THE CURRENT STATE OF PRONUNCIATION IN SPANISH TEXTBOOKS

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Arteaga (2000) found that pronunciation instruction in 10, widely used, elementary-level Spanish textbooks was minimal or non-existent 24 years ago. Additionally, textbooks that did contain pronunciation-related materials included erroneous information. Since the seminal study, numerous studies have tested a wide range of pronunciation methodologies, some specifically focusing on Spanish. Therefore, it is crucial to (1) determine whether current curriculum incorporates pronunciation materials into textbooks and (2) assess if tested materials (such as explicit phonetic instruction, visual feedback, and HVPT) have been implemented. An analysis of 10 beginner-level, Spanish textbooks was conducted, calculating the total percentage of pronunciation materials per textbook and determining the accuracy of materials and recycling (Arteaga, 2000). Results reveal that five of the 10 textbooks include no pronunciation materials, while five textbooks contain less than 4.5% of textual real estate dedicated to pronunciation. Further, results show that some explanations in textbooks are inaccurate and lack tested methods.

INTRODUCTION

As prior research has highlighted the fact that pronunciation instruction is essential to developing fluency, intelligibility, and comprehensibility (Derwing & Munro, 2009), a careful examination of pronunciation materials is of clear benefit to the field. Previous research by Arteaga (2000) sought to document the state of pronunciation materials in college-level Spanish language textbooks and found significant gaps in both content and accuracy. In the past two decades, L2 pronunciation research has experienced significant growth with numerous tested materials having been developed (Nagle & Hiver, 2023). The current study provides an examination of Spanish-language textbooks to assess if current textbooks have addressed Arteaga's (2000) findings.

Arteaga (2000) Review

In her seminal study, Arteaga (2000) conducted a textual analysis of 10 beginner-level Spanish textbooks, assessing whether pronunciation materials were included, the accuracy of descriptions, recycling of sounds into textbook activities, and what features (if any) were addressed. The study revealed that six of the 10 textbooks had no pronunciation materials and of the four that did include dedicated pronunciation and phonetics instruction, there was erroneous information contained in each of these textbooks. With respect to erroneous information, Arteaga (2000) mentions instances in which Spanish segments are conflated with English segments, indicating that certain features in Spanish are equivalent to features in English, which is not often the case. For example, Spanish vowels 'a' and 'e' (/a/ and /e/) are explained as the "equivalents" of English 'a' and 'e' (/a/ and /eɪ/), often being compared to the sounds in the English words 'father' and 'hey' (/fa.ðə/ and /heɪ/). Arteaga (2000) further found that, if pronunciation was

Offerman, H. (2024). The Current State of Pronunciation in Spanish Textbooks. In D. J. Olson, J. L. Sturm, O. Dmitrieva, & J. M. Levis (eds), *Proceedings of 14th Pronunciation in Second Language Learning and Teaching Conference*, (pp. 1-11). Purdue University, September 2023. <u>https://doi.org/10.31274/psllt.17572</u> addressed, coverage was minimal and there was a lack of connection between pronunciation activities and other textbook content that limited the recycling of the newly introduced sounds.

With these concerns in mind, the current study seeks to explore if pronunciation materials are more thoroughly incorporated in current textbooks, and, if so, whether these current textbooks have addressed the issues outlined in Arteaga (2000). Further, while not in Arteaga's original study, this this study seeks to assess how much textual real estate, if any, is dedicated to pronunciation activities in textbooks. Textual real estate is operationalized in the current study as the percentage of text that addresses a particular learning objective, such as pronunciation materials. Moreover, since the year 2000, the field of L2 pronunciation has experienced a 'boom' in quantitative studies, many of which have shown significant L2 learner gains. Therefore, the current study also assesses whether any of the pedagogical methods that have been well-documented over the last two decades have been incorporated into lower-level textbooks, connecting research to pedagogical practice and materials development.

