

# THE EFFECT OF PERSON IN THE SUBJECT EXPRESSION OF SPANISH HERITAGE SPEAKERS

## 1. Introduction

The linguistic aspects of Spanish heritage bilingualism have received attention from both generativist and variationist approaches. One structure that has been examined by both is subject pronoun expression (SPE), due to the cross-linguistic differences between English, a non-null subject language, and Spanish, a null subject language.

Spanish is a null subject language where null subjects are used more frequently (80% of the time in certain varieties of Spanish) than overt pronominal subjects (20% of the time). English, in contrast, has a near categorical use of overt pronominal subjects. The context where English does not require overt pronominal subjects is in coordinated clauses (Torres-Cacoullous & Travis 2015). It is important to point out, though, that those cases are not considered null subjects but coordinated VPs in the theoretical literature. In general, overt subjects are considered the unmarked form, arguing that the overt form avoids the burden of keeping a referent in memory (Sorace 2011). Thus, even though the overt form is less frequent in Spanish, it is less marked. As a result of overt subject rates being easy to measure and related to markedness, they have served as an attractive measure of comparisons across varieties as well as between monolingual and bilingual speakers. For example, differences across varieties have been attested, mostly in terms of overt subject pronoun rates, between Caribbean and non-Caribbean varieties of Spanish. Although overt subjects are the least frequent form across varieties, there is some variation observed: coreferential subjects are produced as overt at rates of 20% to 40% (Bentivoglio 1994, Cameron 1995, Flores-Ferrán 2004, Silva-Corvalán 1994, cited in Travis 2007). In spite of the insight gained from the study of rates of overt pronominal subjects, rates are subject to external factors and may vary from paper to paper due to the questions asked or the tasks used. Thus, in addition to rates of null and overt pronominal subjects, previous research has sought to describe their distribution.

It has been noted on both generative and variationist approaches that discourse continuity determines whether a null or an overt pronominal subject will be used. In particular, co-referentiality, or the relationship between the target subject and the preceding subject has been identified as an important factor in the choice of a null or an overt pronominal subject. It has been observed that null subjects are used in clauses where the subject is the same as the subject in the preceding clause while overt pronominal subjects are used in contexts of switch reference. The difference between generative and variationist approaches lies in the categorization of this trend as categorical (generative assumption) or variable (variationist approach). Therefore, while generative studies consider the distribution of null vs. overt pronominal subjects can be solely attributed to co-referentiality, such that null subjects are used in clauses where the subject is the same as the subject in the preceding clause while overt pronominal subjects are used in contexts of switch reference, variationist approaches assume this trend is not categorical. Previous research has reported variation within those contexts, such that overt forms are used in contexts of same reference and nulls in contexts of different reference, in monolingual Spanish speakers. Variationist accounts conclude that SPE is best accounted for by a variety of factors (Carvalho et al. 2015, and references therein).

Many of those factors are related to speech connectivity. Just like switch reference, it has been observed that context where the TAM (Tense/Aspect/Mood) is the same as in the previous verb form tend to favor null subjects. In fact, a combination of both variables is widely used among variationist studies of SPE, under the variable speech connectivity. Three levels are distinguished: same referent and same TAM, same referent and different TAM, and different referent. The observed results are that null subjects are

avored in contexts with more speech connectivity while overt subjects are used in contexts of less speech connectivity. Consider the following example from an interview with one of our participants.

(1) Speech connectivity

Mi quinto periodo era history, creo que **era**, y después mi séptimo periodo, como yo **hice** dual enrollment, no **tenía** clase, **tenía** clase en el college o **me quedaba** en la escuela o **me iba** porque como tengo carro nos podíamos ir...

*My fifth period was History, I think it was, and then my seventh period, since I did dual enrollment I did not have class, I had class at the college or I stayed at school or I left because since I have a car we could leave...*

