## On the Teaching of Spanish Pronunciation

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#### 1. Introduction

Research in Spanish phonetics is on the move. The emergence of "laboratory approaches" to phonology as a subdiscipline speaks to a burgeoning interest in analyses that are data-driven but theoretically sound, and studies which are methodologically rigorous yet based on real human language. It is also true that the theoretical objects of our interest are very different from those we were looking at four decades ago, as are the tools with which we operate. How much of our theoretical and empirical enlightenment, though, has made it into the Spanish language classroom? What are we saying to undergraduate students about Spanish pronunciation that makes use of the advances in the field? How much of our laboratory and field work informs introductory courses in Spanish pronunciation and phonetics? Indeed, are we saying the same, tired things we said 20 or 40 years ago—sometimes even in spite of counterevidence?

What follows is a sort of Spanish phonological "flea circus" that presents a wide range of possibilities for content, approach, or delivery method that often escape our notice precisely because they haven't been in our textbooks and haven't been a part of our own classroom experience. My objective is to make us think outside the curricular box and, by so doing, to give us an excuse to have more fun than we may have been having with the content we teach. This paper is hardly exhaustive; indeed, it offers merely a sample of research findings and other innovations of a segmental, suprasegmental, dialectological, orthographic, technological, and pedagogical nature—any of which can be easily incorporated into a 21st-century Spanish phonetics curriculum. (Please note that audiovisual examples not feasible or not permitted in this written, published version appear online at <a href="http://people.cohums.ohio-state.edu/morgan3/labphon.html">http://people.cohums.ohio-state.edu/morgan3/labphon.html</a> and are referenced by letter and with the term "web example" throughout the text.)

## 2. Segmental phonology

I would like to turn first to segmental phenomena, from time immemorial the mainstay of every published course in Spanish phonetics. A close look at two phonemes in particular will serve to make the point that results from our laboratory analyses do not always find their way into our curricula in a timely fashion. Consider the case of the so-called "erre múltiple" and the set of palatal obstruents represented orthographically by the Spanish letter *y*.

#### 2.1. The so-called voiced alveolar trill

In web example (a) at <a href="http://people.cohums.ohio-state.edu/morgan3/labphon.html">http://people.cohums.ohio-state.edu/morgan3/labphon.html</a>, I have isolated unrehearsed tokens from video recordings to illustrate some of the wide array of segments that serve, around the Spanish-speaking world, in place of the normative voiced alveolar trill /r/. In the

<sup>\*</sup> I sincerely appreciate the invitation extended to me by the conference organizers to present this keynote address, as well as their tolerance for my didactic extensions of the results of my own and others' research. Manuel Díaz-Campos was especially patient, resourceful, and accommodating, and two anonymous reviewers were helpful with the final written draft. Finally, whether they realize it or not, Pat Lunn and Scott Schwenter are responsible for convincing me, over the course of several years, that I had something worth saying in the first place. If I didn't end up saying the right things, of course, it's entirely my fault.

Caribbean, r/ is typically accompanied by aspiration, which renders it voiceless [r]. For many Puerto Ricans, this voiceless trill has become uvular [r] (or merely a velar [r] or uvular fricative [r]). In much of Central and South America, r/ has ceased to be a trill altogether and has become an r-colored sibilant [r]. In Paraguay and Costa Rica (just to name two places) the sibilance is often lost, leaving an approximant not unlike an unrounded version of the American English rhotic [r]. In highland Bolivia, on the other hand, it is the r-coloring that is lost, leaving a voiced, apical sibilant [r]. Finally, for many native Spanish speakers in the United States, what was historically a trill is now simply a tap [r], resulting in a merger of r/ and r/.

While some of the finer details of these geographic variants (such as the phonetically divergent tendencies in what are commonly referred to as assibilating dialects) have not been explored in depth, published studies in both phonetics (Hammond 1999, Quilis 1993, Quilis & Carril 1971, Willis & Pedrosa 1998) and sociolinguistics (Diez Canseco 1997, López Morales 1979) have quantified and qualified quite a number of common manifestations of the trilled /r/ and their attendant social value. Nevertheless, in our remedial pronunciation class, we continue to teach as if the voiced alveolar variant were the only acceptable one. I'm not going so far as to say that students should simply choose their favorite and practice it; sociolinguistic and geographic considerations do matter. Still, at the very least, we need to expose students to real examples (such as those cited above) of the many variants they will hear, and even give them models which are easily imitated. As we will reiterate in section 6, speech samples need to be contextualized at the same time that they are isolatable and student-friendly.