Evolution of Pronunciation Materials and Development Since 2000

Since Arteaga's (2000) study, other researchers have called attention to the necessity of incorporating pronunciation materials into second language teaching. For example, Derwing and Munro (2005), in their seminal study, found a lack of materials and preparation in the field of pronunciation instruction. They suggest that research-based methods are crucial for testing the benefits of pronunciation methods, instead of relying on ad-hoc approaches that are based on intuition rather than empirically tested techniques (Derwing & Munro, 2005). Although this study was primarily aimed at addressing pronunciation methods for English as a Second Language (ESL) purposes, a number of researchers have examined pronunciation teaching methods in other languages aside from English, such as French (Inceoglu, 2019; Miller, 2012; Sturm, 2013), German (Stratton, 2023) Japanese (Saito & Lyster, 2012), and Spanish (Kissling, 2013; Lord, 2005; Offerman & Olson, 2016; Offerman & Yelin, 2022; Olson, 2014; Trofimovich & Gatbonton, 2006). For the purposes of the current study, the following sections will focus specifically on pronunciation research conducted for L2 learners of Spanish.

Considering the broad range of pronunciation materials developed, several practices have garnered significant attention from researchers, including explicit phonetic instruction (Elliott, 1997; Kissling, 2013; Lord, 2005; Offerman & Yelin, 2022), visual feedback (Offerman & Olson, 2016; Olson, 2014), and high variability phonetic training (HVPT; Thomson, 2011), among others. Explicit instruction consists primarily of the use of the International Phonetic Alphabet (IPA) to have L2 learners associate sounds with IPA symbols in place of graphemes, (i.e., letters) avoiding the phonological association between L1 and L2 orthographic systems (Offerman & Yelin, 2022). For example, Offerman and Yelin (2022) demonstrated the difference in the phonetic production of the term banana, a cognate, in both Spanish and English with IPA symbols: [ba.na.na] (Spanish) vs. [bə.næ.nə] (American English). Moreover, explicit instruction often incorporates explanations of place and manner of articulation of sounds (Elliott, 1997). Visual feedback references the use of visual representations (e.g., sound waves and/or spectrograms) of productions of L2 learners and native speakers (NSs) so that learners may assess differences in L1 and L2 pronunciation features and apply what they have visually learned to pronunciation practice and development (Offerman & Olson, 2016; Olson, 2014). Finally, HPVT offers the use of multiple voices producing sounds in the L2 for learners to have a broader repertoire of input to enhance perceptual skills and refine pronunciation abilities (Thomson, 2011).

While there have been numerous pronunciation methods developed over the last 24 years, the current study will specifically analyze the role of these two methods, explicit phonetic instruction and visual feedback, as these have been often studied and tested for L2 Spanish. Moreover, as will be discussed in the results and discussion sections, explicit phonetic instruction and visual feedback were the only two tested methods found to be incorporated in the textbooks analyzed in the current study.

Research Questions

The following research questions have been proposed:

RQ1: If pronunciation is addressed in current textbooks, to what extent? How much textual real estate is dedicated to pronunciation issues?

RQ2: For textbooks that do incorporate pronunciation, which, if any, contain errors regarding accuracy?

RQ3: For textbooks that do incorporate pronunciation, which, if any, contain recycling activities of pronunciation topics?

RQ4: Do any of the textbooks incorporate empirically tested methodologies and practices?

METHODOLOGY

Materials and Textual Real Estate

Ten, beginner-level college Spanish textbooks were examined for this study, parallel to Arteaga's (2000) study. To obtain a variety of textual samples, textbooks were chosen from four major publishing companies, which are used widely in the U.S. higher education system. Of the 10 textbooks selected, five were selected from Vista Higher Learning (VHL), two from Pearson, two from McGraw-Hill (MGH), and one from Difusión (see References; each specific textbook is denoted with an asterisk).

While Arteaga (2000) did not investigate textual real estate, the current study wished to observe the extent to which pronunciation was included in each textbook, if at all, in efforts to provide quantitative analysis. Textual real estate percentages were calculated by dividing the total number of pages that contained pronunciation information and/or activities by the total number of content pages. Content pages were defined as those that contain information relevant to concepts covered in that chapter. For example, a page was not counted if it was a title page or a blank page separating chapters; pages with activities, readings, cultural content, writing, vocabulary, etc. were counted in calculations of content pages.

