## **BOOK REVIEWS**

## REVIEWS/RESENHAS

Baptista, Barbara O. & Watkins, Michael. *English with a Latin Beat.* Studies in Portuguese/Spanish - English Interphonology. Studies in Bilingualism 31. John Benjamins, 2006.

by Walcir Cardoso

Can English with a Latin Beat do the samba, salsa, and flamenco without losing its beat? This is one of the guestions that will be addressed in this review. The volume consists of an introductory section and eleven papers on the phonological acquisition of English as a foreign or second language within a classroom environment. It is organized in a bottom-up hierarchical fashion, covering studies that revolve around the segment (Part I), the syllable (Part II), and higher prosodic domains (Part III). The volume distinguishes itself from others in the field (e.g., those organized by Gass & Selinker, 1983; James & Leather, 1986; Joup & Weinberger, 1987: Strange, 1995) in that it compiles studies focusing on two geographically and linguistically related first languages: Brazilian Portuguese and Spanish. In addition, the ELB brings together a collection of empirical studies explicitly or implicitly designed to assess two theoretical assumptions on second language acquisition in an instructed setting (L2): the Speech Learning Model (Flege, 1995) and Markedness Theory (e.g., Eckman's (1977) Markedness Differential Hypothesis).

The volume begins with an introductory section written by the editors. It presents and contextualizes the rationale behind the conceptualization of the volume, and provides a succinct historical overview of the recent trends in research in L2 phonological acquisition. starting with the publication of the seminal volumes edited by James & Leather (1986) and Joup & Weinberger (1987), and the first meeting of the New Sounds conference in 1990. The editors then proceed with a brief but informative introduction to some of the theoretical models that the studies included in the volume adopt to analyze interlanguage phenomena, namely Flege's (1995) Speech Learning Model, Eckman's (1977) Markedness Differential Hypothesis and its more recent incarnation, the Interlanguage Structural Conformity Hypothesis (Eckman, 1991), Major's (2001) Ontogeny Phylogeny Model, and Best's (1995) Perceptual Assimilation Model. This is followed by an overview of the eleven papers. Finally, the section ends with a discussion of the practical (for pronunciation instruction) and theoretical implications of the results and analyses reported in the eleven papers included in the volume.

Ilha do Desterro	Florianópolis	nº 55	p. 199- 206	jul./dez. 2008
------------------	---------------	-------	-------------	----------------

The first part of the volume is comprised of segmental-level studies and consists of three papers. The first paper "Adult Phonetic Learning of a Second Language Vowel System", by Barbara Baptista, examines the longitudinal acquisition of English vowels by Brazilian Portuguese (BP) speakers under the assumption that the phonetic learning of a novel vocalic system is possible in adulthood. After acoustic analyses of the speech of eleven BP speakers producing words containing the relevant set of English vowels, the author concludes that foreign vowels are not acquired in isolation; instead, she argues that they are acquired as part of a system in which each new vowel triggers featural adjustments in its vocalic neighbors.

The second paper in this section is "The Phonological and Phonetic Development of New Vowel Contrasts in Spanish Learners of English", by Paola Escudero, which reports the findings of an experimental study investigating the perception of Scottish English high front vowels /i/ - /I/ by 50 Spanish speakers from various regions of Spain and South America. Her findings suggest a stagelike trajectory in the development of the /i/ - /I/ contrast, starting with the learners' inability to identify the contrast, intermediated via stages in which they use vowel duration or a combination of vowel duration and spectral quality to differentiate the two vowels, to a final stage in which the two vowels are discriminated using spectral quality only, as is the case by speakers of the target L2, Scottish English. These results lead the author to conclude that L2 learners have the ability to learn to perceive foreign L2 vowels phonologically.

The final paper in this section is "Age and Native Language Influence on the Perception of English Vowels, by Francisco Gallardo del Puerto, María Luisa García Lecumberri and Jasone Cenoz. which, as the title suggests, investigates the effects of age and L1 influences (Spanish) on the perception of English vowels. The analysis of three groups of children, organized by age of onset of learning English (4, 8 and 11 respectively, with mean exposure of 6 years by the date the experiments were administered) indicate that the age of initial exposure to the L2 does not constitute an advantage to the accurate perception of English vowels, thus dismissing a critical period effect. Consistent with Flege's (1995) Speech Learning Model, the results of this study confirm that while new and identical vowels are more likely to be perceived correctly earlier in the L2 acquisition process, relatively similar vowels are more likely to be misidentified

