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TBLT and L2 Pronunciation:

Do the Benefits of Tasks Extend beyond Grammar and Lexis?

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TBLT and L2 Pronunciation: Do the Benefits of Tasks Extend Beyond Grammar and Lexis?

Decades of research on task-based language teaching and learning (TBLT) have demonstrated that tasks may encourage second/foreign language (L2) development by providing conditions for the engagement of processes that facilitate L2 acquisition (e.g., Robinson, 2011; Skehan, 2014). Specifically, manipulating task features has been shown to draw learners' attention to target forms within meaning-based interaction; to encourage automatization and fluency of target structures; and to promote use of more accurate, varied, and/or complex forms. However, the majority of the research examining the facilitative role of tasks and task features thus far has focused on tasks that center on grammatical or lexical structures, or even pragmatics. To date, there is a lack of systematic investigation into the role of tasks and task manipulation in promoting opportunities for the development of L2 pronunciation, an important aspect of L2 acquisition and communicative competence. In fact, despite recognition that the theoretical rationale for TBLT includes pronunciation (Ellis, 2009) and research demonstrating that form-focused episodes (FFEs) targeting pronunciation do indeed occur naturally within meaning-based task interactions (Ellis, Basturkmen, & Loewen, 2001; Gurzynski-Weiss & Baralt, 2014; Loewen, 2005), few studies have focused specifically on TBLT and pronunciation. Those that have included pronunciation (e.g., de la Fuente, 2006; De Ridder, Vangehuchten, & Seseña Gómez, 2007; Ellis, et al., 2001; Loewen, 2005) have measured pronunciation incidentally, alongside grammatical and lexical targets. The five empirical papers in this thematic issue investigate, systematically and for the first time, if the benefits of tasks extend beyond grammar and lexis. Specifically, these studies examine the potential of tasks to encourage attention to pronunciation targets and the development of L2 pronunciation accuracy.

In addition to discussing the theoretical role(s) of attention in L2 development, the introduction to this special issue provides a concise overview of the role of pronunciation in language competence, of what is known about how L2 pronunciation is learned, and of how L2 pronunciation development is examined. The five novel empirical studies demonstrate how TBLT research may be extended to L2 pronunciation and how traditional acoustic analysis can provide an important way of measuring gains in L2 pronunciation accuracy within the context of TBLT. These studies include investigations into: (a) the amount of attention given to pronunciation in task-based interaction and the relationship between such attention and task features including task type, modality, and the interlocutor's first language (L1), (b) the effectiveness of pronunciation-focused recasts during task-based interaction, (c) the effects of a task-based lesson on L2 prosody, (d) the potential of auditory priming and task and procedural repetition to aid in the development of stress patterns, and (e) whether the predictions of the cognition hypothesis extend to L2 pronunciation for tasks designed to make accurate vowel production task essential. The special issue concludes with a brief epilogue by experts in TBLT and L2 pronunciation who outline future directions for research in this area.

TBLT and Attention

One of the strongest arguments in support of TBLT is the theoretical rationale, and corroborating empirical evidence, that well-designed tasks can draw learners' attention to form within meaning. Focusing on form within meaning or, even more specifically, within communicative tasks, is a central component in task-based frameworks (Ellis, 2003; Long, 1985, 1998, 2015; Long & Norris, 2000; Robinson, 2001, 2011; Skehan, 1998). Robinson (2011) states, "Tasks provide opportunities for noticing the gap between a participant's production and input provided and for metalinguistic reflection in the form of output" (p. 2). Ellis (2003)

highlights the role of the researcher and instructor, asserting that, “Task designers should manipulate tasks in such a way as to enhance the probability that language learners will pay attention to particular aspects of the language code in the context of a meaningful activity, because this is believed to strongly promote SLA” (p. 9). Although TBLT is not as concerned with the level of attention or awareness needed (see Leow, 1998, 2001; Schmidt, 2001; Tomlin & Villa, 1994), the belief is that learning is predicated on learners’ attending, at some level, to the target structure(s) while they are already engaged in meaningful task-based interaction (for a discussion of the importance of attention at two levels in TBLT, see Long, 2015). This relationship between task design and learners’ attention has been supported by considerable empirical research.

