

HERITAGE SPEAKERS' SPANISH IN CALIFORNIA: HOW UNBALANCED BILINGUALISM AFFECTS REVERSE CONSTRUCTIONS OF THE GUSTAR-TYPE

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1. Introduction

1.1 General introduction

Spanish Heritage Speakers as a linguistically intriguing population have caught the attention of researchers since the 70s and 80s (cf. Valdés 1975; Dvorak and Kirschner 1982), both from a didactic and a descriptive point of view, and more recently also from a theoretical perspective (Silva-Corvalán 1994, 2003; Montrul 2002, 2004, 2005; Toribio 2004; Rothman 2009; Pires and Rothman 2009; De Prada Pérez and Pascual y Cabo 2011; Pascual y Cabo and Rothman 2012, to name but a few). Given the many communities of Spanish speakers in the US and the contact situation between English as a majority language and Spanish as a widespread minority language, it is perhaps not surprising that more linguists have devoted their attention to the analysis of the linguistic behavior of these heritage speakers' bilingualism. Silva-Corvalán pioneered some sociolinguistic studies in the early 90s that helped define Spanish heritage speakers (henceforth HS) as a linguistic group different from monolingual native speakers of Spanish (henceforth NS). She also highlighted the fast rate of L1 attrition among HS and the influence English had on language loss in a contact situation (1991, 1994). The number of studies has increased over the past decade thanks to the effort mostly of committed researchers such as Carreira (2007, 2012), Silva-Corvalán (2012), Montrul and colleagues (2002, 2004, 2005, 2006a,b, 2008, 2010, 2011), Montrul and Bowles (2009, 2010), Polinsky (2008), Toribio and colleagues (Toribio 2004, Bullock and Toribio 2004, Toribio and Nye 2006), Valdés (1975, 1997, 2000, 2001), as well as to specialized publications such as the Heritage Language Journal and Linguistic Approaches to Bilingualism among others. This paper highlights a specific area of Spanish grammar, reverse psychological predicates (e.g. gustar 'to like', encantar 'to charm, to like a lot'), which have been shown to cause problems for Spanish HS (Toribio and Nye 2006).





HS are bilingual speakers that grow up speaking a different language at home from the one spoken by the surrounding community (Silva-Corvalán 1994). As Valdés points out (2000: 238), the definition of HS is not without problems, as different levels of proficiency must be posited: in her definition, HS "are, by and large, English speakers who have grown up in this country as members of families or communities where non-English languages are spoken" and speak or at least understand the household language and are to some degree bilingual in that language and in English.¹

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However, allegiances and identity construction as a member of the ethnic and/or cultural group are not constant – they may be negotiated and re-constructed over time and do not always include language as a necessary identity requirement (Urciuoli 2008; Niño-Murcia and Rothman 2008). Moreover, HS may claim multiple linguistic identities (Bustamante-López 2008: 280).

This type of speaker exemplifies a specific situation of language contact, which could be defined as a case of diglossia (Ferguson 1959; Fishman 1967). Typically, in such cases, the first language acquired in a naturalistic environment becomes ancillary to the use of the dominant societal language because schooling is carried out in the dominant language. The dominant language is needed for social and economic advancement and in the work environment and thus acquires a higher prestige, whereas the first language is relegated to the home or conversations among friends (Valdés 1975, 1997, 2001; Villa 1996, 1997). Communities of immigrants are numerically smaller than the overall monolingual majority, thus their language is in a minority situation and is stigmatized by low prestige (Villa 2000, 2002). Over time, then, these early bilinguals acquire more fluency in the majority language, and attrition of the L1 is attested (Silva-Corvalán 1991, 1994, 2003, 2012; Polinsky 2008). Some researchers had noticed already in the late 80s that attrition of the heritage language sets in relatively quickly, in fact, i.e. within 15 years from inception of residence in the US, and that it correlates with age and length of residence in the US: the younger the immigrant and the longer the stay in the US, the quicker and more likely his/her shift to English (Veltman 1988).

Attrition is sometimes difficult to distinguish from a so-called incomplete acquisition of the L1. *Incomplete acquisition* is a term that describes grammatical, not communicative competence, which in HS is usually highly developed. HS' communicative competence can be limited to some particular register, and it is appropriate to the age of the speaker. HS' knowledge and use of particular grammatical structures, however, may not be comparable with the competence of a monolingual NS of Spanish of the same age, because HS' competence has failed to develop suc-





See also Suárez (2007) and the references cited therein.

cessfully in the minority language situation within a majority-language dominant community (Montrul 2011: ii.). Montrul (2008, 2011) observes that distinguishing between incomplete acquisition and attrition is impossible unless the speakers are followed in a longitudinal study. Therefore, we will not attempt to distinguish between the two in this paper.

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Overall, the Spanish of HS in 'assimilationist' communities in the US is characterized by attrition or incomplete acquisition (Montrul 2002, 2005, 2006a, 2008).² Spanish-English early bilinguals are, therefore, not necessarily highly competent, balanced bilinguals in all facets of the L1. Typically, Spanish-English bilinguals in the US are exposed to both Spanish and English from birth (because the household is bilingual) or – more typically – as soon as they enter preschool, or the schoolaged curriculum, starting at age 3-4. And yet, successful and complete language acquisition depends on receiving a minimum threshold of input that will trigger the full development (i.e., age appropriate) of language abilities and grammatical proficiency (Montrul 2011: ii).

This threshold of input is not always available for HS of Spanish in assimilationist communities in the US. Therefore, English becomes the dominant language for these HS as the language that they use most often and the language in which they are fluent in a variety of registers. As a result, these speakers arguably never attain complete native fluency in their L1 (Sorace 2003; Bolger and Zapata 2011), which is why they have been called the 'missing link' between NS and L2 learners (Polinsky 2008) and exhibit characteristics of both groups (Carreira 2007; Montrul 2010). Some basic aspects of grammar, such as core properties of syntax (Montrul and Bowles 2009) or phonology (Miglio 2011) benefit from early exposure to the L1 and, in those aspects, HS' performance replicates or comes very close to monolingual NS' performance.

However, in other aspects, such as the syntax-semantics interface, morphology (Mikhaylova 2012), pragmatics (Montrul and Bowles 2009), or word-order (Bruhn de Garavito 2002), HS behave much more similarly to L2 learners (sometimes termed 'late bilinguals'), for instance by exhibiting less native-like judgments of more peripheral, less frequent structures. Research has also shown that the HS' first language tends to converge towards the dominant language (Silva-Corvalán 1991, 1994, 2003; Sorace 2003; Montrul 2004, 2005, 2008; Toribio 2004; Bullock and Toribio 2004; Toribio and Nye 2006; De Prada Pérez and Pascual y Cabo 2011; Otheguy 2011). For *convergence*, we adopt Silva-Corvalán's (1991: 153) definition: "the achievement of structural similarity in a given aspect of the grammar of two or more languages, assumed to be different at the onset of contact."





