

The Effect of Dialect Familiarity via a Study Abroad Experience on L2 Comprehension of Spanish

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1. Introduction

Speaker dialect has been found to play an important role in listening comprehension by learners of a second language (L2) (see, for example, Brown, 1968; Eisenstein & Berkowitz, 1981; Major et al., 2005; Wilcox, 1978). L2 listeners have been tested on their comprehension of various international, regional, and nonnative varieties of the target language, and differences in comprehension have been found according to dialect. It has been proposed by Tauroza and Luk (1997) that these differences in target language comprehension according to dialect are in fact due to *dialect familiarity*, with greater comprehension of those varieties to which the learner is exposed.

This study addresses the role of the target language variety, or dialect, on listening comprehension of Spanish as a second language. Specifically, the goal of the study is to determine if exposure to a previously unfamiliar dialect of Spanish through a three-week study abroad program in the Dominican Republic has an effect on the performance on listening comprehension tasks by L2 learners of Spanish.

Previous studies on the effect of dialect on listening comprehension by L2 learners have frequently considered English as the target language, but no previous study has examined the effects of dialect on listening comprehension of Spanish as the L2. Also, this study is the first to offer an examination of the effects of *exposing* L2 learners to a previously unfamiliar variety of the target language by following the learners' listening comprehension abilities from pre-exposure to post-exposure to the unfamiliar variety via a study abroad program in the targeted dialectal region.

The following section presents an overview of previous work on the role of study abroad in L2 listening comprehension as well as the relationship between target language dialect and L2 listening comprehension. Section 3 describes the phonological characteristics of the targeted Spanish variety spoken in Santo Domingo, the Dominican Republic. Section 4 presents the methodology employed in the current study, and Section 5 describes the results found. A discussion of the results and final conclusions are presented in Sections 6 and 7.

2. Listening comprehension

2.1. *Effects of a study abroad experience on L2 listening comprehension*

Despite the range of studies investigating the effect of a study abroad experience on the acquisition of such areas of second language acquisition such as morphosyntax, pragmatics, and oral fluency (see Lafford & Collentine, 2006, for an overview of study abroad research for Spanish), there have been very few studies of the effects of study abroad on listening comprehension of the L2. Allen and Herron (2003) found that after a study abroad experience, learners of French had a higher level of confidence in their ability to perform certain listening tasks and significantly improved in a multiple-choice task that tested their comprehension of three scenes from a French police TV drama. Huebner (1995) determined that beginning learners of Japanese who participated in a study abroad experience in Japan tested better in listening and reading comprehension than those beginning learners of Japanese who took classes at the home institution. Huebner claimed that the better performance by the study abroad group was due to more opportunities to practice the listening and reading skills.

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In summary, the effects of a study abroad experience on L2 listening comprehension have not been investigated in detail, and only general findings regarding overall comprehension have been determined. This study adds further insight into the relationship between an abroad experience and listening comprehension as well as addresses several factors that may come into play to explain effects of a study abroad program.

2.2. *Dialect familiarity and L2 listening comprehension*

There is much empirical support that speaker dialect has an effect on listening comprehension, even for L2 listeners. For example, Major et al. (2005) determined that English as a second language (ESL) listeners scored lower on listening comprehension tests when hearing ethnic and international dialects of English than when hearing standard American English. Eisenstein & Berkowitz (1981) found that standard English was more intelligible for advanced beginners and high intermediate-level learners than working-class New Yorkese or foreign-accented English. However, it is not always the standard dialect that L2 listeners are most successful in comprehending. Chinese learners of English in China were most successful in comprehending Singaporean-Malaysian English than British English Received Pronunciation (RP), General American English, or standard Australian English (Wilcox, 1978). Twi and Ewe speakers in Africa best understood Twi-accented or Ewe-accented English, respectively, than British English RP or the English spoken by the other tribe (Brown, 1968).

Tauroza and Luk (1997) claim that the fact that some learner populations are more successful in comprehending a standard variety while other learner populations achieve greater comprehension of a L1-accented variety is explained by the influence of *dialect familiarity*. They propose that L2 learners understand best the dialect(s) to which they are exposed, be it the standard variety as in the case of learners in the target language environment (Eisenstein & Berkowitz, 1981; Major et al., 2005) or be it a variety spoken by speakers of the same first language, as may be the case of learners in a foreign language environment (Brown, 1968; Wilcox, 1978).

Interestingly, however, Fox and McGory (2007), in a study of listening comprehension of Standard American English and Southern American English by L2 listeners, native speakers of Japanese, who were residing in one or the other dialectal regions, found that exposure to the Southern American English variety did not improve the learners' perception of southern vowels. In fact, both groups of learners identified the Southern vowels significantly worse than the standard vowels. However, Fox and McGory suggest that there may be sociolinguistic factors contributing to this unexpected result such as the variety spoken by the English instructors, attitudes toward nonstandard dialects of the target language, and the amount of time that the learners actually interact with individuals who speak the southern variety.