In (1) the verb form *hice* 'I did' is preceded by the verb form *era* 'it was', a context of different referents (and different TAMs). *Hice* 'I did' is followed by *tenía* 'I had', which has the same referent but different TAM from *hice* 'I did'. *Tenía* 'I had', in turn, is followed by *tenía* 'I had', *me quedaba* 'I stayed' and *me iba* 'I left' all of which have the same referent and the same TAM. Although this variable explains a significant amount of the variance in the data, it does not explain the distribution completely. Another highly ranked variable that explains the distribution is the grammatical person of the verb form. It has been previously reported in the literature that overt pronominal subjects are more frequent in 1sg than in 3sg, or any of the plural verb forms in monolingual varieties of Spanish (Bayley & Pease Álvarez 1997; Enríquez 1984; Morales 1997; Prada Pérez 2009; Shin 2012; Silva-Corvalán 1982, 1994). Of relevance to this study is the difference between 1sg and 3sg, which Silva-Corvalán (1994) has attributed to "speaker egocentrism." The following example from an oral interview with one of our participants exemplifies the coding commonly used in the field for the variable grammatical person:

(2) Person

Sí bueno yo le **hablé** todo el tiempo en inglés porque el español de ella en realidad casi no la **puedo** entender porque el español cubano es bien feo de verdad. El español venezolano es lindísimo y bien como cantado.

*Yes well I talked to her in English all the time because, honestly, I could hardly understand her Spanish because Cuban Spanish is so ugly really. Venezuelan Spanish is so pretty and like they are singing.*

In example (2) there are two forms that are conjugated in 1sg, one is realized with an overt pronominal subject and one with a null subject. Other variables of importance that have been widely researched are verb form ambiguity, where forms that are ambiguous (e.g. 1sg and 3sg in imperfect, conditional and related TAMs) tend to appear with more overt pronominal subjects (Bayley & Pease-Álvarez 1996, 1997, Silva-Corvalán 1994, Travis 2005, however see Casanova 1999, Morales 1997, Ranson 1991), and semantic verb type, where predicates expressing external actions tend to occur with more overt pronominal subjects than mental and stative predicates (Enríquez 1984, Morales 1997, Otheguy et al. 2007, Silva-Corvalán 1982, 1994, Travis 2007, however for more recent approaches see Orozco 2015, Posio 2015). These two factors tend to have a smaller effect magnitude and, as a consequence, are not always reported as significant across studies. It is important to note, however, that while differences in rates have been attested across varieties of Spanish, differences are hardly ever observed in terms of the effect of variables and the direction of effects. Thus, the underlying grammars seem to be very similar across varieties of Spanish (Carvalho, Orozco & Lapidus Shin 2015).

Of central relevance to our study is the effect of language contact on SPE. The differences between English and Spanish/Italian with respect to SPE have warranted considerable interest in the SPE of

second language learners and bilingual speakers, both by generative and variationist linguistics. A unidirectional influence has been observed in a large number of studies, where Spanish exhibits contact effects in the form of more overt subjects (Belletti, Bennati & Sorace 2007; Erker & Guy 2013; Erker & Otheguy 2016; Lipski 1994, 1996; Montrul 2004; Otheguy & Zentella 2012; Silva-Corvalán 1994; Shin 2012; Shin & Otheguy 2012; Toribio 2004; Tsimpli, Sorace, Heycock & Fliaci 2004).

Generative studies examine the use of null and overt pronominal subjects in these contexts of coreferentiality and switch reference, primarily with third person singular subjects. With this purpose, they have used a variety of tasks, from elicited production (e.g., Montrul 2004) to acceptability judgment tasks (AJTs, Rothman 2009). In general, they report an overuse of overt pronominal subjects, as an extension of overt pronominal subjects to topic continuation contexts. The use of null subjects in contexts of switch reference has also been reported (e.g. Rothman 2009, although not as universally).

Variationist studies examine SPE through semi-spontaneous data, usually collected through sociolinguistic interviews. Some studies examine all grammatical persons (e.g. Otheguy & Zentella 2012, Toribio 2004) while others only include first person singular subjects (Torres Cacoullós & Travis 2010, Travis 2007). There is also some variation as to the speaker groups included in the analysis; some compare monolingual and bilingual speakers (e.g. Silva-Corvalán 1994), while others compare different bilingual groups with different exposure to both languages (e.g. Otheguy & Zentella 2012).

Regarding SPE rates, results are mixed. While some do not report differences in bilingual vs. monolingual varieties of Spanish (Bayley and Pease-Alvarez 1997, Flores and Toro 2000, Flores-Ferrán 2004, Silva-Corvalán 1994, Torres-Cacoullós & Travis 2010, and Travis 2007), others report an increase in overt pronominal subjects and changes in the distribution reflected in variables that are significant, their ranking, and/or their constraint ranking (Erker & Guy 2013, Erker & Otheguy 2016, Lipski 1994, 1996, Otheguy & Zentella 2012, Shin 2012, Shin & Otheguy 2013, Orozco 2015, Toribio 2004, among others). Most research examining only 1sg subjects seems not to report an increase in overt pronominal subjects while those including a variety of subject forms tend to report this effect, an idea that we further examine in this paper.