² The term *assimilationist* is taken from Bolger and Zapata (2011).

In our case of Spanish-English contact, one of the areas where this type of transfer may be expected is Spanish reverse predicates, such as *gustar* 'to like.' In Spanish sentences with *gustar*, the stimulus (henceforth STIM) is the syntactic subject, the experiencer (henceforth EXP) is an oblique, non-nominative argument, and the verb agrees with the STIM/subject (cf. 1a). In English, on the other hand, the STIM is a direct object, the EXP is the subject, and the verb agrees with the EXP/subject (cf. 1b).

(1)	a. A María	le	gustan	los gatos
	EXP		V	STIM
	OBL (DAT)	$\mathrm{OBL}_{\mathrm{redup}}$	V-3pl.	SUBJ (NOM)
	'María likes cats.'	redup		
	b. Mary		likes	cats
	EXP		V	STIM
	SUBJ (NOM)		V-3sg.	DO (ACC)

Gustar is the most common of many so-called psych verbs,³ i.e. verbs of emotion that in Romance and other languages build reverse constructions.⁴ The mismatch between the semantic and syntactic roles causes learnability problems in NS and foreign language learners (cf. Montrul 1998 on L2 Spanish). Since English and Spanish use the verbs *gustar/to like* in constructions with different constituent orders, this provides an interesting testing ground for HS' competence in their heritage language and for a possible convergence area with English.

1.2 Overview of the present paper

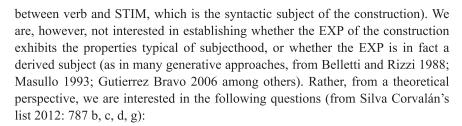
In this paper, we focus on the HS' and L2 speakers' recognition of different forms of the reverse construction with *gustar*. In a questionnaire (see below), we manipulate a series of elements of these constructions using both manipulations that render the construction acceptable to NS (such as negation, pre- or postverbal position of the STIM, reduplication of EXP clitic by a stressed pronoun) and ones that make the construction unacceptable to NS (such as the required agreement





In the Corpus del Español (Davies 2002-), instances of *gustar* occur 9643 times (in the 19th and 20th century section of the corpus), much more often than other common Spanish psych verbs with reverse constructions: *interesar* 'to interest' 4157, *preocupar* 'to worry' 2132, and *encantar* 'to like a lot, to charm.' 1193.

The literature on reverse predicates (also called 'inverse predicates') is very extensive both in generative and functionalist approaches and covers many languages. It suffices to name here a few well-known treatments from the 1980s to this day: Belletti and Rizzi 1988; Bossong 1980, 1998; Comrie 1989; Sigurðsson 1989; Croft 1993; Barðdal and Eythórsson 2003, 2009; Masullo 1993; Melis 1999; Bentley 2006; Di Tullio 2004; Gutiérrez Bravo 2006; Vázquez Rozas 2006, 2012; Dahl and Fedriani 2012, among others.



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- i. To what extent are the mechanisms of monolingual and bilingual acquisition similar or different?
- ii. What is the effect of the nature of the linguistic input (i.e., linguistic feature frequency and complexity) on the development of each of the bilingual's language systems?
- iii. What is the effect of the amount of exposure to and use of the languages on the development of each of the bilingual's language systems?
- vi. What is the effect of bilingualism on mental processes of language recognition and production?

Thus, we are exploring the roles of frequency of occurrence and exposure to the structure, the nature of acquisition and ability of recognition of the structure in NS, HS, and L2 speakers, and possible interference between the two interdependent systems. Therefore, we were interested in ascertaining whether manipulating word order and agreement made a difference in HS and L2 speakers' acceptability of the sentence, rather than in the syntactic nature of the structure. Our analysis adopts a constructivist approach to L1 language acquisition, and therefore assumes that language acquisition takes place through the learners' general cognitive and learning abilities when they are exposed to the language structures they hear in their environment (Silva Corvalán 2012). Thus, we would expect a difference between their acceptance of (what to NS are either) grammatical or ungrammatical stimuli with *gustar*.

Moreover, modifying the position of the STIM, while still resulting in a grammatical sentence, makes the sentence type less frequent in corpora of naturally-occurring speech, and this may have an effect both on L2 learners, but also on HS. If learning is gradual and dependent on a "critical mass" of input (Silva-Corvalán 2012: 785), for the abstract concept of the *gustar*-type reverse constructions to be deducted from exposure to specific occurrences of *gustar*, the less frequent the word-order in the specific instance, the more difficult it will be to recognize the structure as grammatical for a HS. We assume that acquisition of Spanish and English by HS develops along the lines of separate but interdependent systems (cf.





Silva-Corvalán 2012), which may cause transfer from either language on the other.

In the present study, therefore, we analyzed HS' and L2 learners' comprehension/acceptance of *gustar* through a written questionnaire (see Appendix I) that required providing acceptability judgments on sentences that contain forms of *gustar* and vary along several dimensions suspected to co-vary with speakers' judgments. Since both populations are dominant in English by the time they finish their education, comparing judgments between the two groups would highlight the difference between the grammatical systems of early and late bilinguals in Spanish, as well as any potential influence that English may have on their Spanish, as the community's dominant language.

In Section 2, we discuss our experiment (Section 2.1) as well as of our statistical analysis of the data thus obtained (Section 2.2). Section 3 describes in detail the results of our statistical analysis of the responses obtained from the subjects. Finally, Section 4 discusses the results of the experiment and its implications with regard to existing work and possible follow-up research.

2. Methods

2.1 The experimental design of the questionnaire

As mentioned above, we conducted an experiment on the uses of *gustar* from HS and L2 learners. Specifically, we collected two types of information: First, we collected acceptability judgments from HS and L2 learners on 24 stimulus sentence. Sections 2.1.1 to 2.1.4 discuss the independent variables which we crossed, in a balanced fashion, to develop the stimulus sentences. To avoid making the questionnaire too long, no filler items were included, but we presented the stimuli in no particular order and included a predictor to partial out any particular order effects that might still have arisen; cf. Section 2.1.5. Second, we collected data on the subjects' biographies and linguistic habits, which is described in Section 2.1.6.

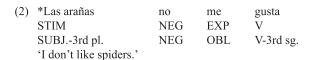
2.1.1 The predictor Grammaticality

The variable Grammaticality, or Gram for short, refers to whether the stimulus sentence is grammatical or not; thus it has two levels, *no* vs. *yes*. This variable hinged on agreement mismatches between the verb and the syntactic subject of the construction, as exemplified without reduplication of the EXP in (2) and with reduplication of the EXP (3).⁵





The ungrammatical sentences were counterbalanced by grammatical ones such as: *los postres franceses nos gustan* 'we like French desserts' (no reduplication of the EXP), and *la contaminación no me gusta a mí* 'as for me, I don't like pollution' (with reduplication of the EXP).