3. Dominican Spanish

Dominican Spanish shares several features with that of its surrounding Caribbean and coastal neighbors. Several syllable-final consonants undergo weakening and deletion processes, which may cause additional difficulties for L2 learners in comprehension of the Dominican speech. These include the aspiration or, more commonly, the complete deletion of the syllable-final and word-final sibilant /s/; the deletion of the intervocalic and word-final dental approximant [δ]; and the variation of the syllable-final liquids /r/ and /l/ (Alba, 2004; Jiménez Sabater, 1975; Lipski, 1994). Other phonological characteristics of the Dominican dialect include the velarization of word-final nasals¹, a weak aspiration of the fricative /x/ (Alba, 2004; Jiménez Sabater, 1975), and pre-breathy voicing of the trill (Willis, 2006; 2007a). A number of morphological, syntactic, and lexical features also distinguish the Dominican dialect (see Lipski, 1994). However, these features were not included in the current study and were controlled for in the speech samples included².

¹ Nasalization of the preceding vowel and deletion of the nasal consonant has also been attested in Dominican Spanish (Hualde, 2005; Jiménez Sabater, 1975).

² Dominican prosody has also been found to differ from that of other dialects of Spanish (Willis, 2007b). It is recognized that Dominican dialectal prosodic patterns may be present in the samples included at the phrase-level.

Finally, within the Dominican Republic, three or four different dialectal zones can be proposed: the northern Cibao region; the region surrounding Santo Domingo, the capital; the extreme eastern tip of the island; and various Afro-Hispanic enclaves (Lipski, 1994). What distinguishes the dialectal zones is the realization of syllable-final liquids. The dialect to which the study abroad learners were most exposed was the Santo Domingo speech, which is characterized by lambdacism, a lateral realization [l] of the rhotic /r/, as in the word for *woman*: *mujer* [mu.hél] (Alba, 2004).

4. Methods

4.1. Research questions

The following are the research questions posited in the present study:

- (1) How does exposure to a previously unfamiliar dialect of the L2 through a study abroad experience affect L2 listening comprehension of that dialect at the word- and phrase-levels?
- (2) How does *discourse level* (word-level versus phrase-level) play a role in L2 listeners' comprehension of the Dominican speech?
- (3) What role does each *Dominican phonological feature* play in the L2 learners' listening comprehension of Dominican speech?

4.2. Participants

Eleven participants were included in this study from an original participant pool of eighteen. Two of the study abroad participants were eliminated at the beginning of the study as they were novice or low beginners and did not have sufficient competence in the L2 to complete the listening tasks. Five additional participants were later eliminated from the analysis for failure to complete both tests.

The participants spanned a range of proficiency levels in Spanish, from low intermediate through near-native; however, the majority classified themselves as intermediate or advanced. There was one bilingual participant who was raised in a Mexican Spanish-speaking household in the United States (participant 8). Another participant (participant 2) had a parent from the Dominican Republic, but she did not consider herself bilingual and the quantity of Spanish heard and spoken in the household is uncertain. Two of the participants had also previously spent over a year abroad in other dialectal regions of the Spanish-speaking world³. All participants were native speakers of English and had limited or no knowledge of any other languages (other than Spanish).

4.3. The study abroad program

The program consisted of a week of readings and class discussion at the home institution prior to leaving for the Dominican Republic in preparation for the program. Three weeks were then spent in the capital city, Santo Domingo, where the students stayed together in a hotel. The focus of the program was on Dominican culture and literature, yet as the students came from a diverse background of proficiency levels of Spanish, the majority of the readings and class discussions were in English. However, the study abroad participants were exposed on a daily basis to Dominican Spanish through talks by invited guest lecturers and tour guides, instruction by the program coordinator, exposure to Dominican television and radio, and daily interactions with Dominicans in public places such as restaurants, shops, the market, the hotel, and so on. Although the program did not include any instruction on the Spanish language, prior to leaving for the Dominican Republic (and after completing the pretest), an invited expert on Dominican Spanish gave a lecture and played examples of Dominican dialectal features, including Dominican phonology, lexicon, and syntax.

4.4. Tasks

4.4.1. Dialectal listening comprehension tasks

In order to address the research questions posited above, a series of listening comprehension tasks were completed by the study abroad participants one week before leaving for the Dominican Republic

³ Participant 1 spent a year in Burgos, Spain, and four months in Salamanca, Spain, and participant 7 studied one year in Argentina.

and then again two days after returning from the three-week time abroad. The series of tasks consisted of a word comprehension task, a phrase comprehension task, and a discourse comprehension task. Only the results from the word and phrase comprehension tasks are included in the present study.

The participants completed the series of listening comprehension tasks at individual computer stations in a computer language laboratory. After hearing a spoken word or spoken phrase twice by clicking on the corresponding number of the speech sample in a PowerPoint presentation, the participants wrote down the word or phrase that they heard in Spanish and then wrote the word's or the phrase's meaning in English. The word task was completed first and consisted of twenty-five spoken words in Spanish. The phrase task consisted of fourteen spoken phrases in Spanish.

