

Invariable *gusta* in the Spanish of Heritage Speakers in the US

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1. Introduction

Within the field of second language acquisition, the overwhelming majority of the research conducted since the 1960s has examined the speech of non-naturalistic second language learners (L2ers). In recent years, a growing body of research has emerged examining the production and competence of heritage speaker (HS) bilinguals. Briefly defined, a HS is a bilingual that grows up speaking a language at home that is different from the language spoken by the mainstream society. Among other distinct qualities, this population usually shows signs of convergence of the grammars since, in most cases, the societal language ends up becoming the individual's dominant language. The benefits of studying this population are numerous and they contribute to the field in non-trivial ways: not only is it necessary to determine what structures might be more vulnerable to divergence from monolingual norms under specific environments of language contact, but also to gain functional knowledge in terms of “theory testing and building within diachronic linguistics, sociolinguistics, L1 attrition, adult language acquisition, formal syntactic theory and more” (Rothman 2009: 162). In this sense, many researchers have identified the interfaces of syntax with other linguistic and cognitive modules as a primary locus of (emerging) optionality in HS populations (e.g. Montrul 2004, 2008, Sánchez 2004, Sorace 2003, Rothman 2007, 2009, Toribio 2004).

In this paper we follow this line of investigation examining 61 HSs residing in the North Central Florida region. More specifically we study verb and clitic agreement as reflective of the argument structure of reverse psychological predicates as it lies within the lexico-semantic interface with syntax. With this goal in mind, we have organized this paper in the following manner. First, we provide the necessary background information regarding (reverse) psychological predicates as well as meaningful examples that illustrate the way these verbs operate. Next, we offer a brief overview of the existing literature on this topic. In section 4 we give specific details of the present study paying special attention to the description of the participants and the methodology used. Section 5 includes the results obtained under such methodology which are further discussed in section 6. Finally, we conclude by summarizing the main points presented in the previous sections.

2. (Reverse) Psychological Predicates

In linguistic terms, the notion of ‘psychological verbs’ captures the fact that they communicate meanings of state of emotions or the psychological process that results in an emotional state (e.g. to love, to hate, etc.). In general, these verbs differ from regular agentive verbs in that they subcategorize for an <experiencer> and a <theme> instead of an <agent> and a <theme> as it would be the case with verbs such as *romper* (to break) or *comprar* (to buy). Typologically, Belletti & Rizzi (1988) proposed a three-class distinction of psychological predicates for Italian¹: class I-*temere* (to fear), class II-*preoccupare* (to worry), and class III-*piacere* (to like). Since Belletti & Rizzi's (1988) seminal work, many researchers have proposed different typological and syntactic analyses aiming to provide an

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¹ Parodi-Lewin (1991) extended this division to Spanish.

explanation for this atypical arrangement (e.g. Postal 1971; Brekke 1976; Ruwet 1972, 1993,1995; Perlmutter 1987; Grimshaw 1990; Pesetsky 1995; Bouchard 1995; Whitley 1995). Of special interest to this study is the Spanish equivalent of class III since it presents an atypical syntactic representation which does not exist in English. Most of the analyses proposed are based on the fact that the reverse surface representation of class III verbs is a result of semantically determined constraints. Without trying to be exhaustive in our description, verbs that belong in class III are characterized by an unusual mapping of the arguments to syntactic positions, which results in a structure with a postverbal thematic subject and a preverbal dative doubled by a clitic, hence, the name reverse. For example, Grimshaw (1990) appealed to the interaction between the thematic² and the aspectual³ hierarchies as the cause for the reverse mapping of arguments to syntactic positions. Two of several Spanish verbs that belong in this group are *gustar* (to like) and *encantar* (to love). This reverse structure becomes evident when we compare two sentences, one of which contains a regular agentive verb such as *comer* (to eat) and the other contains a reverse psychological verb such as *gustar* (to like). In (1) the agent appears in sentence initial position and controls verbal agreement. Conversely, in (2) a postverbal thematic subject controls verbal agreement.