Regarding the variable person, in contact varieties, the difference between 1sg and 3sg is not as significant as in monolingual Spanish. For instance, in Otheguy & Zentella (2012) only those speakers of Caribbean heritage who had recently arrived in the U.S. (Newcomers) maintain this difference. For those speakers, 1sg favored overt pronominal subjects more than 3sg. In fact, the trend for 3sg to favor overt pronominal subjects did not reach significance. For speakers of Mainland varieties, both persons significantly favored overt pronominal subjects but more so in 3sg. For speakers who were raised in NY (NYR), both persons significantly favored overt pronominal subjects. For Caribbeans 1sg favored them more than 3sg while the opposite trend is reported for Mainland speakers. The difference attested in Mainland varieties, together with the discrepancies in SPE rate increase in bilinguals across studies, indicates further clarification is needed. Thus, in this paper we compare contact effects in different groups of bilinguals in 1sg and 3sg subjects.

Although language contact intensity has been measured in different and effective ways in previous variationist work, to the best of our knowledge, one factor that has not been previously examined in these studies is the effect of proficiency in the heritage language, a variable that we argue can shed some light to differences across individuals within a generation.

All in all, generativist and variationist studies seem to report conflicting results regarding the effect of bilingualism on SPE. In particular, in the case of Spanish in the U.S., generative studies report a higher rate of overt pronominal subjects and a loss of sensitivity to switch reference in the use of overt subjects. Variationist studies do not seem to find such consensus. Several studies report no higher rate of overt

pronominal subjects in bilinguals and, although overall the weakening of sensitivity to the variable switch reference is attested, the variable is still largely found as significant. It seems likely that contact effects are not applying to the entire paradigm but just to third person singular forms. We consider that it is possible to integrate generativist and variationist conflicting results by examining the possibility that contact effects are restricted to third person singular subjects. Additionally, the extant previous research has made significant headway in our understanding of SPE in different groups of speakers. Nonetheless, there are a few gaps in the previous literature that we have identified here, namely the effect of the grammatical person in contact varieties and the effect of speaker proficiency in the heritage language. This paper explores the effect of these two variables in Spanish-English bilinguals' acceptability judgments.

The paper is organized as follows. Section 2 offers a description of the research questions, hypotheses, participants, materials and results. Section 3 discusses the research questions in light of the results. Lastly, we offer some conclusions in section 4.

## **2. The current study**

The aim of this study is to examine the effects of language contact on subject expression in HSs of different proficiencies (high vs. low) and varieties (Caribbean vs. non Caribbean) contrasting data from two different persons (first *yo* 'I' and third *él/ella* 'he/she') and three speech connectivity contexts. The purposeful analysis and contrast of two different persons will allow us to uncover a possible source for the conflicting results in the previous literature since we believe that examining a person-effect on subject expression could help us reconcile those discrepancies.

### *2.1 Research questions and hypothesis*

We will explore four research questions (RQs) for this study. RQs 1 and 2 focus on linguistic factors while RQs 3 and 4 focus on extralinguistic factors. Below we provide a list of RQs and hypotheses based on results from previous studies.

RQ 1: Are there more contact effects in 3sg than in 1sg?

H1: We hypothesize more contact effects in 3sg, that is, higher rating of overt pronominal subjects over null subjects in 3psg.

RQ 2: Are there differences in sensitivity to the variable speech connectivity?

H2: We hypothesize that lower ratings for null subjects will take place in contexts with different referents (less speech connectivity).

RQ 3: Are there differences in SPE related to proficiency (high vs. low)?

H3: We hypothesize that more contact-induced changes will take place at lower levels of proficiency. This manifests in a weakening of the pragmatic contrast between null and overt subjects.

RQ 4: Are there differences in SPE related to Spanish variety (Caribbean vs. non Caribbean)?

H4: We hypothesize higher ratings of overt pronominal subjects in Caribbean speakers.