(3) *El cine de acción nos gustan a nosotros STIM EXP V EXP SUBJ-3rd sg. OBL V-3rd pl. OBL redup

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L2 learners often omit inflectional morphology (Dulay and Burt 1974; Prévost and White 2000), and even in discrimination tasks, there is clear evidence that agreement between subject and verb improves with continued learning and experience for L2 speakers (see Renaud 2008 on L2 French). Thus, our expectation was that agreement would distinguish NS from HS, and HS from L2 learners, where HS may be closer to NS (esp. since gustar and reverse constructions are frequent in natural language). Moreover, since recent studies (Toribio and Nye 2006; De Prada Pérez and Pascual y Cabo 2011) have posited the existence of a morphologically simplified verbal paradigm in HS' Spanish, resulting in an invariable form of gustar > gusta (3rd sg.) even with plural subjects, accepting prescriptively ungrammatical agreement mismatches would support the hypothesis of verbal paradigm simplification. Half of the test sentences were formulated to be grammatical, the other half was ungrammatical (due to an agreement mismatch between the verb and its corresponding STIM); this experimental manipulation was tested with five native speakers (two from Spain, three from Mexico) who verified the agreement mistakes 100% of the time.

2.1.2 The predictor Negation

The variable Negation is concerned with whether the stimulus involves negation and has two levels, *no* vs. *yes*. Negation has been traditionally considered to be a complicating factor in cognitive processing, often described as an extra step or men tal operation (Wason 1959; Wason and Johnson-Laird 1972: 39). More recently, Dale and Duran (2011) document this extra step through the processing of the trajectory of the computer mouse in an experiment. There is evidence that the increased reaction time implied by the 'extra' cognitive step can be decreased through context (Wason 1965; Glenberg, Robertson, Jansen and Johnson-Glenberg 1999), but the sentences in this questionnaire did not provide any context. We therefore expected that negation, as in (4), would add a layer of complexity to the judgments and that both HS and L2 learners would find it more difficult to rate sentences with negation than those without, distinguishing between sentences such as (4) and (5):





(4) Las películas de horror no me gustan
STIM NEG EXP V
SUBJ-3rd pl. NEG OBL clitic V-3rd pl.
'We don't like horror movies.'

(5) Los postres franceses nos gustan⁶
STIM EXP V
SUBJ-3rd pl. OBL clitic V-3rd pl.
'We like French desserts.'

Again, half of the stimulus sentences were affirmative, half were negative.

2.1.3 The predictor REDUPLICATION

The variable Reduplication,⁷ or Redup for short, reflects whether the sentence involves reduplication of the oblique EXP, *no* vs. *yes*; again each condition was represented twelve times in the stimulus set. More specifically, some sentences exhibited the reduplication of the EXP, often represented by a simple clitic (79.4% of times in monolingual Spanish according to Vázquez Rozas 2006). Clitic doubling is grammatical in Spanish and usually marks emphatic expressions or contrastive focus. There is therefore a clear distinction in native speakers' usage between sentences such as (6) and (7):

(6) Nos gusta el cine español EXP V STIM
OBL V-3rd sg. SUBJ-3rd sg. 'We like Spanish cinema.'

(7) A nosotros nos gusta el cine español EXP 8 EXP V STIM OBL OBL clitic V-3rd sg. SUBJ-3rd sg. 'As for us, we like Spanish cinema.'

While (6) is unmarked, (7) is used contrastively to distinguish the EXP in this sentence from a previously mentioned one (someone who likes, say, Latin American





While we maintained stimuli simple and short (see Appendix I), we did not control for the appearance of a full noun phrase with a prepositional phrase (example 4) vs. full noun phrase with an adjectival phrase (example 5). First person singular and plural were the only EXP types we used in the stimuli, and they were balanced between 12 first person sg. examples vs. 12 first person pl. examples.

We used the term 'reduplication' for the form of clitic doubling used in our stimuli, which always consists of the obligatory clitic+an emphatic, stressed pronoun (not a full NP).

We mark the fully-fledged pronoun as doubling the clitic only to distinguish between types of stimuli in our experiment, although historically the doubling (our 'reduplication') refers to the clitic, and not to the stressed pronoun (Vázquez Rozas and García 2012).

cinema). Despite the lack of context requiring the use of a sentence such as (7), native speakers have no problem rating them as grammatical. However, Vázquez Rozas (2006: 84) concludes that \approx 79% of *gustar*-type reverse verbal constructions express their EXP as a clitic, and only \approx 9% do so through a full NP. The EXP is represented by a clitic and a reduplicated stressed pronoun in 13.38% of cases – still clearly a minority of cases compared to the almost 80% that exhibit a clitic-only experiencer. In this case, given that the majority of these constructions collected in naturally-occurring speech corpora only exhibits a clitic pronoun, and not a 'reduplicated' stressed pronoun, a better rating of either clitic-only forms or 'reduplicative' forms could suggest that subjects are more or less sensitive to frequency patterns in the language. The expectation in this case can be twofold: (i) that all speakers will have more trouble assessing the 'reduplicated' forms because it is one more item to keep track of and that could interfere with subject agreement (if there is a mismatch between grammatical subject, i.e. the STIM and EXP); or (ii) that HS particularly have trouble accepting Redup because it is less frequent in Spanish overall.

2.1.4 The predictors ExperiencerPos and StimulusPosition

The variable EXPERIENCERPOS, or EXPPOS for short, indicates the positions of the EXP with regard to the verb respectively: *one* (just before the verb) vs. *more than one* (before and or after the verb). The variable STIMULUSPOSITION, or STIMPOS for short, reflects the position of the STIM with regard to the verb: *after* vs. *before*.

These two variables were included because subjects and indirect objects have been shown to exhibit strong preferences for particular positions in sentences. Consider Table 1 for the data on the position of arguments in *gustar*-type verbs reported by Vázquez Rozas (2006), based on the BDS database, a tagged database extracted from the ARTHUS corpus.⁹

	SUBJECT / STIM		IO / EXP		Total	
Preposed	125	(10%)	223	(18.3%)	348	(14.1%)
Postposed	678	(54.2%)	29	(2.4%)	707	(28.6%)
Implicit, clitic	449	(35.9%)	969	(79.4%)	1418	(57.3%)
Total	1252	(100%)	1221	(100%)	2473	(100%)

Table 1. Frequencies and column percentages of pre- and postpositions of subjects and indirect objects for *gustar*-type verbs





ARTHUS stands for Archivo de Textos Hispánicos de la Universidad de Santiago (Spain). It is a corpus of Spanish syntactic data, the contemporary part of which comprises approximately 1.5 million words from mostly written texts comprising different styles, and about 300,000 words from oral texts. The BDS (Base de Datos Sintácticos) database includes syntactic analysis carried out by Guillermo Rojo's team. For further information and access, see http://www.bds.usc.es/.

