Prosody, Phonology and Phonetics

Series Editors

Daniel J. Hirst, CNRS Laboratoire Parole et Langage, Aix-en-Provence, France

Hongwei Ding, School of Foreign Languages, Shanghai Jiao Tong University, Shanghai, China

Qiuwu Ma, School of Foreign Languages, Tongji University, Shanghai, China

The series will publish studies in the general area of Speech Prosody with a particular (but non-exclusive) focus on the importance of phonetics and phonology in this field. The topic of speech prosody is today a far larger area of research than is often realised. The number of papers on the topic presented at large international conferences such as Interspeech and ICPhS is considerable and regularly increasing. The proposed book series would be the natural place to publish extended versions of papers presented at the Speech Prosody Conferences, in particular the papers presented in Special Sessions at the conference. This could potentially involve the publication of 3 or 4 volumes every two years ensuring a stable future for the book series. If such publications are produced fairly rapidly, they will in turn provide a strong incentive for the organisation of other special sessions at future Speech Prosody conferences.

Antônio Roberto Monteiro Simões

Spanish and Brazilian Portuguese Pronunciation

The Mainstream Pronunciation of Spanish and Brazilian Portuguese, From Sound Segments to Speech Melodies

Springer

Antônio Roberto Monteiro Simões
Department of Spanish and Portuguese
University of Kansas
Lawrence, KS, USA

To Peter F. MacNeilage,
my former teacher and mentor

Preface

These materials are largely based on my notes, books, and materials from my time as a graduate student at the former Institute of Phonetics of the University of Aix-Marseille in Aix-en-Provence, France in the 1980s. Then, as the manuscript grew, I realized that I had lagged behind what was happening in Phonetics, particularly in Speech Prosody, and had a lot to update. For this reason, around 2013 I began working on Speech Prosody, and I have continued to work in this area ever since. The writing process of this book helped me organize my ideas about Phonetics, especially the use of musical notation and musical theory to analyze speech. It is thanks to this writing process that I have become optimistic about finding solutions to make the most of the use of musical notation to describe prosody of speech.

Thus, one of the reasons that prompted me to turn my postgraduate notes into a book was the opportunity to revisit concepts in Phonetics that continue to make me wonder. As a result, some of the views that I offer do not resonate—to borrow an acoustical term—with the views of some of the authors in my bibliography. This dissonance is especially true in the case of the existing descriptions of Spanish and Portuguese, some aspects of which I refute in this discussion. I dispute some traditional views, as in the case of the articulatory feature **retroflex**, which I believe is not a straightforward place of articulation. My view goes against its presentation on the IPA Chart, which is adopted by Ladefoged and Johnson (2016, pp. 175–176), and likely many phoneticians. The feature retroflex fits so conveniently on the Place of Articulation axis of phonetic charts that no one seems inclined to bother with changing it. In my view, the tip and blade of the tongue constitute an area of articulation remarkably different from the other articulatory areas of the vocal tract. It has a flexibility of controlled movements which is unparalleled in the vocal tract. Thinking of the lamina as a privileged articulatory area due to its flexibility leads me to see it as a potential fourth axis, or a fourth dimension in sound production. However, given how unpractical it is to add another axis to a chart or to descriptions in general, it might be wise to leave things as they are, at least for practical reasons, and to simply keep in mind this alternate view. This is the attitude that is reflected in my charts.

Where I do not agree with commonly accepted views, I offer alternatives. For example, I describe the realization of nasal vowels as open-mid, in contrast to their traditional description of close-mid vowels. In other words, I argue that both vowel realizations are possible in Brazilian Portuguese although for me it is easier to produce the open-mid [ɛ̃] and the open-mid [ɔ̃] than their corresponding close-mid [ẽ] and [õ]. Furthermore, I call for caution in the recent trends to include in Brazilian Portuguese the **schwa** as an established realization, and the **glottal fortis-r** as the predominant realization of the several **fortis-r** of the Portuguese rhotics. It is still premature to suggest a generalized presence of a schwa in the phonetic or phonological descriptions of Brazilian Portuguese. A schwa may be developing in some of the Brazilian varieties, but it is not yet an established, widespread phenomenon in Brazilian Portuguese. The **velar fortis-r** is still a wise description for Brazilian Portuguese although the glottal fortis-r has a strong presence in Brazil. I ask myself whether the **glottal fortis-r** is more common in academic circles and other populations where the English language is commonly taught or spoken—i.e., a result of languages in contact. These and other varying interpretations of the pronunciation in Spanish and Brazilian Portuguese lead me to use the careful mainstream registers of these languages as the reference.

A schwa in English, for example, is integrated into the structure of the English language as a system. It does not surface sporadically. In Brazilian Portuguese, if there is a schwa, it only happens in posttonic position in some dialects and registers and in alternation with other vocalic realizations. The Brazilian Portuguese language system has not yet consolidated the schwa into its linguistic structures although it might happen in the future. To borrow an expression from Saussure, the schwa is not yet *un élément organique du système linguistique* (the schwa is not yet an organic element of the linguistic system).

I observe that generally in Spanish (not the accurate Spanish of Northern Spain and a few highland areas of Latin America), the predominance of the approximant feature of voiced stop consonants is so far-reaching in spontaneous discourse that phonological rules should have these approximants as the underlying base representation, instead of the occlusive (stop) voiced consonants that we are accustomed to seeing in descriptions of Spanish. Except in Hispanic academic circles, the stop consonants of Spanish tend to occur more frequently due to reinforced pronunciation, which is a common trait in Spanish in general. As an illustration, the traditional Spanish pronunciation rule to describe changes in the non-nasal voiced bilabial consonant could be:

The approximant consonant phoneme /β/ becomes the stop consonant allophone [b] when it appears on a stressed position after a pause or after a nasal consonant. Otherwise, it remains the approximant [β].

This description above reverses the traditional description, which states that:

The stop consonant phoneme /b/ remains the stop [b] when it appears after a pause or after a nasal consonant. Otherwise, it becomes the approximant allophone [β].