Accuracy, Recycling of Topics, and Tested Practices

In Arteaga's (2000) study, the accuracy of phonetic or pronunciation-oriented content was discussed and assessed. The results concluded that there were numerous phonetic topics that were often conflated with English. Parallel to Arteaga's (2000) analysis, the current study examined the accuracy of the pronunciation materials, specifically assessing the presence of inaccurate conflations between English and Spanish with respect to orthography.

Further, after analyzing pronunciation activities, this study examined the role of post-activity recycling of sounds for each textbook that contained pronunciation activities. This was examined by looking at whether pronunciation topics were explicitly integrated into other topics presented in the texts, such as vocabulary and grammar activities. In her review, Arteaga (2000) found that there was no recycling of pronunciation concepts incorporated throughout textbooks and urged that such activities be implemented to help reinforce newly learned pronunciation features.

Finally, the current selection of textbooks was examined to determine whether any tested pronunciation practices were present. Specifically, each textbook was examined for the number of instances of explicit phonetic instruction, visual feedback, or HPVT. Incorporation of explicit phonetic instruction often includes descriptions of Spanish phonetic features and/or comparisons of Spanish phonetic features with English. With respect to visual feedback, any visual representation in the form of sound waves or spectrograms was considered.

In sum, textual real estate, accuracy, recycling of pronunciation materials, and tested practices were analyzed in each of the 10 textbooks. Results from all analyses are presented in the following section.

RESULTS AND ANALYSES

Textual Real Estate: Percentages and Features

Once again, textual real estate was calculated according to number of pages that contained pronunciation instruction and activities divided the total number of content pages. The results are shown in Figure 2. Each textbook is identified by a publishing company name and book number, with the publishing company: Pearson, McGraw-Hill (MGH), Vista Higher Learning (VHL), and Difusión¹.

¹ In comparison to Arteaga's (2000) study, one publishing company (MGH) is common between the previous study and the current study; this is due to the changing textbook market as well as the development of new publishing companies since 2000.

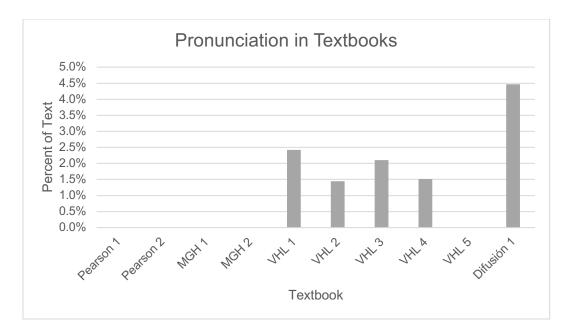


Figure 2. Percentage of textual real estate dedicated to pronunciation by textbook with publishing company.²

Five of the 10 textbooks did not include any information related to pronunciation. Apart from one textbook (Difusión 1), four that contained pronunciation materials were calculated as dedicating less than 2.5% percent of the text to pronunciation. Difusión 1, which was the highest in the data set, dedicated 4.5% to the textual real estate to pronunciation. Additionally, Table 1 below details each phonetic feature and topic presented in each of the five Spanish textbooks that included pronunciation instruction (Table 1 is based on and adapted from Table 2 in Arteaga, 2000, p. 348). The symbol "+" indicates inclusion of a feature, while the symbol "-" denotes a lack of inclusion ("+/-" refers to the first feature mentioned being included, but not the second; for example, in VHL 1, [b] is mentioned, but not [β]).

² VHL 1 & Difusión 1 on most pages included only short descriptions, not taking up a whole page.

Table 1

	VHL 1	VHL 2	VHL 3	VHL 4	Difusión 1
Voiced Stop/					
Approximant					
(Fricative)					
[b] [β]	+/-	+	+	+	
[d] [ð]		+	+	+	
[g] [ɣ]		+/-	+/-	+/-	
Liquids					
[1]	+	+	+	+	+
[r]	+	+	+	+	+
[1]					
Voiceless Stop					
[p]	+				+
[t]	+	+	+	+	+
[k]	+	+	+	+	+
Vowels [a,e,i,o,u]	+	+	+	+	+
Diphthongs & Linking	+/-	+	+	+	+
Lack of Vowel					
Reduction					
[Ø] & [h]	+	+	+	+	
Nasal Assimilation					
Suprasegmentals					
Syllabification					
Rhythm	+				
Intonation	+				+
Stress		+	+	+	+
Rhythm					
Dialectal Features					
Distinción	+	+	+	+	
Yeísmo		+	+	+	