Indeed, assibilated /r/'s are common currency for tens of millions of native Spanish speakers, many of whom would be hard-pressed to produce a contextualized voiced alveolar trill on command. And, as we have seen, assibilation itself appears to be of at least two very different types and phonological change is undoubtedly leading the speakers of each in very different directions. Meanwhile, if word-internal neutralization of taps and trills offends the more prescriptive among you, I hope that the real samples from Ohio will at least have served to illustrate just how low the functional load of the distinction must be: minimal pairs of the type *para/parra*, *coro/corro*, *vario/barrio*, which we parade regularly in front of our students as evidence of the need to maintain an /r/ separate from /r/, have not been sufficient to keep some speakers from eliminating the distinction (whether we like it or not). It is important that we as researchers highlight this sort of "connection" (about which more in section 7) between phonetics and other linguistic subfields (here, for example, between dialectology and language change).

#### 2.2. Palatal obstruents

The palatal obstruent (a.k.a. "Spanish y") presents a completely different pedagogical situation. Whereas the trilled rhotic [r] presented in our textbooks is arguably the sociolinguistically preferred segment for a broad swath of the Spanish-speaking world, for some reason, in the case of y, our texts (e.g. Dalbor 1997:218, Barrutia & Schwegler 1994:125; Stokes 2005:123—but not Hammond 2001:240) have been content to allow students to get by with their English approximant (i.e. the initial [j] of English 'yes') rather than insist upon the fricative and affricate variants (e.g. [j], [j]) which anchor them to fellow obstruents /b/, /d/, /g/, and /tʃ/ for the vast majority of native Spanish speakers. Díaz-Campos and Morgan (2002) have suggested that even Central Americans with lax palatal obstruents perceive the difference between [ma.ja] and [ma.ja], in spite of the fact that their own dialect allows freely for everything from an affricate to an approximant. On the other hand, native English speakers easily perceive an affricate or sibilant fricative as a separate entity, but have enormous difficulty distinguishing between the nonsibilant fricative of [ma.ja] and the approximant of [ma.ja].

Díaz-Campos and Morgan suggest not only that the distinction between (acceptable) [ma.ja] and (unacceptable) [ma.ja] matters in most varieties of Spanish, but that it is teachable to the English-speaking student. They further explore pedagogical and acoustic-phonetic devices that can be used to train students to appreciate and imitate the sound that is foreign to them. The illustration in web example (b) is of a student pronunciation of *playa* that has no palatal constriction. In the second illustration on that web page, we appreciate the same student's ability to produce the same word with nativelike palatal friction subsequent to classroom instruction and practice that included instant

feedback to the student via these very illustrations. Although perception of such non-strident palatal fricatives may continue to be a challenge for them, students can learn to "feel" the correct point and manner of articulation when given a visual target such as this and repeated opportunities to practice hitting it.

## 3. Suprasegmental phonology

It is probably at the suprasegmental level that there have been more dramatic research discoveries than in any other area of Spanish phonology in the last generation. In the areas of intonation and stress alone, entire new models of representation have arisen, with their attendant vocabularies, symbols, and diagrams (Beckman et al. 2002, Face 1999, Harris 1983, Hualde 2002, Sosa 1999). Nevertheless, what we say about these issues in the introductory phonetics classroom is largely unchanged from forty years ago. Alas, development of student-friendly materials and approaches for the teaching and modeling of Spanish intonation will have to be left for the future.

The suprasegmental unit that I would like to comment on in more detail here is the syllable. The importance of the syllable as an organizing principle continues to be largely ignored by instructors and students alike, in spite of the fact that all the laboratory and theoretical work of the last generation has left no doubt about its critical role. Two particular points might be made about the difference between Spanish and English syllable structure in order to bring our students closer to the phonological competence and performance of native Spanish speakers. The first (section 3.1) involves automatic processes which occur in syllable codas and of which speakers are largely unaware. The second (section 3.2) is an example of how syllable structure contributes to our collective, language-specific, phonological culture in ways that we can relate to on a daily basis.

#### 3.1. Syllable-final consonant neutralization

Syllable structure figures prominently in most consonant neutralizations in Spanish, since, not surprisingly, it is coda position that provides the appropriate environment for a host of weakening phenomena. Whether by way of formal rules, ranked constraints, or didactic description, students need to be prepared for the neutralizations that occur in syllable codas. In a sense, they "know too much" when they keep /t/ and /d/ (or /p/ and /b/, or /k/ and /g/) separate syllable-finally in Spanish; I would maintain that they should also be taught to appreciate further neutralizations: of all obstruents, for example, or of liquids.

