

Measure Phrases in Spanish Second Language Learners and Heritage Speakers

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1 Introduction

The linguistic repertoires of second language (L2) learners and heritage speakers (HS) have been compared, in the recent past, to better understand the processes of language acquisition, the possibility of transfer from the dominant language, the differing communicative practices, and mental grammars of these two broadly defined groups (e.g. Montrul, 2010; Showstack, 2017). While research has demonstrated that the Spanish of adult HS differs from the Spanish of monolinguals of the same age group, and that there is a great deal of diversity within the HS group, these differences need further exploration. In addition to contributing to formal linguistics, such studies are also important to heritage language (HL) pedagogy because they show how the pedagogical needs of HS differ from those of L2 learners (Bayram, Prada, Pascual y Cabo, and Rothman, 2016). In a study of Spanish clitics, Montrul (2010) found that HS had clear advantages over L2 learners in some areas but concluded that both groups showed effects of English in some areas, particularly at the interface between syntax and semantics/pragmatics. While it is difficult to determine whether a given linguistic feature does indeed exhibit crosslinguistic influence (Silva-Corvalán, 1993) and scholars in applied linguistics caution against classifying similarities to English in bilingual speech as a deficit (García, 2009; Showstack, 2017), further research is needed on the mental grammars and linguistic production of L2 learners and HS at the syntax/semantics interface to understand the effects of different bilingual learning contexts on the linguistic repertoires of speakers from these two groups.

For Spanish HS and L2 learners, one syntactic/semantic feature that merits further investigation is measure phrases (e.g. five inches, two pounds), because syntax/semantics research suggests that they are realized differently in Spanish and English. Measure phrases are often taken to be modifiers of gradable adjectives (such as *tall*). In degree expressions, they measure an amount or a difference on a scale. In English, measure phrases appear with both the positive form of the adjective or the comparative form of the adjective as in (1)¹.

- (1) a. Mary is six feet tall.
b. Mary is six inches taller.

In (1a), the adjective *tall* is in the positive form. The measure phrase *six feet* measures the height of Mary. In (1b), the adjective *taller* is in the comparative form, with the *-er* marker attaching onto the positive form of the adjective. Here, the measure phrase measures the difference in height between Mary and the target of comparison (which is implicit in this case). We will refer to these constructions as the non-comparative form and the comparative form respectively.

Languages differ on the basis of whether they allow measure phrases with both the comparative and non-comparative forms. Contrary to English, research in syntax/semantics posits that Spanish measure phrases can only appear with the comparative form of the adjective (Sáez del Álamo, 1997; Bosque, 1998;

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¹ This distinction between measurements is often referred to as the absolute measurement versus differential measurement. Languages vary internally and cross-linguistically between these two kinds of measurements (see, Schwarzschild, 2005).

Schwarzschild, 2005; and, Eguren and Pastor, 2014), as shown below.

- (2) a. Juan es un metro más alto que Pedro (Eguren and Pastor, 2014 (1a, b))
 John is a meter more tall than Peter
 ‘John is one meter taller than Peter.’
 b. *Juan es un metro alto
 John is a meter tall
 Intended: John is one meter tall

In (2), the measure phrase *un metro* is compatible only with the comparative form of the adjective *más alto*. Without the comparative marker *más*, the combination is ungrammatical, as shown in (2b). Thus, measure phrases are incompatible with non-comparative adjectives in Spanish. However, it has been noted in the literature that some types of adjectives do allow measure phrases with non-comparative adjectives in Spanish. These adjectives have a lower closed scale, according to the typology of Kennedy and McNally (2005)².

- | | | | |
|-----|-------------------------------|---------|--------------|
| (3) | A typology of scale structure | | Example |
| a. | (Totally) open scale | ○-----○ | <i>tall</i> |
| b. | Lower closed scale | ●-----○ | <i>dirty</i> |
| c. | Upper closed scale | ○-----● | <i>clean</i> |
| d. | (Totally) closed scale | ●-----● | <i>full</i> |

Lower closed scale adjectives such as *dirty* are compatible with the degree modifier ‘slightly’ and incompatible with the degree modifier ‘perfectly’. This is due to the fact that ‘slightly’ picks out the minimum degree on the adjective’s scale whereas ‘perfectly’ picks out the maximum degree. In lower closed scale adjectives, the maximum degree is open and therefore the incompatibility.