### *2.2 Participants*

Forty-seven participants completed the AJT. All participants were instructed heritage speakers (HSs) enrolled in Spanish university courses at the time of the study. In order to be able to classify participants according to their proficiency level, we also administered a proficiency test. The proficiency test is an abbreviated version of the Diploma de español como lengua extranjera (DELE) widely used in the field of second and heritage language acquisition (Montrul & Slabakova, 2003; Cuza, 2013). The test consists of 50 questions divided into two different sections: a multiple-choice vocabulary section and a cloze passage that tests grammatical knowledge. In previous studies, participants were assigned to levels depending on predetermined scoring (40-50 as advanced, 20-39 as intermediate, and under 20 as low proficiency). In our context, very few participants scored as advanced and very few as low proficiency, which made

statistical comparisons impossible. Therefore, we used a median split to create two groups within our data. We divided participants into low and high proficiency: 21 participants scored below 29 and 26 scored above 29. In terms of gender, we had uneven numbers with 9 male participants compared to 38 females. Finally, we were also interested in looking at participant origin, so we classified participants based on either the country they were born in (for those born outside the U.S.), the country of origin of their parents (for those born in the U.S.), or the country of origin of the parents, if both were Spanish speakers, the Spanish-speaking parent, if only one of them was a Spanish speaker and the mother (in the case of participants born in the U.S. but whose mother and father were of different origins) (e.g., Potowski 2008). Following this taxonomy, two groups were used to classify our participants: the Caribbean group (Cuba, Puerto Rico and the Dominican Republic) with 17 participants, and the Non-Caribbean group (Chile, Colombia, Mexico, etc.) with 30 participants..

### 2.3 Materials

We carried out a contextualized AJT, which was distributed via Qualtrics. The task consisted of 96 tokens: 48 target items, which tested participants' intuitions on subject expression, and 48 fillers, which tested a different variable structure not reported in this chapter. Participants read a short text establishing the context followed by three sentences with three different subject forms (null, overt pronominal and overt lexical), which they judged on a 4-point Likert scale.

We created the materials controlling for variables reported in the variationist literature to affect production. We constructed the sentences by manipulating three language-internal variables, which were SUBJECT FORM (null/overt pronominal and overt lexical), PERSON (1<sup>st</sup> and 3<sup>rd</sup> singular) and SPEECH CONNECTIVITY (CONNECT) (same referent same TAM (Tense Aspect Mood), same referent different TAM and different referent). The table below lists the variables manipulated in the AJT, their associated constraints, and provides an example for each one.

<TABLE 1 HERE>

The combination of these different constraints resulted in 6 conditions:

- Condition 1: 1st person, same referent & same TAM
- Condition 2: 1st person, same referent & different TAM
- Condition 3: 1st person, different referent
- Condition 4: 3rd person, same referent & same TAM
- Condition 5: 3rd person, same referent & different TAM
- Condition 6: 3rd person, different referent

We controlled for the following variables: clause type (all clauses were main clauses), verb form ambiguity (all verbs were non-ambiguous), animacy (all referents were animate) and verb type (all verbs were external activities).

Below (3) is a token from condition 4 (3<sup>rd</sup> person, same referent, same TAM). We expect (a) to be the highest scored option since both the context and the following sentence refer to the same person "María."

- (3) Yo soy enfermera. María también lo es y tiene un horario complicado.
- |   |   |   |   |   |
|---|---|---|---|---|
| a. Trabaja de noche los fines de semana       | 1 | 2 | 3 | 4 |
| b. Ella trabaja de noche los fines de semana. | 1 | 2 | 3 | 4 |
| c. María trabaja de noche los fines de semana | 1 | 2 | 3 | 4 |

### 2.4 Results

The data was submitted to statistical analysis using SPSS v. 24 with the sentence rating as the dependent variable and three linguistic independent variables (subject form, person and connect). An initial analysis revealed interactions with the extralinguistic independent variables (variety and proficiency). Thus, to better understand the grammars of each of the groups, separate analyses were performed for each group: Caribbean HSs of Higher proficiency (CH), Caribbean HSs of Lower proficiency (CL), Non-Caribbean HSs of Higher proficiency (NH), and Non-Caribbean HSs of Lower proficiency (NL). Separate analyses were also performed for 1sg, since the dependent variable only had two levels (null vs. overt pronominal subjects), and 3sg, which had three levels in the variable subject form (null vs. overt pronominal vs. lexical subjects).