Table 1. Findings in Five Elementary Spanish Textbooks (based on Arteaga, 2000)

As seen in Table 1, some features are mentioned in some textbooks, while other features are not covered in other books (for example, [p] is not discussed in three books, while it is covered in other books), indicating a lack of a wider coverage of sounds and pronunciation in each of these five books. Additionally, in some textbooks, the full set of features is not presented; for example, the voiceless stops [t,k] are covered in VHL 2, 3, and 4, but [p] is not included.

Issues with Accuracy, Recycling, & Incorporation of Current Practices

This section discusses commonalities and differences in the five textbooks reviewed that contained pronunciation practice. Regarding the accuracy of pronunciation materials, it was found that four out of five textbooks appear to contain erroneous information (VHL 1 = 2 errors

out 10 lessons; VHL 2, 3, and 4 = 8 errors out of 10 lessons [these lessons were the same for each listed]). Similar to Arteaga's findings (2000), 'father' and 'hey' are used as examples to demonstrate the sounds /a/ and /e/ in Spanish (VHL 2, 3 and 4), continuing to conflate these Spanish vowels with English vowels or diphthong patterns in English. Another example explains that $\langle b \rangle$ and $\langle v \rangle$ in Spanish often sound like 'b' ([b]) in English; while 'b' is produced as [b] in some contexts in Spanish, and that $\langle b \rangle$ and $\langle v \rangle$ are sometimes pronounced "softer" (VHL 2, 3, and 4). These descriptions are misleading, as $\langle b \rangle$ is often produced as the voiced bliabial approximant (or sometimes referred to as a slit fricative) [β] in many contexts (Hammond, 2001; Hualde, 2005) within Spanish and does not exist in English (Hammond, 2001), as the approximants are not phonetically described as softer, but rather the consisting of the lack of full occlusion and the production of airflow (Hualde, 2005).

Regarding recycling, four out of five textbooks did provide activities at the end of some pronunciation lessons to recycle and reinforce learned knowledge of phonetic features in Spanish. Such recycling included providing activities in which students need to either repeat vocabulary items with the phonetic features recently reviewed or in which students must read sentences aloud and focus their attention on their pronunciation of specific features. While this could be considered an improvement since Arteaga's (2000) study, there is a notable lack of recycling of learned phonetic features throughout the entirety of each chapter, and these sounds are not revisited in any of the following chapters. In other words, recycling activities typically only appear on the pages that immediately follow information on the respective phonetic features and are not incorporated into the following grammar and vocabulary portions of a chapter.

Finally, considering the incorporation of current practices, only two textbooks included tested practices. In VHL 1, there was one instance of the use of IPA symbols. In this material, an explanation of the Peninsular Spanish phenomenon *distinción* was provided (Hammond, 2001; Hualde, 2005) utilizing IPA symbols to describe the correspondence between the graphemes <s, c, z> and the sounds /s/ vs. / θ / (see Hammond, 2001; Hualde, 2005), illustrating the differences in Peninsular Spanish productions of 'casa' /ka.sa/ and 'caza' /ka. θ a/. Difusión 1 contained two different types of tested practices, each appearing once. First, an explanation of the place and manner of articulation was described with a visual aid of a vowel chart to express the five Spanish vowels (/a,e,i,o,u/), with a reference to English. Additionally, Difusión 1 included intonation contours that displayed rising and falling pitch related to interrogatives in Spanish. While the incorporation of this tested method, visual feedback, represents a positive step forward, there was little explanation provided in the textbook for interpretation of intonation contours. While these contours should be relatively intuitive (de Bot, 1983), more context and explanation is recommended upon introducing visual feedback.