The second part of the volume is devoted to syllable-level studies involving the L2 acquisition of codas and onset clusters and includes five papers. The first, entitled "The Influence of Voicing and Sonority Relationships on the Production of English Final Consonants", by Barbara Baptista and Jair da Silva Filho, examines the acquisition of English word-final consonants (codas) by BP speakers. More specifically, the

study investigates the effect of voicing and sonority markedness on the production of codas that are illicit in BP which, due to L1 transfer and markedness effects, syllabify as onsets of the epenthesis vowel [i] (i-paragoge henceforth) in early and intermediate stages of L2 acquisition. The results indicate that this interlanguage phenomenon is more likely to occur following a voiced consonant, an obstruent, and obstruents that have dorsal and coronal articulators

The second paper, "Perception and Production of Vowel Paragoge by Brazilian EFL Students", authored by Rosana Denise Koerich, adds another dimension to the analysis of the i-paragoge phenomenon in BP-based interlanguage via the incorporation of a perception perspective. Under the assumption that "inaccurate perceptual targets may be responsible for the misproduction of L2 sounds" (p.91), the study establishes that the production of codas in interlanguage positively correlates with learners' ability to discriminate them, corroborating thus the "perception before production" hypothesis (e.g., Polivanov, 1931; Flege, 1993).

The remaining three papers in Part II involve the acquisition of a single syllable component: /s/ + consonant/s onset clusters (sC clusters). The first of these, "The Sonority Cycle and the Acquisition of Complex Onsets", by Robert Carlisle, sets the scene for the subsequent two papers by providing a comprehensive discussion of the theoretical apparatuses that have been pro-

posed for the analyses of sC clusters. Carlisle's two experimental studies involving Hispanophone EFL learners confirm previous research on the subject by demonstrating that sC sequences are more easily articulated if they are shorter (e.g., compare the shorter bilateral cluster in [st]op with the longer trilateral sequence in [str]ap) and preceded by a vowel, and that their acquisition order follows a path determined by markedness on sonority sequencing (Clements, 1990) that predicts that the least marked /sl/ cluster is acquired before its more marked homorganic counterparts (i.e., /sn/ and /st/, in that order).

Based on Carlisle's studies on the acquisition of sC sequences, the fourth paper, authored by Jeanne Teixeira Rebello and Barbara Baptista, "The Influence of Voicing on the Production of Initial /s/-clusters by Brazilian Learners", carries on a similar study involving a different community of EFL learners, Brazilian Portuguese speakers. The results, however, run counter to those of Carlisle in that the length of the cluster as well as the preceding phonological environment (consonant versus vowel) had no significant effect on sC production. In addition, the hypothesis based on Clements' (1990) sonority sequencing was not confirmed. since the production of the least marked /s/ + sonorant clusters encountered the highest rate of L1 interference. The last paper dedicated to syllable-level studies is the contribution by Andréia Schurt Rauber, "Production of English Initial /s/-clusters by Speakers of Brazilian Portuguese and Argentine Spanish". Influenced by Carlisle's works on the subject, Rauber's study compares the production of the same set of sC clusters across two distinct EFL learning communities, using the same methodology for data collection and analysis adopted in the aforementioned studies by Carlisle and Rebello and Baptista. In general and with insignificant disparities, the results presented in this study corroborate those obtained in their respective groups of learners, as discussed in the overview of Carlisle and Rebello and Baptista above, and emphasize the effects of both markedness and L1 transfer in the acquisition of a second language.

Finally, the third part consists of prosodic-level studies involving the acquisition of English prosody, more specifically stress and rhythm. It starts with the paper by Michael Alan Watkins, "Variability in the Use of Weak Forms of Prepositions", which investigates the variable production of the reduced forms of four English prepositions, as produced by BP speakers. The study concludes that, of the set of prepositions analyzed, only "to" is more likely to undergo vowel reduction, and that the phenomenon is favored in the presence of a preceding syllable within the same intonation group, when it is followed by an onsetless syllable, and when the preposition is followed by a stressed syllable. María Luisa García Lecumberri's paper entitled "Perception of Double Stress by Spanish Learners of English" is devoted to the perception of secondary and primary stress in polysyllabic simple and compound words in the speech of non-native (L1 Spanish) and native English speakers. By comparing how these two groups identify stress in English words (e.g., no difference in identifying primary stress in compounds across the native and non-native groups), the author concludes that, in general, native competence alone does not provide a strong advantage for stress identification vis-à-vis the feature investigated.

The volume closes with L. Armando Silveiro and Michael Alan Watkins's paper "The Production of Compound Stress by Brazilian learners of English", in which the authors examine the production of phrasal stress patterns for compounds among advanced EFL students. The results indicate a strong tendency for incorrect stress placement on the second constituent of compounds, which is interpreted as a direct transfer of the patterns that characterize the phonology of the L1, Brazilian Portuguese.