#### 2.4.1 First person singular

As can be seen in the graphs below, the ratings for both null and overt pronominal subjects fall within the acceptance range (above 2.50) and are similar in any of the conditions for any of the speaker groups. Additionally, the ratings for null subjects across speech connectivity (or connect) contexts seems to be rather similar, except for contexts with a different referent where the CH group's rating is slightly lower. There do not seem to be differences across the speaker groups in the ratings of specific conditions or the patterns across conditions.

<FIGURE 1 HERE>

<FIGURE 2 HERE>

<FIGURE 3 HERE>

<FIGURE 4 HERE>

The results from the 2 (subject form: null vs. pronominal) by 3 (connect: same referent and same TAM, same referent and different TAM, different referent) repeated-measures ANOVA further confirmed these trends. There was no main effect for subject form, connect or a subject form by connect interaction for any of the four groups.

<TABLE 2 HERE>

Overall these results indicate that these groups of HSs rate null and overt subjects similarly across different conditions, thus, evidencing the weakening of the pragmatic conditioning of the null vs. overt pronominal subjects.

#### 2.4.2. Third person singular subjects

The data for third person singular subjects also displays mean ratings above the acceptance range. Participants rated overt subjects (both pronominal and lexical) higher than null subjects for all groups of speaker except for the NL group. In addition, null subjects are rated lower in clauses with a different referent than the previous clause for speakers in the two higher proficiency groups. At higher proficiency levels there do not seem to be differences between speakers of Caribbean and Non-Caribbean varieties while at lower proficiencies more differences are attested. In particular, NL do not exhibit preferences for any subject form across any condition.

<FIGURE 5 HERE>

<FIGURE 6 HERE>

<FIGURE 7 HERE>

<FIGURE 8 HERE>

The statistical analyses revealed a main effect for subject form, no main effect for connect, and subject form by connect interaction in both higher proficiency groups. For the CL group, there was a main effect

for subject form, connect and a subject form by connect interaction. The remaining three groups rated overt subjects significantly higher than null subjects, particularly in contexts with a different referent. Lastly, for NL there was a main effect for subject form, where null and overt pronominal subjects were rated significantly lower than overt lexical subjects, no main effect for connect and no subject form by connect interaction.

<TABLE 3 HERE>

Overall, the data for third person singular subjects seems to indicate a preference for overt subjects, although there remains a distinction across contexts with different speech connectivity since null subjects are rated lower in contexts with a different referent. The NL group, however, seems to have a weakened sensitivity to this pragmatic factor.

### 3. Discussion

In this section we return to our research questions in light of the results. Our aim was to explore speaker preferences with respect to subject form across different discourse connectivity contexts in two different grammatical persons. Previous literature on SPE in the Spanish of U.S. HSs had returned conflicting results regarding both the increased use of overt pronominal subjects and the loss of the pragmatic contrast between null and overt pronominal subjects. With the observation that previous literature had not been consistent in the grammatical person represented in their tasks/corpora, we explored the role of person in this study by comparing the results of items with first person singular referents and those with third person singular referents. We anticipated a higher rating for overt pronominal subjects, in comparison to null subjects, in the third person since the previous literature reporting a contact effect included third person singular subjects. In contrast, we anticipated no contact effects in the rating of overt vs null pronominal subjects in the first person singular items. The results partially confirmed these predictions. With third person singular subjects, most groups rated overt pronominal subjects higher than null subjects across conditions. With first person singular subjects, the effect of language contact seems subtler, given that there is no preference for either subject form. Thus, the results are suggestive of a stronger contact effect in the third vs. the first person singular forms.

Regarding the pragmatic contrast associated with null and overt pronominal subjects, we anticipated a weakening of pragmatic contrast, as previous research evidences either a use of the overt pronominal subject in contexts of topic continuation or a weakening of the effect size of the variable (or a lower range of the factor group). Our results are largely consistent with these predictions. In the first person there were no subject form\*connect interactions for any of the groups. In the third person the pattern was the same across all three contexts: overt forms were rated higher than null subjects. Only the more advanced groups (CH, NH) showed an interaction: null subjects were rated lower in different referent contexts than in the other two contexts with the same referent. Although previous literature indicates that 1sg subjects favor overt subjects while 3sg subjects do not (Prada Pérez 2009, Silva Corvalán 1994), in Otheguy and Zentella's (2012) data, 3sg also favors overt subjects, even more than 1sg in Mainland speakers. This is true even in their group with less contact with English (Newcomers). Thus, it seems that more contact effects are present in 3sg. There could be several explanations for the difference in vulnerability across persons. The deictic function of the 1sg vs. the referential function of the 3sg may have an effect in bilingual Spanish. While a higher use of the 1sg can be explained as due to the egocentric nature of speakers (Silva Corvalán 1994), in 3sg it may serve a disambiguating function, as more than one referent may be possible in the context. Additionally, while 1sg verb forms have a person and number morpheme in Spanish, 3sg verb forms do not. Therefore, there are significant differences between these persons that may explain the differences in contact effects. Future research may be able to identify which of these differences better accounts for this outcome.