As Table 1 shows, there is a highly significant and strong association between positions and roles (χ^2 =813.8, df=2, p<10⁻¹⁷⁰, Cramer's V=0.57): subjects/STIMs in NS' Spanish are very strongly preferred in postposed positions (Pearson residual=16.9) whereas indirect objects/EXPs are strongly preferred in implicits/clitics (Pearson residual=10.2) and more weakly in preposed positions (Pearson residual=3.9). Our expectations in analyzing the STIM's position was that its acceptability would vary as a function of the frequency patterns found in the language. In practice, this is an area where HS could exhibit a different behavior from L2 learners, because they are exposed from birth to common frequency patterns in natural Spanish and could show a preference for the stimulus to be placed after the verb. Our NS controls, in fact, commented on diminished acceptability/naturalness of sentences with STIM located before the verb. However, since Spanish has flexible word order and the STIM can be placed before or after the verb for stylistic or focus-driven effects, the NS still considered them grammatical, presumably because they were able to recreate plausible contexts in which such sentences would be used, something which a less proficient HS may not be able to do as straightforwardly. This also means that a STIM before a verb likely reflects some pragmatic motivation, which could be more cognitively taxing, and therefore dispreferred in acceptability judgments for instance by L2 learners, who hear it less frequently in class and who may have more difficulty processing the pre-verbal STIM because they do not master the stylistic or focusdriven conditions that govern it. The result may be the same for HS, then, because of frequency effects, and for L2 learners because of cognitive reasons. As with all other predictors, each level of ExpPos and STIMPos was represented in half of the data.

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2.1.5 The predictor QUESTION

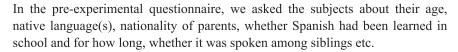
In addition to the above variables, we included an experimental control variable called QUESTION, which is simply a numeric control variable numbering all stimuli within each subject – that is, it was 1 for the first sentence seen by a subject, 2 for the second sentence seen by a subject, etc. – and allowed us to partial out order, habituation, or fatigue effects out of the results.

2.1.6 The predictor Speaker

The most important independent variable was Speaker. Our acceptability-judgment questionnaire was given to 51 *learner* speakers and 98 *heritage* speakers. (Given the complete uniformity of the Spanish and Mexican NS controls, we did not distinguish different speaker varieties.) All subjects were university-level undergraduate students taking a Hispanic linguistics class at the University of California, Santa Barbara, in which experiential predicates were not part of the topics on the syllabus. The subjects participated voluntarily and were not compensated for their participation in the study.







All subjects were university-level undergraduate students between 22 and 28 years of age, approximately 70% of whom were women. Both L2 and HS groups were jointly taking upper-division courses at the University of California, Santa Barbara which require students to be fluent in Spanish and are taught entirely in Spanish. This means, they had studied Spanish at university for at least two years, or had equivalent studies. It should be noted that students taking such classes are accustomed to writing essays and projects in Spanish, as well as to reading texts of considerable complexity in the language, such as medieval and Golden Age literature, which means both speaker groups are well-equipped to handle a written questionnaire. The L2 subjects were advanced L2 learners with English as their L1 and advanced competence in Spanish. The HS subjects were 1.5 generation or second generation HS from California, i.e. early bilingual HS (Spanish spoken at home, onset of English exposure before 7 years of age). ^{10, 11}

2.1.7 The dependent variable: Correct

Every subject received the same above-mentioned questionnaire with 24 stimulus sentences (see Appendix I) and was instructed to judge each as either 'acceptable' or 'unacceptable'. Reverse construction predicates were not part of the contents





Second generation HS are U.S.-born speakers of the heritage language that have at least one foreign-born parent. Generation 1.5 comprises foreign-born HS who immigrated as school-age children and whose education was carried out mainly in the U.S. (see definitions and sources in Suarez 2007: 36). We controlled for participants' dialectal variation only indirectly by choosing the most frequent verb among Spanish experiential predicates: gustar 'to like' occurs for a total of 6867 instances in the 20th century section of Davies' Corpus del Español (2002-), as compared to other frequent experiential predicates in reverse constructions such as *interesar* 'to interest' (2479), *encantar* 'to charm' (767), and molestar 'to bother' (871). Because existing literature on the subject does not mention dialectal variation in usage (for instance Melis 1999, or Vázquez Rozas 2006, 2012), and because the structure in question is so common, we do not expect any interdialectal difference to affect speakers' acceptability judgments. As for language attrition and attitudes towards Spanish, research has shown that inter-dialectal differences do not affect these aspects of the heritage language (Veltman 1988; Urciuoli 2008), although Mexican-Americans have been shown to retain the heritage language longer than other groups (Bustamante-López 2008 and literature cited therein).

We did not include the socio-economic status of the speakers into the analysis. Given the high degree of oral and written proficiency of both the L2 learners and the HS – given the above-mentioned nature of the courses they were taking – and given that all subjects were attending a relatively expensive 4-year college (meaning they most likely came from at least middle-class families, there was no reason to expect large and, more importantly, systematic co-variation with the judgments).

studied in the class, nor were the subjects alerted as to the goal of the experiment. The dependent variable in this design was Correct with the levels

- *no*: the speaker made the wrong choice by labeling a grammatical or an ungrammatical sentence 'unacceptable' or 'acceptable' respectively;
- yes: the speaker made the right choice by labeling a grammatical or an ungrammatical sentence 'acceptable' or 'unacceptable' respectively.

2.2 The statistical evaluation

Since the experimental design involves a binary dependent variable Correct, we computed a binary logistic regression with an automatic model selection process (based on *AIC*) to determine which characteristics of the experimental stimuli and of the speakers influence the speakers' accuracy the most. The model selection process tried to predict Correct: *yes*, i.e., when speakers made the right choice, and was allowed to add or subtract predictors as necessary between, on the one hand, the smallest model containing just the overall intercept/baseline frequencies of the responses and, on the other hand, the largest model containing all main effects, 2-way, and 3-way interactions of the above-mentioned independent variables (cf. Crawley 2007: Chapter 9 or Gries 2013: Section 5.1 for discussion of these notions)

3. Results

3.1 General overview

On a very general level, the results of our logistic regression indicate that the data can be explained intermediately well. As a result of the model fitting process, we obtained a minimally adequate model that indicated a highly significant correlation between a subset of our initial predictors and Correct: Loglikelihood ratio=518.83, df=21, p<10⁻⁵⁰. This correlation is only intermediately strong (Nagelkerke R^2 =0.23), but it comes with a nearly good classification accuracy (C=0.775, a frequently mentioned threshold value for 'good' accuracy is 0.8; correct predictions by the model: 83.81%, which is highly significantly better than chance (p<10⁻⁵⁰)). However, as will become obvious below, the final model also indicates that the relations between the predictors and the model are very complex. Table 2 provides an overview of all predictors of the final model, their coefficients, and their p-values.¹²