Written by a team of researchers from universities in Brazil, Europe and the United States, some of international renown, this volume constitutes a significant contribution to the field of phonological L2 acquisition and, as such, it is highly recommended to researchers and specialists in the field and in phonology in general. The eleven papers cover an extensive selection of topics that empirically validate and challenge some of the hypotheses, models and theoretical principles proposed in the literature for the analysis of phonological

phenomena in second language acquisition. Accordingly, the volume illustrates some current and relevant advances in L2 phonological acquisition research. However, as is the case with any enterprise of this magnitude, the volume contains some shortcomings.

Let us start with the omissions. Considering its recent date of publication, I was surprised not to see a single analysis or discussion that considers the effect of input frequency in the development of L2 phonology (e.g., the model formalized in Bybee (2001), and the empirical studies compiled in Bybee & Hopper (2001)). In current L2 acquisition research (e.g., see the special 2002 thematic issue on frequency effects on L2 acquisition of the Studies in Second Language Acquisition journal), several studies have confirmed that structures with higher phonotactic probability are produced earlier and more accurately than those characterized by a lower probabilistic distribution in the input (i.e., in student-directed speech or teacher talk, considering that the majority of the studies included in English with a Latin Beat are based on in-classroom L2 acquisition). Some of the studies in the volume could benefit from exploring the hypothesis that some of the patterns encountered in L2 development could also be explained from a frequency-based perspective. For instance, one could argue that the results indicating that bilateral (sC) clusters are acquired earlier (or articulated more easily) than trilateral (sCC) clusters, reported in Carlisle's study, could be eas-

ily explained by a frequency-based analysis of these forms in English. For instance, an examination of the 1,000,000 words that comprise the Brown Corpus (Kucera & Francis, 1967), conducted via Cobb's web-based Concordancer on The Compleat Lexical Tutor - version 4.5: http://www.lextutor.ca) reveals that the phonotactic distribution of each pair of /sp/-/spr/ and /sk/-/skr/ clusters in the corpus can predict with exact precision their acquisition order, similar to what is reported in Carlisle's analysis based on markedness. Specifically, and assuming that L2 learners' input correlate with that of the Brown Corpus (see Jurafsky (2003) and Cardoso (2008) for a similar proposal). a frequency-based analysis predicts that the highly frequent bilateral clusters ( sp/ = found in 3,736 words; /sk/ =593 words) should be acquired earlier (or more accurately produced) than their less frequent trilateral counterparts (/spr/ = 404 words; /skr/ = not found)in the corpus).

Another surprising omission was not to see any reference to Optimality Theory (OT; Prince & Smolensky, 1993) as a framework to analyze second language phenomena, especially considering that many of the authors have a strong background in generative linguistics. There is a considerable amount of research using the framework and its more recent developments (e.g., Boersma & Hayes' (2001) Stochastic OT) to analyze L2 acquisition within the areas of inquiry embraced by the volume, including production (e.g., Broselow, Chen &

Wang, 1998), perception (e.g., Escudero & Boersma, 2004), sociolinguistically-grounded variation (e.g., Cardoso, 2007), and frequency effects (e.g., Broselow & Xu, 2004).

Other less serious omissions and quibbles include the following: There are no studies on the acquisition of English consonants or their features (e.g., the interdentals, voice onset time in the production and perception of voiceless stops, which are notoriously problematic for the two L1s encompassed by the volume). In addition, the volume lacks studies involving the European variety of Portuguese (EP) as an L1, an absence that the editors acknowledge as accidental because "no relevant research was available" (a surprising statement considering the works of Madalena Cruz-Ferreira over the last two decades) and. more convincingly, because EP "differs most noticeably from BP and Spanish" at both the prosodic and segmental levels (pp. 2-3).

The volume has also some inconsistencies in editing and planning, especially involving the reference sections and the author index. The discrepancies involving the former could have been avoided had the editors unified all the reference lists into a single bibliography at the end of the book, which would also eliminate the considerable amount of overlap of references across the individual papers (e.g., Flege (1995) and several works by Carlisle are consistently repeated). Other minor drawbacks of similar nature include: The title for Flege

(1995) is not provided in a uniform manner (compare "Second language speech learning: Theory, findings and problems" (p.14) with "Second language speech learning theory, findings and problems" (p.39)).

Moreover, the criteria for inclusion of an author's name in the author index section is not clear (e.g., two of Broselow's studies are cited at least twice in two separate papers (p.4, p.75) and the author does not appear in the index, while Boersma, who is only cited once as a second author, is worthy of a place in the list).