It will become apparent in these discussions that I insist on reminding the reader that language is a **dynamic**, or a "living organism," to borrow Wilhelm von Humboldt (1767–1835)'s remark. Because languages are living organisms, the behavior of their speakers can surprise. In that sense, all phonological rules are trends that often may not apply in everyday life. They may be *expected* to apply, however. For this reason, the term **dynamic** permeates this book, in contrast with the **static** view of linguistic phenomena based on the observation of citation forms, in which phonological rules apply with greater certainty. Most of the remarkable realizations accomplished in the history of Phonetics (and Linguistics) used data from static or quasi-static speech. The Weber-Fechner Law, for example, was a groundbreaking accomplishment for its time although it was based on pure sounds. The International Phonetic Alphabet is based on the observations of static speech. There are many other examples that can confirm the importance of static speech. Even so, this book is an attempt to move in the direction of dynamic speech. One step to move in the direction of dynamic speech is the work with musical notation.

The first of the two descriptions in italics (above) reflects the reality of Latin American Spanish varieties as living organisms. In dynamic spoken Spanish, the occurrence of stop consonants may be more easily observed among bilingual college teachers, or in the university-educated circles of certain varieties of Spanish, such as Galician or Catalan Spanish, and in some mountain areas of Latin America, some northern areas of Spain, as well as in the Spanish of some individuals who elect to speak with tenser (as opposed to lax or laxer)-articulated speech sounds, once they become aware of the common softening of occlusives and other speech sounds in Spanish, which they may perceive as socially non-prestigious pronunciation.

This is the reality throughout the Spanish-speaking world, but this reality comes with a caveat. Perhaps the educational systems of most Spanish-speaking countries do not wish to promote lax habits of pronunciation that will result in outputs like the first rule in italics (above) among native speakers for fear that Spanish will become a *lengua floja* in both the informal and formal registers, given that extreme softening or deletion of occlusives may not carry social prestige.

Despite the current tendencies, it is common practice among linguists of Spanish to preserve a stop consonant as the base representation, to accommodate the expectations of traditional descriptions. Which base representation of phonemes to use depends on the situation. For first language (L1) educational, and particularly literacy, purposes, it may be suggested to consider the goals, cultural preferences, and public policies, among other factors. The base representation must weigh the interests of a country's educational program. For most of the other purposes or applications, for example, the teaching of additional languages (L2), Voice Recognition, Speech Synthesis, Sociolinguistics, Artificial Intelligence, Machine Learning, and many others, both representations should be considered.

The chapter on the use of musical notation offers an analysis of speech prosody that is not yet widely used, due to the presumed limitations of traditional musical notation in describing speech segments and prosodies, or perhaps because of the lack

of musical training among researchers in Linguistics and Phonetics, or possibly due to preferences among phoneticians for other notational alternatives.

The chapter on musical notation is a result of a project that I started in 2013. A few years later, I was fortunate to have Alexsandro Meireles of the Federal University of Vitória in Brazil join forces with me in this new area of research. This book makes use of the materials developed with Alexsandro in our collaborative work, along with my recent work. Other scholars have more recently joined us in the use of musical notation. I began learning about music theory around 2014 because of my research interest in musical notation. In addition to using musical notation in the analysis of speech, I intend to work on ways to make musical notation in Linguistics more accessible so that anyone—specialists or non-specialists, linguists or non-linguists—can make use of and benefit from speech analysis through musical notation, in the hope that the benefits of such studies will not remain confined to hermetically closed groups of specialists. My goals with musical notation have driven me to develop a collaborative work with Nicolas Obin and to integrate the findings of his research team at the Ircam (Institut de recherche et coordination acoustique/musique (French Institute for Research and Coordination in Acoustics/Music.) - https://www.ircam.fr/), in 2019.

The use of accurate or careful speech for reference is not intended to be a theoretical proposal or a proposal to establish language norms for Brazilian Portuguese and Spanish. It is the revisiting and strengthening of an existing concept that is useful in the context of this work. The Introduction discusses the rationale for choosing the mainstream as a benchmark. A similar idea already exists for Spanish under the name of General Spanish or Spanish of the *altiplanos* or *zonas alteñas* (highlands) of Latin America. Both terms Mainstream Spanish (MSp) and Mainstream Brazilian Portuguese (MBP) are used alternately with the terms "Spanish," "Portuguese," and "Brazilian Portuguese," when applicable. However, the terms Mainstream Spanish and Mainstream Portuguese are also reminders of the accurate and still natural-sounding default style/register used as the point of reference throughout this book.

The content of this publication is of interest to research in the fields and sub-fields of Phonetics, Phonology, Speech Prosody, Phono-audiology, Linguistics, Music, Literacy, Speech and Hearing Sciences, Voice Recognition, Speech Synthesis, Sound Analysis, Bilingualism, Heritage Languages, Teaching of Typologically Similar Languages, and readers in the sciences with interest in basic information about pronunciation in Spanish and Brazilian Portuguese, with some brief references to Peninsular Portuguese.

Lawrence, KS, USA   Antônio Roberto Monteiro Simões

Introduction

The use of the Mainstream Pronunciation of Spanish and Brazilian Portuguese as a benchmark brings into focus the accurate and still natural-sounding pronunciation of college educated native speakers of Spanish and Brazilian Portuguese. Both **mainstream** registers are used as the points of departure to observe changes in Spanish and Brazilian Portuguese. These registers or styles are referred to as either **MSp** and **MBP** or **Mainstream Spanish** and **Mainstream Brazilian Portuguese**, respectively. They are defined primarily in terms of their *sound segments*, and less for their **prosodies**. **Prosodies** include, among others, intonation, and rhythm (see **prosody**). Their overall patterns of intonation, for example, are suggested to include the common four basic patterns found in most of the world's languages as described below because it is difficult to agree and decide on workable and teachable patterns of intonation and rhythm in Spanish and Portuguese.

The reader may infer the general meaning of the term "mainstream," which is implicit in the first sentence of the preceding paragraph. Even so, the meaning is still vague, especially in a comparison of Spanish and Portuguese. In order to minimize the vagueness of the existing definitions, I would like to outline the defining features of the **sound segment** inventory and features of **MSP** and **MPB**. This comparison is attempted below using a selected list of features.