The same speech samples were included in both the pretest and the posttest, but presented in a different order for each section. The same samples were used in order to ensure that each test was of equal difficulty. The assumption was made that the rearranged speech samples and the four-week interval between the two tests would aid in diminishing potential effects of the repeated test.

4.4.1.1. *Word task*

Nineteen of the twenty-five words presented in the Word Task were extracted from sociolinguistic interviews with five Dominican male speakers between the ages of twenty to thirty-five and of low to low-middle class (Willis, 2001). The remaining six words came from interviews with three university-educated male native speakers of Spanish of the same age from other regions of the Spanish-speaking world: from Bogota, Colombia, from San Isidro de Pérez Zeledon, Costa Rica, and from Seville, Spain. For the purposes of this study, we will term the samples extracted from these three speakers as "standard Spanish", in the sense that the phonetics of the specific samples chosen do not reflect dialectal variants⁴.

Of the nineteen words extracted from the interviews with the Dominican speakers, originally eight words displayed syllable- or word-final /s/ deletion, four words lambdacism, four words word-final nasal velarization, and two words word-final /d/ deletion (see Appendix A). However, three of the words with word-final /s/ deletion were later excluded from the analysis when the final /s/ was the plural morpheme, as without surrounding syntactic, semantic, and discourse clues, it was not possible for the listeners to capture the notion of plurality.

The six words spoken by the standard speakers were chosen as these six samples did not reflect any dialectal phonological features (see Appendix A). Thus, the assumption was made that no features of the standard speech would be unfamiliar to the participants.

4.4.1.2. *Phrase task*

Of the fourteen phrases presented to the learners, ten were taken from the interviews with the Dominican speakers and the remaining four from interviews with the three other Spanish speakers⁵ (see Appendix B). Of the ten phrases spoken by Dominican speakers, there were four examples of phrases with one or more words exhibiting /s/ deletion, three with lambdacism, two with /d/ deletion, and one phrase with final nasal velarization. The two phrases that contained words with the deleted plural morpheme /-s/ were included in the analysis at the phrase-level as the notion of plurality can be determined by the surrounding semantic, syntactic, or discourse information found at the phrase level.

⁴ It is recognized here that these dialects of Spanish, particularly the Seville and San Isidro variants, are not typically considered to represent 'standard' varieties of Spanish, and in fact, as pointed out by a reviewer, Andalusian Spanish shares many features with Caribbean varieties. However, here they are referred to as representing a 'standard' comparison due to the careful selection of speech samples that do not exhibit dialectal variation. The current study, however, makes no claims as to the 'standardness' of these dialects as a whole.

⁵ Care was taken to insure that no dialectal phonological features were present in the phrases taken from the three speakers representing other Spanish dialects. However, post hoc analysis revealed the presence of the retroflex *r* in the one phrase spoken by the Costa Rican speaker.

4.4.2. Language background and proficiency measures

The day of the pretest the study abroad participants completed a language background questionnaire in which they answered questions concerning their knowledge of other languages, number of years learning Spanish and the last Spanish class taken, the type and amount of contact with Spanish speakers outside of the classroom, and previous time abroad in a Spanish-speaking region. The participants also self-ranked their proficiency in speaking, writing, listening, and reading Spanish on a nine-point scale from novice to native-speaker. The four rankings were later averaged for each participant to assign each participant an overall self-identified proficiency level in Spanish.

4.4.3. Vocabulary recognition task

The participants completed a vocabulary recognition task as the final task in the posttest. The students were presented with forty words written in Spanish that had been presented on the word task, the phrase task, and the discourse task and were asked to mark if they (a) knew the meaning of the word, (b) had heard the word previously but did not know its meaning, or (c) had never heard or seen the word before. If the participants marked that they knew the word, they were instructed to write down its equivalent in English. The participant responses to the vocabulary recognition task were later analyzed in order to determine the learners' familiarity with the words presented in the speech samples in the listening comprehension tasks.

5. Results

5.1. Listening comprehension: Word task

In order to address the first part of Research Question 1 regarding the effect of exposure to a previously unfamiliar dialect of the L2 through a study abroad experience on comprehension of that dialect at the word-level, the number of words spoken by the Dominican speakers that were comprehended was divided by sixteen, the total number of words included in the analysis, for each participant and for each test (pretest and posttest). A score was also given to each participant for both tests according to the number of comprehended words of the standard speech divided by six, the total number of words spoken by the standard speakers. The results of the Word Comprehension Task according to participant, dialect, and test are presented in Table 1.

Table 1. Word Task Listening Comprehension Scores According to Dialect and Test

Participant	Dominican (16)		Standard (6)	
	Pretest	Posttest	Pretest	Posttest
1	69%	88%	100%	100%
2	44%	63%	67%	83%
3	25%	63%	67%	83%
4	38%	44%	67%	83%
5	69%	56%	100%	100%
6	56%	69%	83%	83%
7	44%	69%	67%	83%
8 ^a	88%	100%	100%	100%
9	44%	50%	83%	67%
10	31%	38%	100%	83%
11	19%	13%	17%	33%
Mean	47.9%	59.4%	77.4%	81.6%

(N) = number of words presented. ^aThe bilingual speaker.