Languages that do not generally allow measure phrases combining with non-comparative adjectives (Spanish, Russian, Korean), allow the acceptability of measure phrases with lower closed scale adjectives (Sawada and Grano, 2011), as shown in the following example from Spanish.

- (4) Esta varilla está doblada noventa grados (Sawada and Grano, 2011: (8))
 This rod is bent ninety degrees
 ‘This rod is ninety degrees bent.’

As seen in (4), the measure phrase ‘noventa grados’ modifies the lower closed scale non-comparative adjective ‘bent’. Note that the gradable predicate in this sentence is deverbal, however the semantics of the predicate does not change irrespective of the morphology and it is the semantics that is crucial for the measure phrase. In addition, Eguren and Pastor (2014) has noted that some measure phrases can combine with bare adjectives in the [MP + *de* + A] pattern, where *de* is a prepositional copula heading a small clause, as shown in (5).

- (5) Una valla de piedra de [dos metros de alta] (Eguren and Pastor, 2014: (5))
 A fence_{FEM} of stone of two meters of high-FEM
 ‘a two meters high stone fence’

In the above example, the measure phrase ‘dos metros’ combines with the prepositional copula *de* and the adjective ‘alta’, again contrary to the assumption that measure phrases cannot combine with a non-comparative adjective. To summarize this section, research suggests that English and Spanish allow measure phrases with comparative adjectives, thereby allowing the differential measurement reading, but

² These adjectives are also referred to as absolute adjectives versus relative adjectives (see, Kenney and McNally 2005, Toledo and Sassoon 2011, a.o).

Spanish does not allow measure phrases with non-comparative adjectives, thereby disallowing the absolute measurement reading. However, in Spanish, certain non-comparative adjectives combine with measure phrases. These adjectives belong to the lower closed scale adjectives. In addition, measure phrases can also combine with the prepositional copula *de* and together modify a non-comparative adjective. This is summarized below in table 1 below.

	English	Spanish
Allows measure phrases with comparative adjectives	√	√
Allows measure phrases with all non-comparative adjectives	√	x
Allows measure phrases with some non-comparative adjectives (lower closed scale, with prepositional <i>de</i>)	na	√

Table 1: Summary of existing syntax/semantics literature on English and Spanish Measure Phrases

The literature highlighting these judgments comes from native speaker intuitions (Schwarzschild, 2005; Sawada and Grano, 2011) and corpus data (Eguren and Pastor, 2014). No study has looked at the acceptability of measure phrases with adjectives with different Spanish populations, given that the existing theoretical literature makes contradicting predictions on the acceptability of measure phrases.

In this paper, we present results from an acceptability judgment study and a usability study we conducted, looking at the acceptability and usability of measure phrases in Spanish with populations whose use of measure phrases has not been well studied, namely second language learners and heritage speakers. We chose to study these populations to find out how much they show similarities to English at the syntax/semantics interface. Our results, in the acceptability rating study, show that L2 learners of Spanish prefer measure phrases with comparative adjectives and prefer measure phrases without the prepositional copula *de*. In contrast, our heritage speakers of Spanish had no preference between comparative and non-comparative adjectives. However, they preferred adjectives with the prepositional copula *de* to those without it. Our results, in the usability study, show that both L2 learners and HS rated adjectives without *de* as the sentences they use the least in everyday speech. Both groups also preferred to use adjectives with *de* the most.

The rest of the paper is structured as follows. In the next section, we provide a quick overview of the syntax and semantics of adjectives and measure phrases. In section 3, we introduce our study and the methodology, section 4 presents the results of the study, section 5 is the general discussion and section 6 lays out the plan for future studies.