Mainstream, either MSp or MBP, does not mean a speaking mode without variation. It is a reference that can (1) serve as a model of pronunciation, depending on the intended applications, and (2) be used as a reference point in analysis of any output of the Spanish and Portuguese pronunciation. The choice of a mainstream register as the reference point is not due to the social prestige that a mainstream register may or may not have. Rather, it is because these spoken registers are closer to the Spanish and Portuguese written language. When the written language is strikingly different from the sound it represents, as in the case of Brazilian Portuguese syllable final-l and -m, for example, the represented sounds tend to be consistent with the spelling. The associations between letters and the sounds they represent in these two language registers are not a one-to-one correspondence, as is the case with the graphic symbols used in Phonetics and Phonology. Nevertheless,

this relationship is much closer than in the many language varieties in which consonants and vowels undergo extreme changes in quality. This rationale applies more easily to accurate Spanish than to accurate Brazilian Portuguese; still, this concept of mainstream register is useful for Brazilian Portuguese as well.

The mainstream is not a dialect. It is an idealized register based on several Latin American Spanish dialects and Brazilian Portuguese dialects whose pronunciation is closest to the written language. Resorting to the written language to explain the main register has a practical rationale. For one, it is useful to use the written language because all literate native speakers use it. Additionally, it promotes an awareness of the difference between graphic symbols used in orthographic (writing), phonetic, and phonemic representations.

Defining the Mainstream Registers of Brazilian Portuguese and Spanish: Specific Features

Some of the anchor points that characterize MSp and MBP pronunciation:

The **pronunciation component of MSp** is mainly characterized by a system of five oral vowel phonemes with minimal or no significant change in their quality and two semi-vowels. It has 19 consonants, including /j/ and /w/. The vowels are relatively stable, compared to English and Portuguese. The voiced stop consonants are unstable, i.e., they change to approximants or fricatives, but the changes are not extreme, as is frequently observed in many varieties of Spanish, where some consonants tend to be deleted or almost deleted. MSp uses the **seseo** and **yeísmo** (see Glossary). The consonants /l/, /m/, /n/, /ɾ/, and /s/ in syllable initial and final position are pronounced as [l], [m], [n], [ɾ], and [s], respectively. The consonants /t/ and /d/ are dental. The basic intonation patterns of reference tend to convey (1) finality (with a falling sentence contour); (2) continuity (with various degrees of semi-rising contours and conceivably a flat contour); (3) yes-no questions (with rising contour); and (4) an open question, i.e., a question that requires explanation, definition, or some other type of response (with a falling contour). These contours are the starting point of reference. They may vary depending on the situation and attitude of the speaker. The predominant rhythmic *unit* is the syllable, which results in a *tendency* to produce frequent patterns of a **syllable-timed rhythm**. In other words, MSp speakers commonly mark or beat on the syllables reinforcing the syllable nuclei, thus producing relatively more articulated and stable vowels.

The **pronunciation component of MBP** is characterized primarily by a system of seven oral vowel phonemes varying significantly in quality (except the two open vowels), five nasal vowels, two oral semi-vowels, and two nasal semi-vowels. The vowels are relatively unstable, compared to Spanish vowels. There are 19 consonants. The MPB occlusive consonants are relatively stable, in the sense that they undergo no change to approximants or fricatives, as occurs in Spanish. The consonants /t/ and /d/ are alveolar, and this alveolar gesture facilitates the palatalization of these two sounds when followed by the sound [i]. Their dental articulation in some language varieties, for example, does not facilitate palatalization when followed by [i]. The liquid consonant /l/ changes to a u-like sound in syllable-final position. Although in Portuguese the pronunciation of the letter <r> in word-initial position and the digraph <rr> vary widely, their predominant pronunciation in MBP is the voiceless velar fricative /x/, which can vary on a continuum of pronunciations from this voiceless velar consonant /x/ to a voiceless glottal /h/. The word-final sequences of V+/s/ are

pronounced either as v+[s] or v+semi-vowel [^{i}] + [s], e.g., <três> is produced either [´tres] or [´trei̯s]. The palatal-s, a common pronunciation in Rio and other Portuguese varieties, is not a feature of MBP. The basic overall intonation patterns of reference are similar to those of MSp, and they are also starting points of reference for the phonemic base form. They may vary phonetically depending on the situation. The predominant rhythmic *units* vary mainly between the sentence stress (**stress-timed**) and the syllable (**syllable-timed**), depending on the situation and attitude of the speaker.

The MSp and MBP registers are not fixed (i.e., without variation) speaking registers. They are intended to represent a flexible register of reference that can (1) serve as a model of pronunciation, depending on the intended applications, and (2) be used to observe any Spanish or Portuguese pronunciation output. The mainstream is an idealized register based on several varieties of Latin American Spanish and Brazilian Portuguese whose pronunciation is closest to the written language. Although written communication does not mirror the cognitive reality of spoken communication, it does carry some degree of correspondence between the graphic symbols and the sound segments of the spoken language. The degree of correspondence varies depending on the language, language varieties, and speech acts. The level of correspondence between spoken MSp and written Spanish is not perfect; however, it is close enough to be useful in a variety of applications.

One of the reasons for selecting the mainstream register is its practical application to all areas dealing with speech, from speech synthesis to language classroom teaching and learning, as well as its potential to yield valuable theoretical insights. The two mainstream models, MSp and MBP, are characterized by accurate production of speech segments. Other types of pronunciation are discussed in relation to the accurate pronunciation register of both languages. The terms **accurate** and **careful** are used synonymously to refer to the more clearly articulated pronunciation found in MSp and MBP. One often thinks of register or style as the difference between *tú* and *Ud* in Spanish, or *você~tu* and *o Senhor* in Brazilian Portuguese. In this book, **register** is the same as **style**, which can shift gradually from most formal to most casual, beyond the use of these personal pronouns (along with other pronouns) to indicate changes in register. For instance, in addition to pronoun changes, differences in pronunciation, choice of words, and sentence structure also characterize a register. A register is not necessarily the same during **speech acts**. A speaker may shift from a predominant register to another, depending on the demands of the situation. Lombardi and Peters (1981, p. 143), cited in Whitley (2002, p. 330), include an interesting illustration of speaking styles that has been adapted here. The examples below may not work for all native speakers of Spanish, but they can still help to understand speaking registers. The sentences suggest three registers to express the idea that a woman is expecting a baby in Spanish. As pointed out by Whitley, in academic contexts and in other contexts, the word **vulgar** in Spanish means something common. Vulgar Latin, for example, is not a Latin language variety composed of curse words, but the spoken language of the common Roman people.

