I created special characters for this chapter, but the editors had problems to print them correctly. This version which is currently in print is under format revisions before the final product goes public.

3.3 BRAZILIAN PORTUGUESE PRONUNCIATION FOR SPEAKERS OF SPANISH, LEARNERS OF PORTUGUESE

Antônio Roberto Monteiro Simões
University of Kansas

This chapter contrasts the basic and most relevant pronunciation features of Spanish and Brazilian Portuguese. It is designed for speakers of Spanish who wish to learn Portuguese as well as for teachers with an interest in Portuguese for speakers of Spanish. Given its bilingual nature, it can also be useful for other audiences, such as speakers of Portuguese who are learners of Spanish and, as pointed out by Beaudrie, Ducar and Potowski (2014 212), to heritage speakers. I will focus only on the pronunciation features that are most relevant for these audiences.

I have chosen to avoid certain phonetic details because they are more useful to linguists, especially to phoneticians and phonologists. It is obvious that it is completely impractical for teachers and learners of Portuguese to try to correct every detail of pronunciation. For a more detailed historical and synchronic description of the sounds of Spanish and Portuguese, I recommend the recent study by Ferreira and Holt (2014).

This chapter focuses on the pronunciation of Brazilian Portuguese. Note that the terms "second language" and "foreign language" are not used, as I prefer the term **additional language**. Although this chapter highlights Spanish and Portuguese, examples from English will be used as needed, to more fully illustrate some of the pronunciation features discussed.

All discussions of pronunciation features within this study are based on a general and idealized pronunciation of national television speakers. In the case of Spanish, these idealized speakers are from the regions frequently referred to as the "high-lands" of Latin America, which are former colonial viceroyalties of Spain (e.g. Mexico, D.F., Guadalajara, Bogotá, La Paz, Lima (although this city is at sea level), Quito, to mention some; in the case of Brazilian Portuguese, these idealized speakers are the national television broadcasters within Brazil. Finally, such idealized registers require that these idealized speakers have a college training or higher or the equivalent in their speaking techniques. It may be helpful to know that there is no "standard" or "general" Portuguese spoken in Brazil.

It may be pedagogically helpful to use the speech of speakers of news anchors as the register of reference in the Spanish or Portuguese classrooms. There are many advantages to this approach. One of them is that both teachers and students can easily refer to this register of reference, given the relative accessibility of national televisions broadcasts in any region, through

the Internet, a common tool in today's classrooms. Furthermore, the register of a national news anchor tends to be closer to the formality of the written language while still sounding natural. In other words, we may sometimes find native speakers who are excessively concerned with maintaining a "pure speaking style," and wind up speaking in a pedantic or artificial manner. Usually, that is not the case with national news anchors

Therefore, the goal of this contrastive description of Spanish and Brazilian Portuguese is to provide key practical information about the sound systems of Spanish and Brazilian Portuguese that will help speakers of Spanish to learn the sound system of Portuguese. The contrastive description of how pronunciation patterns operate in these two languages is intended to be a user-friendly reference.

This chapter is organized into three parts. Part I explores the basic pronunciation differences of vowel and consonant segments, as well as some of the most common and productive phonological processes in Brazilian Portuguese.

It must be noted that the first section is intended for readers with little or no background in Linguistics. Part II provides a practical application for the discussion in Part I. It proposes ideas for creating strategies to learn and teach Brazilian Portuguese to speakers of Spanish. Part III expands on Part 1 by discussing additional contrasts between Spanish and Portuguese, especially in terms of language prosody, i.e. suprasegmentals; therefore, it requires some background in linguistics.

How the Sounds of Portuguese and Spanish Work: A Basic Contrast

Table 1 explains the symbols used in this study. Please refer to it as needed. It also lists common conventions for transcribing speech.

Table 1. *Phonetic symbols for Brazilian Portuguese.*

Alphabet Letter	Phonetic Symbol	Alphabet Letter	Phonetic Symbol	Alphabet Letter	Phonetic Symbol
a	[a] **a**to	i	[i] **c**isco [ɪ] se**i**s	r	[ɾ] ra**r**o, trê**s**, ve**r**
ã, an am	[ã] l**ã**, **an**tes [ɐ̃] fal**am**	im in	[ĩ] or [ĩˈ] **sim** [ĩ] **sin**to	r	/R/ [x] **r**aro, ve**r** [h] **r**aro, ve**r** [χ] **r**aro, ve**r** [ʁ] **r**aro, ve**r** [Ø] mute ve**r**
b	[b] **b**oto	j	[ʒ] **j**ogo		
c	[s] **c**ito, **c**éu [k] **ca**ma, **co**m, **cu**lpa	k	[k] **k**art	rr	/R/ [x], [h], [ʁ], [χ] [ɾ] ca**rr**o
ç	[s] dan**ç**a, la**ç**o, a**ç**úcar	l	[l] brasi**l**eiro [ᵘ] Brasi**l**	s	/S/ [s] trê**s**, [z] de**s**de [ʃ] trê**s**, [ʒ] de**s**de

ch	[ʃ] **Ch**ico	lh	[lʲy] or [λ] fi**lh**o	s	[z] a**s**a
d	[d] **de**sde, **d**ar, **d**o, **d**uas [dʒ] **d**igo, bo**de**, des**de**	m	[m] **m**ais [~] ca**m**po, bo**m**	ss	[s] a**ss**a
e	[e] s**e**ja [ɛ] s**e**te [i] set**e** [ⁱ] pass**e**ar	n	[n] ca**n**a [~] ca**n**to, ze**n**	t	[t] **t**eve, **t**al, **t**om, **t**una [ʧ] **t**ime, par**t**e
é ê	[ɛ] **Zé** [e] z**ê**	nh	[ⁱỹ] or [ŋ] te**nh**o	u	[u] **úvu**la, [ᵘ] esto**u**
em en	[**\s\upp̃er 1 (~** [ⁱ] b**em** **]** **\s\upp̃er 1 (~**] b**en**to	o	[o] am**o**r [ɔ] m**o**do [u] mod**o** [ᵘ] enjo**o**	um un	[ũ] or [\s\upp̃er 1 (~ \s\upp̃er 1 (~] b**um**! [ũ] n**un**ca
f	[f] **f**oto			v	[v] **v**oto
g+o,a,u g+i,e	[g] **g**ol, **g**ala, **g**ula [ʒ] **g**iz, **g**ê	ó ô	[ɔ] d**ó** [o] av**ô**	w	[v] **W**aldo [ᵘ] **w**att
gu+e,i	[g] pa**gu̲**e, se**gu̲**inte	om õ, on	[õ] or [ã\s\upp̃er 1 (~] b**om** [õ] p**õ**e, t**on**to	x	[s] trou**x**e [z] e**x**ato [ks] ne**x**o [š] Te**x**aco
		p	[p] **p**ato		
gu+e,i	[gᵘ] a**gu̲**entar, ar**gu̲**ir	q	[k] par**qu̲**e, a**qu̲**ilo	y	[i] Lis**y** [ⁱ] Ble**y** [ʒ] **j**arda
h	[Ø] mute: **h**otel	qu	[kᵘ] elo**qu**ente, tran**qu**ilo	z	[z] fa**z**er

These symbols reflect an approximation of the pronunciation of national news anchors. The symbol [~] indicates nasality. The variant pronunciations of <r, rr>, [χ] and [ʁ] are less common. The capital letters /S/ and /R/ represent a range of pronunciations, which depends on factors such as personal preferences, language varieties, and others. This table shows only isolated changes. It does not take into account changes made by the surrounding sounds or contexts. For instance, the examples for <s> in the words <tres> and <desde> do not show an [i] that may or not surface in the presence of /s/ as in [tɾes, tɾeⁱs, dezde, deⁱzde, tɾeⁱʃ, deʒde, deⁱʒde].

Segments: Vowels.This study assumes that Brazilian Portuguese has seven oral vowels and five nasal vowels. Regardless of how we approach the description of the Portuguese vowel system, there are more vowels in Portuguese than in Spanish. Furthermore, among the college-educated Spanish population, the Spanish vowels are relatively more stable than in Portuguese, meaning that the vowels in Spanish do not change their features

(or qualities) as much as Portuguese or English do.

Interestingly, native speakers of Portuguese understand a good deal of spoken Spanish, whereas native speakers of Spanish frequently have more difficulty understanding basic spoken Portuguese. It is often attributed to the late Brazilian linguist Mattoso Câmara, Jr. the explanation that the main reason for this was due to the difference in the number of vowels within the two languages. However, there are other reasons, vowel instability in Portuguese being one of them. Jensen (1989) empirically observed and described this phenomenon of mutual intelligibility in his study.

Changes in vowel quality permeate Portuguese and this vowel instability has characterized the language throughout its evolution. Vowels in Portuguese change depending on their context. The vowels <e> and <o>, for example, in the word <**e**scrit**o**> are commonly pronounced [i] and [u], [iS.´kri.tu], because of contexts or factors such as their position in the word, the degree of stress, the register, to mention some. On the other hand, at the end of the word <escritor> the vowel <o> does not change, it is pronounced [o], [iS.kri.´toR], because of another factor, i.e. the [o] is in a strong position, a stressed position. Spanish, *relative* to Portuguese or English, tends to mirror, although not perfectly, what is written, in the register of spoken Spanish just referred to in this study.

In addition to coming to grips with vowel instability in Portuguese, Spanish speakers will have to learn seven more vowels to become proficient in Brazilian Portuguese. Although the Portuguese alphabet contains five letters to represent its vowels, <a, e, i, o, u>, these letter symbols are not sufficient to represent the actual number of 12 vowel phonemes.

Among the vowels of Brazilian Portuguese, the narrow-mid oral vowels in Brazilian Portuguese, Table 2, are probably the greatest challenge to speakers of Spanish who are learners of Brazilian Portuguese and also to speakers of English learning Portuguese.