Practice with neutralization might appropriately desensitize English speakers to their own differences between, say, /m/ and /n/, allowing them to pronounce *hámster* with alveolar [n]. It may also allow them to appreciate how the first syllable of *técnico* can close with [k], [ $\gamma$ ], [ $\delta$ ], or [n], among many options. The important lesson is not what /k/ "turns into" in a certain context, but rather that onsets and codas allow for a completely different range of possibilities. They need to be able to predict that *eclipse* can be *ecli*[ $\beta$ ]se, *ecli*[ $\beta$ ]se, or *ecli*[ $\beta$ ]se but never \* $e[\gamma]$ lipse, \* $e[\beta]$ lipse, or \* $e[\beta]$ lipse.

In order to drive the point home, I send my students to a local fast-food restaurant where they can be waited on by a native Spanish speaker, and I instruct them to order  $Pe[k]si\ Cola$ , just to practice their new perspective on coda consonants. Of course, the Spanish speaker behind the counter doesn't even notice (or doesn't think twice about it), and that's what convinces the language learner that, indeed, the phonemic value of Spanish obstruents is compromised in coda position—and that they, too, can participate in that neutralization.

Nor does anyone but the phonologist notice when the Spanish-language instructions at the self check-out at our local supermarket (see web example (c)) include syllable-final consonant neutralization in ace[k]tador/ace[t]tador in Favor de insertar las monedas en el aceptador de monedas antes de insertar los billetes en el aceptador de billetes. Indeed, our students need look no further than their own neighborhood for important lessons in Spanish phonology.

### 3.2. Accessibility of intuitions about syllable structure

Another pedagogically interesting contrast between Spanish and English syllable structure has to do with the salience of syllable boundaries. Whereas native English speakers are often hard-pressed to determine exactly where to divide words, this is generally not the case in Spanish. Admittedly, English orthography complicates the picture even more, but the ease with which Spanish speakers syllabify has given rise to a number of artifacts that now form part of their "linguistic culture," as it were, and such things ought to be part of our instruction precisely because they illustrate how the specific phonology of a language can affect the lives of its speakers in ways we might not have imagined.

The artifact that first comes to mind is the "crucigrama silábico," a crossword puzzle based on syllables rather than individual letters (see web example (d)). Such a crossword is easy enough to solve in Spanish, but in the English-speaking world it would be a bizarre twist to the more common letter-based puzzle—precisely because speakers wouldn't agree on the syllabification of the words to be inserted into the squares. By the same token, it is only in English that you commonly find dictionary entries with fully syllabified words; before the advent of computerized word-processing, the dictionary was the sole authority for breaking up long words that didn't fit at the end of a typed line of text. In Spanish, by comparison, syllabification is so straightforward as to require no more than the intuition of any native speaker.

Related phenomena include *jerigonza* and other language games (Piñeros 1998), and the creation of certain acronyms and hypocoristics. Such processes have been shaped by Spanish syllable structure and, in turn, have helped to shape the linguistic cultures of Spanish-speaking societies.

## 4. Orthography

Spanish orthography is not as straightforward as it once was. For that matter, some have argued (see, for example, Martínez de Sousa 1985, Mosterín 1981, and Morgan 2000) that it never was as straightforward as we led our students to believe. In spite of recent updates by the Royal Spanish Academy (Real Academia Española 1999) aimed at simplifying the use of orthographic accent marks and pronouncements railing against the spelling of loans, a quick romp through cyberspace will attest to widespread orthographic insecurity.

#### 4.1. Failure of orthography to predict pronunciation

Perhaps even more of interest in the phonetics classroom is the increased difficulty one has in predicting the pronunciation of forms encountered regularly in daily life. Indeed, educated native Spanish speakers can peruse periodicals from other countries (for example, at <www.zonalatina.com/Zlpapers.htm>) and be left scratching their heads over the pronunciation of loan words, proper names, trademarks, and acronyms unfamiliar to them (and, unfortunately, unpredictable from the orthography given). Particularly troublesome are graphemes h, w, and x; indigenous loans (from, say, Basque, Quechua, or Guarani) with non-Spanish or partially Hispanicized ("interlanguage") spellings; and the accentuation of all sorts of words in which we fear the correct diacritic may simply have been left off. But many other possibilities for confusion exist throughout the Spanish-speaking world.