2 Adjectives and Measure Phrases

In this section, we briefly provide an overview of the previous analyses of adjectives and measure phrases in the theoretical literature. There are many competing analyses for the semantics of adjectives. Under the standard analysis, gradable adjectives denote relations between individuals and degrees (Seuren 1973, Cresswell 1976 a.o.). A gradable predicate, such as *tall*, incorporates the measure function *height*, which when applied to an individual, yields the degree *d* of *height* of that individual.

$$(6) \quad \llbracket \text{tall} \rrbracket = \lambda d \lambda x. \text{height}(x) \geq d$$

In the degree analysis of adjectives, functional morphology such as, measure phrases (*two feet*), positive morphemes (POS), or the comparative morpheme *more* saturate the degree argument. Thus, the semantic composition for (7) is shown below:

$$(7) \quad \begin{aligned} \llbracket \text{Mary is six feet tall} \rrbracket &= \llbracket \text{six feet} \rrbracket (\llbracket \text{tall} \rrbracket) (\llbracket \text{Mary} \rrbracket) \\ &= \lambda x. \text{height}(x) \geq \text{six feet} \end{aligned}$$

There were 13 L2 learners (4M, 9F) and 11 HS (2M, 9F). At the time of data collection, all of the participants were enrolled in intermediate-level Spanish language courses. Because this was a pilot study, the HS were not grouped according to whether they were simultaneous or sequential bilinguals, nor the amount of Spanish and English to which they were exposed as children.

3.2 Methodology We created an online acceptability rating study using a 2 * 2 design for the acceptability rating stimuli. The first group consisted of measure phrases combining with bare gradable adjectives. These adjectives were either comparative adjectives or non-comparative adjectives. The second group was the presence of absence of the prepositional copula *de*. Some examples are shown in the following table:

	Gradable Adjective	Prepositional Copula
Comparative	un metro más alto 'one meter taller'	
Non-comparative	# un metro alto ⁴ 'one meter tall'	
With <i>de</i>		dos pies de ancha 'two feet wide'
Without <i>de</i>		#dos pies ancha 'two feet wide'

Table 2: Sample experimental stimuli used in the acceptability rating study

3.3 Design and Procedure The questionnaire was administered on Qualtrics. Participants first read the university approved consent form. Once they gave their consent to participate in the survey, they provided socio-demographic information such as birthplace, age of arrival in the U.S., first language learned, etc. Following this, participants went on to rating combinations of measure phrases with comparative adjectives. Each participant rated 10 phrases. These phrases belonged to one of our four conditions. We chose 20 adjectives, a selection of these were taken from corpus data (Eguren and Pastor, 2014). Participants rated these phrases on a scale of 1-5, with 1 being highly unacceptable, 3 being neutral, and 5 being highly acceptable. They were also asked to answer, for each of the phrases, whether they use this phrase (or phrases like these) in their everyday speech. They were given three categories, 'natural for use in casual conversation', 'something that some people would use, but you wouldn't, and 'something that only a nonnative speaker would use'. These categories, roughly based on Labov (2006), allowed us to analyze the participants' perceptions of how the structure is used without confusing such perceptions with prescriptivist notions of what is considered 'correct' or 'incorrect.' The next page consisted of ten additional sentences with the prepositional copula *de*. No adjective was repeated between these two conditions. They rated these sentences on a scale of 1-5, and answered whether they use this sentence in their everyday speech. Following this, they proceeded to rate sentences with non-comparative adjectives and sentences without *de*. The procedure remained the same. Each participant rated 40 sentences in total for both acceptability and usability. The entire survey lasted 10-15 minutes. Participants belonged to intermediate and advanced Spanish grammar courses or conversation courses and were provided a link to take the survey either during class time or in their free time.

3.4 Hypotheses Given Montrul's (2010) findings that both HS and L2 learners exhibit cross-linguistic influence from English at the syntax-semantics interface, we hypothesized that we would find some similarities to English in both groups. For L2 learners, our hypothesis was that the majority of participants would allow measure phrases with any adjective, as they are learning the language and interference from their first language is possible. For HS speakers, we hypothesized that some would allow measure phrases with non-comparative adjectives or without *de* as they have learned those structures at home; however, we expected some of them to exhibit influence from English because, as research shows, the syntax-semantics interface seems to be permeable for HS as well.

⁴ The # represents unacceptability and not ungrammaticality.

4 Results

Recall that we tested the participants on 4 different conditions. The first condition is called the comparative adjective condition (*un metro más alto* ‘one meter taller’), the next condition is called the prepositional *de* condition (*dos pies de ancha* ‘two feet wide’), followed by the non-comparative adjective condition (*#un metro alto* ‘one meter tall’) and without the prepositional *de* condition (*#dos pies ancha* ‘two feet wide’). According to the theoretical literature, the non-comparative adjective condition and the without the prepositional *de* condition are disallowed generally.