A common way of describing the Portuguese vowel phonemes is presented in Table 2. The ones that occur only in strong position are the ones in the boxes with a darker background. Note that the central vowel, referred to as *schwa* (/ə/), has an "only in EP" under it. This is to indicate that it is a vowel phoneme that normally appears only in European Portuguese. Maybe there is a recent trend of production of schwas in Brazilian Portuguese, but if it is the case, the trend may be limited to some regions and in limited contexts. In American English, all unstressed vowels in spontaneous discourse tend to centralize, i.e. to reduce to a schwa. The underlined vowels of the English words <a̲bout> and <so̲u̲thern> are examples of schwas in unstressed and stressed syllables[28] respectively. Spanish, perhaps with the

[28] The Merriam-Webster dictionary defines schwa as "an unstressed mid-central vowel." This is also a common definition among some linguists. But it is common to have schwas in

exception of some varieties of Spanish spoken in the US, normally does not have schwas in the register we use as reference in this study.

Table 2. *The vowel system of Portuguese, based on Simões (2008)*

Front	Central	Back or Velar	
/ i / m**i**to / ĩ /m**in**to, p**in**tura		/ ũ / m**un**do, m**un**dano / u / m**u**do	"Close" or **High/Wide**
/ e / c**e**do / ẽ /s**en**do, a**cen**dendo	/ ə / only in EP	/ õ / b**on**de, **bon**dade / o / p**ô**de	**High/Wide-mid**
/ ɛ / Z**e**ca / ɛ̃ /s**en**do	/ ɐ̃ / m**an**ta	/ ɔ / p**o**de	**Low/Narrow-mid**
	/ a / m**a**ta		"Open" or **Low/Narrow**
Retracted Round	Round	Retracted Round	

Boxes with a darker background show vowels that appear only in strong position, namely stressed syllables. The tilde (~) over a vowel means that the vowel is nasal. Note that this table indicates that the nasal vowel in *sendo* is either front, high/wide-mid (*semi-fechada*), or front low/narrow-mid (*semi-aberta*). Traditionally, this vowel has been described as high/wide-mid or *semi-fechada.*

Spanish speakers, learners of Portuguese will need to learn the Portuguese vowel phonemes not present in Spanish, in addition to learning or perceiving the changes in vowel quality, because these phonemes and their changes in quality are very productive in Portuguese. English and French, for example, have narrow-mid or low mid-vowels that do not correspond exactly to the Portuguese ones. Hence the difficulty that English and French speaker have as well, and Spanish speakers even more, to produce oral narrow-mid vowels in Portuguese, traditionally called "open vowels."

The nasal vowel phonemes may pose some difficulties, but not as much as the open vowels. Finally, some Spanish speakers who speak English as native or near-native language often find the features or terms **lax** and **tense** more helpful than the terms used here, **narrow-mid** or **open**. The narrow-mid or open oral vowels in English are usually described as lax vowels.

Therefore, vowel instability is most likely one of the main factors if not the main factor that makes the intelligibility of Portuguese harder for native speakers of Spanish than the intelligibility of Spanish for native speakers of Portuguese (Simões, 2008).

stressed position (e.g. S**ou**thern). Hence, I have adopted the definition of schwa as "a reduced and mid-central vowel."

Given the information in the preceding paragraphs, unstressed vowels in Portuguese change in quality. These changes may result in other phonological processes or phonological rules. In Brazilian Portuguese, a person who changes /e/ to [i] will also change the pronunciation of /t/ and /d/, when these consonants appear before [i], as in

Source	Intermediate Step	Final Output
futebol (soccer): /fu.**te**.ˊbəl/	→ [fu.**ti**.ˊbəʊ]	[fu.**ʧi**.ˊbəʊ]
cor-de-rosa (pink (color)): /ˊkoR.**de**.ˊRə.za/	→ [ˊkox.**di**.ˊxə.zɐ]	[ˊkox.**ʤi**.ˊxə.zɐ]

Note that the unstressed vowel [ɐ] is used here, instead of the schwa seen in other transcriptions. The symbol [ɐ] represents an unstressed vowel allophone, but not a schwa. With respect to the [e] and [i] alternations, if the person's pronunciation does not change the /e/ to [i], then /t/ and /d/ will remain as they are, alveolar [t] and [d] and, in this person's pronunciation, that is to say the output will be [fu.te.ˊbəʊ] and [ˊkox.de.ˊxə.zɐ]. Note that in <cor-de-rosa> I used [x] for the <r> because it is a very common pronunciation. Obviously, there are other possibilities, as shown in Table 2.

With respect to diphthongs, speakers of Spanish, as well as speakers of English, should not have difficulties saying diphthongs in Portuguese. The only obstacle may be to remember their forms, especially in the forms of the verbs in the Preterit verbal aspect of the Indicative mode, e.g. <falou> (Span. <habló>), <amaneceu> (Span. <amaneció>), <saiu> (<Span. <salió>). ~~*Comparison of Oral Vowels in Spanish and Brazilian Portuguese*~~

Comparison of Oral Vowels in Spanish and Brazilian Portuguese, Using English Vowels When Spanish Lacks the Equivalent

(Male speaker, *capixaba-colatinense* from Espírito Santo)

Spanish	Brazilian Portuguese	English closer equivalents
/i/ Brasília	/i/ Brasília	
/e/ (el) peso	/e/ (o) peso	/e:/bait; (also /ɪ/ as in bit)
No equivalent	/ɛ/ (eu) peso	/ɛ/ pet; (also /æ/ as in Pat)
/a/ Machado	/a/ Machado	
No equivalent	/ɔ/ posso	/ɔ/ thought, awe
/o/ pozo	/o/ poço	/o/ boat
/u/ Hugo	/u/ Hugo	

Segments: The Nasal Vowels of Brazilian Portuguese

In general, neither Spanish nor English have nasal vowels that change the meaning of a word when replaced by a corresponding oral vowel. English speakers may have a slight advantage here because English does

have the interjection "uh-huh" (/ã-ˊhã/), which can be regarded for teaching purposes as a very close equivalent of Brazilian Portuguese /ã/, as in *cantando*. A special challenge for speakers of Spanish and English as well will be the **nasal sounds at the end of a word**. In addition to *hearing* how these sounds are produced in Brazilian Portuguese, they also have to take into account their misleading spelling. For instance, Brazilian Portuguese words like <um, bem, sim, Cancun, porém, festim, garçom, som, nenhum, assim, falam, vem, porém, aparecem> and many others that end in *–n* or *–m*, are pronounced with a nasal vowel or diphthong. The written *–n* and *–m* are not pronounced. The visual image of words spelled with a final *–n* or *–m* tends to mislead non-native speakers. Despite the spelling, *–n* and *–m* are mute, but where they appear, they generally make the preceding vowel letter a spoken nasal vowel or a nasal diphthong.

Therefore, the nasal consonant *letters*, *–n* and *–m*, are written but not normally pronounced. The student must *hear* the different nasal feature of these vowels in word final position and produce them accordingly. (Simões 2008; 2013) The table below provides a summary of the nasal vowels.

Spanish closer equivalents	Brazilian Portuguese	English closer equivalents
tinto	/\s\upper 2 (~	No equivalent
centro	/ assim	No equivalent
zanja	/\s\upper 1 (~	uh-uh
tonto	/ centro	No equivalent
mundo	/ã/ rã	No equivalent
	/õ/ tom	
	/ũ/ atum	

Note that Spanish speakers should not have difficulties using Portuguese nasal vowels **inside a word**.

Segments: Consonants. In Brazilian Portuguese, in the speech of national television speakers, the consonants tend to be well articulated. For example, a stop consonant, voiceless or voiced, is realized as such. Thus, speakers of English should have no problems pronouncing most of them, whereas speakers of Spanish will need to make an extra articulatory effort to avoid the approximant trait of most Spanish consonants in actual discourse.

Table 3. *The consonants of Portuguese, compared to English and Spanish. Adapted from Simões (2008).*

Comparison of Spanish and Brazilian Portuguese Consonants, Using Some of the English Consonants as Interface

Closest sound correspondences, in Spanish	**(Brazilian) Portuguese**	**English**
/p/ **p**ura	/p/ **p**ura	/p/ spot
/b/ [b] in sentence initial position, as in *¡Vaya!*, in México, D.F. or Madrid, but not soft [β] as in *a**b**uelo*, everywhere.	/b/ **b**otar (in Span. = *poner*)	/b/ boy
/t/ **t**aco	/t/ **t**aco	/t/ stop
/d/ [d] in sentence initial position, as in *¡Dale!* in México, D.F. or Madrid, but not [ð] as in *na**d**a*, everywhere.	/d/ A**d**a	/d/ day
/k/ **c**asa	/k/ **c**asa	/k/ sky
/g/ [g] in sentence initial position, as in *¡Goooll!* in México, D.F. or Madrid, but not [ɣ] as in *pa**g**o*, everywhere.	/g/ a **g**ata	/g/ goal
/m/ **m**apa	/m/ **m**apa	/m/ me
/n/ **n**ada	/n/ **n**ada	/n/ no
/ɲ/ or <ñ> ma**ñ**ana (in Spanish it is a palatal phoneme)	/ŋ/ [ⁱ$\tilde{y}$] ma**nh**ã **Note:** The use of velar symbol /ŋ/ is not ideal, but it helps avoiding Spanish /ɲ/. Spanish "ñ" and Portuguese "nh" are very different. Spanish "ñ" is more of an anterior articulation; Portuguese "nh" is posterior, a tongue feature that pushes the palatal contact further back in Portuguese, closer to the velar area. The symbol [$\tilde{y}$] or [ⁱ$\tilde{y}$] may be the best solution to represent "nh" in BP.	No equivalent; but using **ni** as in o**ni**on helps
/f/ **f**é	/f/ **f**é	/f/ **f**ault
No equivalent	/v/ **v**otar	/v/ **v**ault
/s/ **s**é	/s/ **s**ei, ca**ç**a, ca**ss**a	/s/ **s**ea
No equivalent	/z/ fa**z**er, ca**s**a	/z/ **z**oo
No equivalent *phoneme*	/ʃ//š/ a**ch**o	/ʃ/ mi**ssi**on, fi**sh**
No equivalent *phoneme*	/ʒ//ž/ a**j**o, garage	/ʒ/ vi**si**on

/x/ **j**ota	[x] **r**ota, ca**rr**o, gen**r**o, des**r**espeito; Other variants: [h], [ʁ], [χ], [ɾ]	The h-sound, as in "**h**ope" is fine
/ɾ/ or <rr> que**rr**ía, ca**rr**o; softer than BP [rr]	[ɾ] or <rr> **r**ota, ca**rr**o, gen**r**o, des**r**espeito; harder than in Spanish;	No equivalent
/ɾ/ que**r**ía, p**r**áctica, ca**r**o	/ɾ/ que**r**ia, p**r**áctica, ca**r**o	[ɾ] ba**tt**er, be**tt**er in American English
/l/ **l**ata	/l/ **l**ata	/l/ **l**ow
/ʎ/ or <ll> caba**ll**ero, still used (although less than before) in the center and north of Spain	/ʎ// cava**lh**eiro or [ka.va.ˊʎeⁱ.ɾu]	no equivalent phoneme, but English sequence ***lli*** in *mi**lli**on* is similar.