Extremely Formal and Polite: *Está en estado interesante*. (She is in an interesting state)
Colloquial or informal: *Está encinta* or *embarazada*. (She is pregnant)
"Vulgar": *Está preñada*. (She is pregnant or literally "impregnated")

In Brazilian Portuguese, some of the comparative expressions are as follows:

Formal: *Está grávida* or *Está esperando um bebê*.
Informal, colloquial: *Está/Tá grávida* or *Está/Tá esperando um bebê*.

Note that the same expressions can be used in formal and informal registers. *Está* tends to reduce to *Tá* in the informal style more frequently than in situations of formal style.

In very casual situations, such as among friends, one might playfully say:

(Es)Tá de barriguinha or *Tá de barriguinha(, heim!?)*
    (You have a little belly, (eh!?))

Women (generally not men) can also say, informally, *Estamos grávidos* (He and I, we're pregnant).

These informal expressions in Brazilian Portuguese can alter the nuances of informality even more, depending on the context and prosodic touch. For example,

Tá de barriga, Comeu/Engoliu uma melancia, Tá embuchada, Tá embarrigada.
    (You caught/have a belly, You ate a watermelon, You are belly-clogged,
    You had a bellyful of food, etc.)

Extremely informal and tasteless, and possibly offensive:

Tá prenha (a term stigmatized by most people in urban areas because it is normally used for animals)

These illustrations not only demonstrate different possible vocabulary and sentence structures, but also how the same vocabulary and sentence structure may be used in more than one style. However, in these cases, the pronunciation of the same words shifts, a phenomenon also seen in the English varying pronunciations of *Could you not find them?* in careful registers and the colloquial, fast-paced corresponding *Couldncha findem?*, or in Spanish *Es solamente para el resfriado* and *Pal refriao nomá*, taken from Whitley (2002, p. 330). Likewise, Brazilian Portuguese has similar pronunciation changes (as in any language), such as *Tá* for *Está*, *Pó pô um poquim mais* for *Pode por um pouquinho mais*, *Pópassassim* for *Pode passar sim*, and many others. When we do not understand colloquialisms or fast-paced speech acts in an **additional language**—i.e., L2, the naturally sounding accurate pronunciation could make the sentence more likely to be understood.

Speech acts are *intended* vocal tract gestures that may or may not reach their full phonetic targets. The intended linguistic targets imagined in **MSp** and **MBP**[1] are the natural-sounding phoneme realizations (i.e., speech sounds as the performance or realization of phonemes) in the coherent discourse of Spanish and Brazilian Portuguese. With these targets in mind, it is possible to study the sound variations. *The Pronunciation of Mainstream Spanish and Brazilian Portuguese: From Sound*

---

[1] As explained earlier, these abbreviations mean Mainstream Spanish and Mainstream Brazilian Portuguese. The abbreviations and the full expressions are used alternatively as needed.

Segments to Speech Melodies explores traditional and non-traditional methods in order to understand the sound systems of Spanish and Portuguese.

The first time that I heard the term **dialect** as an undergraduate student, and looked it up, it made me wonder. At the same time, I came across the term **regional variation**, which sounded like the same concept and an easier and safer term to use. It looked simpler and fitting in all contexts, unlike the word dialect. Unsurprisingly, I have been using the term regional variation since, rather than dialect. *Dialektos*, the original Greek term, has a long history of varying interpretations. Regional variety is easier to understand without requiring much explanation for languages like English, Spanish, and Portuguese. Someone who has never studied Linguistics or heard either term will intuit immediately what a regional variety means but may wonder about the term dialect. There is, of course, more to it than simply choosing one term over the other, but I will not discuss additional reasons for preferring regional variety over dialect here.

The term **regional variety** can be briefly defined in relationship to the definition of dialect, with a few additions: A **regional variety** is a subset of a language. The regional variety has its own pronunciation in the linguistic community to which it belongs. It has some lexicon and morpho-syntactic systems specific to its linguistic community. Although a regional variety develops independently of the language of which it is part, it is not a language because it has not acquired its own social, cultural, and political status. A **regional variety** is *the means of communication of a* **linguistic community** *that is characterized by its* specific *linguistically significant patterns in at least the pronunciation and lexical components relative to another linguistic community or other communities within the same universe of a larger linguistic community. Regional varieties tend to be, but are not necessarily, mutually intelligible.* From the preceding definition, it follows that languages and their regional varieties are **dynamic**, and as such may or may not be mutually intelligible.

The above definition of regional variety implicates another important definition: the definition of language. After all, a language is the result of significant changes in and beyond the linguistic system of a regional variety. **Language**, in the sense of the French jargon **langue**, is *a means of communication, a system of vocal* **signs** *specific to the members of the same linguistic community* ("une langue est un instrument de communication, un système de signes vocaux spécifiques aux membres d'une même communauté" (Dubois et al., 1973). Given these definitions of regional variety and language, the concept of **language** can be rephrased as *a means of communication, shared by a linguistic community, that is characterized by its* specific, *linguistically significant speaking patterns in at least the pronunciation, lexicon, and morpho-syntactic domains of the language*. Certain languages may have some limited degree of intelligibility, especially if they are typologically similar. In general, if not typologically similar, they are not **mutually intelligible**.