- (1) *María come carne a veces.*
 Maria 3rdSG.eat meat sometimes
 “Maria eats meat sometimes”
- (2) *A Mike le gustan los burritos.*
 To Mike DAT.cli 3rdPL.like the burritos
 “Mike likes burritos”

The unique properties associated with (reverse) psychological predicates have been widely studied in the general field of language acquisition. The next section includes a concise review of some of these studies.

3. The Acquisition of Reverse Psychological Predicates

Most of the studies that have examined psychological predicates in recent years have focused on monolingual subjects with pathological impediments such as aphasia or Alzheimer’s disease (e.g. Manovilidou 2008; Thompson & Lee 2009; Beretta & Campbell 2001). In general, these studies have reported these verbs to be highly problematic both in production and in comprehension tasks. Similar conclusions have been reported when testing children without any linguistic or cognitive impediments. Lord (1979) & Figueira (1984), for example, reported that monolingual children of English and Portuguese respectively produce a high rate of errors in terms of mapping the theta roles to the correct syntactic structures. This does not seem to be different for Spanish monolingual children. Torrens et al. (2006) found that it is not until the age of 6 that Spanish monolingual children start using verbs of this kind with adult-like accuracy.

Not surprisingly, the same sort of problems appears among L2ers (e.g. White et al. 1999). In fact, we would predict that they make more mistakes since we assume that this population is not exposed to the same quantity nor quality of input making it more difficult for them to acquire the appropriate strategies required in order to map the arguments into the syntactic positions accurately. Similar results have been found among different speaker groups with different language pairings. Montrul (1997, 1998, 2000), for example, stated that L2ers have a strong preference towards direct mapping suggesting that the thematic hierarchy overrides the aspectual hierarchy. These problems persist even after pedagogical interventions take place (López Jiménez 2003; Rubio 2005).

There is plenty of evidence to suggest that even if HSs make use of an apparently target-like linguistic system, this is not always the case (Montrul 2008). In fact, HSs’ initial linguistic advantages over L2ers seem to diminish when both groups are compared at the high end of the proficiency spectrum (Au et al., 2002; Montrul 2005, 2010). As for their use of the specific properties associated with the reverse psychological predicates, HSs are not that different from L2ers, and they too produce and accept divergent uses. For example, Dvorak & Kirschner (1982) found that Spanish

² Thematic hierarchy: (Agent[Experiencer][Goal/Source/Location [Theme]])

³ Aspectual hierarchy: (Cause [other[...]])

Puerto Rican HSs in New York City revealed a strong preference towards direct mapping in the sense that it is the preverbal experiencer the one controlling verbal agreement and not the prescribed postverbal theme. In the same study, they also observed an inclination towards the use of the singular dative marker *le* regardless of whether the experiencer was singular or plural. This gave rise to the proposal of the term ‘invariable *le*’. Similar results were obtained by Toribio & Nye (2006) providing supporting empirical data in favor of the so-called ‘invariable *le*’.

4. The Present Study

In the previous section we offered a succinct description of antecedent literature that has focused on reverse psychological predicates among different types of speakers. HS populations in particular have been found to move away from monolingual-like structures. These studies indicate changes in the argument structure of reverse psychological predicates. Although these studies make reference to changes in agreement, it remains unclear whether a direct mapping occurs. Thus, the present study is ultimately guided by questions concerning the consequences of language contact on verbal and clitic agreement and the effects of proficiency among Spanish HSs in the US. Our general prediction is that HS bilinguals will demonstrate difficulties in replicating the monolingual-like structures.