First, we provide the mean ratings of acceptability provided by the L2 group and then the HS group. In the L2 group, participants rated the comparative adjective group a mean of 3.12 out of 5, and the non-comparative adjective group 2.87, thereby preferring adjectives in the comparative form to their non-comparative counterparts. The participants in the L2 group further rated the adjectives with the prepositional copula *de* a mean of 2.76 and adjectives without *de* a mean of 3.38, suggesting that they preferred measure phrases to combine with adjectives without the prepositional copula. The participants in the HS group rated the comparative adjective group a mean of 2.68, and the non-comparative adjective group 2.69. We find comparable ratings to both these conditions. In the HS group, participants also rated the adjectives with the prepositional copula *de* a mean of 3.52 and adjectives without *de* a mean of 2.99, suggesting that they prefer adjectives to combine with measure phrases using the prepositional copula. These results have been summarized in Table 3 and Figure 1 below:

	L2 group	HS group
Comparative <i>un metro más alto</i> ‘one meter taller’	3.12	2.68
Non-comparative <i>#un metro alto</i> ‘one meter tall’	2.87	2.69
With <i>de</i> <i>dos pies de ancha</i> ‘two feet wide’	2.76	3.52
Without <i>de</i> <i>#dos pies ancha</i> ‘two feet wide’	3.38	2.99

Table 3: Mean ratings of acceptability rating task

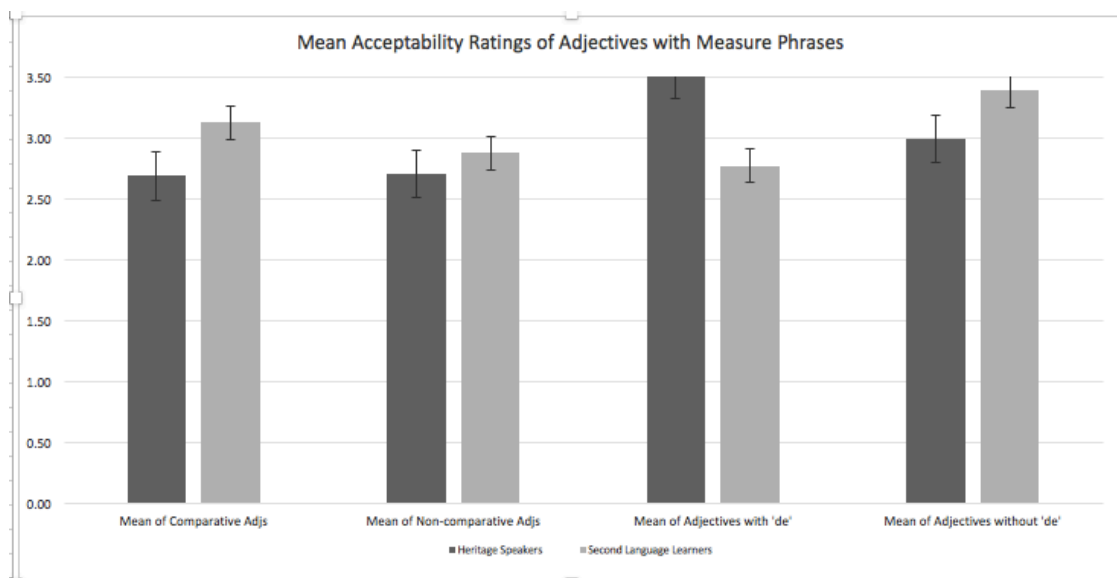


Figure 1: Mean acceptability ratings of measure phrases with adjectives. The darker columns are results of HS participants and lighter columns are results of L2 participants.