The lessons for our students in all this include the importance of phonetic transcription (or, seen another way, the limitations of any standard orthography in dealing with language contact and change) and the authority of local native speakers over questions of correctness. One assignment might be to send students in search of Spanish speakers from certain places in order to find the local pronunciation of the Anglicisms video, sandwich, Washington, and iWork; the Gallicisms buffet and bidet; Koreanisms Hyundai and Daewoo; abbreviations such as DVD, PSOE, FARC, EE.UU., and PEMEX; Castilian wâter, Basque Uriagereka, Catalan/Argentine Puig, Peruvian Áncash, Argentine Gialluca, Paraguayan Yacyreta, and, of course, Mexican Oaxaca, Necaxa, Xochimilco, and Xola (Rosenblat 1968); the notoriously misleading cónyuge pandialectally; and names such as Jenny, Oswaldo, Lourdes, and Elizabeth Taylor, wherever they happen to appear. At some point, they should be

reminded that the orthographic quirks of a world language are exactly what learners of English have dealt with for centuries.

## 4.2. Interrogative words and the orthographic accent mark

In terms of at least one specific aspect of the Spanish writing system, linguists and pedagogues have failed to come up with an adequate description of the facts. While a more exhaustive study and pedagogical solution will have to wait, in what follows I would like to make clear that our typical explanation for the accentuation of interrogative words, though well-intentioned and partially functional, is misleading and, as it turns out, not entirely true.

The stressed interrogatives *cómo*, *cuál(es)*, *cuándo*, *dónde*, *por qué*, *qué*, and *quién(es)* bear a written accent mark, unlike their unstressed counterparts *como*, *cual(es)*, *cuando*, *donde*, *porque*, *que*, and *quien(es)*, which are not interrogatives at all but subordinating conjunctions or other such connectors. This much appears to be well described, well understood, and well illustrated with questions such as the one we see with stressed *cuándo* in (1) and statements of the type we see with unstressed *cuando* in (2).

- (1) ¿Cuándo vienen? 'When are they coming?'
- (2) *Cuando* vienen, dejan a la abuela con la tía Matilde. 'When they come, they leave Grandma with Aunt Matilda.'

Less clear is how to describe the stressed form in (3), which requires a written accent mark even though it is not a question.

(3) No sé *cuándo* vienen. 'I don't know when they are coming.'

Textbooks appear to be largely in agreement that (3) is an *indirect question* (Barrutia & Schwegler 1994:179; Dalbor 1997:291; Hammond 2001:311; Real Academia Española 1999:50; Stokes 2005:40). Apparently the question "indirectly" embedded in (3) is that in (4).

(4) ¿Cuándo vienen? 'When are they coming?'

The notion of "indirect question" is never defined, but straightforward examples given in the texts (such as those presented above) are probably sufficient for a majority of students to come away with knowledge of how to deal with most such cases which surface later in the course. There are at least two problems with this approach, however.

One is that there is sometimes no clear "indirect question" associated with a stressed interrogative. Compare, for example, the stressed *cómo* in (5) with the unstressed *quien* in (6). If ¿Cómo lo haces? is the indirect question in (5), then why would ¿Quién ha salido bien en el examen? not be the indirect question attributable to (6), rendering it stressed and requiring therefore an accent mark?

- (5) No me importa *cómo* lo hagas. 'I don't care how you do it.'
- (6) *Quien* haya salido bien en el examen no tiene que repetir el curso. 'Whoever has done well on the exam does not have to repeat the course.'

The second problem with this appeal to so-called "indirect questions" is that the constructions we have seen in (3) and (5) do not constitute indirect discourse in Spanish. Plann (1982) explains that

indirect questions take the form of (7), and that (8)—which parallels the examples we saw above—is not an indirect question at all.

- (7) Ana dijo <u>que</u> *dónde* estaba la toalla. 'Ana asked where the towel was'
- (8) Ana le dijo *dónde* estaba la toalla. 'Ana told him where the towel was'

What is it, then, that sets examples (1) and (3-5), all with stressed WH-words, apart from examples (2) and (6), where *cuando* and *quien* are unstressed? A thorough treatment of this question will be left for another forum, but it must be stated here that students deserve to know, at the very least, that the actual data are more complicated than we have been letting on.

For those who need it, one didactic could be the substitution of the English phrases in (9) for the corresponding Spanish words given. If the substitution makes sense, then the Spanish interrogative is stressed and requires a written accent mark.