As we mentioned above, different HS populations have been found to move towards a direct mapping of reverse psychological predicates. This implies that clitic agreement is controlled by the theme and verbal agreement by the experiencer as in (3). In our study we examine HS acceptance of third person clitic and third person verb agreement violations. Given the antecedent literature, we expect to find simplification in both. Specifically, we consider three possibilities regarding clitic and verb agreement. The first option, a thematic hierarchy guides agreement, which implies, in the case of the clitic, agreement controlled by a less prominent argument (i.e., the theme); in the case of the verb, agreement with a more prominent argument (i.e., the experiencer). As can be seen in (3), the clitic agrees with the theme instead of the experiencer and the verb agrees with the experiencer instead of the theme. The second option would consist of an invariable form for singular and plural third person. In the specific case of the clitic, invariable *le* has been attested, where both plural and singular experiencers are doubled by singular *le*, independently of theme number, as in (4). In the case of verbal agreement, an invariable singular *gusta* in contexts with singular or plural themes or experiencers would be the equivalent (5). Although invariable *gusta* has not been explicitly discussed in the literature, the results from Dvorak & Kirschner (1982) indicate frequent acceptance of a mismatch in verbal agreement with a plural theme (i.e. *gusta* for *gustan*), as compared to infrequent acceptance of a mismatch in verbal agreement with a singular theme (i.e., *gustan* for *gusta*). Lastly, a thematic hierarchy-driven mapping (direct mapping), where verbal agreement is controlled by the experiencer and clitic agreement by the theme, would obtain (3).

(3) THEMATIC HIERARCHY DERIVED AGREEMENT

- | | |
|---|---------------------------|
| a. A mis primos <u>le</u> gusta el chocolate | SINGULAR CLITIC AGREEMENT |
| b. A mi primo <u>les</u> gusta los bombones | PLURAL CLITIC AGREEMENT |
| c. A mis primos <u>les gusta</u> el chocolate | SINGULAR VERB AGREEMENT |
| d. A mi primo <u>le gusta</u> los bombones | PLURAL VERB AGREEMENT |

(4) MORPHOLOGICALLY INVARIABLE FORM

- | | |
|---|---------------------------|
| a. A mis primos <u>le</u> gusta el chocolate | SINGULAR CLITIC AGREEMENT |
| b. A mi primo <u>le</u> gustan los bombones | PLURAL CLITIC AGREEMENT |
| c. A mis primos <u>les gusta</u> el chocolate | SINGULAR VERB AGREEMENT |
| d. A mi primo <u>le gusta</u> los bombones | PLURAL VERB AGREEMENT |

(5) THEMATIC HIERARCHY DERIVED MAPPING

- | | |
|---|-----------------------------------|
| a. A mis primos <u>le</u> gustan el chocolate | PLURAL EXPERIENCER SINGULAR THEME |
| b. A mi primo <u>les</u> gusta los bombones | SINGULAR EXPERIENCER PLURAL THEME |

Regarding proficiency, HSs are exposed to bilingual Spanish as well as English. Therefore, monolingual-like proficiency may not be achieved since the input they receive differs from the input

monolinguals receive. This project, thus, examines HS linguistic judgments, compared to those of a Spanish control group, on verbal and clitic agreement in reverse psychological predicate constructions.

5. Methodology

5.1. Participants

A total of 61 HSs voluntarily participated in this study. According to their responses to a language background questionnaire, all of them were either born in the US or migrated before the age of 2, electing English as their dominant language. All participants were undergraduate students attending intermediate and advanced classes of Spanish for HSs at the University of Florida. The main goal of these classes, which met for 3 days a week for 50 minutes per session, is to increase register awareness and to develop the students' reading and writing skills. The specific properties discussed here were not part of the syllabi for these classes. In addition to the experimental group, results from a control group of Spanish native (SN) speakers (n=10) were used for comparative purposes. As a prerequisite for participation, since the contexts of the task were not in Spanish, all the members of this group had to know English. All of them had resided in an English-speaking country for at least 1 year but at the time of data collection all of them were residing in their respective countries of origin (7=Spain, 3=Mexico). All participants were assigned to one of three groups according to their results from a commonly used proficiency test (revised version of the DELE) as table 1 illustrates:

Group	Advanced	Intermediate	Low	Total
HSs	25	23	13	61
SNs	10	N/A	N/A	10

Table 1. Distribution of participants.

In addition to the proficiency test and the language background questionnaire mentioned before, our informants were asked to complete a grammaticality judgment task which we describe in the following section.

5.2. Materials

The linguistic experiment per se consisted of a grammaticality judgment task containing a total of 72 items, 24 of which tested verbal and clitic agreement with two reverse psychological predicates⁴: *gustar* (to like) and *encantar* (to love). These items were randomized and counterbalanced with 48 distracters that tested different structures (subject position & innovative use of *estar*) as part of a larger ongoing project. The specific conditions under analysis were 3rd person singular experiencer-3rd person plural theme (6) & 3rd person plural experiencer-3rd person singular Theme (7).