Taking into account the preceding comments and the sound comparisons in Table 3, there are two sets of consonants containing significant phonetic differences that need special attention and pronunciation drills. The first of these sets is <b, d, g>, and the second one is formed with the two sounds spelled <ll> and <ñ> in Spanish and <lh> and <nh> in Portuguese.

Comparison of Spanish and Brazilian Portuguese <b d g>, and the Insertion of [i] and [e] in Brazilian Portuguese. The most obvious differences between this set of sounds in Spanish and Brazilian Portuguese is that in Spanish these sounds are produced as soft or approximant consonants most of the time, especially when they appear between vowels, in *actual discourse*. Relative to Spanish, Brazilian Portuguese, like English, produces these sounds as hard, i.e. stop consonants. In other words, in the production of <b d g> the articulators, i.e. lips, tongue, jaw, soft and hard palates, will either approximate each other without full contact (approximants or soft consonants) or they will touch each other (hard or stop consonants). Generally in Spanish, the articulators do not come into contact. Speakers of Spanish must make sure that these articulators come into contact when speaking Brazilian Portuguese. There are some varieties of Spanish that may have actual stop consonants, especially in the register of some news anchors. In general, however, native speakers of Spanish makes these <b d g> sounds soft, i.e. approximants. As an illustration, the pronunciation of the word <abogado> can be represented in a series of gradual phonetic variations, which we summarize here with three common representations, <abogado>, <aᵇoᵍaᵈo>, <aoao>, to reflect the different degrees of variation of <b d g>. In this summary of gradual variations, the first representation, <abogado>, is what may be expected in the speech of a news anchor. The smaller sizes of the fonts are intended to show the different degrees of variations or reduction, from very slight reduction to complete reduction (deletion) of these sounds, depending on the situation or contexts such as geographical

area, social class, register, to mention some. In another illustration, in the sentence the highlighted consonants have varying degrees of reduction, e.g. <a^{b}uelita, auelita; cansa^{d}a, cansaa, cansá; a^{g}uanta, auanta>.

*Mi a**b**uelita está cansa**d**a, ya no a**g**uanta más*,

There is also the case of the consonant <**d**>, which is dental in Spanish and alveolar or alveopalatal for the majority of Brazilian population. In Portugal, and in some areas of Brazil, there are dental <**d**>s. However, there are general descriptions of Brazilian Portuguese (Silva 2005) that describe <**d**> and <**t**> as dentals, as if this feature were the most common realizations of <**d**> and <**t**>, in Brazilian Portuguese. I think this is misinterpretation can be explained. In Brazilian Portuguese, the tip of the tongue is not the point of contact with the alveolar region. The alveolar region is the area of the root of the front upper teeth. In the pronunciation of <**d**> and <**t**>**,** the front or blade of the tongue, not the tip of the tongue, touches the alveolar area, in Brazilian Portuguese. If <**t**> and <**d**> were dental consonants in Brazilian Portuguese in general, they would simply sound like Spanish <**t**> and <**d**>, or even Latin <**t**> and <**d**>. That is clearly not the case. Anyone can easily verify these differences by asking native speakers of both languages to say words with these sounds to easily see the difference. Spanish has well attested dentals <**t**> and <**d**>, for comparison.

The Insertion of a Supporting Vowel in Contexts that Include Mostly Stop Consonants.A common phonological process in Brazilian Portuguese is to insert a supporting vowel [i] or [e] after a "dangling" consonant, to repair illegal structures. This insertion of a supporting vowel after a dangling consonant creates new **open syllables**, which are the most common type of syllable in Brazilian Portuguese and also in Spanish. I am using the term "dangling consonant" to refer to consonants that are not tolerated in a given position of a syllable structure. These consonants undergo phonological processes in order to fit into the language system.

In Brazilian Portuguese, these dangling consonants normally come from two sets of consonants, the stops / p t k **b d g** (m n ŋ (ŋ=ỹ)) / and the fricatives / s z f v s ʃ ʒ /. I am listing the complete sets of consonants, although some of these consonants are not part of the process of vowel insertion, simply to show the group of consonants to which they belong. The consonants (m n ŋ or ỹ) are inside parentheses because they are traditionally listed as nasals, outside the group of stops. I include them with the stops, because they behave like stops.

The examples below will help understand how vowel insertion after a dangling consonant works.

Spelling Approximation	Dictionary Orthography (Entry)	Spelling Approximation	Dictionary Orthography (Entry)

rí.ti.mu	<rit.mo>	ró.ti-dó.gui	In English <hot-dog>
pi.si.co.lo.gía	<psi.co.lo.gia>	fí.ki.su	<fi.xo>
a.di.vo.gá.du	<ad.vo.ga.do>	pi.néu	<pneu>
a.de.vo.gá.du	<ad.vo.ga.do>	pe.néu	<pneu>
va.rí.zi	<va.riz>	pĩ´.gui-põ´.gui	<pin.gue-pon.gue>
tí.mi	<ti.me> English <team>	á.fi.ta	<af.ta>
Di.ja.vã´	<Dja.van>	Prá.vi.da	In English <Pravda>

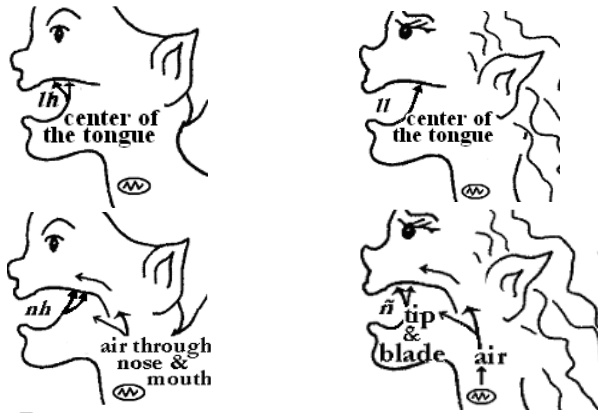
As the words above show, the i/e-insertion creates a common type of syllable made of a consonant and a vowel, i.e. **CV syllables**. **Open syllables** are syllables ending in one or more vowels, as in <sou>, <a>, <ai>, <é>, <pa.ra.le.le.pí.pe.do>. Open syllables or CV syllables constitute more than 70% of the syllable types in Brazilian Portuguese and Spanish. This can be easily attested by checking or counting randomly the syllable types of words in any page of a dictionary or on an internet newspaper written in these languages. Therefore, most words in Brazilian Portuguese and Spanish are made of CV sequences in the orthography of both languages and this trend increases in spoken language. As a result of this inherent pressure for CV syllables, the language system will fix the syllables with dangling consonants (a **resyllabification** process), by deleting or replacing the dangling consonant in favor of open syllables.

In Spanish, the dangling syllable is usually deleted or replaced: <psicología> becomes *sicología*, <ping-pong> becomes *pimpón*, <ciudad> in general becomes *ciudá*. In cases like *ciudá*, there are exceptions in some varieties and registers where final <d> may either be pronounced like the <th> sound of English as in <wi**th**> or pronounced noticeably with varying degrees of <d> reduction. There are other details involving these phonological processes which can be found in the literature. In sum, there are similarities in both languages in their tendencies to simplify their syllable structures, but there are differences as well. What speakers of Spanish should remember mostly is that in Brazilian Portuguese, the trend towards a preference for CV sequences results in the insertion of a supporting vowel in between consonant sequences (ritmo → rítimo), in word final position (hot-dog → roti-dogui), and in the deletion of the dangling consonant (Kim → kĩ).

Comparison of the Spanish <ll> and <ñ> with the Portuguese <lh> and <nh>. Pronouncing the sounds <lh> and <nh> in Brazilian Portuguese with Spanish features will not in general hinder communication, but sometimes it may disturb communication or create a strong accent for

the speaker who pronounces them as in Spanish. Figure 1 suggests the position of the vocal-tract articulators when producing these sounds in both languages. I borrowed a helpful figure from my own work (Simoes 2008), to illustrate these relevant differences.

Figure 1. *Comparison of Spanish <ll> and <ñ> with Brazilian Portuguese counterparts <lh> and <nh>.*



The symbol 〰 indicates voiced sounds. The arrows show roughly the areas **targeted** by the tip, blade or center (dorsum) of the tongue as well as the air flow from the lungs through the mouth and nose. These are impressionistic observations, based on the author's intuition.

In Figure 1, the arrow lines indicate the varying positions of the tongue when it approaches the palate. Spanish <ñ>, for example, is pronounced as if there were a little <ⁱ> after <n>, as in <maⁿⁱana>. In Brazilian Portuguese, using this little <ⁱ> is an illegal pronunciation. This <ⁱ> can work if placed before <nh>, as in <maⁱ**.nh**ã> or yet, <mãe+ⁱ\s\upper 1 (~ã>. The symbol **\s\upper 1 (~** represents a sound similar to <y> in Spanish (as in the general pronunciation of <va**y**a>) or in American English (as in <**y**es>), with nasality. The <ⁱ> may, however, follow <lh> as in <cava**lh**ⁱeiro>, in Brazilian Portuguese. Note that the pronunciation of Spanish <ll>, especially outside the center and north of Spain, is indistinguishable from Spanish <y>, namely most Spanish speakers pronounce <calle> and <caye> in the same way. Nowadays, this distinction is disappearing in Spain as well. Speakers of Spanish will ideally produce the Brazilian Portuguese sounds <lh> /ʎ/ and <nh> /\s\upper 1 (~/ farther back in the mouth than their Spanish counterparts.