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(9) cómo (in) what way
dónde in what place
cuándo (at) what time / (on) what day / etc.
quién what person
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This strategy takes advantage of the fact that English *what* (as opposed to *that*) generally helps to recognize stressed Spanish  $qu\acute{e}$  (as opposed to unstressed  $qu\acute{e}$ ), although this approach is not without its own limitations. Most notable among its shortcomings: it is not especially efficient and appeals to the unholy process of translation into English rather than facing Spanish "on its own terms."

## 5. Dialectology

Changing demographics, globalization of the world economy, and the relative ease of worldwide communication and travel have all conspired to bring our students into contact with more and different dialects of Spanish than would have been the case even a decade ago. As a result, they now have a need for and interest in native pronunciations very unlike those modeled in their texts. For the sake of heritage speakers, study-abroad veterans, students with specific travel plans or job aspirations, and, for that matter, almost any student, it now behooves us to make available speech samples from all over the Spanish-speaking world. Often it also makes sense for /s/-aspiration, /r/-assibilation, and a host of other dialectal features to become part of our modeled pronunciations, allowing students to choose the variety that best suits their needs.

In fact, linguists themselves—even trained phoneticians and phonologists working on an unfamiliar dialect, language, or phenomenon—could benefit from a speech sample as they attempt to make sense of transcriptions presented in the literature. Such is the goal of the *Electronic Catalog of the Sounds of Spanish*, which is beginning to appear at <a href="http://people.cohums.ohio-state.edu/morgan3/catalog.html">http://people.cohums.ohio-state.edu/morgan3/catalog.html</a> and includes representative features of dialects from both on and off the beaten path, both in context and in isolation. To complement what they have seen in print in the form of transcriptions, articulatory descriptions, theoretical analyses, and dialect maps, students and researchers may now click to hear such phenomena as Cibaeño liquid gliding (Harris 1983: 47-50), Dominican /s/-insertion (Núñez-Cedeño 1988, Morgan 1998), Ecuadorian final sibilant voicing (Canfield 1981: 48), Chilean labiodental /b/ (Lipski 1994), Paraguayan glottal stops (Cassano 1973, Granda 1982:157-9), and Puerto Rican backing of /r/ (Vaquero & Quilis 1989).

Obviously, students of remedial pronunciation and introductory phonetics will not be asked to incorporate these features into their own Spanish. There are many dialectal phenomena, however—some of these among them—which find their place comfortably in regional or national prestige models, and neither students nor instructors need be embarrassed by them. If sociolinguists have taught us anything, it's that stigma and prestige are relative.

## 6. Technology

Wide student access to real speech samples will increase with technological advances of the 21st century. The Internet has already paved the way with online audio of local radio programming from across the Spanish-speaking world (<www.zona latina.com> and <lanic.utexas.edu/subject/media/>), and other online databases (such as those of the Real Academia Española at <www.rae.es> and others discussed above) continue to appear and to improve in content and usability.

The Internet and digital technology might be the key to preserving 20th-century corpora and democratizing access to them by students and researchers alike. Imagine, for example, if the entire Norma Culta corpus (Lope Blanch 1986), could be digitized and housed on a public web server for all to use. The possibility that such live recordings might be saved from deterioration and made available to a wide audience is encouraging in light of the limited access we have had up until now and the diachronic texture the collection could give current projects. At the same time, it raises ethical questions about using human subject data in ways that had not been imagined when such projects were developed and interviews were carried out thirty-some years ago.

In other ways, digitization of the introductory phonetics class has already begun in earnest. Currently, the best-known examples of academic computer courseware are probably Lunn 2002 and Piñeros 2003. In addition, phonetic research tools such as PCquirer/Macquirer (<a href="http://www.sciconrd.com/multi.htm">http://www.sciconrd.com/multi.htm</a>), PRAAT (Boersma & Weenink 2005), and MBROLA (Dutoit 1999) all have classroom applications (see, for example, Díaz-Campos and Morgan 2002 and the discussion in section 2.2 above) that must not be overlooked.

## 7. Pedagogy

Application of such technologies may well constitute the greatest pedagogical innovation in the teaching of phonetics over the last decade or so. But research has produced other important advances in educational theory and practice that are compatible with the pronunciation instructor's goals. While I cannot pretend to make contributions to educational theory, I would like to frame my suggestions for curricular approaches—especially the inclusion of certain types of phonology-related content—within a current model that speaks to my own philosophy of teaching.