(6) *A ella le gustan los zapatos*

'She likes the shoes'

(7) *A ellos les gusta la paella*

'They like paella'

For each token, our participants were presented with a short paragraph which was followed by a question. Both the paragraph and the question were written in English. The question was always followed by four similar answers differing in regards to its (un)grammaticality. Example (8) below illustrates a representative example:

⁴ No significant differences were found between these two verbs. From now on, when we refer to *gustar* we combine both *gustar* and *encantar*.

(8) Your sister Sarah and you are planning a surprise party for your parents. Sarah decides to order pizza but she does not know where to get it from, so she asks you, “What kind of pizza do they like?” You respond:

- a) A mis padres les encantan la pizza de Papa John’s →*verb agreement
- b) A mis padres le encantan la pizza de Papa John’s →*clitic & verb agreement
- c) A mis padres le encanta la pizza de Papa John’s →*clitic agreement
- d) A mis padres les encanta la pizza de Papa John’s →✓grammatical

6. Results

The coded data was submitted to statistical analysis using SPSS. Comparisons between *gustar* and *encantar* through paired-sample t-tests yielded mostly non-significant results⁵, therefore, we discuss our results combining both verbs. The following figure illustrates the results obtained across the various groups. The four columns on the left represent the first condition (3rd sg experiencer-3rd pl theme) and the four columns on the right represent the second condition (3rd pl experiencer-3rd sg theme). The target responses for each condition are written in capital case underneath each of the four sentences provided and are separated from each other by a continuous line. The first column in each condition corresponds to the grammatical option. Each subsequent column corresponds to the ungrammatical options in the following order: *verb-agreement, *clitic-agreement, *verb+clitic agreement.

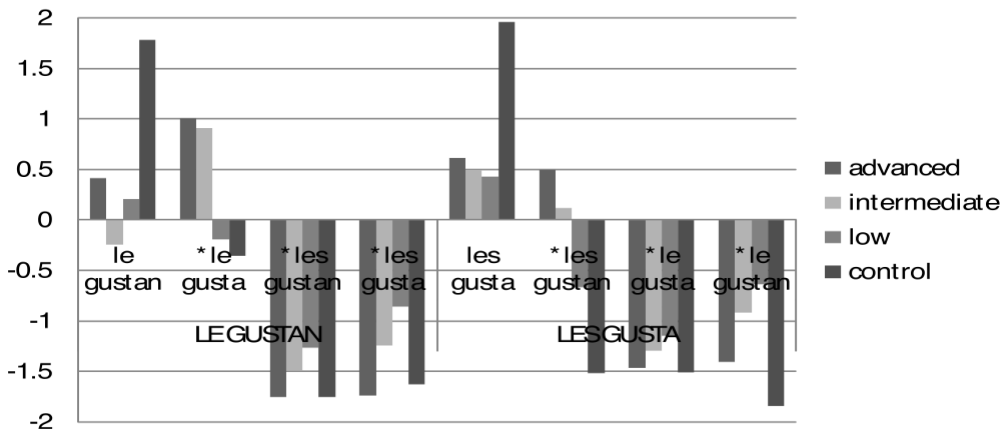


Figure 1. Results across all groups.

A 4 (Grammaticality: grammatical agreement, ungrammatical verbal agreement, ungrammatical clitic agreement, and ungrammatical verbal + clitic agreement) x 4 (Group: Advanced, Intermediate, Low HSs, and native control) repeated measures ANOVA indicated a main effect for agreement, $F(3)=92839$, $p=.000$, no main effect for group, $F(2)=.095$, $p=.962$, and an agreement by group interaction, $F(9)=5411$, $p=.000$ in the condition with singular experiencer and plural theme. With plural experiencer and singular theme, a 4 (Grammaticality: grammatical agreement, ungrammatical verbal agreement, ungrammatical clitic agreement, and ungrammatical verbal + clitic agreement) x 4 (Group: Advanced, Intermediate, Low HSs, and native control) repeated measures ANOVA was run. The results indicate a main effect for agreement, $F(3)=65192$, $p=.000$, no main effect for group, $F(3)=.790$, $p=.504$, and an agreement by group interaction, $F(9)=3084$, $p=.002$. These results indicate that speakers were sensitive to grammaticality. However, the interaction may indicate that they are sensitive in different ways. In order to test this further, we run a series of one way ANOVAS per condition. With singular experiencer and plural theme, differences were found across speakers in the