For example, studies have manipulated the focus of tasks in an attempt to make the target form essential within a meaning-based task. One study, Mackey (1999), which manipulated the type of interaction in which L2 English speakers partook to make the formation of various question forms necessary, was successful in encouraging learners to focus their attention on the linguistic target while completing information gap tasks. Other studies have examined if manipulating the mode of task-based interaction (face-to-face [FTF] as compared to synchronous computer-mediated communication [SCMC]) differentially affects learners’ attention to the linguistic target (e.g., Baralt, 2014; Baralt, Gurzynski-Weiss, & Kim, 2016) or perception of feedback (e.g., Gurzynski-Weiss & Baralt, 2014, 2015; Lai & Zhao, 2006). In Baralt (2014), there was an interaction noted in relation to mode and task complexity for the grammatical target, the Spanish imperfect subjunctive: Learners were incapable of focusing on the imperfect subjunctive in the complex SCMC group. No other study found mode to differentially influence learners’ attention to grammatical (e.g., Baralt, 2014; Baralt et al., 2016) or lexical (e.g.,

Gurzynski-Weiss & Baralt, 2014, 2015) targets, or to the feedback addressing these linguistic targets. Perhaps one of the most notable strands of TBLT research attempting to manipulate learners' attention is the work within the cognition hypothesis (Robinson 2001, 2005). This hypothesis, together with the complementary triadic framework (Robinson & Gilabert, 2007) and SSARC model (Robinson, 2011), outlines a specific formula for directing learners' attention, either to fluency (along resource-dispersing dimensions) or to accuracy/complexity (along resource-directing dimensions).

A large number of studies (recently reviewed in Baralt, Gilabert, & Robinson, 2014, and Jackson & Suethanapornkul, 2013) have set out to systematically investigate how specific manipulations to individual tasks, and tasks in sequence, may optimally direct learners' attention to linguistic targets within communicative, meaning-based tasks. Measuring learners' incidental attention to form has been done most commonly via FFEs (e.g., Loewen, 2005), language-related episodes (LREs; e.g., Baralt, 2014), and/or learners' modified output following feedback (e.g., Gurzynski-Weiss & Baralt, 2015). Form-focused episodes refer to "brief, spontaneous focus on form within a meaning-based interaction" (Loewen, 2005, p. 363). Language-related episodes are another way of operationalizing instances of when learners focus on language during meaning-based tasks. Specifically, LREs occur when "students talk about language they are producing, question their language use, or other- or self-correct their language production" (Swain & Lapkin, 2001, p. 10). The presence of FFEs or LREs can be considered as instantiations of learner reflection on form, as will be mentioned briefly in the section that follows, as a measure of L2 development if the error or linguistic form in question is correctly repaired (e.g., Kim & McDonough, 2008). Although not highlighted in the current volume, learners' modified output[1] is also commonly considered instantiations of learner reflection on

form and is a promising area for future research on L2 pronunciation. In each case, the presence of FFEs, LREs, and modified output, respectively, is taken as evidence that learners have reflected on form.

Empirical findings in this domain indicate that well-designed tasks do indeed encourage learners' attention to the target structures within meaning-focused tasks (e.g., Kim, 2009), and that this attention can relate to L2 development (e.g., Baralt, 2014; Loewen, 2005). However, the target structures that have been examined include grammatical targets such as the imperfect subjunctive in Spanish (e.g., Baralt, 2014; Baralt et al., 2016), lexical targets such as locative prepositions and task-specific vocabulary (e.g., Gurzynski-Weiss & Baralt, 2014, 2015), and, most recently, pragmatic targets including requests and suggestions (e.g., Gilabert & Barón, 2013; Kim & Taguchi, 2015). To the best of our knowledge, TBLT research has yet to dedicate focus to phonological targets, such as specific aspects of L2 pronunciation, to see if task design may direct learners' attention to targets beyond grammar, lexis, and pragmatics.

TBLT and L2 Development

In TBLT, L2 development is conceptualized as targetlike use following a specific task design implementation or manipulation, as resolution of LREs (e.g., Kim & McDonough, 2008), and, as is common outside the field, as gains in pre- to posttests (e.g., Révész & Han, 2015). In TBLT, these gains are often discussed in terms of measuring changes in fluency, accuracy, and/or complexity (CAF; for a thorough review of CAF measures see Housen, Kuiken, & Vedder, 2012). Task-based manipulations with the goal of promoting L2 development have focused on instruction (e.g., De Ridder et al., 2007), task type(s) (e.g., Révész & Han, 2015), task complexity (e.g., Nuevo, Adams, & Ross-Feldman, 2011), interlocutor (e.g., Kim & McDonough, 2008), and mode (most often FTF as compared to SCMC; e.g., Baralt, 2014).