The paradigm known as Universal Design for Learning or UDL (Center for Applied Special Technology 2005) recognizes that one single delivery method is not going to work for everyone, and that by coming at our material from as many different directions as possible we are going to cast the widest possible net—not only in terms of the numbers of students we will reach, but in terms of the ways all students will be able to appreciate the realities and nuances of what we are teaching. UDL proposes that examples be presented in "multiple formats and media," that students be given "multiple pathways ... to interact with the information and express what they know," and that instructors provide "multiple ways to engage and motivate students" (McGraw-Hill 2005).

It is in the spirit of a Universal Design for Learning that I present four principles to be considered as we strive to make courses in introductory phonetics and remedial Spanish pronunciation more effective.

## 7.1. Gradations of complexity

In the same way that more complex structures proceed from the combination of simple ones in introductory language courses, the phonetics curriculum regularly introduces words and phrases before moving on to longer strings. Nevertheless, it is generally the distribution of allophones that is foremost in the minds of instructors and textbook authors, and once that distribution has been adequately illustrated, further practice seems to be simply more and longer stretches of the same: i.e., phonemic phrases in the form of sentences, paragraphs, stories, conversations. In one textbook in particular, students practice reading sentences and a poem with their new-found stop and fricative allophones of /b/, /d/, and /g/, only to be asked, immediately afterwards, "Describa a un compañero lo que serían para usted unas vacaciones ideales. Fíjese bien en su pronunciación de /b, d, g/. Trate de evitar la oclusión

siempre que no preceda a un sonido nasal" (Barrutia & Terrell 1982: 64-5). How will they possibly manage to extend their ability to deal with the letter d each time they see it in a text to the totally different medium of free conversation? Needless to say, the required attention to meaning, grammatical form, and pragmatic concerns would be overwhelming, and would not allow, at this point, for sufficient focus on phoneme d. But what might lead them further than written phrases, sentences, and paragraphs without expecting too much too fast? What would constitute an incremental increase in difficulty (a sort of "n + 1" of phonological complexity, in the sense of Krashen 1981)?

The missing link in our progression of exercises is an intermediate stage that challenges students to continue producing specific phones in the appropriate environments without having to focus on too many other variables. There is no one answer to how this might be achieved, but the progression in (10) is one example. Others appear in web example (e).

- (10)(a) words/phrases: dado, un dado, el dado, cinco dados.
  - (b) symbols for words: 1, 2, 3, ... 9, 10, 11, 12, ...
  - (c) a merger of (a) and (b): me dio 12 dados.
  - (d) identification of pictures: (cards with pictures of words containing /d/)
  - (e) guided questions about items in (d), or about a larger scene in which those items appear
  - (f) guided conversation about topics associated with relevant words

## 7.2. The perspective of the monolingual native speaker

Another pedagogically useful approach is to challenge students to "become" monolingual Spanish speakers—in other words, to "unlearn" everything they know about English. What this allows them to do is to appreciate the phonological competence shared by all native speakers, this set of facts being our object of study in the first place.

Two examples of the need for "unlearning" would be the distinction between /b/ and /v/ and the ability to distinguish syllable- and word-final nasals that all of our English-speaking students bring with them to the task of learning Spanish. It is helpful—especially in terms of their perception—for them to become accustomed to [dém.bɛr] for *Denver*, [xáns.tɛr] for *hámster*, and [xon.di.po] for *Home Depot*. Such practice will allow them to become more quickly integrated into a community of Spanish speakers.

Another thing that native speakers have in common—and that our students need to immerse themselves in—is a shared "phonological culture": behavior and institutions that are the way they are precisely because of the phonological competence of the speech community. The example of syllabic crosswords was presented in section 3.2 above. Another is nursery rhymes and the rhythms and rhyming patterns on which they are built. Yet another is the orthographic tradition that has made the act of spelling out loud extremely commonplace in English, but not in Spanish—where, instead, a word might be spelled "sin hache" or "con be larga," but rarely in letter-by-letter fashion (although in Spanish class that's usually how our teaching of the alphabet proceeds). Other examples appear in the sections that follow.

#### 7.3. Diversity

Something else that can be said about native speakers is that, in spite of a largely shared competence and culture, they are phonologically diverse—dialectally, sociolinguistically, and in terms of their particular idiolect as well. Individuals are, as it turns out, neither idealized nor hypothetical.

Dialect surveys are not lost on our students. Personal experience tells me that variation across the Spanish-speaking world is one of the most popular topics in any undergraduate course, and, for many students and instructors of phonetics, a detailed look at dialects is the "reward" for having mastered Spanish phonetic description in the first place.