When we consider the results of the comprehension of the Dominican speech on the pretest and on the posttest (after the study abroad experience) as displayed in Table 1, we see that the majority of the participants (all but participants 5 and 11) were more successful in comprehending the Dominican speech at the word-level after the experience abroad, reflected by the higher scores on the posttest⁶. A paired-samples t-test was run using SPSS software to determine if the difference between the comprehension scores of the Dominican speech on the pretest and the posttest was significant. Indeed, it was found that the increase in comprehension scores of the Dominican speech at the word-level after the study abroad experience was significant [$t(10) = -2.695, p < .05$]. We also note in Table 1 that the participants appear to perform better on the comprehension of the standard Spanish speech on the posttest than on the pretest. However, a significant difference was not found [$t(10) = -1.11, p = .292$].

Finally, it is important to note that the L2 listeners scored higher on the comprehension of the standard speech (77% and 82% comprehension on the pretest and posttest, respectively) than of the Dominican speech (48% and 59%, respectively) at the word-level. The listening comprehension scores of the Dominican speech on the word task were found to be significantly lower than those of the standard speakers for both the pretest [$t(10) = -5.46, p < .05$] and the posttest [$t(10) = -5.16, p < .05$].

5.2. Listening comprehension: Phrase task

The second part of Research Question 1 regarding the effect of exposure to a previously unfamiliar dialect of the L2 through a study abroad experience on comprehension of that dialect at the phrase-level was addressed by assigning each participant comprehension scores of the Dominican and standard Spanish speech for both tests at the phrase-level. The comprehension scores were assigned by dividing the number of phrases comprehended by ten (the total number of phrases extracted from the Dominican interviews) or by four (the total number of standard Spanish phrases presented)⁷. The results of the Phrase Task according to dialect, test, and participant are presented in Table 2.

Table 2. Phrase Task Listening Comprehension Scores According to Dialect and Test

Participant	Dominican (10)		Standard (4)	
	Pretest	Posttest	Pretest	Posttest
1	40%	70%	100%	100%
2	10%	20%	75%	75%
3	10%	30%	50%	75%
4	10%	10%	50%	25%
5	30%	40%	75%	75%
6	0%	40%	50%	75%
7	20%	30%	75%	75%
8 ^a	60%	70%	100%	100%
9	20%	30%	50%	25%
10	10%	20%	25%	75%
11	0%	0%	0%	0%
Mean	19%	33%	59%	64%

(N) = number of phrases presented. ^aThe bilingual speaker.

⁶ There is a large amount of variation in comprehension scores of the Dominican speech at the word-level, which may reflect the range of L2 proficiency levels of the participants. The results from a Pearson Correlation found a significant strong positive correlation between proficiency level (intermediate, advanced, high advanced, (near) native) and comprehension scores of the Dominican speech at the word-level [$r(9) = .83, p = .002$].

⁷ Participants were given the point for a comprehended phrase only if there was comprehension of the entire phrase.

When we consider the results for the comprehension of the Dominican speech at the phrase-level, we note in Table 2 that as with the results of the comprehension of the Dominican speech at the word-level, the majority of the participants scored higher in comprehension of the Dominican speech at the phrase-level on the posttest than on the pretest⁸. Only participant 4 remained the same and participant 11 did not comprehend any Dominican phrase on either of the tests. A paired samples t-test found the difference in pretest and posttest scores for the comprehension of the Dominican speech at the phrase-level to be significant [$t(10) = -3.75, p < .05$].

The group's comprehension score as a whole of the standard speech at the phrase-level also increased from the pretest to the posttest (from 59% to 64% accuracy). However, contrary to the significant increase in comprehension scores of the Dominican speech on the Phrase Task, the difference between tests for comprehension of the standard speech at the phrase-level was not significant [$t(10) = -.69, p = .506$].

Finally, it is important to also note that when the scores on the Phrase Task according to dialect are compared, we see that the L2 listeners scored higher on the comprehension of the standard Spanish than on the Dominican speech, for both the pretest (59% comprehension of the standard speech compared to 19% of the Dominican) and the posttest (64% compared to 33%). This difference in comprehension of the phrases according to dialect was found to be significant for both the pretest [$t(10) = -6.88, p < .05$] and the posttest [$t(10) = -5.07, p < .05$].

5.3. Listening comprehension according to discourse level

Research Question 2 questioned the effect of *discourse level* (word-level versus phrase-level) on the L2 learners' listening comprehension of the Dominican speech. Table 3 restates the comprehension scores of the Dominican speech according to discourse level for the group.

