. Dona Sancha**

*A long time ago, when I was a child,  
I used to sing with the children in the  
neighborhood, full of joy:*

"Senhora Dona Sancha,  
Coberta d'ouro e prata,  
Descubra seu rosto,

*"Mrs. Dona Sancha,  
covered in gold and silver,  
unveil your face,*

Que nós queremos ver".

*because we want to see it."*

Depois, veio a mocidade.  
Foi-se-me toda a esperança  
De achar a felicidade  
Do meu tempo de criança.

*Later, we grew up.  
All hope was gone  
Of finding the happiness  
Of my childhood time.*

Quando eu ouço,  
Na minha rua  
Os meninos a cantar,  
Vou depressa, sem tardança,  
E fico olhando, a escutar,

*When I hear,  
In my street,  
The children singing,  
I go fast, without delay,  
And I observe, listening,*

(Ah, se eu fosse ainda criança)  
Sem poder acompanhar  
Aqueles meninos todos  
Satisfeitos a gritar:

*(Ah, if I were still a child)  
unable to follow  
all those kids  
gladly screaming:*

"Senhora Dona Sancha,  
Coberta d'ouro e prata,  
Descubra seu rosto,  
Que nós queremos ver..."

*"Mrs. Dona Sancha,  
covered in gold and silver,  
unveil your face,  
because we want to see it."*

Felicidade,  
Senhora Dona Sancha,  
De rosto lindo, mas velado,  
Busquei-te por toda parte,  
Procurei ver o teu rosto,

*Happiness,  
Mrs. Dona Sancha,  
With a pretty, but veiled face,  
I have looked for you everywhere,  
I sought to see your face,*

Devagarinho, com cuidado,  
Atrás daquela bonança  
Do meu tempo encantado de criança.

*Slowly, carefully,  
Behind that tranquility  
Of my enchanted childhood time.*

Agora, nem mais um sonho.  
Não é como antigamente  
Canto à toa, canto a esmo  
Baixinho, para mim mesmo,  
Tristemente, para não esquecer.

*Now, not even a dream.  
It is not like before,  
I sing at leisure,  
Softly, to myself,  
Sorrowfully, so I do not forget:*

"Senhora Dona Sancha,  
Coberta d'ouro e prata,  
Descubra o seu rosto,  
Que eu tanto quero ver...  
**Azulão** (Ovalle/Guarnieri)

*"Mrs. Dona Sancha,  
covered in gold and silver,  
unveil your face,  
because we want to see it."  
**Bluebird***

Vai Azulão,

*Go bluebird,*

Azulão companheiro vai  
Vai ver minha ingrata  
Diz que sem ela  
O sertão não é mais sertão  
Ah, voa, Azulão  
vai contar, companheiro vai!

*my companion, go!  
Go and see my ungrateful one  
Say that without her  
The countryside is no longer the same!  
Ah, fly bluebird,  
Go and tell her, my companion, go!*

**Cantiga (Guarnieri)**

***Ditty***

Dentro do meu peito tenho  
Duas pombas jurity:  
Uma morreu de saudades  
De tanto chorar por ti.

*Inside my chest I have  
Two jurity doves:  
One of them died of yearning  
After weeping so much for you,*

A outra, mais infeliz,  
Bateu asas foi embora.  
E lá no campo, perdida,  
Ainda hoje canta e chora!

*The other, more unfortunate,  
Fluttered and flew away.  
And there in the field, lost,  
Still now sings and cries.*

**Estrela do mar (Marlos Nobre)**

***Star of the Sea***

Ó Iemanjá, quem vem me beijar  
Abaluaê, quem vem me arrastar  
Eu vou co'a rede pescar  
E vou muito peixe trazer  
Das verdes estradas do mar

O Iemanjá, who is going to kiss me  
Abaluaê, who is going to drag me  
I will go fishing with my net  
And will bring a lot of fish  
From the green roads of the sea

Quero ser feliz  
Quero me afogar

I want to be happy  
I want to drown

Nas ondas da praia vou ver  
Vou ver a estrela do mar  
E no chão desse mar esquecer  
O que eu não posso pegar

On the waves at the beach I shall see  
I shall see the Star of the Sea  
And on the bottom of this sea I shall  
forget  
What I cannot catch

Ó Ia Otô vem ver meu penar  
Ó Bajarê, quem me faz sonhar  
Sereia fuja do mar  
E venha na praia viver  
Em cima da areia brincar

O Ia otô, come see my pain  
O Bajarê, who makes me dream  
Mermaid, flee from the sea  
And come live on the beach  
And play on the sand

Quero me perder  
Vem, oh Iemanjá

I want to get lost  
Come, o Iemanjá



A noite que ela não vem  
É só de tristeza pra mim  
E eu ando pr'outro lugar  
Deixando esse mar tão ruim

The night she does not come  
Is full of sadness to me  
I roam to another place  
Leaving such an awful sea

### **Iemanjá Ôtô**

Iemanjá Ôtô Bajarê  
Oki Iemanjá Bajarê ô

Sereia do mar levantou  
Sereia do mar quer brincar  
Canoas te vão trazer  
Presentes te vão levar  
Mãe d'água aceitou macumba  
Vem vindo brincar na areia  
Trazendo Orungã, o filho d'Inaê

O Iná ôdê resseê  
Ôki Iemanjá éro lêguê

### ***Iemanjá Ôtô***

*Iemanjá Ôtô Bajarê  
Oki Iemanjá Bajarê ô*

*The mermaid of the sea arose  
The mermaid of the sea wants to play  
They will bring you canoes  
They will bring you gifts  
The mother of the sea accepted macumba  
She is coming to play on the sand  
Bringing Orungã, the son of Inaê.*

*O Iná ôdê resseê  
Ôki Iemanjá éro lêguê*

### **Ogum de Lé**

Eu me chamo Ogum de Lé  
Não nego meu naturá  
Sou filho das águas claras  
Sou neto de Iemanjá

Iemanjá vem do mar

A noite que ela não veio  
Foi de tristeza prá mim  
Ela ficou nas ondas  
Ela se foi afogar

Iemanjá vem do mar

Eu vou pra outras terras  
Que minha estrela se foi  
Nas ondas verdes do mar

I am called Ogum de lé  
I do not deny my nature,  
I am son of the clear waters,  
I am a grandchild of Iemanjá

Iemanjá is coming from the sea

The night when she did not come  
Was full of sadness to me  
She stayed amid the waves  
She drowned herself

Iemanjá is coming from the sea

I will go to other countries  
For my star has gone  
to the green waves of the sea

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Musicianship Award, Alltech Vocal Scholarship Competition, Lexington, KY	<b>2013</b>
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Lyman T. Johnson Fellowship, University of Kentucky	<b>2012-13</b>
Graduate Assistantship, University of Kentucky	<b>2012-13</b>
Lyman T. Johnson Fellowship, University of Kentucky	<b>2011-12</b>
Graduate Assistantship, University of Kentucky	<b>2011-12</b>

André Campelo