Huge demographic changes—in Spain, Latin America, and the U.S.—put our students in touch with dialects they might not have come in contact with a decade ago. There is a greater likelihood, too, that they will be called on to use their Spanish with speakers from a wider range of socioeconomic classes and levels of education. In addition, we must not forget that our own students come to us from

diverse backgrounds themselves, and our validation of a wide range of linguistic varieties (whether as models or simply as worthwhile objects of analysis) contributes to students' intimate engagement with the material.

#### 7.4. Connections

There is probably no surer way to engage students than by making our subject matter relevant to their own experiences, whatever they may be. The key is to make *connections* to other aspects of our own field (i.e., other areas of linguistics), to our students' background (e.g., English, popular culture, the local scene, etc.), and to a wide range of other information that will motivate them (and us!).

Connections are, in fact, one of the five goal areas of instruction known as the "Five C's" by the American Council on the Teaching of Foreign Languages (ACTFL). In what follows, I have chosen to elaborate on five pedagogically useful connections that I have made recently in my own undergraduate pronunciation course. While one need not replicate these very examples, my hope is that they will serve to illustrate the many pieces of linguistic data, historical information, cultural artifacts, and personal experiences that will strike a nerve and make students want to know more about our field of study.

As I write this, I am reminded that a Universal Design for Learning does not merely remove barriers for students who might not otherwise be able to learn at all; it also provides multiple links to engagement that allow all students to learn more thoroughly. Connections are just such links.

### 7.4.1. Nahuatlisms and the West Side grocers

In order to provide opportunities for practice of the voiceless stops, I enlisted the help of Nahuatlisms the likes of *chocolate, tomate, ocelote, aguacate,* and *cacahuate/cacahuete*, words more or less established pan-dialectally but which share the indelible mark—visible to the historical linguist, if not the untrained native speaker—of their Mexican origin. Felicitously for our purposes, the phonological structure they share is not only the ending *-te* but a complete avoidance of voiced obstruents (ideal because that chapter follows later in the phonetics curriculum) and a preponderance of /p/, /t/, and /k/. Consonant with the above discussion (section 7.1) of gradations of complexity in practice exercises, I came up with a second list of somewhat less universal Mexicanisms that could serve in a reading exercise, in isolated word repetition, as the focus of guided conversation, and even in meaningful conversation with native speakers (see web example (f)).

This second list included *petate, molcajete, popote, papalote,* and other such terms of little currency outside Mexico and Central America. Practice consisted of small-group work to try to define the words, or to match them with a list of definitions. Once they had made as much headway as they could with their classmates, representatives from each group used their cell phones to call Mexicans in hopes of coming up with as much information as possible. Although I provided some names of people they could call in Chicago, Tucson, and Brownsville, several students phoned Mexican grocery stores around town, knowing that the kind employees would be happy to help. All that mattered to me was that they spoke only Spanish; I knew they would have to continue focusing on the forms they had practiced, and that the forms themselves would become progressively further buried within the meaningful conversation that was eventually bound to take place. Subsequent recap for the whole class gave us yet another chance to practice. Although their minds were now on meaning rather than pronunciation, one could hope for occlusives that were unaspirated and *t*'s that were dental.

## 7.4.2. Historical linguistics and that spring break trip to the beach

Anyone who has traveled to Mexico can appreciate its notoriously long place names with their unusual number of z's (and x's, too, but that's a separate—though related—story). Why not make a connection to Spanish pronunciation and historical phonology and orthography? After our presentation on the history of the Medieval sibilants—with particular emphasis on the sources of Modern /s/ and  $/\theta/$  (see, for example, Resnick 1981:109-13)—students have to look at a list of place names from the states of Oaxaca, Guerrero, and Michoacán and figure out why there are so many z's and almost no s's (see

web example (g)). It turns out, of course, that the letter s is absent in indigenous place names because it represented, for the conquering Spaniards, an apical /s/ (the Modern Castilian "ese espesa") which was, not surprisingly, completely absent in the indigenous languages they found in Central Mexico. In fact, this very historical and orthographic connection can be made in almost all of the Americas: consider Cuzco (Peru), Iguazú (Argentina), Irazú (Costa Rica), etc.—and it also offers an explanation for the spellings of Arabic loans such as zanahoria and mozárabe (Penny 2002: 269). Touching on a topic that might have piqued student interest independently—and that at the very least forms part of their experience—we pave the way for further exploration into markedness and language universals (e.g., the relatively rare apical [s] vs. the common dorsoalveolar [s]); orthographic standardization and dialect variation (e.g., the role of Castilian norms); use of orthography as a symbol of resistance to colonialism (e.g., contemporary spellings of Latin American place names and of Amerindian languages: Cuzco/Cusco, Cakchiquel/Kaqchikel, etc.); and a host of related issues.