Empirical research has found these task-based manipulations to promote the development of L2 accuracy, at least for lexis and grammar. For example, Nuevo et al. (2011) examined how L2 development of English locatives could be promoted by task complexity, operationalized according to reasoning demands. They found that learners in the complex group had more instances of self-repair and that this related to greater L2 development. Kim and McDonough (2008) found that interlocutor proficiency significantly affected the presence and resolution of both grammatically and lexically focused LREs for L2 English learners. Finally, Baralt (2014), which examined mode (alongside task complexity, operationalized as intentional reasoning, and attention, operationalized as LREs) in relation to Spanish L2 development, found that learners who completed a complex task in the FTF mode significantly outperformed learners in the SCMC mode. Not only were FTF learners more accurate in their L2 production, learners who interacted in SCMC were too cognitively overwhelmed to even attempt the linguistic target, the imperfect subjunctive.

In other words, TBLT has been considered successful for promoting L2 development. However, this statement is applicable primarily for lexical and grammatical linguistic targets, and most often in English (e.g., locatives, Nuevo, et al., 2011; the past progressive, Révész & Han, 2015; past counterfactual, Révész, Sachs, & Hama, 2014, etc.). Whether or not task-based designs work for other language domains, including L2 pronunciation, has yet to be soundly empirically tested. For example, some studies, such as Kim and McDonough (2008), operationalized a focus on pronunciation as within lexis (p. 218). De Ridder et al. (2007), which contained an independent measure of L2 pronunciation and intonation (in addition to lexis and grammar), relied on two raters, who were also the course instructors, and only one of four components of the experiment was task-based, limiting the study's contribution to our

knowledge of whether task-based designs may promote gains in L2 pronunciation accuracy. Even for studies examining oral gains, such as Tonkyn (2012), no measure of pronunciation was included; L2 accuracy measures (along with fluency and complexity) were reserved for lexis and grammar.

Thus, previous TBLT research has demonstrated that tasks can direct learners' attention to linguistic form within meaning and promote L2 development for grammatical, lexical, and even pragmatic targets, but what about L2 pronunciation? Despite its presence within the theoretical rationale for TBLT (see Ellis, 2009), we have yet to examine if communicative tasks designed with pronunciation linguistic targets can (a) successfully manipulate learner attention and (b) promote accuracy and/or development. Looking briefly at the larger role of L2 pronunciation in experimental second language acquisition (SLA), this oversight is in keeping with trends outside of TBLT.

What about L2 Pronunciation?

Pronunciation is a central component of the acquisition of a L2. Nevertheless, Derwing and Munro (2005) assert that "the study of pronunciation has been marginalized within the field of applied linguistics" (p. 379), with greater attention, even now, being given to other skills and foci, such as vocabulary and grammar. This marginalization, they argue, has led to a reliance on intuition, anecdotal evidence, and personal impression in the teaching of L2 pronunciation in the classroom. In light of this oversight, Derwing and Munro have called for "empirical, replicable studies to inform pronunciation instruction" (p. 380). They argue that, although there has been growing interest in research on speech production and perception, the technical nature of such research, and the fact that it is often conducted in controlled laboratory conditions, makes the immediate relevance and applicability of such research to the classroom less clear.

Within research on TBLT, pronunciation has likewise been marginalized, remarkably absent from most accounts of this approach (the few exceptions cited previously; e.g., Ellis et al., 2001; Loewen, 2005). In fact, neither pronunciation nor phonetics/phonology are mentioned in the following recent volumes on TBLT: *Task-based language learning and teaching* (Ellis, 2003), *Task-based language teaching* (Nunan, 2004), *Task-based language education: From theory to practice* (Van den Branden, 2006), *Task-based language teaching: A reader* (Van den Branden, Bygate, & Norris, 2009), *Task-based language teaching in foreign language contexts* (Shehadeh & Coombe, 2012), *Task-based language teaching from the teachers' perspective* (East, 2012), and *Second language acquisition and task-based language teaching* (Long, 2015). This absence is surprising given the emphasis in previous TBLT research on production measures within communicative outcomes, such as accuracy (including accuracy of specific structures), acceptability and appropriateness, global proficiency measures, and intelligibility (including in relation to the specific interlocutor[s]). Arguably, pronunciation and/or accent play a role in all of these areas. In this thematic issue, we exemplify the manner in which TBLT offers an ideal framework for approaching the empirical study of L2 pronunciation learning in the classroom. The studies in this issue seek to combine what we know about the role of pronunciation in L2 competence, the role of attention in the acquisition of L2 pronunciation, and how pronunciation is learned (as well as how pronunciation learning is measured), employing concepts and approaches central to TBLT. In this way, we examine whether TBLT can encourage L2 pronunciation learning as it has been shown to do for L2 grammar, vocabulary, and pragmatics learning.