In the case of /\s\upper 1 (~/, there are varying degrees of tongue approximation or contact with the palate, depending on factors like speech

registers, speakers, words said in isolation, in discourse, and other factors. The more clearly one intends to be in terms of diction, the closer the articulators tend to get to each other.

On the other hand, for speakers of Portuguese learners of Spanish, there is relatively lesser challenge, in terms of **sound segments** in general. There are areas of Spanish pronunciation that may require attention of speakers of Portuguese, such as rhythm, vowel stability, the <r, rr, j, g> in Spanish words like <Jorge>, <rojo>, <rígido>, etc. and how Spanish consonants in general are "softer" in Spanish than in Brazilian Portuguese. The sound <-rr-> inside a word or <r-> in word initial position has a "harder" version in some southern varieties of Brazilian Portuguese as a variant of the /R/ sound. The rhythm features of Spanish are clearly different than in Brazilian Portuguese. Vowel raising, so common in Brazilian Portuguese (e.g. *fot**o***, *padr**e***, pronounced *fótu*, *pádri*), and discussed in the next section, is not common in the Spanish of national television speakers. Speakers of Brazilian Portuguese may have a tendency to vowel raising when they speak Spanish, which they need to eliminate in their Spanish.

Phonological Processes: Vowel Raising, Palatalization of /t/ and /d/, and Vocalization of /l/.

Among the many phonological processes in Portuguese, this section focuses on four common ones that can be observed in the speech of Brazilian national television speakers. In the many regional variations of Brazil, we can find other important processes, but they would be more of interest to an audience interested in the full spectrum of regional varieties. Similarly, the regional variations in Portugal and other Lusophone regions are also very interesting to study, but they are beyond the scope of this chapter. For example, the palatalization of /s/ in syllable final position characterizes the pronunciation of Rio and Recife, but normally it does not characterize the speech of national television speakers.

Vowel rising interacts with the palatalization of /t/ and /d/. This is a productive process in Brazilian Portuguese. Vowel rising happens when a lower vowel moves up in the phonetic space or diagram shown in Figure 1. In other words, the mid vowels /e/ and /o/ can move to a higher position, becoming respectively high vowels [i] and [u]. When this happens after the alveolar consonants /t/ and /d/, these consonants become respectively palatals [ʧ] and [ʤ]. Examples are abundant in Brazilian Portuguese, as we saw earlier in this study: <escritor> becomes <[i]scritor>, <tango> becomes <tang[u]>. Palatalization requires vowel raising, e.g. <universidade> becomes <universida[ʤi]>, <quente> becomes <quen[ʧi], and so forth. Obviously, if the word has an inherent /i/ phoneme, palatalization happens without vowel raising: <distinto> becomes <[ʤ]is[ʧ]into>.

With respect to vocalization, this is simply the change of /l/ to a semi-

vowel [ᵘ], in syllable-final position. It happens regularly throughout Brazil, e.g. <Portugal> becomes <Portuga[ᵘ]>, <fil.me> becomes <fi[ᵘ].me>, <azul> becomes <azu[ᵘ]>.

Final Remarks on the Basic Contrasts of Spanish and Brazilian Portuguese

Although I often think of sound segments as having a priority over some areas of prosody (i.e. intonation, rhythm, stress) in terms of teaching pronunciation in a classroom, I also realize that both segments and prosody should be taught and learned in parallel, just like we do when we learn our first language. Looking into the overall differences between Spanish and Brazilian Portuguese, it is striking but easy to see that consonants and vowels are very different in both languages. While Spanish is characterized by relatively unstable consonants and stable vowels, Brazilian Portuguese has stable consonants in the sense that they do not reduce as much as in Spanish. On the other hand, vowels in Brazilian Portuguese are unstable, which means that they change in quality in weak (usually unstressed) position much more than in Spanish. As stated in the beginning of this study, this comparison and all statements I have made rely on the register of national television speakers in Brazil, and on the registers of national television speakers in the centers of colonial viceroyalties of Latin America, often labeled as highlands (México, D.F., La Paz, Lima, Bogotá, etc.), and on the register of speakers with school training in college or higher or the equivalent.

The preceding paragraph helps understand why Brazilians learning Spanish produce consonants that are harder or more articulated than the corresponding ones in Spanish. Likewise, it is easily noticed when Brazilian novice or intermediate learners of Spanish change Spanish post-stressed vowels just as they do in Portuguese. In their incorrect pronunciation, Spanish words like <pronto>, <periódico>, <compadre>, <espionaje>, and others will most likely become "prontu," "periódicu," "cumpadri," "ispionaji."

They may pronounce the consonants <b d g> harder when speaking Spanish, instead of the legal pronunciation of approximants in Spanish. The double -rr- is also softer in Spanish. Brazilians tend to make Spanish -rr- hard, like the trilled-r in some dialects of Brazilian Portuguese.

When looking at Table 4, which depicts a summary of the segmental differences between Spanish and Portuguese, keep in mind that Spanish consonants are in general "softer" than in Brazilian Portuguese.

Table 4. *Thirteen phonemes in Brazilian Portuguese that Spanish in general does not have.*

Oral Vowels	Nasal Vowels	Consonants
/ɛ/ (eu) p<u>e</u>so	/\s\upper 2 (~/ m<u>in</u>to,	/v/ votar

/ɔ/ posso	assim /\s\upper 1 (˜/ comenta /ã/ cantando, rã, /õ/ respondo, tom /\s\upper 2 (˜/ mundo, atum	/z/ casa /š/ acho /ž/ ajo [lʲy] cavalheiro [ⁱ\s\upper 1 (˜] manhã

Pedagogical Strategies

This section contains suggestions for the development of pedagogical applications to teach Portuguese to speakers of Spanish and other interested audiences, such as heritage speakers of both languages. The following suggestions take into account the preceding descriptive comparisons between Spanish and Portuguese. They should provide teachers a point of departure in the preparation of their classes and curricula. There are many more strategic alternatives, though. The ones below are intended to illustrate how to go from the preceding descriptions to an endless variety of applications. The suggestions below address speakers of Spanish learners of Portuguese with an Advanced Low level of language proficiency (using the ACTFL scale) in Brazilian Portuguese, since teaching materials seldom targets these. Teaching materials for novice and intermediate levels are more common. Furthermore, speakers of Spanish in general tend to move faster from novice and intermediate into advanced levels. These suggestions are also intended to help improve the sophistication of their linguistic skills. In other words, students in general, and especially students of additional languages typologically close to the first language, progress very fast through basic instructions, in their first two years, but tend to slow considerably once they reach advanced levels of proficiency. This is a common pattern in language learning. The suggestions below aim at helping advanced students, by training them to continue their language gains. It is assumed that these materials, given their bilingual nature, are of interest to heritage speakers of both languages as well. Therefore, such materials should be presented mostly as a top-down teaching strategy although often a bottom-up strategy could be used, depending on the goals of the class activity.

In the Classroom

The classroom is not expected to be the only source for the learning of an additional language. On the other hand, the classroom can be the reference for all other activities that extend beyond the classroom.

General Goals

Students of languages in general must become aware about regional varieties or dialects, registers, standard language, languages in contact, and language shift. These notions must be studied in conjunction with the notions of

culture, social behavior and sociolinguistic factors such as the context of sociolects, i.e. the basolect, mesolect and acrolect. This is valid to all audiences of language learners. Here, the concept of a register of speakers of national television is once again very useful, because we can more easily see how sound changes relative to this register.

Developing Listening and Speaking Skills

Auditory comprehension is essential to the development of speaking skills. There are many ways to develop auditory comprehension. A practical one that does not require a lot of training or special technology is illustrated below for classroom activity.

Auditory Comprehension

1. You will hear four short readings in sequence. Decide if one of the readings is different or if the four of them are the same.[29]

A B C D All the same

The teacher will read four times, <A. dois hinos; B. dois hinos; C. dois hinos; D. dois hinos, with one of them different. This is the representation of the voice of a teacher:

A. [doi´zi.nus]
B. [doi´si.nus]
C. [doi´si.nus]
D. [doi´si.nus] The students are expected to chose A

Some variations can be used in this drill. One is to have only three items (A, B and C); the other is use four items, but make two of them the same, instead of only one as in the example, and so on.

A B C All the same

The teacher will read three times, <A. dois hinos – B. dois hinos – C. dois hinos>, in the same way. For example:

A. [doi´zi.nus]
B. [doi´zi.nus]
C. **[doi´zi.nus]** The correct answer is All the same

A B C D All the same

The teacher will read <A. Preciso de um hotel; B. Preciso de um hotel; C. Preciso de um hotel; D. Preciso de um hotel>, with two of them the same, with respect to the pronunciation of the letter <-m> in <um>, which is normally not pronounced in Brazilian Portuguese. For example:

A. [pri.´si.zu.ʤʲ\s\upper 1 (~.o´tɛᵘ]
B. [pri.´si.zu.ʤʲ\s\upper 1 (~.mo´tɛᵘ]

[29] Some of the forms used in these exercises are illegal in Portuguese. Teachers may find them pedagogically flawed because students are exposed to illegal forms. This author does not agree with this view, especially in the cases illustrated in these exercises, given that these cases are very common mistakes made by Spanish speakers, learners of Portuguese. Therefore, I leave it to the reader's discretion to use them or not.

C. [pri.´si.zu.ʤʲ\s\upɲer 1 (~.o´tɛᵘ]
D. [pri.´si.zu.ʤʲ\s\upɲer 1 (~.mo´tɛᵘ] The correct answer is either A and C or B and D

A B C All the same

The teacher will read <A. mais ou menos – B. mais ou menos – C. mais ou menos>, with the pronunciation of one of them different, with an illegal [s] instead of the legal [z]. For example:

A. [´maʲ.zo´m\s\upɲer 1 (~.nus]
B. [´maʲ.zo´m\s\upɲer 1 (~.nus]
C. [´maʲ.so´m\s\upɲer 1 (~.nus] The correct answer is C

2. The teacher will read one of the two questions below. With a circle around the letters A or B, indicate the one read by the teacher.

A. O senhor já foi casado?
B. O senhor já foi cassado?

3. In Part III of this chapter, we discuss some basic notions of word stress. The drill below is based on this notion of stress. Teachers of Portuguese normally know the terms oxytone, paroxytone and proparoxytone, used in this drill. I hope that including this drill before discussing the basic notions behind it is not a problem to understand its usefulness. In any case, one can always read about stress in Part III, if needed.