Table 3. Comprehension Scores of the Dominican Speech According to Discourse Level

Test	Word Task	Phrase Task
Pretest	48%	19%
Posttest	59%	33%

As displayed in Table 3, the L2 listeners performed better on the comprehension of the Dominican speech on the Word Task than on the Phrase Task. Even the bilingual speaker (participant 8), who scored a 100% on the Dominican Word Task posttest did not score higher than 70% on the Dominican Phrase Task, as reflected in the presentation of the individual results in Tables 1 and 2 above. The difference in comprehension of the Dominican speech according to discourse level was found to be significant both for the pretest [$t(10) = 8.49, p = .000$] and for the posttest [$t(10) = 8.73, p = .000$].

5.4. Analysis of factors contributing to difficulties in comprehension of Dominican speech

5.4.1. Effect of phonological feature present

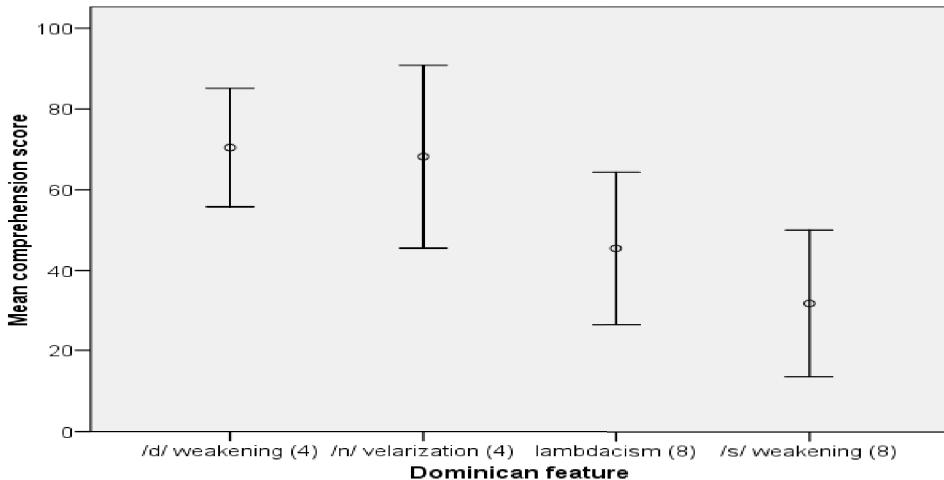
The effect of the presence of specific phonological features on the comprehension of the Dominican speech was considered (Research Question 3). To determine the effect of each Dominican phonological feature on comprehension of the Dominican speech by the L2 listeners, a comprehension score of the words spoken by the Dominican speakers was calculated for each participant according to the feature present⁹. Thus, for example, for the feature final nasal velarization, the total number of

⁸ Once again we find much variation in participant scores of the Dominican speech. A Pearson Correlation determined a significant positive correlation between proficiency level (intermediate, advanced, high advanced, (near) native) and comprehension scores of the Dominican speech at the phrase-level [$r(9) = .86, p = .001$].

⁹ Analysis of the effect of Dominican feature on listening comprehension was carried out with the Word Task data only. The Phrase Task data were not included due to the small number of phrases representing each feature and to the fact that many of the phrases had more than one such feature.

words exhibiting nasal velarization that participant X comprehended was divided by the total number of words presented in the Word Task that displayed velarization. Only words with only one feature were included in the analysis, as it is not possible to discern which feature may impede comprehension of a word if more than one feature is present. Thus, two words, *martes* and *asustado*, could not be included in this part of the analysis as they both exhibited more than one Dominican feature. Also, two additional words, *iban* and *también*, were excluded as posthoc analyses revealed a standard alveolar articulation rather than a velar articulation of these two word-final nasals. Thus, the analysis was based on the comprehension scores of twelve words exhibiting Dominican phonological features at two times, as the pretest and posttest results were combined for this part of the analysis. The results of the comprehension of the Dominican speech on the Word Task according to feature present are presented graphically in Figure 1.

Figure 1. Bar Graph of Comprehension Scores of Dominican Speech at the Word-level According to Feature Present.



(N) = total number of speech samples representing each feature (pre- and posttests combined).

As displayed in Figure 1, there was an effect of phonological feature on the comprehension of the Dominican speech at the word-level by the L2 listener group. The L2 listeners were least successful in comprehension of the Dominican speech when the syllable-final /s/ was deleted (mean comprehension at 32%) or when the rhotic tap was realized as a lateral (mean comprehension at 46%). The presence of word-final /d/ deletion or nasal velarization did not seem to impede L2 listening comprehension to such an extent (with 71% and 68% comprehension, respectively).

A one-way ANOVA was run to determine if the differences found in comprehension of the Dominican speech at the word-level according to phonological feature present were significant. A significant effect for feature was found [$F(3, 40) = 4.853, p = .006$]. However, post hoc Tukey tests with adjusted p-values revealed a significant difference only between the features /d/ deletion and /s/ deletion ($p = .048$) and a difference approaching significance between nasal velarization and /s/ deletion ($p = .08$).