Our research project also aimed to explore the effect of two extra-linguistic factors: proficiency and Spanish variety. In the first person there does not seem to be any effects across proficiency, although evidence consistent with a contact effect exists in the similar rating of null and overt pronominal subjects across conditions, an effect that cannot be confirmed without data from speakers without contact with English. To the best of our knowledge, the previous literature focusing on first person SPE did not contrast groups of different proficiencies and varieties. Therefore, we cannot contrast our data with theirs in this grammatical person. For those focusing on third person only (only in the generative tradition) or on several grammatical persons there seems to be a contact effect (Montrul 2004, Otheguy & Zentella 2012). In this paper, instead of comparing groups with more and less contact with English based on their experiences, we used an independent measure of proficiency in Spanish. The degree of contact with English is determined in previous research based on the language background reported by participants, for instance, their generation. In our context, some third generation HSs were more proficient in Spanish than some second generation HSs, as other factors seemed to affect their proficiency (e.g. time spent with Spanish speaking grandmothers, neighborhood in Miami where they grew up, etc.). Thus, proficiency was a more explanatory factor in our analysis. Even though proficiency and contact with English are not necessarily correlated, we can compare previous literature, where contact with English was included as a variable, and our study, where we included proficiency in Spanish instead. These studies conclude that those speakers with more contact with English exhibited an increase in overt pronominal expression and also some changes in the factors affecting the distribution, switch reference, in particular. Our results indicate that lower proficiency HSs are not sensitive to the interaction between subject form and discourse connectivity while more advanced HSs are sensitive to it. The results are also consistent with an increased acceptance of overt pronominal subjects overall since they were rated significantly higher than null subjects in all four groups of speakers. In sum, for our data, the variable proficiency revealed some differences between the two proficiency levels. Proficiency has not been widely examined in previous studies. It is possible that these previous studies have not found the variable proficiency as determining due to the predetermined groupings based on the results of the DELE-based proficiency measure while we used a median split. While using the median split analysis makes comparisons across studies more difficult, it makes comparisons across groups in contexts like ours possible. Additionally, this practice makes the test more viable. As previously pointed out, the test is in written format, based on a specific variety of Spanish (Peninsular) largely absent from HSs input, and based on prescriptive rules. Not assuming preconceived levels and including participants with literacy in Spanish may have resulted in more realistic participant groupings. We acknowledge, nonetheless, that better measures of proficiency for Spanish HSs in the U.S. are still needed.

With respect to speaker region, differences across varieties are well attested in the literature for studies focusing on second person singular (Cameron 1995, Lipski 1994) or those including a variety of persons (Otheguy & Zentella 2012, Shin & Otheguy 2013). It is not clear, though, that the higher number of overt pronominal subjects in Caribbean Spanish applies across persons. Otheguy and Zentella (2012) show that more differences exist between Caribbean and Mainland speakers among recent arrivals (Newcomers) than among those raised in NY (NYR). With respect to 1sg and 3sg, in Caribbean Spanish 1sg favors overt pronominal subjects while 3sg neither favors nor disfavors them. In Mainland Spanish, in contrast, both persons favor overt pronominal subjects, with 3sg favoring them more than 1sg. Within NYR, Otheguy and Zentella (2012) show evidence of convergence, where both regions favor overt pronominal subjects with 1sg and 3sg. Similarly, our participants show evidence of convergence: both Caribbean and non-Caribbean speakers rate 3sg pronominal subjects higher than nulls and 1sg pronominal subjects similarly to nulls. Otheguy and Zentella (2012) report a difference: for Caribbean speakers, 1sg favors the overt form more than 3sg and the opposite trend is attested for Mainland speakers. In contrast, our Caribbean and non-Caribbean participants did not differ in which of the two persons rated pronouns higher. It is possible, however, that subtle differences exist in production that are not identifiable in this task.