L2 Pronunciation and Competence

Acquiring a L2 sound system involves an intricate adjustment and balance of factors on

cognitive, social, and psychological levels (Moyer, 2013). As Moyer (2013) describes, pronunciation and accent are "fundamental to communication, for without a reasonable degree of phonological fluency, spoken interaction will falter," (p. 9). She goes on to state that L2 speakers use pronunciation (via accent) to "project individual style and signal [their] relationship to interlocutors" and that the degree of intelligibility of a L2 speaker influences that speaker's capacity to participate within the target language community (p. 19). It is for these reasons that L2 pronunciation is central to the entire act of communication in the L2, particularly as it relates to accent. Nevertheless, the acquisition of a new sound system is no easy task and is, as Derwing and Munro (2005) argue, an undertaking for which L2 speakers need support. A growing body of research on L2 pronunciation learning is demonstrating that helping learners notice and pay attention to the manner in which their pronunciation may differ from the target through training, awareness raising, and/or instruction may indeed be beneficial for L2 phonetic/phonological development.

Pronunciation and Attention

Attention is not often addressed as a central construct in the existing research on L2 phonetic and/or phonological learning. Nevertheless, it does appear in theoretical discussions of L2 pronunciation teaching and learning. For instance, Moyer (2013) posits that "phonological instruction is predicated on the learner's ability to detect the differences between their own output and the native(like) model provided to them" (p. 154), and Derwing and Munro (2005) state that "students learning L2 pronunciation benefit from being explicitly taught phonological form to help them notice the difference between their own productions and those of proficient speakers in the L2 community" (p. 388). Beyond underscoring the theoretical importance of attention (i.e., through words like "detect" [Moyer] and "notice" [Derwing & Munro]) in L2

pronunciation development research, these quotes further illustrate that *instruction* has been a primary means by which learners' attention is drawn to phonetic and/or phonological form. Thus, it comes as no surprise that a fair amount of research on L2 pronunciation has been dedicated to investigating the impact of instruction on attention and subsequent learning.

In the research-based pronunciation teaching literature, a variety of instructional methods have been employed. Attested methods for drawing attention to pronunciation via teaching include the use of contrastive analysis techniques (Arroyo Hernández, 2009; Hammerly, 1982), explicit instruction and oral practice on the articulation of specific sound segments (e.g., González-Bueno, 1997; Elliott, 1995, 1997; Macdonald, Yule, & Powers, 1994; Saito, 2013), explicit phonetics training for perception and/or production (e.g., Aliaga-García & Mora, 2009; Derwing, Munro, & Wiebe, 1998; Kissling, 2013; Lord, 2005, 2008, 2010; Missalgia, 1999; Zampini, 1998), and peer teaching (e.g., Rodríguez-Sabater, 2005). Research has also examined the impact of feedback targeting pronunciation-related errors (e.g., Saito, 2015; Saito & Lyster, 2012) as well as the use of journal entries in combination with in-class instruction (e.g., Kennedy & Trofimovich, 2008). Trofimovich and Gatbonton (2006) have also demonstrated the beneficial impact of repetition and focus-on-form on L2 pronunciation accuracy, outlining implications for instruction. The use of instruction as a medium for drawing learner attention to phonetic and/or phonological form and interest in the empirical investigation of whether and/or how instruction can influence L2 pronunciation outcomes is growing (see Lee, Jang, & Plonsky, 2015, for a recent meta-analysis on the effectiveness of L2 pronunciation instruction, and Saito, 2012, for an earlier research synthesis).

Pronunciation and L2 Development

Empirical studies measuring L2 pronunciation learning generally rely on the elicitation of