Three stimuli appeared to be especially difficult for the subjects (in particular the HS). We therefore explored whether (i) discarding these from the data as outliers or (ii) acknowledg-

Predictor	b	р	Predictor	b	р
STIMPOS _{before}	0.51	0.53	Gram _{no}	7.31	< 0.001
SPEAKER _{learner}	-0.55	< 0.06	$ ext{Redupl}_{ ext{yes}}$	4.06	< 0.001
NEGATION	1.05	0.002	Question	0.27	< 0.001
GRAM:STIMPOS	-1.52	0.097	Gram:Redupl	-3.09	0.0024
GRAM:SPEAKER	-0.72	0.03	Gram:Negation	-2.5	< 0.001
GRAM: QUESTION	-0.45	< 0.001	STIMPOS:SPEAKER	1.36	< 0.001
STIMPOS:QUESTION	-0.14	0.001	STIMPOS:REDUPL	-2.83	< 0.001
NEGATION: REDUPL	-1.81	0.002	SPEAKER: QUESTION	-0.02	0.15
NEGATION:SPEAKER	0.56	0.01	GRAM:REDUPL:NEGATION	2.44	0.004
STIMPOS:GRAM:REDUPL	2.82	0.004	STIMPOS:GRAM:SPEAKER	-1.33	0.002
STIMPOS:GRAM:QUESTION	0.26	< 0.001			

Table. 2 Overview of the minimally adequate regression model

In the following sections, we will discuss these effects. Space does not permit an exhaustive discussion of all predictors' effects in detail, and most of the lower-level predictors and interactions are qualified by 2- or 3-way interactions: we will therefore keep the discussion of especially main effects to a minimum.

3.2 Significant main effects and 2-way interactions

3.2.1 Monofactorial evaluation

The monofactorial effects can be summarized quite concisely especially since all of them participate in interactions that qualify their effects markedly (cf. Gries 2013: Section 5.1). Table 3 shows the overall directions of the significant main effects.

In Table 3, all variables have two levels: the dependent variable (in the left column) is that the subject either made a correct or an incorrect judgment, where the judgment is correct if the stimulus was judged acceptable by our subjects *and* by





ing their special status by creating an additional predictor for them would help improve the fit of our regression models. However, both strategies drastically *de*creased the quality of the resulting model. As a result of possibility (i), discarding the three stimuli in question, Nagelkerke's R^2 for the then minimal adequate model decreased to an extremely small value of 0.04 (with an equivalent decrease of C to 0.62). As a result of possibility (ii), flagging the three stimuli in question with a new predictor, Nagelkerke's R^2 for the then minimal adequate model still decreased to 0.16 (with an equivalent decrease of C to 0.71). It therefore seemed most prudent to leave the three stimuli in the data set.

the monolingual NS controls; the judgment is incorrect if the subjects assigned an acceptability judgment that differs from that of the monolingual NS controls.

Dep. var.	Independent. variables					
more correct	HS	ungrammatical	yes	no (=affirmative)	late in exp.	
1	1	1	1	1	1	
Correct	Speaker	Gram	REDUPL	NEGATION	QUESTION	
1	↓	<u> </u>	↓	1	↓	
less correct	learner	grammatical	no	yes (=negative)	early in exp.	

Table 3. Directions of main effects of the minimally adequate regression model

The independent variables are Speaker with two levels, i.e. 'HS' for our early bilingual population and 'learner' for the Spanish as L2 speakers; GRAM with two levels, i.e. 'ungrammatical' for judgments that deviate from the monolingual control group and 'grammatical' for judgments in line with those made by the monolingual control group; REDUPL (i.e. 'reduplication' or doubling) also with two levels, i.e. 'yes' indicating the presence of a stressed pronoun doubling the EXP clitic, and 'no' with the EXP expressed exclusively by the clitic; NEGATION with two levels, i.e. 'no' for affirmative stimuli (no negation) and 'yes' for negative stimuli (i.e. stimuli with negation); finally, QUESTION (i.e. stimulus number on the questionnaire) is shown here also with two levels, i.e. 'early' in the first part of the experiment, and 'late' in the second, or later, part of the experiment. Thus, Table 3 shows that, on average at least, correct judgments by the subjects were more likely when the subject was a HS, when the stimulus was ungrammatical, involved reduplication, was affirmative, and came late in the experiment. However, while these results are straightforward to interpret, the interactions show that this picture is not nearly as simple.

3.2.2 Significant 2-way interactions

In this section, we will briefly discuss the significant 2-way interactions that the model identified in the subjects' responses:

- Gram:StimPos: Gram:yes decreased the percentage of correct responses (see above), but that effect is particularly strong with StimPos:before (as in Las canciones románticas me gustan a mí);
- GRAM:REDUPL: GRAM:yes decreased the percentage of correct responses, but
 that effect is particularly strong with REDUPL:no (as in No nos gusta el fútbol);
 that is, the absence of reduplication makes it particularly difficult to identify
 grammatical sentences correctly;







- GRAM: SPEAKER: learners' rates of correct responses do not differ much for grammatical and ungrammatical sentences, but HS score much better with ungrammatical sentences and much worse with grammatical ones (a 15% difference);
- STIMPOS: Speaker: learners' rate of correct responses are nearly the same regardless of STIMPos, but HS score much better with post-verbal than pre-verbal STIMs; a different way of summarizing the results is that, with preverbal stimuli, both speaker groups perform nearly equally well, but with postverbal stimuli, the HS are better than the learners;
- Gram: Negation: Gram: no increased the percentage of correct responses, but that effect is particularly strong in affirmative sentences (as in *A nosotros nos gustan el cine español); put differently, in negatives, GRAM made no difference to the speakers' accuracy, 13 but in affirmatives, speakers are better at identifying ungrammatical stimuli;
- GRAM: QUESTION: this effect is very weak, but it seems as if, over the course of the experiment, speakers become better/worse at judging the grammatical/ ungrammatical sentences respectively;
- STIMPOS: QUESTION: speakers became more accurate over time (i.e. all participants improved from the beginning to the end of the task), in particular with post-verbal STIMs;
- STIMPos:Redupl: Redupl: yes increased subjects' accuracy, but the effect is especially strong for STIMPos:after (as in A mi me gustan las matemáticas);
- NEGATION: REDUPL: yes increased subjects' accuracy, but especially strongly in affirmatives (as in *El olor a bosque nos gusta a nosotros*);
- NEGATION: Speaker: HS are generally more accurate than learners, but also slightly more in affirmative sentences.