#### 4. Conclusion

This paper contributes to current discussions in the fields of language contact and bilingualism by presenting new SPE data to clarify some contradictory results in the previous literature. In particular, our findings reveal that the locus of cross-linguistic influence in SPE lies mainly within third person singular (as opposed to first person singular). Our study is not without limitations, specifically, the lack of assurance that participants are paying attention to the context makes examining syntactic reflexes of discourse features unreliable. Ideally, this study needs to be completed with oral data in which further variables can be analyzed thoroughly (e.g., semantic verb type, verb form ambiguity). This type of data can further corroborate our findings about the effect of person in HS subject expression.

#### References

- Bayley, R. and Pease-Alvarez, L. 1996. Null and expressed subject pronoun variation in Mexican-descent children's Spanish. In J. Arnold, R. Blake and B. Davidson (eds). *Sociolinguistic Variation: Data, Theory, and Analysis* (pp. 85-99). Stanford, CA: Center for the Study of Language and Information.
- Bayley, R., & Pease-Alvarez, L. 1997. Null pronoun variation in Mexican-descent children's narrative discourse. *Language Variation and Change* 9(3), 349-371.
- Belletti, A., Bennati, E., & Sorace, A. 2007. Theoretical and developmental issues in the syntax of subjects: Evidence from near-native Italian. *Natural Language & Linguistic Theory*, 25(4), 657-689.
- Cameron, R. 1995. The scope and limits of switch reference as a constraint on pronominal subject expression. *Hispanic Linguistics* 6/7, 1-27.
- Carvalho, A.M, R. Orozco & N. L. Shin (eds.). 2015. Subject Pronoun Expression in Spanish: A Cross-dialectal perspective. Washington D.C.: Georgetown University Press.
- Casanova Seuma, L. 1999. "El sujeto en catalán coloquial." *Revista Española de Lingüística* 29(1), 105-131.
- Cuza, A. 2013. Cross-linguistic influence at the syntax proper: interrogative subject-verb inversion in heritage Spanish. *International Journal of Bilingualism*, 17(1), 71-96.
- Enríquez, E. 1984. El pronombre personal sujeto en la lengua española hablada en Madrid. Madrid: Consejo Superior de Investigaciones Científicas.
- Erker, D. & Guy, G. 2012. The role of lexical frequency in syntactic variability: Variable subject personal pronoun expression in Spanish. *Language* 88(3), 526-557.
- Erker, D. & Otheguy, R. 2016. Contact and coherence: Dialectal leveling and structural convergence in NYC Spanish. *Lingua*, 172-173, 131-146.
- Flores, N., and Toro, J. 2000. The persistence of dialect features under conditions of contact and leveling. *Southwest Journal of Linguistics* 19(2), 31-41.
- Flores-Ferrán, N. 2004. Spanish subject personal pronoun use in New York City Puerto Ricans: Can we rest the case for English contact? *Language Variation and Change* 16, 49-73.
- Lipski, J. 1994. Latin American Spanish. London: Longman.
- Lipski, J. 1996. Patterns of pronominal evolution in Cuban-American bilinguals. In A. Roca & J.B. Jensen. (eds.) *Spanish in Contact: Issues in Bilingualism* (pp. 159-186). Somerville: Cascadia.
- Montrul, S. 2004. Subject and object expression in Spanish heritage speakers: a case of morpho-syntactic convergence. *Bilingualism: Language and Cognition* 7, 1-18.
- Montrul, S., and R. Slabakova. 2003. Competence similarities between native and near-native speakers: An investigation of the preterite/imperfect contrast in Spanish. *Studies in Second Language Acquisition* 25(3), 351-98.
- Morales, A. 1997. La hipótesis funcional y la aparición de sujeto no nominal: El español de Puerto Rico. *Hispania*, 80(1), 153-165.
- Orozco, R. 2015. Pronominal variation in Costeño Spanish. In A. Carvalho, R. Orozco, & N. Shin, (eds.) *Subject Pronoun Expression in Spanish: A Cross-dialectal Perspective* (pp. 17-37). Washington D.C.: Georgetown University Press.
- Otheguy, R. & Zentella, A.C. 2012. Spanish in New York. Language Contact, Dialectal Leveling, and Structural Continuity. New York: Oxford University Press.
- Otheguy, R., Zentella, A.C., and Livert, D. 2007. Language and dialect contact in Spanish in New York: Toward the formation of a speech community. *Language* 83, 770-802.