spoken speech,[2] either through open-ended, informal conversations and interviews or through more controlled production tasks that elicit particular sounds in specific phonetic contexts. High-quality audio-recorders and the ready availability of acoustic analysis software (e.g., Praat; Boersma & Weenink, 2014) have changed the ways in which L2 speech is analyzed (e.g., Hansen Edwards & Zampini, 2008) and subsequently interpreted. Acoustic and spectrographic analyses of speech dominate studies of L2 speech production, as researchers quantify phonetic and phonological development through the examination of specific measures that correlate with the adjustment of different aspects of the articulation and realization of L2 sounds. Additionally, methodological designs that include cross-sectional samples or data involving pre- and post- (e.g., treatment, instruction, study abroad, etc.) recordings offer information regarding on-going modifications to learners' L2 systems (i.e., learning or development). Overall, Ellis (2008) describes three general characteristics of L2 phonology that are largely accepted by researchers in the field: (a) L1 phonological features are present in learners' L2 speech, (b) learners tend to substitute unmarked forms in places in which marked forms are required by the target language systems, and (c) unique forms also appear in L2 learners' production, just as they do during L1 phonological acquisition. Additionally, we know that L2 pronunciation is an area of L2 competence in which, even after many years of exposure or study, learners often fail to achieve targetlike accuracy (e.g., Long, 1990), but that, overall, learners who receive pronunciation instruction outperform those who do not and that the effectiveness of instruction has been shown to be augmented when feedback on pronunciation is provided (Lee et al., 2015).

Our knowledge of the development of L2 sound systems is quickly growing; nevertheless, as Moyer (2013) writes, "Despite increasing interest in phonology among applied linguists, neither the cognitive nor the sociolinguistic paradigm offers much practical insight or

advice for FL teachers" (p. 147). The question remains, could TBLT be an ideal locus of connection between the theoretical and the practical in the instructed SLA of pronunciation?

Could TBLT "Work" for L2 Pronunciation?

The studies in this thematic issue combine TBLT designs and measurements with standard phonetic and pronunciation measures to examine if the benefits of TBLT and of tasks, which have been established for grammar and lexis and have begun to be investigated for pragmatics, extend to L2 pronunciation learning. As briefly reviewed, despite a wealth of empirical information on TBLT and on L2 pronunciation and phonetic/phonological learning separately, to date, there is a lack of systematic investigation into the role of tasks and features of task design in promoting opportunities for attention to and the development of L2 pronunciation, which represents a central aspect of L2 acquisition and communicative competence. The five empirical studies in this special issue use innovative designs, methods, and measures to combine TBLT and L2 phonetics/phonology to expand our knowledge of instructed SLA and of L2 pronunciation development. Together, we ask, and take the first steps to answer, do the benefits of tasks extend to L2 pronunciation?

The first empirical study, by Loewen and Isbell, examines the factors of modality (i.e., FTF vs. SCMC), learner L1, and task type in relation to the production of pronunciation-related LREs during task-based interaction by dyads of L2 English learners from a variety of L1 backgrounds. The findings of their study encourage us to consider the role that task characteristics, modality, and learner factors play in orienting learners' focus toward pronunciation during interaction. The following study, by Parlak and Ziegler, also examines modality but in the context of feedback provision (specifically, recasts) and the acquisition of lexical stress by native Arabic learners of English. Their study is important for demonstrating the

potential for recasts to positively influence the development of lexical stress, which is in line with existing pronunciation research outside of TBLT (e.g., Saito & Lyster, 2012). McKinnon's study investigates the impact of task-based instruction on prosody by L2 learners of Spanish. His work highlights the potential of task-based instruction for learning at the suprasegmental level (specifically, intonation) and adds an important contribution to the discussion of the acquisition of a notable pragmatic contrast in L2 Spanish. The study by Jung, Kim, and Murphy extends auditory priming methods and task repetition, a heavily investigated concept in TBLT research, to the examination of English stress patterns by L2 learners. Their study similarly offers positive support for the role of priming and task repetition in the development of a prosodic feature of the L2. The final empirical study, by Solon, Long, and Gurzynski-Weiss, examines whether cognitively simple or cognitively complex dyadic map tasks designed to make pronunciation task essential encouraged the production of pronunciation-focused LREs and/or accuracy of phonetic form. The findings of their study suggest that some of the predictions of the cognition hypothesis (Robinson, 2003, 2011; Robinson & Gilabert, 2007), previously shown to hold for accuracy on specific grammatical structures, may also extend to pronunciation. The epilogue, written collaboratively by phonological expert Mora and TBLT expert Levkina, synthesizes conclusions from the studies, outlines promising research questions and future directions, and specifies the most promising measures to address these research questions.

The robust and varied studies[3] in the present issue demonstrate that TBLT is a worthwhile avenue for promoting attention to and development of L2 pronunciation. It is our hope that the research presented in this special issue paves the way for an empirically-based discussion of how tasks may be utilized in the area of L2 pronunciation and on the nature of tasks in all areas of L2 development. Such research carries important implications for TBLT

research theory and pedagogy as well as for L2 pronunciation learning and teaching.