The notion of **mutual intelligibility** in languages typologically similar, like Spanish and Portuguese, must be observed with caution. Often speakers of Portuguese who have never studied Spanish say that they understand Spanish. Spanish speakers may claim the same about Portuguese. However, these beliefs, if they are indeed correct, must be contextualized. The layman in the urban areas of Portuguese- and Spanish-speaking countries, that is to say the majority of native speakers, does

not have the linguistic skills that one will find in a university environment. Native speakers of Portuguese and Spanish who have lived or studied abroad usually have more sophisticated linguistic skills than most of the population where they live. Consider, for example, a study on mutual intelligibility taking place on a university campus in the United States. In such an environment, the likelihood that the two groups understand each other is far greater than in average groups in Portuguese- and Spanish-speaking countries. The Portuguese- and Spanish-speaking populations in US academia tend to demonstrate a mutual intelligibility that does not represent most of the population of native speakers of Portuguese or Spanish.

Regardless of the population analyzed, examination of the phenomenon of mutual intelligibility requires caution. In academic circles, Portuguese and Spanish speakers who claim to understand each other's language without studying these languages usually mean that they are happy or/and surprised to find that they can understand a great deal. Their mutual understanding, however, is limited to certain situations. For example, soccer players who are native speakers of Spanish and Portuguese are in a maximized situation to understand one another while playing on the field, aided by the pressures of the context. Language aptitude and other factors may facilitate the mutual understanding of the other language without previous extended classroom contact with the language. But in general, the understanding may be limited to the written language, and to the spoken language in greetings, some coinciding lexical expressions and single words, or yet an understanding that may be lottery guesses. In some cases, the same form has the same or a similar meaning, but in other cases, the meaning of a word that sounds the same differs to such an extent that it is more likely to be used in multilingual puns. When normal conversation about topics outside the sphere of the speaker's knowledge takes place, the level of mutual intelligibility may be lower.

The idea of **language variety** requires additional tuning. In order to make observations on how an item varies, a point of reference is necessary to draw conclusions from those observations. Intuitively, people tend to use their micro-language (or idiolect) or the macro-language of their linguistic community as a reference. However, if they use their micro- or macro-language as a reference, their conclusions will necessarily be biased. Is the Spanish spoken in Bogotá a variation of the Spanish spoken in Buenos Aires, or is it better to say that the Spanish spoken in Buenos Aires varies relative to the Spanish spoken in Bogotá? Likewise, against what benchmark should variations in Dominican Spanish be measured? Does the Spanish spoken in Madrid or Castilla and León vary in terms of a Mexican Spanish benchmark, or do all forms of Spanish spoken today radiate from Castilla and León?

The judgment of linguistic variation based on a micro-language (idiolect) or a macro-language of a given linguistic community is biased in electing a specific region or city as a benchmark against which all other varieties of that language are compared; nevertheless, this is something that one sees occasionally. On the other hand, benchmarks are necessary to discuss language varieties.

To minimize biases, this book uses a language benchmark for Spanish that is a combination of some of the general features of the language versions spoken in several regions of various Spanish-speaking countries. Which criteria would be fair to use? The idea of a **general Spanish**, which is based on the Spanish spoken in the former centers of the colonial vice-royalties of the Spanish crown, seems like a good point of departure. Most of these centers are urban areas that developed in the mountainous regions of Latin America, such as the cities of Guadalajara and México City, D.F. in México, Guatemala City in Guatemala, Quito in Ecuador, Lima in Peru (although Lima is at about sea level), Bogotá in Colombia, and La Paz in Bolivia. It is a useful convention. The idea is not new and has been used by other authors (e.g., Teschner, 2000). What is, however, probably new in relation to this general Spanish is the reference to the precise register employed by speakers of this general Spanish of the highlands. The main pronunciation characteristic of these speakers is that their Spanish is most closely related to the written language, as well as the general language of a large Spanish-speaking population. Obviously, it is not a "phonetic language," as we sometimes hear people say of Spanish, but it is easier to relate this spoken mainstream register to the written language. Other varieties of Spanish tend to change or eliminate the pronunciation of the written consonants, for example, in ways that may be culturally stigmatized. There is also a pedagogical advantage to using this imaginary register as a point of departure to teach language before discussing language varieties in the classroom as students progress in their language proficiency skills.

A similar convention is used for Brazilian Portuguese. It should be easier to propose the idea of a general register in Brazil because it is one country, and there is a precedence to promote this type of pronunciation. In 1937, at the *Primeiro Congresso Brasileiro da Língua Falada*, Brazilian scholars organized a national meeting to decide on a Brazilian *norma culta* (educated norm) of pronunciation (*Anais do Primeiro Congresso Brasileiro da Língua Falada*, 1938). A final decision on which patterns of pronunciation should be adopted as normative was not reached. However, two of the suggestions made toward a norma culta were well received and still influence the strategies employed by national radio and television stations, such as the Brazilian Globo Television, in the selection of speakers. The two most influential varieties of Brazilian Portuguese at that time were spoken in the cities of São Paulo and Rio de Janeiro. Conference members agreed to eliminate the pronunciation of the *chiado* characteristic of Rio, and the **trilled-r**, typical of São Paulo, which has its roots in the **erre-caipira**. The **r-caipira** was socially stigmatized in the first half of the twentieth century. Now, however, it is not seen in the same way, and some influential cities like Campinas, in São Paulo, feature the r-caipira in their language variety. In fact, what we find in the speakers of Globo Television and other influential national broadcasting services today in Brazil is an accent that cannot be readily linked to any region or social stratum of Brazil. The pronunciation of these speakers excludes the **chiado** and **trilled-r**. The *chiado* is not a common term outside the Luso-Brazilian world. It is the popular nickname in Brazil for the pronunciation of the palatal-s in syllable-final position, typical of the pronunciation of Rio de Janeiro and a few other areas of Brazil. It was probably

brought to Rio de Janeiro by the 15,000 members of the Portuguese Court in 1808. The pronunciation of Brazilian Portuguese without the trilled-r and palatal-s is normally the form adopted by speakers of national broadcasts; it is also the variety examined in this book. In this type of accurate Brazilian Portuguese, the **alveolar-s** is pronounced, rather than the palatal-s, and the **velar-r** instead of the trilled-r. The correspondence between the spoken and written languages of any variety of spoken Brazilian Portuguese will not be as close as it is in Spanish, but it is also not as dramatically different as it is in the English language, abounding in dissimilarities between the written and spoken languages.