- Posio, P. 2015. Subject pronoun usage in formulaic sequences. In A.M. Carvalho, R. Orozco & N. L. Shin (eds.). *Subject pronoun expression in Spanish: A Cross-dialectal Perspective* (pp. 59-78). Washington D.C.: Georgetown University Press.
- Potowski, K. 2008. "I was raised talking like my mom": The influence of mothers in the development of MexiRicans' phonological and lexical features. In J. Rothman & M. Niño-Murcia (eds.) *Linguistic Identity and Bilingualism in Different Hispanic Contexts* (pp.201-220). New York: John Benjamins.
- Prada Pérez, A. de. 2009. Subject expression in Minorcan Spanish: consequences of contact with Catalan. Phd diss. (unpublished), The Pennsylvania State University.
- Ranson, D.L. (1991). Person marking in the wake of /s/ deletion in Andalusian Spanish. *Language Variation and Change* 3(2), 133-152.
- Rothman, J. 2009. Pragmatic deficits with syntactic consequences?: L2 pronominal subjects and the syntax-pragmatics interface. *Journal of Pragmatics* 41:951–973.
- Shin, Naomi L. 2013. Women as leaders of language change: A qualification from the bilingual perspective. In Ana Maria Carvalho & Sara Beaudrie (eds.) *Proceedings of the 6th International Workshop on Spanish Sociolinguistics*, 135-147. Cascadilla Proceedings Project.
- Shin, N.L. 2012. Variable use of Spanish subject pronouns by monolingual children in Mexico. In K. Geeslin and M. Díaz-Campos (eds.) *Selected Proceedings of the 2010 Hispanic Linguistics Symposium* (130-141). Somerville, MA: Cascadilla Proceedings Project.
- Shin, N. L., & Otheguy, R. 2013. Social class and gender impacting change in bilingual settings: Spanish subject pronoun use in New York. *Language in Society* 42(4), 429-452.
- Silva-Corvalán, C. 1982. Subject expression and placement in Mexican-American Spanish. In J. Amastae & L. Elías-Olivares (eds.) *Spanish in the United States: Sociolinguistic Aspects*, (pp. 93–120). Cambridge: Cambridge University Press.
- Silva-Corvalán, C. 1994. *Language Contact and Change: Spanish in Los Angeles*. New York: Oxford University Press.
- Sorace, A. 2011. Pinning down the concept of "interface" in bilingualism. *Linguistic Approaches to Bilingualism*, 1(1), 1-33.
- Toribio, Almeida Jacqueline. 2004. Convergence as an optimization strategy in bilingual speech: Evidence from code-switching. *Bilingualism: Language and Cognition* 7(2), 165-173.
- Torres Cacoullos, R. & Travis, C.E. 2010. Variable yo expression in New Mexico: English influence? In S. Rivera-Mills & D. Villa (eds.) *Spanish of the Southwest: A Language in Transition* (pp.185-206). Frankfurt: Iberoamericana/Vervuert.
- Torres Cacoullos, R. & Travis, C.E. 2015. Foundations for the Study of Subject Pronoun Expression in Spanish in Contact with English: Assessing Intralinguistic (Dis)similarity via Intralinguistic Variability. In A.M. Carvalho, R.Orozco, and N. Lapidus Shin (eds.) *Subject Pronoun Expression in Spanish: A Cross-Dialectal Perspective* (pp. 81–100). Washington D.C.: Georgetown University Press.
- Travis, Catherine E. 2005. The yo-yo effect: Priming in subject expression in Colombian Spanish. In R. Gess and Ed J. Rubin (eds). *Theoretical and Experimental Approaches to Romance Linguistics: Selected papers from the 34th Linguistic Symposium on Romance Languages, 2004*, (pp. 329-349). Amsterdam / Philadelphia: John Benjamins.
- Travis, C. 2007. Genre effects on subject expression in Spanish: Priming in narrative and conversation. *Language Variation and Change*, 19, 101–135.
- Tsimpli, I., Sorace, A., Heycock, C., & Filiaci, F. 2004. First language attrition and syntactic subjects: A study of Greek and Italian near-native speakers of English. *International Journal of Bilingualism*, 8(3), 257-277.