Notes

1. Modified output refers to learners' use of feedback that has been provided to them. Modified output can be categorized as immediate or delayed (referring to the turn in which the learner modifies his or her output) as well as full or partial (Gurzynski-Weiss & Baralt, 2015). Full modified output is when learners repeat the entire correction; partial modified output is when learners extract out the error within the larger discourse and repeat the correction.

2. There is, of course, also an extensive body of research on L2 perception that is not mentioned here, as the studies in this thematic issue focus on L2 pronunciation as measured via production.

3. The empirical papers and synthesis were presented as a competitive colloquium in the 6th Biennial Task-Based Language Teaching and Learning Conference in Leuven, Belgium in September 2015.

References

Aliaga-García, C., & Mora, J. C. (2009). Assessing the effects of phonetic training on L2 sound perception and production. In M. A. Watkins, A. S. Rauber, & B. O. Baptista (Eds.), *Recent research in second language phonetics/phonology* (pp. 2-31). Newcastle upon Tyne, UK: Cambridge Scholars Publishing.

Arroyo Hernández, I. (2009). Tension and quantity in phonetic correction with Italian speakers: A proposal for the Spanish as a foreign language classroom. *Revista Española de Lingüística Aplicada, 22,* 59-75.

Baralt, M. (2014). Task complexity and task sequencing in traditional versus online language classes. In M. Baralt, R. Gilabert, & P. Robinson (Eds.), *Task sequencing and instructed second language learning* (pp. 95-122). London, UK: Bloomsbury.

Baralt, M., Gilabert, R., & Robinson, P. (Eds.). (2014). *Task sequencing and instructed second language learning*. London, UK: Bloomsbury.

Baralt, M., Gurzynski-Weiss, L., & Kim, Y. (2016). The effects of task type and classroom environment on learners' engagement with the language. In M. Sato & S. Ballinger (Eds.), *Peer interaction and second language learning: Pedagogical potential and research agenda* (pp. 209-239). Amsterdam, the Netherlands: Benjamins.

Boersma, P., & Weenink, D. (2014). Praat: Doing phonetics by computer [Computer software]. Available at http://www.fon.hum.uva.nl/praat/

de la Fuente, M. J. (2006). Classroom L2 vocabulary acquisition: Investigating the role of pedagogical tasks and form-focused instruction. *Language Teaching Research, 10,* 263-295.

De Ridder, I., Vangehuchten, L., & Seseña Gómez, M. (2007). Enhancing automaticity through

task-based language learning. *Applied Linguistics, 28,* 309-315.

Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly, 39,* 379-397.

Derwing, T. M., Munro, M. J., & Wiebe, G. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning, 48,* 393-410.

East, M. (2012). *Task-based language teaching from the teachers' perspective: Insights from New Zealand*. Amsterdam, the Netherlands: Benjamins.

Elliott, A. R. (1995). Field independence/dependence, hemispheric specialization, and attitude in relation to pronunciation accuracy in Spanish as a foreign language. *Modern Language Journal, 79,* 356-371.

Elliott, A. R. (1997). On the teaching and acquisition of pronunciation within a communicative approach. *Hispania, 801,* 95-108.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford, UK: Oxford University Press.

Ellis, R. (2008). *The study of second language acquisition* (2nd ed.). Oxford, UK: Oxford University Press.

Ellis, R. (2009). Task-based language teaching: sorting out the misunderstandings. *International Journal of Applied Linguistics, 19,* 221-246.

Ellis, R., Baskturkmen, H., & Loewen, S. (2001). Learning uptake in communicative ESL lessons. *Language Learning, 51,* 281-318.

Gilabert, R., & Barón, J. (2013). The impact of increasing task complexity on L2 pragmatic moves. In A. Mackey & K. McDonough (Eds.), *Second language interaction in diverse educational settings* (pp. 45-69). Amsterdam, the Netherlands: Benjamins.

González-Bueno, M. (1997). The effects of formal instruction on the acquisition of Spanish stop consonants. In W. Glass & A. T. Pérez-Leroux (Eds.), *Contemporary perspectives on the acquisition of Spanish. Volume 2: Production, processing, and comprehension* (pp. 57-75). Somerville, MA: Cascadilla Press.

Gurzynski-Weiss, L., & Baralt, M. (2014). Exploring learner perception and use of task-based interactional feedback in FTF and CMC modes. *Studies in Second Language Acquisition*, *36,* 1-37.