Indicate if the words read aloud are proparoxytones, paroxytones or oxytones.

A.	proparoxytone	paroxytone	oxytone
B.	proparoxytone	paroxytone	oxytone
C.	proparoxytone	paroxytone	oxytone

The teacher can choose words to read aloud. For example, if the teacher says

"- A. - Difícil!" the student should circle the word in the second column of item A, that is <paroxytone>. Then, the second word, item B, can be <"- Oficial"> and the correct answer will be to circle the word in the third column, <oxytone>. The third reading could be <"- Parágrafo"> and the answer should be the third word from the right, in item C, <proparoxytone>. This activity may last anywhere between 5 to 20 minutes.

These are some of the possibilities for aural training, taking into account the descriptions of the differences between Spanish and Portuguese. Teachers can create many other variations for aural training that will help make the speakers of Spanish aware of these differences between Spanish and Portuguese. Therefore, a teacher can read aloud isolated words,

expressions or preferably short sentences that contain differences in authentic contexts with the sound targeted for the audiences of interest.

Another way of improving auditory comprehension and consequently pronunciation is through self-analysis of their own pronunciation, using recordings of their voices. In self-analysis, students can be given tasks for recording their voices and then listen to themselves. One task, for example, can be the interview of a native speaker of Portuguese. In this interview, they will dialogue with natives for 10-30 minutes. Then, they rewind the interview and listen carefully to the dialogues with the native, stopping the recording as needed, and taking notes of what they notice. Instructions on how they could direct such activities are shown below. This suggestion is intended for a semester program.

Recording Assignments

Students will conduct two 15-20 minute interviews this semester. These interviews must be made with native speakers of Portuguese about current events in his/her country of origin. For both recordings, students will turn in a well written and organized analysis of their own pronunciation and the pronunciation of their interviewee. Students are allowed to add information about their recording experience, but their analyses must include comments about the vowels, consonants, and prosodic elements of Portuguese pronunciation. The model of presentation below illustrates a way of making these analyses. Students will present these analyses in class, orally, and the written presentation is intended to help them with their oral presentation. But do not rely too much on the written presentation, because the oral presentation must sound as spontaneous as possible. Make sure you provide examples of words from your recording, and avoid over-emphasizing vague comments like, "tenho que trabalhar muito para melhorar minha pronúncia," "Gostei muito de ter feito esta gravação," among others. Such comments are fine, but they are not the most important ones in these analyses, because they are superficial, they do not discuss specific patterns of pronunciation. For the length of this self-analysis, one to two solid pages is sufficient.

Presentation #1, made by [name of the student]

Na minha primeira apresentação, entrevistei uma brasileira de São Paulo e conversamos sobre as músicas de Gilberto Gil e Rita Lee. Depois de terminar esta gravação, passei a ouvi-la e observei o seguinte:

1. A entrevistada, não pronuncia o <t> e <d> como eu esperava. Ela pronuncia o <t> em certas palavras como <tivesse>, <batida> com o <t> mais parecido com o <t> do espanhol e não como o <t> do locutor da TV Globo. O <l> de <palco> é como a vogal <u>.

2. Estes são os comentários sobre a minha pronúncia:

Minha pronúncia em geral está bem, apesar do meu sotaque. Por isso me daria a nota 7/10, de uma maneira geral. Em áreas específicas, isso foi o que notei:

Vogais: minhas vogais estão bem, mas não mudo muito a qualidade das vogais como costumam fazer os brasileiros e, ainda mais que os brasileiros, os portugueses. Digo

<Chic[o]> em lugar de <Chic[u]>, etc. Minhas vogais ainda lembram muito as vogais do espanhol, mas me entendem muito bem quando falo e por isso me daria a nota 8/10, em relação às vogais. (10/10 = falante nativo)

Consoantes: Ainda não consigo falar o /z/ conforme tenho que fazer. Quando disse as palavras <abusar> e <presidente>, notei que sairam sem o /z/, como <abu[s]ar> e <pre[s]idente>, e não como <abu[z]ar> e <pre[z]idente>. Nesta parte a minha nota poderia ser 6/10.

Acento de palavra: Comentários sobre o lugar do acento nas palavras, etc. (...) 9/10

Prosódia em geral: Explicar como está a entoação, o ritmo, os enlaces e outros processos fonológicos semelhantes, etc. 8/10

Total: _____/ 100

After the student turns in her/his self-analysis, the teacher should meet with the student and listen together to the recording, then provide the student with further comments on her/his pronunciation.

Dictations **are still a helpful, user-friendly and practical way to develop auditory comprehension. For students with advanced level of language proficiency, the teacher can use authentic 10-20 seconds passages from audio and video interviews on the internet, and ask them to simply write down what they heard, using normal handwriting. It is important to check their understanding, too, after they write down what they have heard.**

Movies are also excellent for not only improving their pronunciation, but also understanding the culture and current events in a Luso-Brazilian region. This can be done with an accompanying list of movie terminology in Portuguese to help their presentations. There are increasing resources on the internet. A key-word that will produce good results is <terminologia de cinema em português>. Most movies can be easily found on campus existing resources, or through Netflix.

Students should watch the movies outside class. But the teacher may select 30 minutes of passages of one movie to show in class, and make one presentation of this selected movie, which will serve as a model presentation

for the students. In each presentation, students should prepare themselves according to a set of criteria, a rubric that the teacher will use to evaluate their presentation.

Below I suggest two of the many rubrics that can be created, which was prepared for speakers of English, intermediate and advanced learners of Spanish, in my undergraduate and graduate classes.

Maximum number of points: 24 (6*4). All components on the leftmost column weigh the same.

	4 =Highest			
CONTENT Organization and flow of ideas	Engages in conversation in a participatory manner, in the major time frames of past, present, and future, when appropriate; has coherence and cohesion; articulated and easy flow of ideas		Communicates short messages on highly predictable, everyday topics. Inadequate handling of conversational subjects; not easy flow of ideas.	
	4	3	2	1
SOCIO-LINGUISTIC COMPETENCE	Shows awareness of socio-linguistic and cultural rules, formal vs. informal register		Does not show a clear awareness of socio-linguistic and cultural rules, formal vs. informal register	
	4	3	2	1
MORPHO-SYNTAX: Use of syntax and the appropriate forms of pronouns, i.e. "grammar" in general: word order, mode, tense, etc. (This area does not include general agreement (*concordancia*).	Uses relatively more complex grammar structures; use of implicit SUBJECT pronouns adequately; uses object pronouns adequately. Uses structural patterns, but not with consistent accuracy		Uses basic grammar structure; excessive/unnecessary use of subject pronouns; prefers the use of nouns instead of pronouns, i.e. avoids pronouns.	
	4	3	2	1
AGREEMENT (*concordancia*) in general: Gender, number and subject-verb	Relatively fewer mistakes in agreement in general		Does not show a clear mastery of agreement	
	4	3	2	1
PRONUNCIATION Overall	Native or near-native pronunciation; or speaks with strong accent, but clearly. Pronunciation flows without hindering communication.		Misuse of speech sounds affects communication; requires repetition to be understood.	
	4	3	2	1

VOCABULARY	Uses a variety of vocabulary, without excessive use of repeated vocabulary.		Speaks with limited vocabulary, i.e. excessive repetition of frequent words (*entonces, también*, *gustar*, *ser*, *estar*, etc.), vague or "lazy" vocabulary (imprecise words like *cosa*, *interesante*, depending on context, and the like.)	
	4	3	2	1

Sugestões para guias de avaliacão das apresentações orais

Significado dos símbolos utilizados	**Símbolos**	**Peso**
Seguiram-se ou não as instruções. A apresentação se fez ou não dentro do tempo permitido? Houve falta de preparação?	I	0-10
Competência socio-linguística: uso in/adequado de regras socio-linguïsticas e culturais, registro formal e informal.	SL	0-5
Uso de **sintaxes** ou "gramática" em geral: ordem das palavras, modo, tempo e aspecto verbal, etc. Aqui não se inclui a *concordância* (agreement).	S	0-10
Concordância em geral: gênero, número e desinência verbal.	C	0-10
Vocabulário: repetição excessiva de palavras de uso frequente tais como *então, também*, *ser*, *estar, gostar*, etc.), vocabulário vago, impreciso como *coisa, interessante.*	V	0-20
Organização das ideias: Deve-se anunciar claramente o que vai ser a apresentação, seguir uma progressão lógica das ideias através de uma introdução clara, um desenvolvimento e uma conclusão; coerência e coesão.	O	0-20
Pronúncia: uso in/correto de fonemas e uso exagerado de sons do espanhol, especialmente as consoantes aproximantes; acento de palavra.	P	0-20
PESO TOTAL	**100**	

Short 5 minute individual presentations of the movies

Students should not summarize or present an analysis of the film or its characters. Rather, students must relate the film to other issues—cultural, historical, political, economic, social, etc. — and present this context to the class. The presentation should include information about the director, awards won, to mention some, so that you will become familiar with the new vocabulary. Students may be as creative as they would like in the way that they present — via an interview, a dramatized scene, visual aids, YouTube clips (3 minutes maximum), etc.

In order to optimize class work, students should present to each other, all at the same time, while the teacher goes around verifying their interactions, and moderating as needed. Their 200-400 word written text that they will prepare for their oral presentation is to be used as a supporting element for the spoken presentation. They should follow their text as a guide, as they present their analyses of the movie, so that their pronunciation is natural. In other words, instead of reading mechanically the text that they write, they should become used to speaking with only short glances at their written presentation and make more eye contact with their classmates and instructor. Otherwise, they will not disconnect their eyes from their paper and will likely present in a boring mechanical manner.