A primary motivation in selecting these registers for the two languages under consideration is that they take into account how similar the Spanish and Brazilian Portuguese spoken registers are to the written language. A second motivation for this choice is the usefulness of this spoken model in the classroom. For instance, one of the advantages for using the speech of news anchors as the register of reference is that teachers and students can access the national television broadcasts of any region through the internet. Furthermore, the register of a national news anchor sounds natural, while still closely resembling the written language. Native speakers are often excessively concerned with maintaining a "pure speaking style," which ultimately results in a pedantic or artificial manner. Additionally, a language benchmark should not call to mind the language variety of a specific city in Brazil or in the Hispanic World although it can be used to discuss linguistic variation. There are other motivations that could be added to this list, such as the formalization of phonological rules, but to enumerate them all here would distract from our purpose.

In an article published in the Spanish newspaper *El país*, written by Álex Grijelmo, the opening paragraph directly or indirectly reinforces some of the points that led to the choice to use a Mainstream Spanish and a Mainstream Portuguese. The opening sentence of the first paragraph reads, "*Solamente por escrito tenemos todos el mismo acento*" (Only in writing do we all have the same accent). The article was written as a review of the Spanish television series *La Peste* (The Plague), based on the history of Andalusia, in sixteenth-century Spain, in the context of the Black Plague. The television series review is titled *Peste de vocalización* (Voice Articulation Plague). The translation appears right after the Spanish text. Many of the language varieties in Spanish found in Latin America, particularly in the Caribbean, have their origins in Andalusia in southern Spain.

Peste de vocalización
   Debate sobre las dificultades para entender el acento andaluz de los actores en la nueva serie española
   ÁLEX GRIJELMO, El país, 26 de enero de 2018
   https://elpais.com/cultura/2018/01/26/television/1516974725_914226.html
   Solamente por escrito tenemos todos el mismo acento. En la lengua hablada, sin embargo, el idioma español es la suma de sus variedades. Y no sobra ni una. Los hispanohablantes se entienden al margen de que medien miles de kilómetros entre sus pueblos, y en ello radica la unidad de nuestra lengua, que pasa por encima de las realizaciones fonéticas que sean propias de cada lugar.
   Translation:
   The Plague of Articulation

Debate on the difficulties understanding the Andalusian accent of the actors in the new Spanish series

Only in writing do we all have the same accent. In spoken language, however, the Spanish language is the sum of its varieties. And there is not one left out. Spanish speakers understand one another regardless of whether there are thousands of kilometers between their towns, and in this lies the unity of our language, which goes beyond the phonetic realizations that are specific to each place.

Stanley Whitley, in the second edition of his book *Spanish/English Contrasts—A Course in Spanish Linguistics*, brings up interesting points regarding the language taught in literary style, and wonders how useful it is to learn a literary style or register of a language, if one will then feel lost when facing situations in which the actual language is quite distinct (Whitley 302). While Whitley's remark is correct, jargon, slang, literary, and other registers do co-exist in any language. Native speakers use them all according to the situations in which they find themselves. Sociolinguistically competent native speakers recognize the nuances from the most formal (which may include literary) style to the most informal register. Likewise, language learners should familiarize themselves with as many register nuances as possible, from literary style to the most informal. In terms of pronunciation, this means listening to and speaking in different ranges of styles, from careful, well-articulated pronunciation to the most relaxed speaking style, which may be quite distant from the written language.

Learners of Spanish or Portuguese as additional languages will enjoy speaking a Mainstream Spanish or Mainstream Portuguese language of reference, but they need to train their auditory comprehension and production of Non-Mainstream Spanish or Non-Mainstream Portuguese, just like natives do. This is accomplished in a variety of ways, depending on the learner's language proficiency level. These include skits in the classroom, in which they may imitate a given regional variety, or by listening, transcribing, and discussing these register variations. They may manipulate these variations in multicultural experiences and make linguistic and cultural discoveries. These experiences in the classroom will help students to understand the difference between pronunciations that carry a **social stigma** and pronunciations that are **socially prestigious**. In Brazilian Portuguese, for instance, the idea of **cacophony** is very distinct, when compared to English and Spanish. Most Brazilians will easily catch certain speech sound sequences when these sequence combinations sound unusual or funny to them, regardless of their grammaticality in Portuguese. They may have a good laugh about them or seize the opportunity to make witty comments. Brazilians tend to be perceptually sensitive to sound combinations or cacophonies in their linguistic and cultural contexts. These native behaviors happen often, and non-natives might wonder at them and will likely require a native speaker to explain or "translate" the situation. Brazilians are able to come up with many examples of cacophonies. Some common examples include the expressions "É fé demais…," (It is a lot/too much faith...), "Escutei isso da boca dela," (I heard it/this from her mouth), "Uma por cada…" (one for each...), and many others. Although these sequences are technically grammatically correct, they sound unpleasant or amusing because their word order creates additional meanings. To avoid this, it is necessary to

reorder the words. "É fé demais" sounds awkward because it is similar to "É, fede mais" (Yes, it smells more foul[from the verb "feder"]); "Escutei isso da boca dela" attracts attention due to the cacophony "cadela," which means "female dog," or yet "... from the good female dog" ("da boa cadela"), and "Uma por cada. . ." may sound like "a bunch of pigs, a pork dish, or something dirty."

In other languages, the term **cacophony** usually refers to a syllable or word combination that produces an unintentional meaning. The Portuguese people are often surprised by this cultural behavior of Brazilians. For example, one of the most famous lines of sixteenth-century Portuguese literature, written by the remarkable poet Luís Vaz de Camões in his book *Sonetos*, may sound unusual or even amusing to a Brazilian:

> *Alma minha gentil que te partiste* (my paraphrase: "Gentle soul of mine who has left")

Perhaps due to differences in rhythmic perception (or something else) between Brazilian and Portuguese native speakers, this verse sounds perfectly fine to a Portuguese ear, but Brazilians may respectfully wonder about the way it sounds when they read it aloud because the combination of the words "alma" and "minha" create, to the Brazilian ear, a new word: "maminha" (little tit) or "Há uma maminha" (There is a little tit) in "Alma minha gentil" (Gentle soul of mine). In public readings of Camões works, performers, aware of this possibility, will often include a short pause (which still sounds natural) between "Alma" and "minha" <´al.ma pause ´mi. nha gen.´til> to avoid any potentially surprising interpretations of the sounds. Obviously, the possibility of a surprising sound in this line to a Brazilian ear does not diminish the superb quality and form of the sonnet, as with all the works of the greatest writer of the Portuguese language.