L2 learners preferred comparative adjectives to non-comparative adjectives, resembling the predictions for Spanish and contradicting our hypothesis; however, they also preferred adjectives without *de* to adjectives with *de*, which contradicts the normative Spanish usage. In fact, they preferred adjectives without *de* the highest of the two groups at 3.38. The latter is in line with our hypothesis, since this could be interference from their first language. The HS participants showed no preference between measure phrases with comparative adjectives and with non-comparative adjectives. They rated both these conditions exactly the same. This is in line with our hypothesis; their results are mixed, supporting our prediction that some HS would show influence from English while others would not. In addition, the HS group preferred adjectives with *de* the highest at 3.52. This has been summarized below:

	Comparative Adjectives <i>un metro más alto</i> ‘one meter taller’	Non-comparative Adjectives <i>#un metro alto</i> ‘one meter tall’
HS	No difference	No difference
L2	Preference	

Table 4: Summary of results of comparative adjectives and non-comparative adjectives

	Adjectives with <i>de</i> <i>dos pies de ancha</i> ‘two feet wide’	Adjectives without <i>de</i> <i>#dos pies ancha</i> ‘two feet wide’
HS	Preference	
L2		Preference

Table 5: Summary of results of adjectives with *de* and without *de*

Thus, we see that our HS participants did appear to exhibit influence from English, as hypothesized before, whereas our L2 learners preferred comparative adjectives, contrary to our hypothesis.

Next, we discuss the ratings of usability. Participants were asked to answer for each of the phrases whether they use this phrase (or phrases like these) in their everyday speech. They were given three categories, ‘natural for use in casual conversation’ (rating of 1), ‘something that some people would use, but you wouldn’t’ (rating of 2), and ‘something that only a nonnative speaker would use’ (rating of 3). They rated the same sentences as they did for the acceptability task. First, we provide the mean ratings provided by the L2 group and then the HS group.

The L2 group rated their usability of the comparative adjective group a mean of 1.74 out of 3, and the non-comparative adjective group 1.75 out of 3. The L2 group rated the adjectives with the prepositional copula *de* a mean of 1.83 and adjectives without *de* a mean of 2 out of 3. The HS group rated the comparative adjective group a mean of 2.05 out of 3, and the non-comparative adjective group 2.4 out of 3. The HS group rated the adjectives with the prepositional copula *de* a mean of 1.9 out of 3 and adjectives without *de* a mean of 2.53 out of 3. These results have been summarized in Table 6 below:

	L2 group	HS group
Comparative <i>un metro más alto</i> ‘one meter taller’	1.73	2.05
Non-comparative <i>#un metro alto</i> ‘one meter tall’	1.75	2.4
With <i>de</i> <i>dos pies de ancha</i> ‘two feet wide’	1.83	1.9
Without <i>de</i> <i>#dos pies ancha</i> ‘two feet wide’	2	2.53

Table 6: Mean ratings of usability rating task

As seen in the table, the L2 group rated the adjectives with measure phrases without the prepositional copula *de* the lowest, i.e. 2 (something that some people would use, but you wouldn’t). The L2 group did

not distinguish between the usage of comparative adjectives versus non-comparative adjectives. They rated adjectives with *de* slightly better than adjectives without *de*. Overall, this suggests that L2 speakers use either measure phrases with comparative or non-comparative forms of the adjective, or measure phrases combining with the adjective using *de*, but they don't prefer to use adjectives combining with measure phrases without *de*. Similarly, the HS group also rated the use of adjectives without *de* the lowest. Similar to the L2 group, the HS group shows a comparable usability rating between adjectives in the comparative form and adjectives in the non-comparative form. They also preferred measure phrases combining with adjectives using the prepositional copula *de* the best. Thus, we see that both the groups have very similar usability ratings of the sentences. This is summarized in Figure 2 below.