⁵ For the advanced HSs, *gustar* is significantly different from *encantar* with *verb+clitic agreement with a plural experiencer-singular theme, $t(24)=2595$, $p=.020$. For the low proficiency HSs, *gustar* is significantly different from *encantar* with *verb agreement with plural experiencer-singular theme, $t(12)=2546$, $p=.026$. For the control group, *gustar* is significantly different from *encantar* with grammatical sentences with singular experiencer-plural theme, $t(9)=-3791$, $p=.004$.

grammatical condition, $F(3)=5936, p=.001$, and the ungrammatical condition due to verbal agreement, $F(3)=3942, p=.012$. A post-hoc Sheffe analysis reveals that the intermediate is different from the control group in the grammatical condition and from the low in the ungrammatical condition due to verbal agreement. In the plural experiencer with singular theme condition, differences were found across speakers in the grammatical condition, $F(3)=2794, p=.047$, and the ungrammatical condition due to verbal agreement, $F(3)=3266, p=.027$. Post-hoc Sheffe tests indicate that the intermediate group differs from the control in both conditions. Crucially, all groups provide similar grammaticality judgments on the two conditions where there is a clitic agreement violation. In the following discussion we present the results from paired-samples t-tests run to reveal each of the groups' judgments.

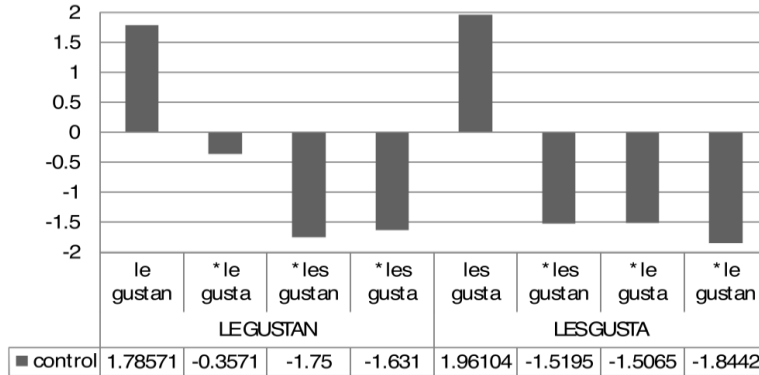


Figure 2. Results from Spanish control group.

The responses from the control group are as expected. Visibly, NSs accept the grammatical options at ceiling level and reject all the ungrammatical ones. They accept \checkmark *gusta* significantly more than *verb-agreement sentences, $t(9)=4706, p=.001$, *clitic-agreement, $t(9)=43382, p=.000$, and *verb+clitic agreement, $t(9)=27769, p=.000$, in the singular theme-plural experiencer condition. Likewise, they accept \checkmark *gusta* significantly more than *verb-agreement sentences, $t(9)=10985, p=.000$, *clitic-agreement sentences, $t(9)=24100, p=.000$, and *verb+clitic agreement, $t(9)=38150, p=.000$ in the plural experiencer-singular theme condition. Interestingly, although they seem to reject the sentences that are ungrammatical because of *clitic-agreement almost categorically, that is not the case with *verb-agreement sentences. A paired-sample t-test comparing singular theme *verb-agreement vs. plural theme *verb agreement reveals a significant difference, $t(9)=3695, p=.005$. SNs highly reject *verb-agreement sentences when the option is **gustan* instead of \checkmark *gusta*. Conversely, this is not the case with *verb-agreement sentences when the option is **gusta* instead of \checkmark *gustan*. These results illustrate that their judgments are very strong in all cases except with *verb-agreement **gusta* in which case they show a higher degree of indeterminacy. This indeterminacy is even clearer among the low proficiency group as illustrated in figure 3 below.