When deciding which speaking model to follow, it is helpful to consider socially stigmatized or prestigious forms in relation to the notions of Descriptive and Prescriptive Grammars. **Prescriptive Grammars** are the grammars that are used in school to help students learn the "correct" way of using the language. Prescriptive Grammars are also known as Normative Grammars. They dictate the ways in which a language can be used "correctly." For example, a prescriptive comment from a teacher to a student would be, "*Do not say* yo sabo *or* fuistes. *The correct thing to say is* (yo) sé *y* fuiste." **Descriptive Grammars**, on the other hand, observe and describe, systematically or scientifically, the actual use of the language as it is usually **spoken** by native speakers, and indirectly observe how native speakers write. Descriptive or Observational Linguistics does not pass judgment as to what is the best or superior language. A descriptive comment from a teacher to a student would be, "*Interesting! I heard a student say* yo sabo *and* fuistes. *I think that they are making interesting generalizations.*"

It does not make sense in Linguistics to say that a given language, or a language spoken in a certain area of the world, is better than or superior to another language or another language variety. If a Spaniard says that a Mexican or a Dominican speaks bad Spanish, or a Mexican says that Dominicans and Spaniards speak "badly" or sound "funny," or a Dominican says that Spaniards and Mexicans do not know how

to speak Spanish, these exchanges may be entertaining (or offensive), but are not supported in the objective views of Linguistics.

Prescriptive studies usually focus on how **native speakers** normally write and speak, but this is not always the case. A non-native, global version of English that has developed in recent years called "Globish" (McCrum, 2010) may also be studied either prescriptively or descriptively.

These notions of prescriptiveness and descriptiveness apply more easily to the norms and non-norms of the morphological and syntactical components of Spanish and Portuguese. With the appropriate caveats, however, we can link these notions to the phonetic and phonological components of these languages at the **discourse level** to promote a certain type of pronunciation in the classroom and study stigmatized pronunciation. Teaching pronunciation makes more sense if realized in the **context of the discourse**, in alternation with the use of words or longer stretches of words in isolation for a specific pedagogical purpose. **Discourse**, to borrow a definition from Stanley Whitley, "is any coherent stretch of linguistic output, spoken or written: a conversation, story, speech, essay, poem, prayer, recipe, announcement, list of instructions, and so on." (Whitley 336).

In sum, this publication is intended to present fundamental concepts in Phonetics, Speech Prosody, and Phonology and to incorporate those concepts in descriptions of the pronunciation of mainstream Spanish and Brazilian Portuguese, and, drawing on these descriptions, to observe how language variation takes place in any language variety analyzed.

Review Questions for the Introduction

This section reviews the information discussed in the Introduction to help reinforcing the main points discussed.

1. Which ones are examples of mainstream Brazilian Portuguese? Check the ones that you consider right.

( ) Mineiro Portuguese   ( ) Gaúcho Portuguese
( ) Carioca Portuguese   ( ) Newscast speakers of BandNews TV
( ) Newscast speakers of Jornal Nacional in Globo TV
( ) Newscast speakers of *A Voz do Brasil*

2. Which ones are examples of mainstream Spanish? Check the ones you consider right.

( ) Newscast speakers of Univisión   ( ) The Dominican celebrity Cardi B
( ) The Palenquero variety, in Colombia   ( ) Speakers of rural Puerto Rico
( ) Newscast speakers of Mexican Televisa   ( ) Newscasts speakers of Televisión
                                                       Ecuavisa, in Quito, Ecuador

3. Which style/s is/are formal in mainstream Brazilian Portuguese?

(   )   *Estamos grávidos.*
(   )   *Tá de barriga.*
(   )   *Está esperando um bebê.*
(   )   *Está grávida.*

4. Which style/s is/are informal in mainstream Brazilian Portuguese?

(   )   *Estamos grávidos.*
(   )   *Tá de barriga.*
(   )   *Está esperando um bebê.*
(   )   *Está grávida.*

5. Which style/s is/are formal in mainstream Spanish?

(   )   *Está preñada.*
(   )   *Está en estado interesante.*
(   )   *Está embarazada.*

6. Which style/s is/are informal in mainstream Spanish?

(   )   *Está preñada.*
(   )   *Está en estado interesante.*
(   )   *Está embarazada.*

7. Which ones are regional varieties?

(   )   American English   (   )   British English
(   )   Latino Spanish in the United States   (   )   Palenquero, in Colombia
(   )   Quechua   (   )   Carioca
(   )   Mineiro   (   )   The Burgos Spanish, in Spain
(   )   Portuguese spoken by newscast speakers of Globo TV
(   )   Spanish spoken by newscast speakers of Univisión, in the United States

8. Which ones are mutually intelligible?

(   )   American and British English   (   )   Dominican and Puerto Rican
(   )   Latino Spanish in the United States   (   )   Carioca and Mineiro
         and Spanish Castellano
(   )   Quechua and Spanish   (   )   Argentinean and Chilean
(   )   El Paso, Mexico, and San José, Costa Rica   (   )   Carioca and Castellano
(   )   Portuguese spoken by Globo TV speakers and Spanish spoken by speakers of Univisión

9. Which ones are languages in the French, Spanish, and Portuguese meaning of *langue, lengua,* and *língua*?

(   )   American and British English   (   )   Dominican and Puerto Rican Spanish
(   )   Latino Spanish in the United States   (   )   Carioca and Mineiro Portuguese
         and Castellano

(   )   Quechua and Spanish   (   )   Argentinean and Chilean Spanish
(   )   Carioca Portuguese and Argentinean Castellano
(   )   The Spanish of El Paso, in Mexico, and San José, Costa Rica
(   )   Portuguese and Spanish spoken by newscast speakers of Globo TV and Univisión

10.   Which ones are prescriptive (P) and descriptive comments (D)? Write P or D.

(   )   The correct is *Este* and not *Ete*.
(   )   Speakers from Minas Gerais, the Mineiros, they don't add a little "i" before "s," e.g., <tres>, as Cariocas normally do, e.g., <treis>.
(   )   A teacher makes the following observation to his students, "Did you notice how interesting that lady is when she says <cinco pão>. People often say the same nowadays, instead of <cinco pães>. What do you think?"
(   )   A teacher tells his students, "Make sure to use the correct plural of <pão>, when saying more than one, like <cinco pães> instead of <cinco *pão>."