5.4.2. Effect of word familiarity

The responses of the L2 learners to the Vocabulary Task were analyzed according to response type (*word known*, *word familiar*, *word never seen before*) for each of the sixteen words spoken by the Dominican speakers and the six words spoken by standard speakers that were presented in the word comprehension task.

Of the 16 words spoken by Dominican speakers, the average number of words with which each participant was familiar (either knew the meaning or had claimed to have heard or seen it previously) was 15.2 ($SD = 2.5$), while the average number of words of which each participant actually new the meaning was 13.2 ($SD = 1.3$). The average number of the 6 words spoken by the standard speakers

with which the learners claimed familiarity was 5.5 ($SD = 0.5$), while the average number of which each participant knew the meaning was 4.4 ($SD = 0.8$). Thus, it is safe to claim that the L2 listeners knew or were at least familiar with the vast majority of lexical items presented to them and that difficulties in comprehension of the speech must then be due to features of the speech itself rather than to the fact that the learners were unfamiliar with the words.

6. Discussion

6.1. Effect of dialect exposure on listening comprehension through a study abroad experience

The results of this study support the claim made by Tauroza and Luk (1997) that *dialect familiarity* has a significant effect on listening comprehension by L2 learners. After exposure to a previously unfamiliar dialect of Spanish, here, Dominican Spanish, the L2 learners in this study significantly improved in comprehension of the Dominican speech, both at the word-level as well as at the phrase-level. The three-week study abroad program afforded an opportunity for the L2 learners to become exposed to a dialect of the L2 with which they had no previous experience.

Also, the participants made slight gains in comprehension of the standard Spanish speech at the word- and phrase-levels. An improvement in general comprehension of the L2 is not surprising, as Huebner (1995) found that the increased opportunities to practice listening skills that an abroad experience affords enabled the L2 learners of Japanese who studied in Japan in his study to perform better than those learners who stayed at the home institution. However, the gain in comprehension of the standard speech was not found to be significant. This finding is important in our analysis as it provides support that the gain in comprehension of the Dominican speech did not simply reflect an overall gain due to exposure to Spanish in general, but that it was due to the specific exposure to the Dominican dialect.

It is also important to note that the L2 learners in this study were not only exposed to the Santo Domingo variety of Spanish through the input heard during the three-week stay in the Dominican Republic, but also through the explicit presentation of various phonological, morphosyntactic, and lexical features of Dominican speech presented by a guest lecturer prior to the time abroad. It is unknown to what extent it was the input heard by the learners or the explicit awareness of phonological features of the dialect (or the combination of both) that contributed to a significant gain in comprehension of Dominican speech. Future study should separate these factors (input, instruction, and the combination of both input and instruction) to determine which may have the greatest effect on dialect-specific listening comprehension.

6.2. Comprehension according to task type

The participants performed significantly better in comprehension of the Dominican speech on the Word Task than on the Phrase Task. This could be due to the fact that five of the ten phrases had not only one, but two Dominican features, which may have made comprehension of the Dominican speech even more difficult for the L2 listeners. Also, seven of the ten phrases displayed /s/ deletion or lambdacism, which were the two features found to most impede comprehension of the Dominican speech by the L2 listeners. Finally, comprehension of the Dominican speech at the phrase-level may also have been more difficult for the learners due to dialectal differences in prosody.

However, the L2 listeners also performed better on the comprehension of the standard Spanish on the Word Task than on the Phrase Task, which would suggest alternatively that lower comprehension of both the Dominican and standard speech on the phrase tasks is due to the length of speech heard (a phrase as opposed to a single word). However, when the results for the comprehension of the standard Spanish speech at the phrase level are examined, we see that many of the participants had difficulties understanding one phrase in particular spoken by the Costa Rican speaker, *mi tía es enfermera* (*my aunt is a nurse*)¹⁰, which, as there were only four test phrases included to begin with, may have been the cause of such low scores on the comprehension of the standard Spanish at the phrase level. Had

¹⁰ The difficulty of the learners with this phrase may be due to the dialectal phonetic realization of the Costa Rican tap /t/ with a retroflex pronunciation, similar to the English rhotic (see Lipski 1994). This was the only case of a dialectal feature in what are considered the standard speech samples in this study (see footnote 6).

there been more samples of standard Spanish phrases, we might expect to see higher scores for comprehension of the standard speech on the Phrase Tasks.

6.3. Location of the phonological feature

Could it be the case that some features of the Dominican variety of Spanish cause more difficulties for the L2 listeners than others? Results from this study suggest that different phonological features of the Dominican Spanish have different effects on comprehension of the Dominican speech. Deletion of the syllable-final sibilant /s/ and realization of the syllable-final tap /r/ as the lateral liquid [l] impede comprehension by the L2 listeners to a greater extent than do deletion of word-final /d/ or velarization of the word-final nasal. It is proposed that this difference in effect of feature may be due to the previous linguistic experience of the learners with Spanish phonetics and phonology in general.