Developing Cultural Proficiency

The development of cultural proficiency through pronunciation can also be realized through an array of possibilities. One of them would be for the teacher to identify what characterizes the pronunciation of a region. For example, the Spanish sound for the letter <ñ> as well as the letter itself is probably what most characterizes the Spanish culture throughout the world. Is there any sound or letter that characterizes the Portuguese world? Maybe the nasal vowels, but specially the nasal marker <~>, as in <Camões>. But maybe there is another trait and teachers may want to think about it. If we go into more regional traits, Spanish and Portuguese have plenty to offer. For instance, the word final palatal /s/ of Rio de Janeiro's, as in <rapa[ʲʃ]> (<rapaz>), or the nasal diphthong in the City of São Paulo, as in <set[\s\upper 1 (~ɪ]bro>, for <setembro>. Another social and regional trait throughout Brazil is the r-caipira, which can also be explained and explored in many ways such as skits where the characters are *caipiras*.

All languages have some clearly noticeable cultural traits reflected in the way native speakers interact. The question tag <..., né?>, short for <não é?> in Brazilian Portuguese, is a Brazilian trait that my students notice the most among native speakers of Brazilian Portuguese. Furthermore, why do I know that a person abroad whom I have never seen before is Brazilian just by catching some of their milliseconds of voice gestures like <hmmm>, interjections or even the way the laugh, in a shopping mall, for example? What is there in these very brief sounds, not actual words, that is inherent to a Brazilian? The French *mou*, for example, is a typical trait probably limited to Metropolitan France. It is a facial-lips-sound gesture that expresses their *je m'en fous*, disagreements, doubts, disbeliefs, and similar meanings. The French also expect of everyone speaking French a full greeting when they meet someone they know. A Frenchman must say confidently to the other <Bonjour, Monsieur/Madame Untel. Comment-allez vous>, or something similar. A monotone greeting as it is common among Americans, like <Hi!>, or a shy handshake or head movement instead of a full salutation is

considered rude or bizarre among the French. This is so typical of the culture that it can cause a lot of misunderstanding when a foreigner does not apply this cultural trait when in France. We, instructors of Brazilian Portuguese, should identify these patterns of linguistic and behavioral traits, not only to make our classes more appealing to our students, but also to increase our awareness of our own language and culture.

As we can see, many interesting patterns of linguistic and cultural traits of a nation can easily enliven classroom discussions. These traits can be identified either by asking ourselves which ones they are, or in discussions with other colleagues, or yet through internet groups as these groups continue to grow on the internet.

Outside the Classroom

All the activities proposed here have rich and easily accessible resources that can help teachers planning their classes, and students to continue learning additional languages outside the class room. Below I list a few of the ones I use regularly, all visited normally in spring 2015. Most are free, but some will cost around $10 dollars a month.

- Mango - **http://lib.ku.edu/databases/database/2871** Usually available in US Public Libraries and in most campuses.
- Kansas City Public Library: http://www.kclibrary.org/languages-literature, then click on <Languages>.
- iLove languages http://www.ilovelanguages.com/ at the New York Public Library;
- Duolingo: https://www.duolingo.com/;
- BBC languages: http://www.bbc.co.uk/languages/spanish/;
- Google translate: https://translate.google.com/
- Yabla: https://www.yabla.com/ This one is not for free. It costs c. $10/mo.

In other words, Nunca parem de aprender! The internet can complement our classroom work. Therefore, teachers may consider this type of work outside class as part of their student grades. In this case, teachers may want to ask their students to prepare either a journal written in Portuguese, or a portfolio of their outside classroom activities.

Further Reading on the Differing Functions of Portuguese and Spanish

Table 5 adds another set of common conventions to the ones already used in this study.

Tab*le 5. Some conventions for symbols used in phonemic (phonological) and phonetic transcriptions*

Symbol	Meaning
< >	Orthographic transcription; it encloses regular writing.
/ /	Phonemic or phonological transcription; it indicates what is expected.
[ ]	Phonetic or physical transcription; it indicates what the speaker actually says.
→	It indicates a current sound change; it reads as "becomes;" it also represents a flat intonation contour (see below in this table).
/	It means "in the context," or some equivalent expressions like "when…" and alike.
#	Word boundary
.	Syllable boundary
|	Short pause
||	Longer pause
ˊ	Word stress, place before the stressed syllable.
↑, ↓, →	Rising, falling and flat intonation, respectively; there are other possibilities not included here.

As stated previously, the goal of this contrastive description of Spanish and Portuguese is to provide key information about the Spanish and Portuguese sound systems that will help speakers of Spanish who are learners of Portuguese to improve their pronunciation and hopefully to find fast and friendly access to information regarding how these two languages work, in terms of pronunciation. Pronunciation can be divided into two major areas of study, Phonetics and Phonology. Phonetics is essentially the study of the sound output, i.e. the physical features of sounds, what is measurable, what is tangible. Phonology (or Phonemics) belongs more in the domain of abstractions. Phonology describes how sounds form patterns as they form syllables, morphemes, words and other language units. The key concepts in these areas are the **phoneme**, i.e. **t**he smallest linguistics unit that changes the meaning of a word when replaced by another linguistic unit, and the allophone, which is the materialization of a phoneme.

A speech sound is a phoneme if it changes the meaning of a word, when replaced by another sound in a pair of words that contain the same sequence of sounds, except in one spot where the sounds being compared appear. Such pairs of words are called **minimal pairs**.

The Portuguese names <Célia> (/ˊsɛ.lia/) and <Zélia> (/ˊzɛ.lia/) form a minimal pair. In Portuguese, if we replace /z/ of the word <Zélia> or /ˊzɛ.lia/, with the /s/ of <Célia> or /ˊsɛ.lia/, we refer to two different

persons, i.e. we change the meaning of these words by alternating /z/ and /s/. Therefore, /z/ and /s/ are **phonemes** in Portuguese. These same sounds are also phonemes in English. In English we find similar pairs, as in <zeal> and <seal>. Normally, we do not find such pairs contrasting /z/ and /s/ in Spanish, although there are <z> and <s> **letters** in Spanish. In the center and north of Spain there is no /z/ phoneme, either. The letter <z> in some areas of Spain has a different sound, which is like the <th> sound of the English word <with>, and usually represented with the symbol /θ/. In Spain only, the sound of the letters <s> and <z> are in contrast, in minimal pairs, and therefore their sounds constitute different phonemes, because they change the meaning of words when they replace each other, e.g. <ves> vs. <vez> or /bes/ vs. /beθ/. In other words, orthographic <z> and <s> exist in Spanish, but /z/ is not a **phoneme**. In most of the Hispanic World, <z> is an **allophone** of Spanish, because the [z] sound appears *predictably*, that is to say, it appears before voiced consonants, as in <mismo>. Therefore, Spanish only has the sound [z] as an allophone, not as a phoneme. Phonemes appear unpredictably.

To illustrate further the notions of phoneme and allophone, we can use the word used earlier in this study, <tango>, which in Portuguese has five phonemes, /ˊtan.go/. Since the phoneme is an abstraction, we can think of these five phonemes as "ideas" that form the word, and the word itself is another "idea." This phonological "idea," /ˊtan.go/, materializes with five allophones in Portuguese, [ˊtãŋ.gu]. It is useful to represent these "ideas" with three types of representations.

Orthographic representation: <tango>

Phonemic or phonological representation: /ˊtan.go /

Phonetic representation: [ˊtãŋ.gu]

Although the orthographic representation is very close to the actual pronunciation of this word, the orthography is not always so close to the actual pronunciation. The orthography is not an efficient representation of speech sounds or phonemes, because it does not always represent a one-to-one correspondence of symbols and speech sounds or phonemes. For example, in Portuguese the word <argentino> has the consonant graphemes or letters <g> and <t> pronounced in a way that is different in other words; for example, <tango>. Likewise, the <r> in <argentino> has different pronunciations depending on personal preferences, regional variation and other factors. The same letter, however, is used for different pronunciations. That is not the case with phonological and phonetic representations, because in these representations the correspondences are one-to-one. The phonological and phonetic symbols for language sounds will change if the phonemes or sounds change. For instance, <tango argentino> is represented phonologically or phonemically as /ˊtan.go#aR.ʒen.ˊti.no/ and phonetically as [ˊtãŋ.gwar.ʒen.ˊʧi.nu].

Notice that the symbol /R/ represents several varieties already introduced in Table 1:

[x] **r**aro, ve**r**
[h] **r**aro, ve**r**
[χ] **r**aro, ve**r**
[ʁ] **r**aro, ve**r**
[Ø] mute ve**r**

I picked the [x] realization in <argentino> because it is the most common pronunciation in Brazil and among speakers of national television.

In order to study the sound system of any human language, we need to distinguish between "sound segments" and what is not a sound segment, that is to say the melody of languages. **Prosody** (or suprasegmentals) is the melody of a language. **Prosody** *envelops* intonation, rhythm, stress, accent, sound quality, duration and phonological processes.

Sound segments are basically raw vowels and consonants. They were discussed in Part I.

Sound segments in Portuguese are relatively easier to teach and to learn. The melody demands more work on the part of the teacher and students, because language studies still need improvements in this area. We still have difficulties in making generalizations about prosodic patterns in Portuguese as well as in Spanish, although we have probably all the information we need to teach sound segments. It is very difficult to implement in the teaching of additional languages what we know about the melody of a language. Regardless of the drills one uses to implement these teachings, mechanic or contextualized drills, it is difficult for students to internalize the prosodic patterns that we know through classroom teaching. But it is important to teach what we know, because somehow some students will learn and internalize prosodic patterns and it is helpful to simply become aware of them.

The English term "language," has two equivalents in Portuguese and Spanish, namely *língua* and *linguagem*, *lengua* and *lenguaje*, respectively. A general view of these notions is summarized below. The symbol "**=**" indicates a direct relation.

Language (*língua* or *lengua*) = Phonology or Phonemics = Phoneme, enclosed in / /

Speech act (*fala* or *habla*) = Phonetics = speech sounds or allophones, enclosed in [ ]

To illustrate a **phonological rule** and the use of the symbols and conventions in Tables 1 and 5, we can use the same word <tango>. Below there is a **phonological rule** called Assimilation Rule, which describes one of the changes in the word <tango>, from the abstraction of a phoneme to a concrete allophone, that is to say from abstraction to materialization. This rule states that "/n/ changes from alveolar nasal to the velar nasal

represented as [ŋ], before the velar consonant [g]."