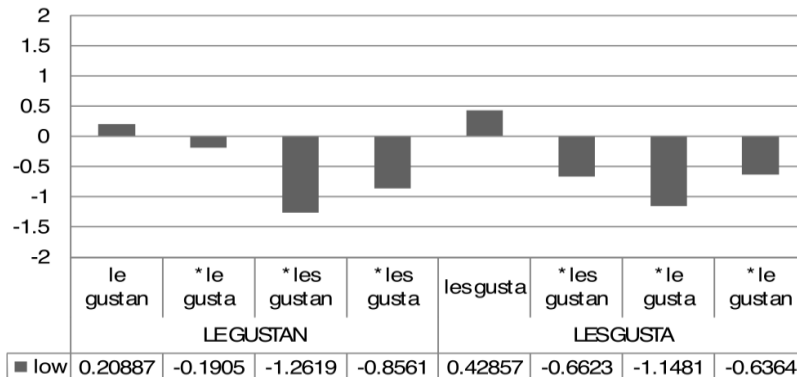


Figure 3. Results from low proficiency group.

At first sight, it is apparent that the mean scores of this group are not as defined as the ones from figure 2 (above) for any of the categories studied. However, the trends are similar: grammatical sentences are judged as grammatical and ungrammatical sentences are ungrammatical: they judged grammatical sentences higher than *verb-agreement sentences, $t(12)=2347$, $p=.035$, *clitic agreement sentences, $t(12)=5067$, $p=.000$, and *verb+clitic agreement, $t(12)=3714$, $p=.003$ in the singular experiencer-plural theme condition. Similarly, they judged grammatical sentences higher than *verb-agreement sentences, $t(12)=3400$, $p=.005$, *clitic-agreement sentences, $t(12)=4976$, $p=.000$, and *verb+clitic agreement, $t(12)=3287$, $p=.006$ in the plural experiencer-singular theme condition. Among the ungrammatical sentences, visually the least rejected option is again *verb-agreement when the option is **gusta* instead of ✓*gustan*. However, the difference between *verb-agreement with plural theme and *verb agreement with singular theme does not reach significance, $t(12)=1222$, $p=.245$. In summary, these speakers behave targetlike: the grammatical sentences are accepted significantly more than the ungrammatical sentences and there is no evidence of invariable *gusta* or invariable *le* (as opposed to Dvorak & Kirschner 1982; Toribio & Nye 2006).

The responses provided by the Intermediate HSs are illustrated in figure 4 below. The trend of rejection of ungrammatical sentences (*clitic-agreement) observed among Low HSs (figure 3) is not present among Intermediate HSs.

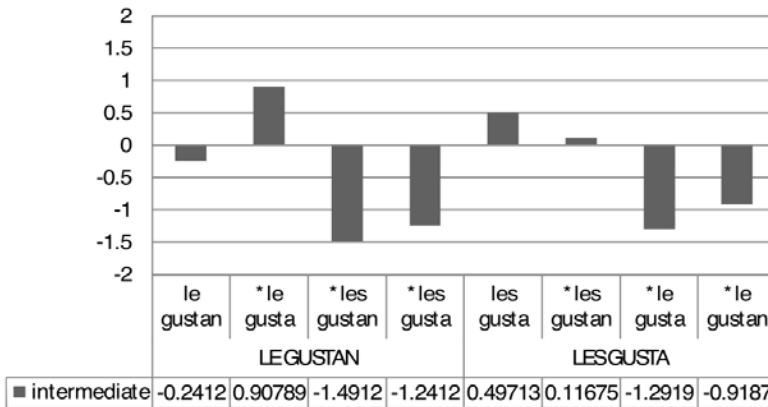


Figure 4. Results from intermediate proficiency group.