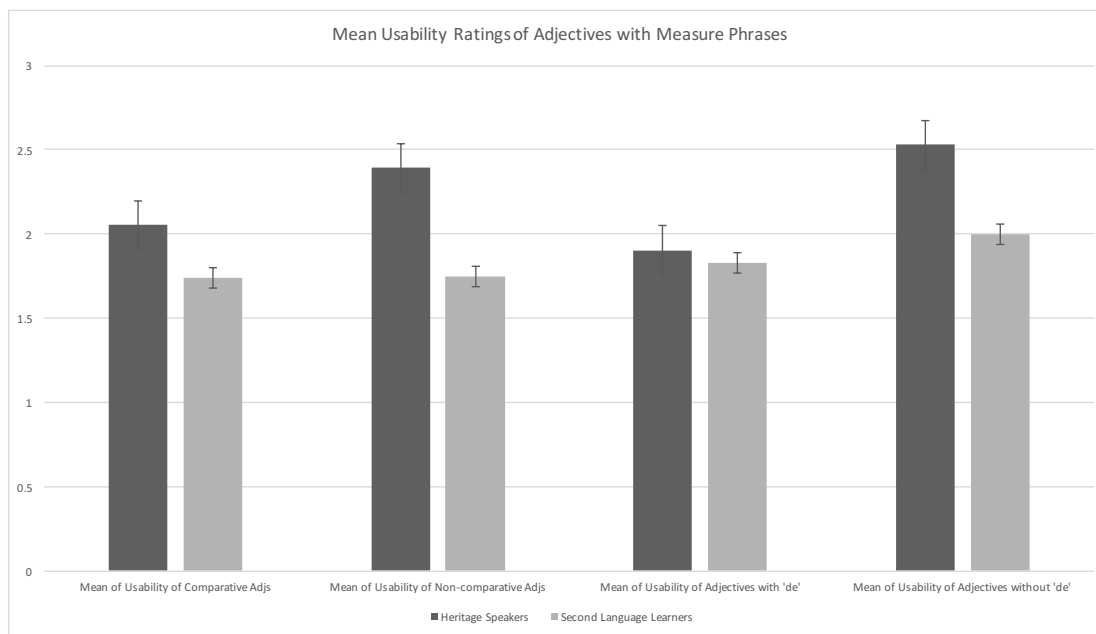


Figure 2: Mean usability ratings of measure phrases with adjectives. The darker columns are results of HS participants and lighter columns are results of L2 participants.

To summarize, both groups rated adjectives without *de* as the phrases they will least use in everyday speech. Both groups also preferred to use adjectives with *de* the most. Our results thereby provide new, experimental evidence for Eguren and Pastor's (2014) observation from corpus data, namely in Spanish measure phrases can combine with adjectives using the prepositional copula *de*.

	Comparative Adjectives <i>un metro más alto</i> 'one meter taller'	Non-comparative Adjectives <i>#un metro alto</i> 'one meter tall'
HS	Preference	
L2	No difference	No difference

Table 7: Summary of usability results of comparative adjectives and non-comparative adjectives

	Adjectives with <i>de</i> <i>dos pies de ancha</i> 'two feet wide'	Adjectives without <i>de</i> <i>#dos pies ancha</i> 'two feet wide'
HS	Preference	
L2	Preference	

Table 8: Summary of usability results of adjectives with *de* and without *de*

We find that the usability ratings differ from the acceptability ratings among participants and groups.

Recall that we hypothesized L2 learners could allow measure phrases with any adjective and some HS speakers should allow measure phrases with non-comparative adjectives and adjectives without *de*. Contra to our hypotheses, both participants showed a preference for adjectives with *de* and with measure phrases combining with comparative adjectives, thus suggesting that there is a difference between the language they use daily versus the language they find acceptable.

5 General Discussion

Our findings are in line with Montrul's (2010) observation that the HS in her study tended to display more influence from English at the syntax/semantics interface: our HS participants exhibited similarity to English in their preference for the type of adjectives that could be used with measure phrases, while they followed predictions for Spanish in their preference for the use of *de* with adjectives, a feature that is primarily syntactic. Montrul (2010) argues that the difficulty that some HS (particularly sequential bilinguals and early L2 learners) encounter at the syntax/semantics interface may be an indication that they have not reached 'ultimate attainment' of the language. The notion that a certain group of HS has not reached 'ultimate attainment' or has achieved an 'incomplete acquisition' of their heritage language suggests that there is an inherent deficiency in the linguistic repertoires of these speakers, and therefore has received a great deal of scrutiny from linguists (e.g. Otheguy and Zentella, 2012). Following Pascual y Cabo and Rothman (2012), we prefer not to use the term 'incomplete' to describe the grammatical systems of HS who have acquired English at a young age and do not utilize all of the grammatical structures that appear in the variety of Spanish spoken by their parents; rather, we simply describe their systems as 'different.' One possible explanation for the HSs' lack of alignment with predictions for Spanish is that they may possess a 'simplified' grammatical system due to early acquisition of English; however, the reasons for differences between HS and L2 grammars are still not fully understood (Bayram et al., 2016). Further information on the age of first exposure to English and exposure to Spanish in educational contexts would be helpful to determine whether participants' input in Spanish was limited from a young age and whether they had opportunities to develop their academic literacy in the language. As Bayram et al. (2016) point out, recent research shows that HS who receive significant literacy training in the HL as part of their primary education show minimal differences from monolinguals of the same age as early adults (Bayram et al. cite Kupisch & Rothman, 2016).