Assimilation Rule: /n/ → [ŋ] / __ [g]

As one can see, this phonological rule is a short and more efficient way of describing the change that took place. This is a very simple rule, but very common and productive in human languages. A **phonological rule**, which is the same as phonological principle or phonological process, describes language changes in pronunciation, especially when changes are repeated or predictable, i.e. when they form patterns. Phonological rules can clarify many changes that occur with the phonemes of Portuguese. For instance, they tell us why in Brazilian Portuguese <t> is sometimes pronounced with a sound like the <ch> in the English word <church> and sometimes almost like English <t> in <stop>.

Below there are examples of typical transcriptions in the three representations considered here: orthographic transcription (regular writing, graphemes or letters), phonemic transcription (anticipatory representation of sound targets, phonemes, abstraction) and phonetic transcription (the result or the output of what had been anticipated, i.e. the allophones). The phonological representation is intended to reflect the general voice of speakers of national television in cities like Lima, Bogotá, La Paz, México, D.F. and cities alike where the spoken language is closest to the written language. The national television variety of Spanish and Portuguese makes it difficult or impossible to tell where the speaker is from in the country where s/he comes from.

Here, the arrows represent the directions of the main intonational inflexions. Note that in Mexican Spanish, the two arrows represent a typical Mexican intonation contour, known as *circumflex* intonation, often represented with a caret (^). In this type of contour, the intonation goes up and down in the last or nuclear word of a sentence or phonological unit.

American English

Orthographic (graphemes):

< - Did you eat yet? >

Phonemic/phonological (phonemes, abstractions mostly):

/ˊdid#juˊit#jɛt ↑ /

Phonetic (allophones, physical):

[ˊʤiʔjɛʔ ↑]

Note: This American English example is adapted from Ladefoged and Johnson (2014 142). The physical/phonetic representation follows exactly what a speaker of American English actually says. The phonetic transcription here is one among several possibilities.

Brazilian Portuguese, Vitória, Espírito Santo

Orthographic (graphemes):

< - Sim… Mais ou menos. > (Yes… more or less.)

Phonemic/phonological (phonemes, abstractions mostly):

/s\s\upper (~ → | ˊmais#ou#ˊmɛ.noS ↓ /

Phonetic (allophones, physical):

[s\s\upper (~ → | ˊmaⁱ.zoˊm\s\upper 1 (~.nus ↓]

Note: The physical/phonetic representation follows exactly what a speaker of BP says. The phonetic transcription here is one among several possibilities.

Mexican Spanish, D.F.:

Orthographic (graphemes): **-**

<Sí… Más o menos.> (Yes… more or less.)

Phonemic/phonological (phonemes, abstractions mostly):

/ ˊsi → | ˊmas#o#ˊme.nos ↓] /

Phonetic (allophones, physical):

[ˊsi → | ˊma.so.ˊme.nos ↑↓]

Note: The physical/phonetic representation follows exactly what a speaker of Mexican Spanish actually says. The phonetic transcription here is one among several possibilities.

Transcriptions are helpful tools to help language learners master pronunciation. The preceding discussion was intended as a refresher for some teachers and as a helpful discussion for teachers without a background in Phonetics and Phonology to prepare their own class activities for pronunciation drills.

Prosody: Intonation and Rhythm

Either intonation or rhythm can be described in details, but we will not get into these interesting details here. This discussion focuses on simple and general descriptions of both languages. In such a scope, some universal or common patterns can be helpful.

The general patterns of intonation in Spanish and Portuguese follow common patterns of intonation in world languages.

Falling intonation, a **toneme** represented as /↓/, usually indicates the **conclusion of an idea**, usually at the end of a sentence. This falling intonation usually appears as the last inflexion movement at the end of declarative sentences, linked to the last "content" word, as the word <Santo>, in <Sou de Vitória, Espírito Santo>. In Spanish, it is generally similar, as in the word <Perú> or <México>, in <Soy de Lima, Perú > or <Soy de Chihuahua, México>.

Tonemes that are either **Flat** /→/ or **slightly raising in intonation** /□ / can indicate **continuity**. An example would be the intonation of the underlined words in <Meu filho, passe no mercado e compre farinha de trigo, manteiga, café e pão> (Eng. Son, go to the market and buy flour, butter, coffee and bread). Usually, the word before the last in this list, <café>, will carry a relatively slightly higher rising intonation, in anticipation of the last

word in the list, <pão>, which concludes the idea, and as a result carries a falling intonation.

A **rising intonation** /↑/ usually means in Portuguese, Spanish, English and other languages a **yes-no question**, and in a way it also means **continuity**, because a question requires an answer, i.e. a continuity. If the parent in the preceding paragraph asked his son, <Você trouxe o café?> (Eng. Did you bring the coffee?), the answer will be either <sim> (yes) or <não> (no). The word <café> usually has a rising intonation. **This is what is common and expected**, but since intonation also reflects the **attitude** of the speaker, <café> may sometimes have a falling intonation, just as in Spanish. A falling intonation may signify a concern on the part of the parent, or other subtle meanings, e.g. a double check on what his/her son did, because s/he knows that the son is sometimes absent minded.

Likewise, some people, especially teachers who try to put students at ease when speaking with them, may try to make them feel comfortable, not threatened, by using different rising intonations where a flat or falling intonation would be expected. This is possible in Portuguese, Spanish or English, and it can be labelled as part of a **social prosody**.

As seen above, intonation in languages like Portuguese, Spanish and English is relatively simple in its limited contrastive meanings. There are, however, some interesting intonation patterns still being studied in these languages, which are not in the scope of this study and rarely discussed in an additional language classroom. Although this discussion called attention to the difficulty that some language students may find to learn the prosody of an additional language, speech prosody should not be an obstacle to Spanish speakers learners of Portuguese, because native speakers tend to intuitively accept and filter false prosodic notes of non-natives.

Stress Assignment in Portuguese

Stress assignment also contributes to create rhythmic patterns in a language. In general, words in Portuguese fall into a three-syllable window as follows (the little squares represent the syllable in words):

... □.□.□.□́ – oxytones, *por.tu.guês*;

... □.□.□́.□ – paroxytones, *di.fí.cil*;

… □.□́.□.□ – proparoxytones, *pa.ra.le.le.pí.pe.do*.

Similar to Spanish, paroxytone words in Brazilian Portuguese are considered the most common pattern. If we subscribe to this claim, we can consider paroxytones **unmarked**, and the two others as marked. This would explain why in the Portuguese and in Spanish orthography paraxytones do not have as many stress markers as much as proparoxytones and oxytones, the marked ones, do. It is also noteworthy that there are some unusual cases of stress in the

4th syllable in Portuguese, but these are limited to a couple cases of lexicon borrowings like "técnica", i.e. [té.ki.ni.ka].

Scholars (e.g. Mateus 1975; 1983; Bisol 1994; Cagliari 1999; Lee 2007) have tried to explain stress assignment in Portuguese with a single rule, based on the high occurrence of paroxytone words. These attempts, usually influenced by the generativist tradition in US linguistics, are still inconclusive. These explanations in Portuguese require excessive abstraction and solutions that create artifacts. Maybe the ongoing changes in Brazilian Portuguese nowadays (Roberts 1993, Tarallo 1993) are behind the difficulties one finds to describe stress assignment in a predictable manner. After all the efforts so far, it may be the case that stress assignment is not predictable in Portuguese as Câmara Jr. (1970 1972) already claimed many years ago.

Rhythm, Timing

The late Kenneth Pike (Pike 1945) and later Abercrombie (1967), used an explanation about rhythm, which can be very useful pedagogically, although it may face some challenges if this explanation is attempted to be tested empirically. Pike's goal, to his credit, was to provide a useful explanation about rhythm for teachers and language learners.

In this view, there are essentially two main types of rhythm, **stress-timed** and **syllable-timed** rhythms. English and Spanish are usually taken as references to best illustrate these timing notions. **English** is a typical **stress-timed** language, and **Spanish** is a typical **syllable-timed** language. According to this notion, we can use a metronome to time the reading out loud of prose by a native speaker of American English. A native speaker of English can read out loud a text stressing or beating the most proeminent syllables in a sentence, following a metronome. In Spanish, it would be harder for a native speaker to read a text aloud, following a metronome. In the classic example below, from Pike, these beats are indicated with the marker <′> on the most prominent syllables. Thus, the sentence

If ′Tom will ′I will

keeps the same timing, even if we add other syllables, as in

If ′Tom'll do it ′I will.

Notice that the number of syllables increased, but the number of beats are the same. In other words, the number of syllable feet are the same. In order to fit into this interstressed sequences, English reduces the number of sounds, reduces some sounds and lengthens others as needed, to fit the syllables in between stresses or beats. In this example, with the addition of <do it>, <will> becomes <ll>.

In Spanish, if the number of syllables increases, the tendency is to keep the sounds, increasing the length of the sentences, without segment reductions or lengthening as in English.

Si ′va a tocar ′Tom, i′remos.

Si ´va a to´car Tom Jo´bim, i´remos.

Pike claimed that is because Spanish is syllable-timed. There is a tendency among native speakers of Spanish to beat on as many syllables as possible and still maintain the sentence beats. Spanish strikes (or focuses on) primarily the syllables, whereas in English the beats are primarily at sentence level.

The interstress beats in English give the impression of a "chopping" rhythm. Hence the difficulty English speakers find in saying long words in Spanish, because they will attempt to cut long words into two or more words, causing vowel reduction, among other consequences, and a strong foreign accent. Brazilian Portuguese can be placed between these two prototypical types of rhythm depending on the regional variety. Peninsular Portuguese in general, tends to be more of a stress-timed variety, and this may explain why there are more vowel reduction in Peninsular Portuguese than in Brazilian Portuguese, especially in the production of schwas. In Brazilian Portuguese, we can find different rhythmic patterns, but in terms of the notions discussed here, it makes more sense to expect Brazilian Portuguese to oscillate between stress- and syllable-timed rhythms. The illustration below, may help to compare with English and Spanish. In Brazilian Portuguese, if we add one syllable, in the idiolect of the author, the number of syllables increases.

Se o ´Tom Jo´bim to´car eu ´vou.

Se o ´Tom Jo´bim for to´car eu ´vou.

Compare the poem by Robert Frost (1874-1963) below, and see how the number of feet is the same, whereas the number of syllables change.