DISCUSSION AND CONCLUSIONS

This study considered the percent of textual real estate dedicated to pronunciation instruction in 10 textbooks, assessed the notions of accuracy and recycling originally highlighted in Arteaga (2000), and examined whether empirically tested pronunciation instruction practices have been incorporated into pronunciation instructional materials. Only five of the 10 textbooks reviewed (50%) contain pronunciation materials and practice. This percentage represents only a marginal increase over the last two decades relative to Arteaga (2000), which found that four of 10

textbooks contained pronunciation materials. While the current study included a different selection of textbooks than Arteaga (2000), this study emphasizes the broader issue that only 50% (five of 10) of selected textbooks include pronunciation activities in the texts themselves. This is crucial as the selected textbooks are widely used by multiple institutions in the U.S.

In addition to the lack of pronunciation materials, textbooks that did include pronunciation materials revealed issues related to accuracy similar to those found by Arteaga (2000), with some even presenting the same erroneous information that Arteaga (2000) found. Further, while four textbooks included recycling activities, the recycling were very limited in scope and did not exist for every pronunciation topic presented in textbooks. Moreover, recycling activities were not included throughout the entirety of the chapters, as originally suggested by Arteaga (2000).

Finally, there were only three instances across two textbooks of the implementation of tested pronunciation practices. Specifically, there was some limited use of explicit phonetic instruction (i.e., use of IPA symbols and explanation of place and manner of articulation) and one instance of visual feedback (i.e., intonation contours) in the reviewed textbooks. It was also noted that, apart from explicit instruction and visual feedback, no other form of tested practices was mentioned in these textbooks. This brings into questions why tested practices were rarely introduced and did not appear throughout each textbook that did include them, and further why they did not appear in other textbooks. In making these observations, several implications arise: (1) Spanish language programs and program directors should carefully consider the pronunciation materials that are presented in textbooks; (2) furthered communication should be fostered between pronunciation researchers and publishing companies and/or textbook authors in acknowledging the gap that still exists between research and instructional materials; (3) future research should perhaps call into question the reason there is still an apparent gap in connecting tested methods to current Spanish textbooks.

Although not the focus of the current study, it is worth briefly mentioning how these textbooks were found to engage with variation of sounds. It was noted that *distinción* (typical of Peninsular Spanish; Hammond, 2001) was introduced in four of the five textbooks with pronunciation material, while other types of fricative variation were not mentioned, such as /s/ aspiration and deletion which are typical of Caribbean Spanish (Hammond, 2001). Patterns of *yeismo* were also mentioned in four of the five textbooks; however, there was no mention of *zeismo* and *sheismo* (typical of Southern Cone Spanish; Hammond, 2001). This brings into question issues of standardization in Spanish and should be addressed in future research, assessing the rationale underlying why certain dialectal variations may receive more attention than others in textbooks. Inclusion of dialectal variation in pronunciation teaching could address previous concerns related to learner awareness of Spanish dialectal variation (Schmidt, 2022).

Limitations

One limitation of this study concerns the lack of analysis of online components. While some textbooks indicated that complementary online components included pronunciation materials, these were not assessed. The decision to focus on textbooks rather than online materials was made considering Arteaga's (2000) comment that, "...if phonetics instruction is crucial to meeting the goals within a communicative/proficiency-oriented classroom, it is obvious that

coverage must be provided within the text itself. Not all programs require students to complete the lab manual, and as I have stated, it would be impossible to verify student work given the types of exercises that provide phonetics practice" (Arteaga, 2000; p. 347). As lab manuals have been replaced with online components for most, if not all textbook programs, this line of thought should be similarly applied. Although most students have access to the online textbook's component, not all programs require these supplementary materials. Further, there is typically no instructor supervision with students having the opportunity to receive real-time feedback on pronunciation. Future analyses may seek to assess these online components to add to the current analysis.

Future research may also seek to expand the number of textbooks analyzed. The decision to analyze 10 textbooks in the current project was made to more closely replicate the seminal work by Arteaga (2000). As there may be a larger variety of Spanish textbooks at this point, future study may seek to draw on a wider variety of textbooks and publishers. **ABOUT THE AUTHOR**

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ACKNOWLEDGEMENTS

I would like to thank Jhonathan Carmona Tangarife and Camila Naiquén Bracamonte for their work on this project. This would not have been possible without their assistance.

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