Given the multitude and interconnectedness of these interactions, it is nearly impossible to summarize them in a few pithy sentences. In a sense, this already shows how important careful experimentation and simultaneous control of many predictors is when it comes to exploring these constructions. One way to summarize the data is by focusing on two of the most central variables, Speaker and Gram. With regard to the former, the data show that HS outperform learners in particular with ungrammatical and affirmative sentences and with post-verbal STIMs. With regard to the latter, the data show that grammatical sentences with pre-verbal STIMs





We use *speakers* as a cover term for both HS and L2 learners.

are difficult to identify, while affirmative ungrammatical sentences are easy to identify. Interestingly, over the course of the experiment, speakers became better at their assessments for grammatical sentences and post-verbal stimuli.

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3.3 Significant 3-way interactions

The previous section has already demonstrated how complex the relations in the data are. Interestingly, but in some sense also unfortunately, many of the above 2-way interactions require an even finer resolution to take the full patterning in the data into account.

First, the interaction Gram: Redupl: Negation. This interaction shows that the accuracy of the judgments of affirmative grammatical sentences without reduplication is particularly bad; in fact, with this combination of characteristics, subjects' performance was not different from chance, whereas sentences involving reduplication were close to perfect native-speaker performance.

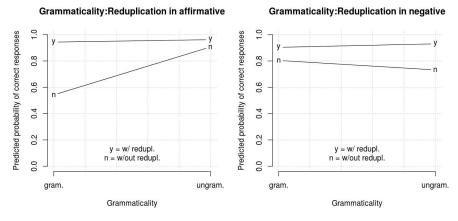


Figure 1. Gram: REDUPL: NEGATION

Second, the interaction StimPos:Gram:Redupl, which is represented in Figure 2 and is more complicated, as it qualifies three of the above results in two ways. Sentences with pre-verbal STIMs exhibit the expected additive effect: sentences with reduplication are judged more accurately than without, and ungrammatical sentences are judged more accurately than grammatical ones, and both of these regardless of reduplication. However, sentences with post-verbal STIMs are responsible for the interaction because, in those, the expected main effect of Gram disappears: grammatical and ungrammatical sentences are judged nearly equally well.







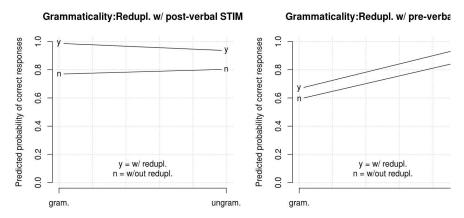
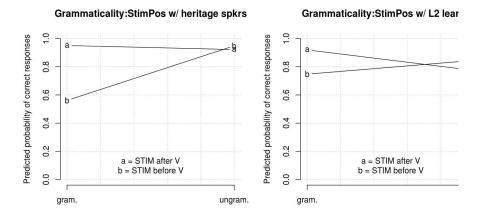


Figure 2. StimPos:Gram:Redupl

Third, the interaction STIMPOS:GRAM:SPEAKER represented in Figure 3 also qualifies several of the above findings. The HS nearly always perform close to ceiling – the only scenario in which their ratings become quite inaccurate is with grammatical sentences that have pre-verbal STIMs, in which case they are close to chance accuracy. As far as the learners are concerned, when the sentence is grammatical, they do better with post- than with pre-verbal STIMs – when the sentence is ungrammatical, however, the position of the STIM no longer makes much of a difference.



 $\textbf{Figure 3.} \ S \\ \\ \text{TIMPOS:} \\ G \\ \text{RAM:} \\ S \\ \text{PEAKER}$





The final interaction, STIMPOS:GRAM:QUESTION, is interesting in how it reflects different types of habituation. With grammatical sentences, subjects become more accurate over time, but more quickly so with post-verbal STIMs. With ungrammatical sentences, subjects become less accurate over time, again more quickly with post-verbal STIMs.

4. Discussion and concluding remarks

In our analysis of grammaticality judgments carried out by early (HS) and late bilinguals (advanced L2 learners), we have found two kinds of factors that affect the performance of both L2 learners and HS, but they do so in different ways. On the one hand, there are factors related to ease/difficulty of cognitive processing (negation, reduplication of the EXP); on the other hand, there are pragmatic factors (lack of context warranting an emphatic/contrastive responses) and stylistic manipulation of the canonical position of arguments, specifically of the syntactic subject/STIM.

4.1 Results involving Speaker

On the whole, we have seen that the HS achieved a higher rate of correct judgments. However, in spite of this being a significant main effect, the superior performance of HS is not found across the board, but it is rather part of significant interactions with other factors.

First, there is a very weak tendency reflecting the fact that the subjects become more accurate over the time of the experiment, but while the HS perform better than the learners, it is also the HS who seem to benefit most from the practice that the experiment provides.

Second, with regard to the role of Negation, the main effect we find is that negated sentences were judged less correctly across all speakers, and all other things being equal, this is compatible with their increased cognitive load as discussed above. However, the significant interaction Speaker:Negation qualifies this finding by revealing that the performance advantage of affirmative sentences is really only observed for the HS. In other words, the HS are generally better than the learners at making correct judgments – but their performance deteriorates with negated sentences whereas the learners' performance is unaffected by negated sentences.

Third, the significant three-way interaction is STIMPOS:GRAM:SPEAKER. This interaction reveals that effects from some of the two-way interactions are special cases. For instance, the fact that HS are less accurate with grammatical sentences







is only true of pre-verbal STIMs, which are rarer than STIMs in the default post-verbal position. That is, the HS perform worst in a linguistic scenario that is supposedly unmarked in some sense (because the sentence is grammatical), but marked (because they do not encounter pre-verbal STIMS as much in authentic contexts). In all remaining combinations of characteristics of this interaction, HS outperform learners.

In all three cases, we think that the difference between HS and learners' performance may be best explained by the fact that most HS, as early bilinguals, have had little or no formal instruction on Spanish grammar/usage, and that they therefore lack the explicit practice of manipulating these structures by adding or removing elements (negation, reduplication), modifying agreement (changes from singular to plural, agreement with STIM in reverse constructions), and other exercises that are a common part of formal L2 instruction. Specifically, with regards to the first point above (improvement as the experiment proceeds), this may be directly due to the fact that HS are not accustomed to formally manipulating grammatical structures in Spanish, as learners would do in an L2 classroom setting. Therefore, the experimental setting did not help L2 learners improve their accuracy over time, as they were already accustomed to being tested on the grammaticality of sentences from exposure to formal learning of Spanish as a foreign language – however, it did allow HS, who may have had little or no exposure to the formal learning of Spanish grammar, to become more accurate in their judgments as the experiment proceeded. In the same way, the fact that the presence of NEGATION affected mainly HS (the second point above), could be due to the increased cognitive load imposed by Negation given their lack of experience manipulating grammatical elements such as negation or agreement in a formal classroom setting. Finally, why would the learners be better than the HS at judging grammatical sentences with pre-verbal STIMs? One possibility is, once again, that the formal, academic instruction, which is the environment responsible for most of the learners' linguistic knowledge, exposes the learners to this configuration even though this configuration is generally rarer (esp. without some pragmatically licensing context). Put differently, the structured exposure of this configuration in learners' teaching settings may be enough to compensate them for the configuration's rarity, which seems to be what makes it so hard for HS. HS, in fact, are not accustomed to manipulating the form in a classroom setting (many textbooks of Spanish for HS do not even report reverse constructions) and may have less metalinguistic awareness of the form in its less than canonical configurations.¹⁴





⁴ Didactic aspects of these constructions in textbooks for HS are discussed in Miglio and Miranda (2012).