Nothing gold can stay[30]

N**á**ture's first gr**ée**n is g**ó**ld, (6 syllables)

Her h**á**rdest h**ú**e to h**ó**ld. (6 syllables)

Her **éa**rly l**éa**f's a fl**ó**wer (7 syllables)

But **ó**nly s**ó** an h**ó**ur. (7 syllables)

Then l**éa**f subs**í**des to l**éa**f. (6 syllables)

So **É**den s**á**nk to gr**íe**f. (6 syllables)

So d**á**wn g**ó**es d**ó**wn to d**á**y. (6 syllables)

N**ó**thing g**ó**ld can st**á**y." (5 syllables)

In music, we find similar illustrations. Consider the tempo or timing in Tom Jobim's popular song "Garota de Ipanema." Notice that the words whose meanings are easier to understand, the so called "content words," are the ones that usually carry the sentence beats, but not necessarily always.

´O.lha, que ´coi.sa mais ´lin.da

Mais ´cheia de ´gra.ça

É ´e.la me´ni.na que ´vem e que ´pa.ssa

Num ´do.ce ba´lan.ço ca´mi.nho do ´mar.

[30] I thank my colleague, Jonathan Mayhew, for the suggestion to use Frost's poem.

In Brazilian Portuguese, we can tap on prominent syllables at the sentence level and also on the syllables.

The preceding discussion is based on Pike's view of rhythm in natural languages, and it is provided here because it is a useful approach in language teaching. However, current empirical work that I have been conducting (Simões and Meireles, forthcoming) shows that **both** syllable-timed and stressed-timed rhythms exist not only in Spanish, but also in Portuguese, English, French and Italian, depending on the situation or on the intent of the speaker.

Phonological Processes: Linking

A very common phonological process in Portuguese and in Spanish is the linking of the last consonant of a word with the following vowel of the next word, as follows.

Portuguese

- Sim… Mais ou menos. (Yes… more or less.)

/s\s\upper (˜ → | ˊmais#ou#ˊmɛ.noS ↓ /

[s\s\upper (˜ → | ˊmaⁱ.zoˊm\s\upper 1 (˜.nus ↓]

Spanish

- Sí… Más o menos. (Yes… more or less.)

/ˊsi → | ˊmas#o#ˊme.nos ↓ /

[ˊsi → | ˊma.so.ˊme.nos ↑↓]

The /s/ after <mais> in Portuguese, and <más> in Spanish links to the following vowel. Note that in Portuguese it changes to [z], a common process in intervocalic context. In Spanish, the /s/ remains [s], after linking happens. In this case, if Spanish speakers do not change /s/ to [z], s/he will have a strong accent, although it does not affect the meaning in this case. However, sometimes surfacing an illegal [s] in Portuguese, in a linking, can disturb communication and sometimes change the meaning of the message. For example, in the sequence <dois hinos> (two hymns) already referred to earlier in this chapter, if one does not change the /s/ to [z] as [ˊdoⁱ.ˊzi.nus], the meaning is different, that is to say, <dois sinos> (two bells), [ˊdoⁱ.ˊsi.nus].

Concluding Remarks

This chapter compared basic elements of pronunciation in Spanish and Brazilian Portuguese. Although it is based on current theoretical descriptions of Spanish and Brazilian Portuguese, these descriptions were simplified to facilitate the development of pedagogical tools for learners of Brazilian Portuguese. Given its bilingual nature, this study may also be of interest to heritage speakers of both languages as noted in Beaudrie, Ducar and Potowski (2014 212). Furthermore, parts of this study can serve as preliminary materials to teach speakers of BP learning Spanish, if one understands that the strategy discussed here will follow a reverse path. For

instance, if a speaker of Spanish learning BP is instructed to pronounce Portuguese stops <b d g> with more articulatory effort, a speaker of BP learning Spanish will be instructed to make these consonants less effort. In principle, once we undertand how the sound patterns of Brazilian Portuguese work in comparison with Spanish, it should not be difficult to follow the reverse path to discover how Spanish works for speakers of Brazilian Portuguese. This chapter did not go into the specifics of this strategy, because it was not the goal of this book project.

This chapter dealt with pronunciation only, because this is most likely the first step a Spanish speaker needs to take to learn Portuguese. Obviously, there are other language components of interest for the speaker of Spanish, such as morpho-syntax, as seen in other materials (e.g. Simoes 2008). I hope that teachers and students will find this chapter useful for their teaching and learning of Brazilian Portuguese.

References

Azeredo, José, et al. (2011), *Gramática comparativa Houaiss: Quatro línguas românicas*, São Paulo, Editora Publifolha.

Azevedo, Milton M. (2005), *Portuguese: a Linguistic Introduction*, Cambridge, Cambridge University Press.

Beaudrie, Sara, Cynthia Ducar and Kim Potowski. 2014. *Heritage Language Teaching: Research and Practice – McGraw-Hill second language professional series: Directions in second language learning*. New York, NY: McGraw-Hill Education.

Bisol, Leda (1994), *O acento e o pé métrico binário*, Letras de Hoje 98, 25-36.

Bisol, Leda (org.) (2005), *Introdução a estudos de fonologia do português brasileiro*, Porto Alegre, EDIPCURS.

Cagliari, Luiz Carlos (1999), *O acento em português*, Campinas, Editora do Autor.

Câmara, Jr., Joaquim Mattoso (1970), *Estrutura da língua portuguesa*, Petrópolis, RJ, Vozes.

——. (1972), *The Portuguese Language*, Chicago, University of Chicago Press.

Domahs, U., I. Plag and R. Carroll. (2014) Word stress assignment in German, English and Dutch: Quantity-sensitivity and extrametricality revisited. In *Journal of Comparative Germanic* Linguistics, 17, 1, 59-96.

Ferreira, Letânia and D. Eric Holt (2014). On the partially divergent phonology of Spanish, Portuguese and points in between, in *Portuguese-Spanish Interfaces: Diachrony, synchrony, and contact*, in Patrícia Amaral and Ana Maria Carvalho, editors. John Benjamins Publishing Company

Jensen, John B. (1989), *On the Mutual Intelligibility of Spanish and Portuguese*, Hispania 72, 848-852.

Lee, Seung-Hwa (2007), *O acento primário no português: Uma análise unificada na Teoria da Otimalidade*, in: Gabriel Antunes de Araújo (ed.), *O acento em português: Abordagens fonológicas*, São Paulo, Parábola Editorial, 121-143.

Ladefoged, Peter and Keith Johnson (2014), *A course in Phonetics*, 7th Edition, Stamford, CT, Cengage Learning.

Landercy, Albert, and Raymond Renard (1977), *Éléments de phonétique*, Bruxelles, Belgium, Didier.

Mateus, Maria Helena Mira Mira (1975), *Aspectos da fonologia portuguesa*, Lisboa, Centro de Estudos Fonológicos.

——. (1983), *O acento de palavra em português: Uma nova proposta*, Boletim de Filologia 27, 211-229.

Molczanow, J., Domahs, U., Knaus, J. & Wiese, R. (2013) The lexical representation of word stress in Russian: Evidence from event-related potentials. *The Mental Lexicon*, 8, 164- 194.

Núnez Cedeño, Rafael A. and Morales-Front, Alfonso. *Fonología generativa contemporánea de la lengua española.* Washington, D.C.: Georgetown University Press, 1998.

Pike, Kenneth (1945), *The intonation of American English*, University of Michigan Publications in Linguistics 1. Ann Arbor: University of Michigan Press.

Plag, Ingo. (2006) The variability of compound stress in English: structural, semantic, and analogical factors. *English Language and Linguistics* Volume 10 Issue 01 / May 2006, 143-172.

Roberts, Ian (1993), *Pósfácio*, in: Ian Roberts/Mary A. Kato (edd.), *Português brasileiro: Uma viagem diacrônica*, 2a edição, Campinas, SP, Editora da UNICAMP, 409-425.

Roberts, Ian/Kato, Mary A. (1993), *Português brasileiro: Uma viagem diacrônica*, 2a edição, Campinas, SP, Editora da UNICAMP.

Roca, Iggy M. (1990) "Diachrony and synchrony in Spanish stress", *Journal of Linguistics* 26: 133–164.

——. (1999), *Stress in the Romance Languages*, in: Harry van der Hulst (ed.), *Word Prosodic Systems in the Languages of Europe*, Berlin, Mouton de Gruyter, 659-811.

——. (2006) "The Spanish stress window", in F. Martínez-Gil & S. Colina (eds.), *Optimality-theoretic advances in Spanish phonology*, Amsterdam: John Benjamins. 239-77.

Silva, Thaïs Cristófaro (2005), *Fonética e fonologia do português*, 8a edição, São Paulo, Editora Contexto.

Simões, Antônio R.M. (2008), *Pois não: Brazilian Portuguese Course for Spanish Speakers, with Basic Reference Grammar*, Austin, University of Texas Press.

——. (2013), *Baticum! E-Curso avançado de português para estrangeiros através da*

MPB, Creative Commons, in: http://www.merlot.org/merlot/viewMaterial.htm;jsessionid=3E5CC8A19295C1135AFC4636A34EC343?id=732260, (10.07.2013).

——. 2014. Lexical Stress in Brazilian Portuguese in Contrast with Spanish. In Campbell, Nick, Dafydd Gibbon and Daniel Hirst, editors, *Annals of the Speech Prosody Conference # 7*. Dublin, Ireland, Trinity College: 251-255. http://www.speechprosody2014.org/

——. 2016 (in print). Stress assignment contrasted in Spanish and Brazilian Portuguese prosodic non-verbal words. Chapter Three, in *Courses on Speech Prosody*, Alexsandro Rodrigues Meireles, editor. London: Cambridge University Press, 33-51.

Simões, Antônio R.M. and Alexsandro R. Meireles. (in progress). Speech Prosody in Musical Notation: Spanish, Portuguese and English.

Sosa, Juan Manuel. (1999) *La entonación del español: su estructura fónica, variabilidad y dialectología*. Madrid: Cátedra.

Tarallo, Fernando (1993*), Diagnosticando uma gramática brasileira: o português d'aquém e d'além mar ao final do século XIX*, in: Ian Roberts/Marx A. Kato (edd.), *Português brasileiro: Uma viagem diacrônica*, 2a edição, Campinas, SP, Editora da UNICAMP, 69-106.