Gurzynski-Weiss, L., & Baralt, M. (2015). A closer look at learner responses to feedback and their effect on noticing in face-to-face and computer-mediated task-based interaction. *Applied Psycholinguistics, 36,* 1393-1420.

Hammerly, H. (1982). Contrastive phonology and error analysis. *International Review of Applied Linguistics in Language Teaching, 201,* 17-32.

Hansen Edwards, J. G., & Zampini, M. L. (2008). Introduction. In J. G. Hansen Edwards & M. L. Zampini (Eds.), *Phonology and second language acquisition* (pp. 1-11). Amsterdam, the Netherlands: Benjamins.

Housen, A., Kuiken, F., & Vedder, I. (2012). Complexity, accuracy and fluency. *Dimensions of L2 performance and proficiency: Complexity, accuracy and fluency in SLA*. Amsterdam, the Netherlands: Benjamins.

Jackson, D. O., & Suethanapornkul, S. (2013). The Cognition Hypothesis: A synthesis and meta-analysis of research on second language task complexity. *Language Learning, 63,* 330-367.

Kennedy, S., & Trofimovich, P. (2008). Intelligibility, comprehensibility, and accentedness of L2 speech: The role of listener experience and semantic context. *Canadian Modern*

Language Review, 64, 459-489.

Kim, Y. (2009). The effects of task complexity on learner–learner interaction. *System, 37,* 254-268.

Kim, Y., & McDonough, K. (2008). The effect of interlocutor proficiency on the collaborative dialogue between Korean as a second language learners. *Language Teaching Research, 12,* 211-234.

Kim, Y., & Taguchi, N. (2015). Promoting task-based pragmatics instruction in EFL classroom contexts: The role of task complexity. *Modern Language Journal, 99,* 656-677.

Kissling, E. M. (2013). Teaching pronunciation: Is explicit phonetics instruction beneficial for FL learners? *Modern Language Journal, 97,* 720-744.

Lai, C., & Zhao, Y. (2006). Noticing and text-based chat. *Language Learning & Technology, 10,* 102-120.

Lee, J., Jang, J., & Plonsky, L. (2015). The effectiveness of second language pronunciation instruction: A meta-analysis. *Applied Linguistics, 36,* 345-366.

Leow, R. P. (1998). Toward operationalizing the process of attention in SLA: Evidence for Tomlin and Villa's (1994) fine-grained analysis of attention. *Applied Psycholinguistics*, *19,* 133-160.

Leow, R. P. (2001). Attention, awareness, and foreign language behavior. *Language Learning*, *51*(Suppl. 1), 113-155.

Loewen, S. (2005). Incidental focus on form and second language learning. *Studies in Second Language Acquisition, 27,* 361-386.

Long, M. H. (1985). A role for instruction in second language acquisition: Task-based language teaching. In K. Hyltenstam & M. Pienemann (Eds.), *Modelling and assessing second*

language acquisition (pp. 77-99). Clevedon, UK: Multilingual Matters.

Long, M. H. (1990). Maturational constraints on language development. *Studies in Second Language Acquisition, 12,* 251-285.

Long, M. H. (1998). Focus on form in task-based language teaching. *University of Hawai'i Working Papers in ESL, 16,* 35-49.

Long, M. (2015). *Second language acquisition and task-based language teaching*. Malden, MA: Wiley.

Long, M. H., & Norris, J. M. (2000). Task-based teaching and assessment. In M. Byram (Ed.), *Encyclopedia of language teaching* (pp. 597-603). New York, NY: Routledge.

Lord, G. (2005). (How) can we teach foreign language pronunciation? On the effects of a Spanish phonetics course. *Hispania, 88,* 557-567.

Lord, G. (2008). Podcasting communities and second language pronunciation. *Foreign Language Annals, 41,* 364-379.

Lord, G. (2010). The combined effects of immersion and instruction on second language pronunciation. *Foreign Language Annals, 43,* 488-503.

Macdonald, D., Yule, G., & Powers, M. (1994). Attempts to improve English L2 pronunciation: The variable effects of different types of instruction. *Language Learning, 44,* 75-100.

Mackey, A. (1999). Input, interaction, and second language development: An empirical study of question formation in ESL. *Studies in Second Language Acquisition, 21,* 557-587.

Missaglia, F. (1999) Contrastive prosody in SLA: An empirical study with adult Italian learners of German. *Proceedings of the 14th International Congress of Phonetic Sciences, 1,* 551-554.

Moyer, A. (2013). *Foreign accent: The phenomenon of non-native speech*. Cambridge, UK:

Cambridge University Press.