First, the processes of /s/ deletion (as in “turiØta”) and lambdacism (as in “po[l]que”) generate realizations of sounds that are not allophones of the underlying /s/ or /r/ in either standard Spanish or in the L1 (English), but, in fact, are associated with a different phoneme altogether. Thus, the L2 listeners may be unable to associate these Dominican phonetic realizations, Ø and [l], with their corresponding phonemes, /s/ and /r/. The learners must learn to re-associate these new allophonic segments (or complete deletion of the segment) with the corresponding Spanish phonemes in the appropriate contexts.

It is proposed that the phonological process of /d/ deletion, although similar to /s/ deletion in that it involves the complete absence of a Spanish phoneme, presents a different case. In the majority of Spanish dialects, the voiced stops /b d g/ are categorically “weakened” from a stop to a spirantized approximant [β δ γ] in intervocalic position (Hualde, 2005). Thus, although in this case there is further weakening of the spirantized approximant [δ] to complete deletion, the L2 listeners are already familiar with a weakening process of the voiced stop /d/, possibly lessening the effect of a further weakening of this segment (to complete deletion) on the comprehension of speech with this feature.

Finally, it is proposed that the velarization of the word-final nasal also causes less difficulty in comprehension by the L2 listeners as the velar nasal [ŋ] never occurs as a phoneme in any dialect of Spanish and categorically appears as an allophone in standard Spanish when preceding a velar consonant, both word-internally and across boundaries (Hualde, 2005; Quilis, 1993). Thus, L2 listeners’ previous familiarity with both /d/ weakening and nasal place assimilation to following velar consonants in other varieties of Spanish may explain why the deleted /d/ and velarized nasal caused fewer difficulties in comprehension of the Dominican speech.

However, there is another possible explanation for the differences found in the effect of feature present. Due to the nature of the speech samples included in the present study, there was an unanticipated relation between specific feature present and location of the targeted feature, with all the samples included in the Word Task of /d/ deletion and /n/ velarization occurring word-finally and all the samples included in the Word Task of /s/ deletion and lambdacism occurring word-internally. Thus, it is possible that those processes that occur within the word have a greater effect on L2 listener comprehension than those that occur at the end of the word. In fact, Tauroza (1993) found that L2 learners of English were not affected in their comprehension of English when word-final consonants were deleted in the speech of native speakers. Future study must separate these two factors in order to determine if the effect on comprehension is due to the specific feature present, to the location of the feature within the word, or to both.

7. Conclusion

The intermediate through near-native L2 learners of Spanish in this study significantly improved in comprehension of the Dominican speech after the three-week study abroad experience in the Dominican Republic, providing support to Tauroza and Luk’s claim that dialect familiarity has an effect on listening comprehension by L2 listeners (1997). However, even after three weeks of intense exposure to the Dominican dialect through a study abroad experience, the L2 learners in this study did not reach the same level of accuracy of listening comprehension of the Dominican speech at either the word-level or the phrase-level as of the more standard and previously familiar speech. However, we do

see that the bilingual speaker does reach 100% accuracy of comprehension of the Dominican speech at the word level, and the near-native speaker of Spanish (participant 1) comes close to being equally successful in comprehension at the word-level for both the Dominican and the standard speech after the time abroad.

This raises the interesting question of how *length of exposure* to a previously unfamiliar dialect of the L2 interacts with listening comprehension of that dialectal variety. What length of time is needed for the L2 listeners to equally comprehend a previously unfamiliar dialect as they do a more standard (and familiar) variety of the target language? If these L2 learners had spent six weeks, three months, or one year in the Dominican Republic, would their listening comprehension scores of the Dominican eventually have caught up to those scores of the standard Spanish? Or, is it possible that comprehension of less “conservative” target language speech varieties never reaches the same level of comprehension of more “conservative” varieties by L2 listeners? These, along with the possibility of the influence of sociolinguistic factors (Fox & McGory, 2007) are interesting questions that should be addressed in future work.

This study also finds preliminary support for the possibility of determining what phonetic features or characteristics of different types of target language speech cause greater difficulties for L2 listeners. Dialectal phonetic feature, location of dialectal feature, and word familiarity were discussed as possible factors affecting dialectal listening comprehension by L2 learners. The effects of other dialectal differences such as phonetic features of other Spanish varieties, rate of speech, and intonation patterns should be investigated in future work to expand our understanding of how different dialectal features of Spanish may affect L2 learners’ listening comprehension.

Lastly, it is recognized that the number of samples representing the targeted Dominican dialectal phonological features considered in this study is small, as well as the number of samples of speech from other Spanish dialects. This needs to be addressed in future study by the inclusion of a greater number and more balanced selection of speech samples. However, in spite of this limitation, the current study still offers very interesting preliminary results with regard to the effect of different phonological features on L2 listening comprehension.