## 7.4.3. Dialectology and baby talk

While some Spanish phonetics textbooks caution students to use only the velar or uvular "jota" (that is, what is commonly described as the phoneme /x/), others acknowledge that glottal aspiration (the segment employed by over 100 million speakers) is a perfectly acceptable variant. I choose to provide laboratory, natural, and musical samples of all three models and allow students to choose the one that is most appropriate to their situation. The salience of  $[\chi]$  vs. [x] vs. [h] for English speakers (with little training) makes for an especially easy tie-in with dialectology, and examples are not hard to find since public performance of a dialectal variant of /x/ does not seem to be subject to stigmatization and correction to the degree that we have come to expect for many phenomena.

In addition, I have found that our study of /x/ leads naturally to a discussion of baby talk (of all things). The frames presented in web example (h) are from *El bebé pitufo* (Peyo 1984:9), published in Madrid. There we see Papa Smurf tickling Baby Smurf with a "cuchicuchicu..." and receiving the response "Ajo" from the baby. Papá Pitufo is then seen walking away saying "¡Detesto los ajos!" leaving the baby with simply a question mark emanating from his mouth. This is supposed to be funny, as it turns out, because "ajo" is simply a culture-specific prototype for baby talk in Spain; the baby was not referring to garlic at all, but rather was saying the equivalent of English "goo-goo-ga-ga." Imagine my surprise when native Spanish speakers from elsewhere told me they didn't get the joke! What I hadn't realized is that "ajo" is hardly a pan-Hispanic prototype. But of course this ought to be the case, given that the glottal fricative "jota" of the Caribbean, Colombia, Central America, and beyond would not provide the same effect as the Spanish uvular  $[\chi]!$  (Instead, much of the Southern Cone apparently renders baby talk as final-stressed *ajó* and other areas, from Chile to Mexico, employ something like *agu, tata, agugutata,* etc.) This excursus into what I have called "phonological culture" allows us to make connections to child language, onomatopoeia, and the arbitrariness of linguistic signs—not to mention comics!

#### 7.4.4. Modern Arabic and syllable-final laterals

The Spanish lateral /l/ is an extremely common phoneme, and examples abound for students to practice avoidance of English-style velarization and vocalization. One set of words lends itself to practice with the dreaded syllable-final context in particular, as well as to timely connections to language change in general, to the history of the Spanish lexicon, and to Modern Arabic. I am referring, of course, to Arabic loans such as *alcachofa*, *albaricoque*, *algarrobo*, *almacén*, and *albóndiga*, which have been borrowed with the now-opaque Arabic definite article *al*- which renders them so relevant to our purposes (see web example (i)).

As a way of creating a pragmatically realistic and interesting context for continuing to use these forms, I play the modern reflexes of the same words as spoken by an Arabic speaker and ask my students to identify the corresponding Spanish form. For many of them, it is the first time they approach Modern Arabic on any linguistic terms at all, and the revelations the assignment portends in terms of the history of Spain and the Spanish language cannot be underestimated.

## 7.4.5. Euphemisms and taboos

Finally, commonalities across languages and cultures are no more clearly evident than in the phonetic similarity of a large class of euphemisms to the taboo forms they replace. With the parallel case of English *fudge!*, *shoot!*, and *darn!* clearly in mind, I urge students to consider the Spanish euphemisms in (11) and the taboo forms which begin with the same sequence of phonemes, listed to the left.<sup>1</sup>

I dare say that this connection gets at the daily linguistic behavior of every one of our students, irrespective of the degree of euphemism they employ. It is a classic but pedagogically useful testimony to the relevance of phonetics, the tacit nature of linguistic competence, the social context of language, and the importance of objectivity in research.

#### 8. Conclusions

Here we have seen evidence that there is some disconnect between what we teach about Spanish pronunciation and what we know to be phonological reality for native speakers of the language. To some extent, this will always be the case, given that an introductory course is, well, introductory. Nevertheless, I hope that some of the foregoing suggestions will move us to take to the classroom more of the results of our laboratory and field research, more of our own relevant experiences, more diverse perspectives, and more innovative pedagogies in order to both improve our instruction and have fun in the process.

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<sup>&</sup>lt;sup>1</sup> I dedicate the list of taboo forms (not shown) to Jim Lee. The euphemisms are for my mother-in-law.

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