In conclusion, despite some of the shortcomings discussed above, there is much to admire in this collection of papers. In general, the volume is superbly well written and organized and, as the first collection to gather studies involving the acquisition of L2 English from the perspective of those who speak English "with a Latin beat", it should be considered a starting point for researchers and graduate-level students interested in the subject. It includes empirical studies that reveal a great deal about phonological L2 acquisition and, furthermore, it provides compelling evidence for the different roles that the native language, the target language, and universal principles have in the development of perception and production skills in a second language. In closing and answering the question put forward at the outset of this review: Yes. "English with a Latin Beat" can definitely do the samba, salsa and flamenco,

but it will almost certainly have a difficult time accompanying the lethargic rhythm of the *fado*.

## References

- Best, C. (1995). A direct realist perspective on cross-language speech perception. In W. Strange (Ed.), *Speech perception* and linguistic experience: Issues in cross-linguistic research (pp. 171-204). Timonium, MD: York Press.
- Boersma, P. & Hayes, B. (2001). Empirical tests of the gradual learning algorithm. *Linguistic Inquiry* 32, 45-86.
- Broselow, E. & Xu, Z. (2004). Differential difficulty in the acquisition of second language phonology. *International Journal of English Studies: Advances in Optimality Theory* 4(2), 135-163.
- Broselow, E., Chen, S. I. & Wang, C. (1998). The emergence of the unmarked in second language phonology. *Studies* in *Second Language Acquisition*, 20, 261-280.
- Bybee, J. & Hopper, P. (2001). Frequency and the emergence of linguistic structure. Amsterdam: John Benjamins.
- Bybee, J. (2001). *Phonology and language use*. Cambridge: Cambridge University Press.
- Cardoso, W. (2008). The development of sC onset clusters in interlanguage: Markedness vs. frequency effects. In Proceedings of the Generative Approaches to Second Language Acquisition (GASLA 9), R. Slabakova, J. Rothman, P. Kempchinsky, and E. Gavruseva (eds.), 15-29. Somerville, MA: Cascadilla Proceedings Project.
- Cardoso, W. (2007). The variable development of English word-final stops by Brazilian

- Portuguese speakers: A stochastic optimality theoretic account. *Language Variation and Change* 19, 1-30.
- Clements, G. (1990). The role of the sonority cycle in core syllabification. In J. Kingston and M. Beckman (Eds.), *Papers in laboratory phonology I: Between the grammar and physics of speech* (pp. 283-333). New York: Cambridge University Press.
- Cobb, T. (2004). *The Complete Lexical Tu-tor 4.5* [A web-based suite for corpus analysis]. URL: http://www.lextutor.ca.
- Eckman, F. (1977). Markedness and the contrastive analysis hypothesis. *Language Learning* 27, 315-330.
- Eckman, F. (1991). The structural conformity hypothesis and the acquisition of consonant clusters in the interlanguage of ESL learners. *Studies in Second Language Acquisition*, 13, 23-41.
- Escudero, P. & Boersma, P. (2004). Bridging the gap between L2 speech perception research and phonological theory. *Studies in Second Language Acquisition* 26(4), 55-585.
- Flege, J. E. (1993). Production and perception of a novel, second-language phonetic contrast. *Journal of the Acoustical Society of America* 93 (3), 1589-1608.
- Flege, J. E. (1995). Second language speech learning: Theory, findings and problems. In W. Strange (Ed.), *Speech* perception and linguistic experience: Issues in cross-language research (pp. 233-277). Timonium MD: York Press.
- Gass, S. & Selinker, L. eds. (1983). Language transfer in language learning. Cambridge, MA: Newbury House Publishers

- Ioup, G. & Weinberger, S. (1987). Interlanguage phonology. Cambridge, MA: Newbury House Publishers.
- James, A. & Leather, J. (1986). Sound patterns in second language acquisition. Dordrecht: Foris.
- Jurafsky, D. (2003). Probabilistic modeling in psycholinguistics: Linguistic comprehension and production. In R. Bod, J. Hay, and S. Jannedy (Eds.) *Probabilistic linguistics* (pp.39-95). Cambridge, MA: The MIT Press.
- Kucera, H. & Francis, N. (1967). Computational analysis of present-day American English [The Brown Corpus]. Providence: Brown University Press.
- Major, R. (2001). Foreign accent: The ontogeny and phylogeny of second language phonology. Mahwah, NJ: Lawrence Erlbaum.
- Polivanov, E. (1931). La perception des sons d'une langue étrangère. Travaux du Cercle Linguistique de Prague, 4, 79-96.
- Prince, A. & Smolensky, P. (1993). *Optimality theory: Constraint interaction in generative grammar*. Cambridge, MA: The MIT Press.
- Strange, W. (1995). Speech perception and linguistic experience: Issues in cross-language speech research. Timonium, MD: York Pres.