Appendix A. Words included in the listening comprehension tasks¹¹

Feature	Words			
syllable-final /s/ deletion	una e <u>s</u> quina	de e <u>s</u> tro <u>g</u> eno	yo e <u>s</u> toy	tur <u>is</u> ta
syllable-final lambdacism	acu <u>e</u> rdo	pe <u>r</u> cha	ta <u>r</u> de	po <u>r</u> que
word-final nasal velarization	ve <u>n</u>	po <u>b</u> lacio <u>n</u>		
word-final /d/ deletion	eda <u>d</u>	salu <u>d</u>		
two features	ma <u>r</u> te <u>s</u>	asu <u>s</u> tado		
no feature	tambi <u>e</u> n	iba <u>n</u>		
no feature (Seville)	pl <u>a</u> ya	ah <u>o</u> ra		
no feature (Bogota)	pre <u>g</u> rado	equivalente		
no feature (San Isidro)	pe <u>n</u> a	du <u>l</u> ce		

Appendix B. Phrases included in the listening comprehension tasks

Feature	Phrases	
syllable-final /s/ deletion	s <u>í</u> , pasa <u>n</u> alguna <u>s</u> veces	do <u>s</u> el l <u>u</u> ne <u>s</u>
syllable-final lambdacism	necesito comprar lo <u>s</u> lente <u>s</u> otra ve <u>z</u>	tengo que e <u>s</u> tudiar
	se introducen una pe <u>r</u> cha de metal	que se pier <u>d</u> e
	pero en realida <u>d</u> , es un abo <u>r</u> to	

¹¹ Targeted feature underlined.

word-final /n/ velarization	con <u>relación</u> a los <u>casos</u>	
word-final /d/ deletion	al ser mayor de <u>edad</u>	sí, eso <u>es</u> <u>verdad</u>
no feature (Seville)	me voy a cambiar de país	tenía vida social
no feature (Bogota)	estas cosas me pasan a mí	
retroflex rhotic (San Isidro)	mi tía es enfer <u>me</u> ra	

References

- Alba, O. (2004). *Cómo hablamos los dominicanos: un enfoque sociolingüístico*. Santo Domingo: Grupo León Jimenes.
- Allen, H., & Herron, C. (2003). A mixed methodology investigation of the linguistic and affective outcomes of summer study abroad. *Foreign Language Annals*, 36, 370-385.
- Brown, K. (1968). Intelligibility. In A. Davies (Ed.), *Language testing symposium* (pp.180-191). Oxford, England: Oxford University Press.
- Eisenstein, M., & Berkowitz, D. (1981). The effect of phonological variation on adult learner comprehension. *Studies in Second Language Acquisition*, 4, 75-80.
- Fox, R., & McGory, J. (2007). Second language acquisition of a regional dialect of American English by native Japanese speakers. In O. Bohn & M. Munro (Eds.), *Language experience in second language speech learning: In honor of James Emil Flege* (pp.117-134). Amsterdam & Philadelphia: John Benjamins.
- Hualde, J. (2005). *The sounds of Spanish*. New York: Cambridge University Press.
- Huebner, T. (1995). The effects of overseas language programs: Report on a case study of an intensive Japanese course. In B. Freed (Ed.), *Second language acquisition in a study abroad context* (pp.171-193). Amsterdam: John Benjamins.
- Jiménez, M. (1975). *Más datos sobre el español de la República Dominicana*. Santo Domingo: Ediciones Intec.
- Lafford, B., & Collentine, J. (2006). The effects of study abroad and classroom contexts on the acquisition of Spanish as a second language: From research to application. In M. R. Salaberry & B. Lafford (Eds.), *The art of teaching Spanish: Second language acquisition from research to praxis* (pp.103-126). Washington, D.C.: Georgetown University Press.
- Lipski, J. (1994). *Latin American Spanish*. New York: Longman.
- Major, R., Fitzmaurice, S., Bunta, F., & Balsubramian, C. (2005). Testing the effects of regional, ethnic, and international dialects of English on listening comprehension. *Language Learning*, 55, 37-69.
- Quilis, A. (1993). *Tratado de fonología y fonética españolas*. Madrid: Gredos.
- Tauroza, S. (1993). Recognizing words in continuous speech: How important are word-final consonants? *ELT Journal*, 47, 211-218.
- Tauroza, S., & Luk, J. (1997). Accent and second language listening comprehension. *RELC Journal*, 28, 54-71.
- Wilcox, G. (1978). The effect of accent on listening comprehension: A Singapore study. *English Language Teaching Journal*, 32, 118-127.
- Willis, E. (2001). [Dominican Speech Database]. Indiana University.
- Willis, E. (2006). Trill variation in Dominican Spanish: An acoustic examination and comparative analysis. In N. Sagarra & A. Toribio (Eds.), *Selected proceedings of the 9th Hispanic linguistics symposium* (pp.121-131). Somerville, MA: Cascadilla Proceedings Project.
- Willis, E. (2007a). An acoustic study of the “pre-aspirated trill” in narrative Cibaeño Dominican Spanish. *Journal of the International Phonetic Association*, 37, 33-49.
- Willis, E. (2007b). Utterance signaling and tonal levels in Dominican Spanish declaratives and interrogatives. *Journal of Portuguese Linguistics*, 5/6, 179-202.

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