In sum, we can confirm that "[…] HS' initial linguistic advantages over L2 learners seem to diminish when both groups are compared at the high end of the proficiency spectrum" (De Prada Pérez and Pascual y Cabo 2011: 111, cf. also Au *et al.*, 2002 and Montrul 2005, 2010), and that HS share linguistic behaviors with both monolingual native speakers (marked sensitivity to frequency of patterns in natural language), and with L2 speakers (being sensitive to cognitively taxing factors such as negation).

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4.2 Results not involving Speaker

In addition to the predictors that revealed differences between HS and learners, we also obtained effects that apply to both speaker populations. These effects involve nearly all individual variables: the grammaticality of the sentences, the reduplication of the experiencer, the position of the stimulus, and the presence of negation in the following interactions.

In both interactions, we find the main effect of REDUPL: yes, which facilitates correct judgments. While we expected that this type of clitic doubling (REDUPL) would result in increased cognitive load, i.e. the total amount of mental activity imposed on working memory at any one time, and therefore decrease the subjects' accuracy, the opposite was observed. This may be explained by embracing the view that REDUPL is in fact a form of object agreement (Bossong 1980; García-Miguel 1991; Franco 2000; Vázquez and García 2012), which copies some of the features of a strong pronoun (or an NP) onto the verb (gender, case, number, person). The copying of these features increases the accessibility of the referent (Vázquez and García 2012, ex. 16), which – in sentences without context as in our experiment - helps keep track of different verbal arguments, and therefore facilitates the subjects' accuracy in evaluating the grammaticality of the sentence. At the same time, the interactions show that the main effect of Gram – that ungrammatical sentences are identified better – does not hold across the board. For instance, the interaction Gram: REDUPL: NEGATION shows a complex pattern. While grammatical sentences as well as sentences without reduplication overall lead to low accuracies, and while affirmatives overall lead to high accuracies, the combination of these three features leads to low accuracies close to chance. While an additive effect of grammatical stimulus and no reduplication can be expected, we have not found a convincing explanation of why this combination should cause considerably worse judgments in affirmative (Fig. 1, left panel) than in negative sentences (right panel).

The second interaction, STIMPos:GRAM:REDUPL, also represents quite a complex picture. Once we accept that REDUPL:yes and GRAM:no lead to more accurate ratings, the rarer pre-verbal STIMs yield the expected additive effect, but the more







frequent post-verbal stimuli do not: there the effect of Gram disappears. This is most likely a frequency effect, i.e. exposure to post-verbal stimuli is much more frequent than to pre-verbal ones in reverse constructions, whether in natural language or in a classroom setting, therefore all subjects are more accurate at rating sentences with post-verbal stimuli regardless of whether the sentence is grammatical or not.

Finally, the last significant three-way interaction is STIMPOS:GRAM:QUESTION. The effect that subjects' improvement is most pronounced in grammatical sentences with post-verbal stimuli seems to derive from the fact that these sentences exhibit the combinations of characteristics that speakers on the whole are most exposed to: most of the time, what they hear will be grammatical, and the post-verbal position of the STIM is the default so speakers can adjust to this quickly. Even if the STIM is in pre-verbal position, there is still a positive learning effect as long as the sentences are still grammatical. On the other hand, with ungrammatical sentences, subjects get less accurate over time (in particular with pre-verbal STIMs). This finding is generally compatible with what has been found in other studies, namely that exposure to experimental items can change subjects' perceptions in subtle ways. For example, Doğruöz and Gries (2012) report a similar effect in an experiment on creativity/unconventionality in Turkish morphology: after as few as a dozen experimental stimuli in a completely randomized and controlled experimental design, speakers of Turkish from Turkey became more accepting of unconventional expressions normally exclusively used by speakers of Turkish from the Netherlands. Against this background, the observed learning effects in the present study are less surprising than they might seem at first.

4.3 Implications

In our analysis of grammaticality judgments carried out by groups of HS and advanced L2 speakers, we found that both cognitive and pragmatic factors affect the performance of both HS and L2 speakers, but in different ways. Cognitive factors may affect both groups in complex interactions, but frequency effects are more noticeable in HS, betraying their mode of acquisition of Spanish as L1 (early bilinguals), even when English has become their dominant language.

Our analysis confirms that contact between the dominant English and minority Spanish in most Hispanic communities in the US produces bilingual speakers characterized by incomplete acquisition or attrition of their L1 (as in Silva-Corvalán 1991, 1994, 2003; Montrul 2002, 2008, 2009, 2011; Polinsky 2008). These HS behave like native speakers in that they react to frequency patterns in natural language more than L2 learners, but their advantage over advanced L2 learners is often small, because they have had little experience in manipulating morphologi-





cal elements of sentences in a formal learning environment, which is where late bilinguals (advanced L2 learners) show an advantage over HS. These contradictory characteristics of HS have been confirmed by recent literature (Au *et al.* 2002; De Prada Pérez and Pascual y Cabo 2011; Montrul 2005, 2010). Some researchers have underlined the fact that morphology specifically, and not just semantics or pragmatics, seems to be 'a bottleneck' for both L2 and HS (Mikhaylova 2012: 65), and this is certainly confirmed by our experimental results on grammaticality judgments based on agreement mismatches.

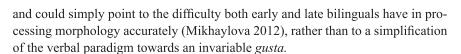
While our HS subjects exhibit a marginal advantage in rating accuracy over learners of Spanish as L2, these advanced L2 speakers exhibit a higher ease of manipulation of reverse structures due to their learning of Spanish in a formal classroom setting. These findings correlate well with recent proposals (O'Grady 2006; Paradis 2004, 2009) that ascribe the advantage of early bilingualism to the acquisition of certain mechanisms through procedural memory, as opposed to operative memory (for which conscious manipulation and conscious learning come into play, as in the learning of lexical items).