Nuevo, A. M., Adams, R., & Ross-Feldman, L. (2011). Task complexity, modified output, and L2 development in learner–learner interaction. In P. Robinson (Ed.), *Second language task complexity: Researching the cognition hypothesis of language learning and performance* (pp. 175-202). Amsterdam, the Netherlands: Benjamins.

Nunan, D. (2004). *Task-based language teaching*. Cambridge, UK: Cambridge University Press.

Révész, A., & Han, Z. H. (2015). Task content familiarity, task type and efficacy of recasts. *Language Awareness, 15,* 160-179.

Révész, A., Sachs, R., & Hama, M. (2014). The effects of task complexity and input frequency on the acquisition of the past counterfactual construction through recasts. *Language Learning, 64,* 615-650.

Robinson, P. (2001). Task complexity, task difficulty, and task production: Exploring interactions in a componential framework. *Applied Linguistics, 22,* 27-57.

Robinson, P. (2003). The cognition hypothesis, task design, and adult task-based language learning. *Second Language Studies, 21,* 45-105.

Robinson, P. (2005). Cognitive complexity and task sequencing: Studies in a componential framework for second language task design. *IRAL-International Review of Applied Linguistics in Language Teaching, 43,* 1-32.

Robinson, P. (Ed.). (2011). *Second language task complexity: researching the cognition hypothesis of language learning and performance*. Amsterdam, the Netherlands: Benjamins.

Robinson, P., & Gilabert, R. (2007). Task complexity, the Cognition Hypothesis and second language learning and performance. *IRAL-International Review of Applied Linguistics in*

Language Teaching, 45, 161-176.

Rodríguez-Sabater, S. (2005). Utilizing undergraduate peer teaching assistants in a speaking program in Spanish as a foreign language. *Foreign Language Annals, 38,* 533-538.

Saito, K. (2012). Effects of instruction on L2 pronunciation development: A synthesis of 15 quasi-experimental intervention studies. *TESOL Quarterly, 46,* 842-854.

Saito, K. (2013). Reexamining effects of form-focused instruction on L2 pronunciation development. *Studies in Second Language Acquisition, 35,* 1-29.

Saito, K. (2015). Variables affecting the effects of recasts on L2 pronunciation development. *Language Teaching Research, 19,* 276-300.

Saito, K., & Lyster, R. (2012). Effects of form-focused instruction and corrective feedback on L2 pronunciation development of /ɹ/ by Japanese learners of English. *Language Learning, 62,* 595-633.

Schmidt, R. (2001). Attention. In P. Robinson (Ed.), *Cognition and Second Language Instruction* (pp. 3-32). Cambridge, UK: Cambridge University Press.

Shehadeh, A., & Coombe, C. A. (Eds.). (2012). *Task-based language teaching in foreign language contexts: Research and implementation*. Amsterdam, the Netherlands: Benjamins.

Skehan, P. (1998). A cognitive approach to language learning. Oxford, UK: Oxford University Press.

Skehan, P. (Ed.). (2014). *Processing perspectives on task performance*. Amsterdam, the Netherlands: Benjamins.

Swain, M., & Lapkin, S. (2001). Focus on form through collaborative dialogue: Exploring task effects. In M. Bygate, P. Skehan, & M. Swain (Eds.), *Researching pedagogic tasks. Second language learning, teaching and testing* (pp. 99-118). Harlow, UK: Longman.

Tomlin, R. S., & Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition, 16,* 183-203.

Tonkyn, A. (2012). Measuring and perceiving changes in oral complexity, accuracy and fluency: Examining instructed learners' short-term gains. In A. Housen, F. Kuiken, & I. Vedder (Eds.), *Dimensions of L2 performance and proficiency: Complexity, accuracy and fluency in SLA* (pp. 221-246). Amsterdam, the Netherlands: Benjamins.

Trofimovich, P., & Gatbonton, E. (2006). Repetition and focus on form in processing L2 Spanish words: Implications for pronunciation instruction. *Modern Language Journal, 90,* 519-535.

Van den Branden, K. (Ed.). (2006). *Task-based language education: From theory to practice*. Cambridge, UK: Cambridge University Press.

Van den Branden, K., Bygate, M., & Norris, J. M. (Eds.). (2009). *Task-based language teaching: a reader*. Amsterdam, the Netherlands: Benjamins.

Zampini, M. L. (1998). The relationship between the production and perception of L2 Spanish stops. *Texas Papers in Foreign Language Education, 3,* 85-100.