Another possible explanation for the HSs' preference for both comparative and non-comparative adjectives is that they may have acquired a contact variety of Spanish either at home or in bilingual contexts outside of home (Escobar and Potowski, 2015). For example, perhaps in some communities of speakers of U.S. Mexican Spanish (e.g. a network of families from Zacatecas who live in Kansas), it could be acceptable to use measure phrases with non-comparative adjectives; the existence of such a feature could be analyzed as the result of structural borrowing from English. In this case, the HS selection of measure phrase + non-comparative adjective combinations on the questionnaire would be analyzed as a contact feature rather than a result of a process of language acquisition (e.g. transfer, generalization, etc.). In order to determine whether this is the case, it would be necessary to collect additional data from other groups of speakers of U.S. Mexican Spanish in the same community, including the parents of the study participants.

While we have presented two feasible explanations for the HSs' apparent indifference to the comparative vs. non-comparative adjective distinction, there is also a third possibility: their responses may have been related to the study design rather than their linguistic awareness. Because the phrases the participants judged were presented out of context and were not complete sentences, it is possible that they may have judged some of the phrases that were intended to represent normative Spanish usage as unacceptable for reasons other than the measure phrase/adjective structure. For example, having learned Spanish in a natural setting at home, they may have been unaccustomed to examining short written phrases out of context, as L2 learners may have been.⁵ It would be helpful to utilize additional complementary

⁵ This difference in linguistic background also explains why L2 classes are often difficult for heritage speakers, especially when taught with a focus on traditional mechanical grammar exercises.

forms of data collection to further examine this feature, such as a production task. In particular, our results from the usability task suggests that there is a difference between rating a phrase versus actually using the phrase. A production study would shed more light on this difference.

Regarding the L2 learners' preference for comparative adjectives, this finding may be a reflection of the level of proficiency in Spanish that had been reached by the students who participated in this study. To be allowed in the intermediate Spanish classes where data were collected, students had to have either completed a three-semester basic language sequence or scored high enough on a placement exam to skip ahead. Many of the students have had some study abroad or missionary/public service experience in Spanish-speaking countries by this point in their studies. However, using the students' Spanish class level as an indication of language proficiency may not provide enough information to compare HS with L2 learners; a more precise method of measuring students' language proficiency would help to support such conclusions. Moreover, it may be more useful to compare highly proficient L2 learners with HS (rather than students classified as 'intermediate') as both groups have been classified as having reached an 'end-state' (Bayram et al., 2016).

Our examination of the syntax and semantics of measure phrases for HS and L2 learners expands our understanding of the grammars of these groups, contributing to the fields of cognitive linguistics, sociolinguistics, and the research base for heritage language pedagogy (Bayram et al., 2016), as well as complementing existing theoretical studies in syntax and semantics. It is important for heritage language instructors to understand the differences between how some HS may express measure phrases and the ways such phrases would be structured by Spanish monolinguals, and to critically reflect on their understanding of these differences, in order to teach HS better in the language classroom. Instructors' understanding of HS syntax/semantics can support contemporary critical and sociolinguistic approaches to heritage language education (e.g. Leeman, 2005; Shin and Henderson, 2017) by providing additional information about the reasons for the differences between the grammars of different groups of Spanish speakers. Further research is needed to better understand this aspect of Spanish HS syntax/semantics and how heritage language instructors should address it in the classroom.

6 Future Work

The authors intend to collect additional data using both a perception and a production task and testing a broader range of participants, including different proficiency levels and, for the HS, different ages of first exposure to English. In addition to HS and L2 learners, participants will also include first generation Spanish speakers from northern Mexico who live in central Kansas, including the parents of the HS participants. We hope to be able to include first generation Spanish speakers with both high and low levels of proficiency in English, and we also hope to be able to use a standardized method to evaluate the Spanish proficiency level of all of the participants.