11.   Check the ones that are examples of discourse, as presented in the list below.

(   )   A book
(   )   A poem by Camões
(   )   Esteeee. . . well, hummm, sessenta y cinco. . .
(   )   A paella recipe
(   )   A normal interview with Cardi B

The suggested answers appear in the next page.

Answers to the Review Questions for the Introduction

1. It is easy to find recordings of these voices on the internet. Some speakers may vary slightly from each other, but nothing significant. For example, the expected mainstream Brazilian Portuguese pronunciation of sequences of a vowel and <s> in word final position as in <três> (Eng. "three") is [trɛⁱs]. But occasionally some of the speakers in these national broadcasts, not the majority, may say [tres], i.e., without the insertion of the vocalic [ⁱ].

(X)   Newscast speakers of BandNews
(X)   Newscast speakers of Jornal Nacional in Globo TV
(X)   Newscast speakers of *A Voz do Brasil*

2. Newscast speakers of Univisión, newscast speakers of Mexican Televisa, newscasts speakers of Televisión Ecuavisa, in Quito, Ecuador. Occasionally, some speakers of these broadcasts may show slight non-significant segment variation in their pronunciation, and a more significant variation in their intonation. Recall

that what most characterizes the mainstream style in Spanish and Portuguese is the pronunciation of the segment, not the intonation.

(X)   Newscast speakers of Univisión
(X)   Newscast speakers of Mexican Televisa
(X)   Newscasts speakers of Televisión Ecuavisa, in Quito, Ecuador

3. Which style/s is/are formal in mainstream Brazilian Portuguese?

(X)   *Está esperando um bebê.*
(X)   *Está grávida.*

4. Which style/s is/are informal in mainstream Brazilian Portuguese?

(X)   *Estamos grávidos.* (Normally only women say this, and very informally)
(X)   *Tá de barriga.* (very informal)
(X)   *Está esperando um bebê.* (normal)
(X)   *Está grávida.* (normal)

5. Which style/s is/are formal in mainstream Spanish?

( )   *Está preñada.*
(X)   *Está en estado interesante.*
( )   *Está embarazada.*

6. Which style/s is/are informal in mainstream Spanish?

(X)   *Está preñada.* (Very informal, "vulgar")
( )   *Está en estado interesante.*
(X)   *Está embarazada.* (normal)

7. Which ones are regional varieties?

(X)   American English   (X)   British English
(X)   Latino Spanish in the United States   (X)   Palenquero, in Colombia
(X)   Quechua   (X)   Carioca
(X)   Mineiro   (X)   The Burgos Spanish, in Spain
( )   Portuguese spoken by newscast speakers of Globo TV
( )   Spanish spoken by newscast speakers of Univisión, in the United States

8. Which ones are mutually intelligible?

(X)   American and British English   (X)   Dominican and Puerto Rican
(X)   Latino Spanish in the United States   (X)   Carioca and Mineiro
         and Spanish Castellano
( )   Quechua and Spanish   (X)   Argentinean and Chilean
(X)   El Paso, Mexico, and San José, Costa Rica   ( )   Carioca and Castellano
( )   Portuguese spoken by Globo TV speakers and Spanish spoken by speakers of Univisión

9. Which ones are different languages in the French, Spanish, and Portuguese meaning of *langue, lengua,* and *língua*?

( ) American and British English   ( ) Dominican and Puerto Rican Spanish
( ) Latino Spanish in the United States   ( ) Carioca and Mineiro Portuguese
    and Castellano
(X) Quechua and Spanish   ( ) Argentinean and Chilean Spanish
( ) Carioca Portuguese and Argentinean Castellano
( ) The Spanish of El Paso, in Mexico, and San José, Costa Rica
( ) Portuguese and Spanish spoken by newscast speakers of Globo TV and Univisión

10. Which ones are prescriptive (P) and descriptive comments (D)? Write P or D.

(P) The correct is *Este* and not *Ete*.
(D) Speakers from Minas Gerais, the Mineiros, they don't add a little "i" before "s," e.g.,
    <tres>, as Cariocas normally do, e.g., <treis>.
(D) A teacher makes the following observation to his students, "Did you notice how
    interesting that lady is when she says <cinco pão>. People often say the same nowadays,
    instead of <cinco pães>. What do you think?"
(P) A teacher tells his students, "Make sure to use the correct plural of <pão>, when saying
    more than one, like <cinco pães> instead of <cinco *pão>."

11. Check the ones that are correct examples of discourse.

(X) A book
(X) A poem by Camões
( ) Esteeee... well, hummm, sessenta y cinco...
(X) A paella recipe
(X) A normal interview with Cardi B

Acknowledgments

Contents

About the Author

Antônio R. M. Simões is a Professor of Spanish and Portuguese Linguistics in the Department of Spanish and Portuguese at the University of Kansas in Lawrence, KS, USA. He has been teaching Spanish and Portuguese as foreign languages and courses on Spanish and Portuguese Linguistics at universities in the United States and abroad for over 30 years and has published his research in national as well as international peer-edited publications. His current research interest in Speech Prosody takes him back to his work for the Graduate Program of the former Institut de phonétique (currently CNRS's Laboratoire Parole et Langage, http://www.lpl-aix.fr/), in Aix-en-Provence, France. One of the most useful aspects of his current research work, which began around 2013, is the application of musical theory and musical notation to the transcription and analysis of speech prosody. Professor Simões published his first article using this model of speech analysis in 2016 in the Proceedings of the Speech Prosody Congress in Boston, Massachusetts, with his colleague Dr. Alexsandro R. Meireles.