As for the effects of English as a dominant language on the Spanish of HS, we find that its influence is not so easily discernible. In this respect, for instance, recent literature maintains that HS Spanish in the US exhibits a form of invariable gusta (Toribio and Nye 2006; De Prada Pérez and Pascual v Cabo 2011). If this were the case, we would most likely find more mistakes with gustan in the plural, which, however, is not what our data show (although the effect is minimal: $\chi^2=71.15$, df=1 Cramer's V=0.2). If HS were tending towards a form of invariable gusta, ¹⁵ HS should tolerate an ungrammatical sentence with gusta (sg.) coupled with a plural STIM better than one with gustan (pl.) with a singular STIM, given their supposedly simplified verbal paradigm. We found that – in all sentences – subjects were weakly but significantly less correct in assessing gustan (pl.). In ungrammatical sentences, we found that a plural STIM (syntactic subject) led to more incorrect judgments. That is, when the STIM is plural and gusta is singular, then subjects judge the sentence as grammatical and therefore make the incorrect decision more often (χ^2 =29.69, df=1, Cramer's V=0.13). When the sentence is grammatical, there is no significant effect. If gustan is plural and the STIM is singular, then subjects are more likely to give the correct answer, i.e. that the sentence is ungrammatical, whereas if both gustan and the STIM are plural, they are more likely to give the wrong answer (i.e. rate the sentence as ungrammatical). These results are marginal





After all, *gusta* (3rd sg.) is by far the most frequent single embodiment of the verb: 2971 instances of *gusta* out of 6867, i.e. 43% of all forms of *gustar* for the 20th century, in Davies' *Corpus del Español* (2002-), followed by the second most frequent form *gustaría* (3rd sg.) 'would like' with 837 occurrences (12%).



It is clear that pragmatic, sociolinguistic and psycholinguistic factors need to be assessed at the level of each component within constructions for L2 learning, and HS language (Paradis 2004, 2009). Our findings confirm previous literature in placing HS as the missing link between L2 learners and NS – sharing characteristics of both, and in observing attrition or incomplete acquisition in a context where English becomes these HS' dominant language, but we cannot point to any specific English structure as the direct cause for HS' deviation from monolingual native speakers' performance in grammaticality judgments on *gustar*-type predicates.

4.4 Where to go from here

Dvorak and Kirschner (1982), and more recently Toribio and Nye (2006), had found evidence of restructuring of the reverse constructions (experiencer-verb-stimulus) towards a direct construction (agent-verb-patient) in Puerto Rican communities in New York. This would mean that this construction is an example of convergence between English and Spanish, i.e. *gustar* is becoming more similar to *to like*. While we could not use this study to assess this area of possible convergence, we are currently analyzing the data from a large experimental study, which could shed more light on the direct influence of English on Heritage Spanish.

Type of fine-grained statistic analysis used in this study marks a novel approach to HS studies. It is admittedly difficult to interpret three-way interactions among variables linguistically. However, at the same time the present data reveal the considerable complexity that needs to be addressed when comparing HS to learners (and, ultimately, both to NS). Simpler analyses may uncover main effects, but the subtle ways in which HS and L2 learners differ require the more comprehensive approach adopted here – generalizations involving only main effects, for example, would not have uncovered HS' sensitivity to negation. Thus, only with quantitatively sound findings will we be able to analyze the very complex reality of heritage language in all its proficiency levels and understand a phenomenon that is spreading with increased immigration to the US and that affects all levels of education.¹⁶





Over a population of 312 million in the US according to 2011 census estimates (http://quickfacts.census.gov/qfd/states/00000.html, accessed 12/19/12), approximately 17% are Hispanic (i.e. around 53 million people), while in the 1990s the total Hispanic population of the US was a mere 21 million. In California alone, with a population of approximately 38 million people, according to the 2011 census, about 38% are of Hispanic origin (http://quickfacts.census.gov/qfd/states/06000.html, accessed 12/19/12), i.e. around 14 million people.

Understanding the workings of heritage language certainly holds linguistic interest for researchers in bilingualism and its interactions with cognition. Moreover, from a sociolinguistic point of view, a precise assessment of HS' linguistic abilities and of their language usage may be a way to give HS back a more complete and positive understanding of their heritage language. Heritage Spanish would be seen not as an inferior variety worth despising and forgetting, but rather as any other non-standard, dialectal variety of Spanish that may and should be used as a springboard for a faster and more successful learning of the prestige, academic Spanish than L2 learners ever could (whether this learning happens for utilitarian or identity reasons, as in the cases mentioned by Urciuoli 2008). In this sense, highly specialized, quantitative studies on specific detailed areas of HS' language competence and usage are indeed called for.

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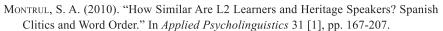




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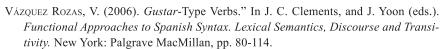




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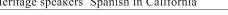


APPENDIX I – Questionnaire used in this study

Edad:	Sexo:	Lugar de i	nacımıent	o:			
Lugar de nacimiento de su padre:			de su ma	dre:			
¿Ha vivido	en los EEUU	desde su nacim	iento?	Sí	No		
¿En dónde?							
¿Se habla es	spañol en su o	casa? Sí	No				
¿Quién(es)	lo habla(n)? _						
Si tiene her	manos, ¿qué i	idioma hablan e	ntre ustec	les?			
¿Tomó claso	es de español	en la escuela se	ecundaria	? Sí	No		
¿Cuánto ties	mpo?						
¿Ha pasado	algún tiempo	en un país de l	nabla hisp	ana?	Sí	No	
¿Cuánto ties	mpo?						
¿Cuál(es) pa	aís(es)?						
Clases de es	spañol tomad	as en UCSB:					
Clase Trime	estre (Quarter) / Año					







Señale si la oración le parece correcta (OK) o incorrecta (NO).

1. A mí me gustan las matemáticas	OK	NO
2. No me gusta los deportes	OK	NO
3. Las canciones románticas me gustan a mí	OK	NO
4. Las arañas no me gusta	OK	NO
5. A nosotros nos gusta la comida italiana	OK	NO
6. No nos gustan la basura tirada en la playa	OK	NO
7. El olor a bosque nos gusta a nosotros	OK	NO
8. El clima lluvioso no nos gustan	OK	NO
9. A mí no me gusta la música clásica	OK	NO
10. Me gustan mucho mi familia	OK	NO
11. La contaminación no me gusta a mí	OK	NO
12. El mar me gustan mucho	OK	NO
13. No nos gusta el futbol	OK	NO
14. A nosotros nos gustan el cine español	OK	NO
15. La política no nos gusta	OK	NO
16. El cine de acción nos gustan a nosotros	OK	NO
17. No me gustan los ejercicios aeróbicos	OK	NO
18. A mí me gusta los chocolates	OK	NO
19. Las películas de horror no me gustan	OK	NO
20. Los deportes extremos me gusta a mí	OK	NO
21. Nos gustan las películas de aventuras	OK	NO
22. A nosotros no nos gusta las clases de idiomas	OK	NO
23. Los postres franceses nos gustan	OK	NO

24. Las clases aburridas no nos gusta a nosotros





OK

NO