References

- Bayram, Fatih, Prada, Josh, Pascual y Cabo, Diego, & Rothman, Jason. 2016. Why should formal linguistic approaches to heritage language education be linked to heritage language pedagogies? *Handbook of Research and Practice in Heritage Language Education*: Springer International Publishing AG.
- Bosque, Ignacio. 1998. Sobre los complementos de medida. In *Estudios en honor del profesor Josse de Kock*, eds. Nicole Delbecque and Christian De Paepe, 57-73. Leuven: Leuven University Press.
- Cresswell, Max J. 1976. The semantics of degree. In Barbara Partee (ed.) *Montague Grammar*. New York: Academic Press, 261-292.
- Eguren, Luis and Pastor, Alberto. 2014. Measure phrases with bare adjectives in Spanish. *Natural Language and Linguistics Theory* 32: 459-497.
- Escobar, Anna María, & Potowski, Kim. 2015. *El español de los Estados Unidos*. Cambridge: Cambridge University Press.
- García, Ofelia. 2009. *Bilingual education in the 21st century: A global perspective*. Malden, MA and Oxford: Wiley/Blackwell.
- García-Pardo, Alfredo and Menon, Mythili. to appear. The Aspectual Structure of the Adjective: Spanish *Ser* and *Estar*. *Issues in Hispanic and Lusophone Linguistics*. John Benjamins Publishing.

- Kennedy, Chris, and McNally, Louise. 2005. Scale structure and the semantic typology of gradable predicates. *Language*, 81(2), 345–381.
- Kupisch, Tanja, & Rothman, Jason. 2016. Terminology matters! Why difference is not incompleteness and how early child bilinguals are heritage speakers. *International Journal of Bilingualism*, 1-19. doi:10.1177/1367006916654355
- Labov, William. 2006. *The social stratification of English in New York City* (2nd Edition). Cambridge: Cambridge University Press.
- Leeman, Jennifer. 2005. Engaging critical pedagogy: Spanish for native speakers. *Foreign Language Annals*, 38(1), 35-45.
- Montrul, Silvina. 2010. Dominant language transfer in adult second language learners and heritage speakers. *Second Language Research*, 26(3), 293-327.
- Otheguy, Ricardo, & Zentella, Ana Celia. 2012. *Spanish in New York: Language contact, dialectal levelling, and structural continuity*. Oxford: Oxford University Press.
- Pascual y Cabo, Diego, & Rothman, Jason. 2012. The (Il)logical problem of heritage speaker bilingualism and incomplete acquisition. *Applied Linguistics*, 33, 450-455.
- Sáez del Álamo, Luis. 1997. Cuantificadores y sintagma de medida. In *Proceedings of the IV colloquium of generative grammar*, eds. Natàlia Català and María Bargalló, 162-184. Tarragona Universitat Rovira i Virgili.
- Sawada, Osamu and Grano, Thomas. 2011. Scale structure, coercion, and the interpretation of measure phrases in Japanese. *Natural Language Semantics*, 191-226.
- Schwarzschild, Roger. 2005. Measure phrases as modifiers of adjectives. *Recherches linguistiques de Vincennes* 34: 207-228.
- Seuren, Pieter. 1973. The Comparative. In Ferene Kiefer and Nicolas Ruwet (eds.) *Generative Grammar in Europe*. Dordrecht D. Reidel. 528-564.
- Shin, Naomi, and Henderson, Mary. 2017. A sociolinguistic approach to teaching Spanish grammatical structures. *Foreign Language Annals*, 50:1, 195-213.
- Showstack, Rachel. 2017. La pragmática transcultural de los hablantes de herencia de español: análisis e implicaciones pedagógicas. *Journal of Spanish Language Teaching*, 3(2).
- Silva-Corvalán, Carmen. 1993. On the permeability of grammars: Evidence from Spanish and English contact. In William J. Ashby, Marian Mithun, and Giorgio Perissinotto (eds.), *Linguistic Perspectives on Romance Languages: Selected Papers from the XXI Linguistic Symposium on Romance Languages, Santa Barbara, February 21–24, 1991* (pp. 19-43): Benjamins.
- Toledo, Assaf, and Sassoon, Galit. 2011. Absolute vs. relative adjectives – Variance within vs. between individuals. In *Proceedings of SALT 21*, 135-154.