A visual analysis of the data indicates that Intermediate HSs exhibit a preference towards the use of **gusta* regardless of whether the theme and experiencer are singular or plural, that is, they prefer ✓*gusta* instead of **gustan* and reject ✓*gustan* in favor of **gusta*. This is further supported by statistical analysis. Intermediate HSs rate *verb-agreement sentences higher than the grammatical sentences, $t(22)=-2897$, $p=.008$, grammatical sentences significantly higher than *clitic-agreement sentences, $t(22)=6755$, and *clitic+verb-agreement sentences, $t(22)=3308$, $p=.003$ with singular experiencer-plural theme. Furthermore, they rate the grammatical sentence and the *verb-agreement sentences similarly, $t(22)=.946$, $p=.354$, grammatical sentences higher than *clitic-agreement sentences, $t(22)=6755$, $p=.000$, and *verb+clitic agreement sentences, $t(22)=3443$, $p=.002$ in the plural experiencer-singular theme condition. The grammatical sentence is rated significantly higher in the plural experiencer-singular theme condition than in the singular experiencer-plural theme condition, $t(22)=-3987$, $p=.001$. At the same time, *verb-agreement sentences in singular experiencer-plural theme sentences are rated higher than in plural experiencer-singular theme, $t(22)=3290$, $p=.003$. Regarding clitic agreement, Intermediate HSs reject it in all cases. The rejection of *clitic-agreement sentences does not offer evidence in favor of invariable *le* (contra Dvorak & Kirschner 1982; Toribio & Nye 2006). However, these data are evidence in favor of invariable *gusta*.

Unlike Intermediate HSs, Advanced HSs accept grammatical sentences with both singular and plural experiencers. In fact, paired-samples t-tests indicate no significant differences between grammatical sentences and *verb-agreement with singular experiencer-plural theme, $t(24)=-.145$, $p=.886$, or plural experiencer-singular theme, $t(24)=1420$, $p=.169$. Evidence for invariable *gusta* is proven once again by the significantly higher rating of *verb-agreement sentences in the singular experiencer-plural theme condition than in the plural experiencer-singular theme, $t(24)=2945$, $p=.007$.

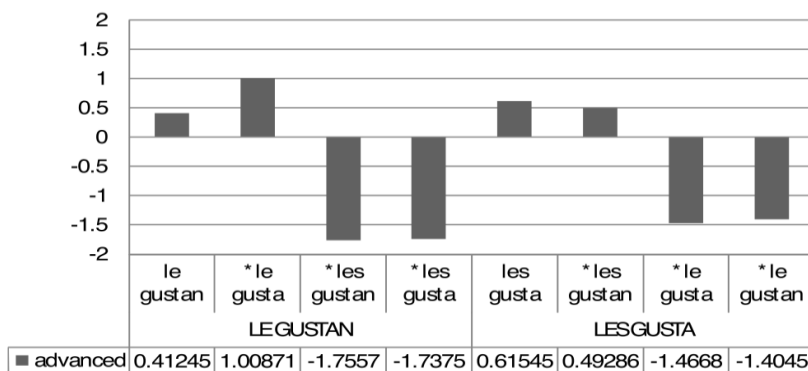


Figure 5. Results from advanced proficiency group.

Regarding clitic agreement, Advanced HSs accept grammatical sentences significantly more than *clitic-agreement sentences, $t(24)=8254$, $p=.000$, *clitic+verb agreement, $t(23)=8302$, $p=.000$, with singular experiencers, and *clitic-agreement sentences, $t(24)=9002$, $p=.000$ and *clitic+verb agreement, $t(24)=6970$, $p=.000$, with plural experiencers. They show even a higher rejection rate for what would be considered invariable *le* (Dvorak & Kirschner 1982; Toribio & Nye 2006). As a matter of fact, they reject all sentences with *clitic-agreement and *verb+clitic-agreement with similar negative values regardless of whether the clitic is in singular or plural, $t(24)=-1835$, $p=.079$, $t(24)=-1586$, $p=.126$, respectively.

To sum up the results obtained, all groups were sensitive to clitic grammaticality violations. Both conditions where clitic agreement is violated are sanctioned by all speakers and judged significantly lower than the grammatical sentence. Verb agreement violations are only sanctioned by the control and the low proficiency group. Crucially, the control group sanctions clitic agreement violations more sharply than verb agreement violations with a plural theme. This is essential to our argument. This is the only condition where the native control group exhibits less categorical judgments. As we argue in de Prada Pérez & Pascual y Cabo (forthcoming), variable phenomena in native speakers are the locus of inter-language influence. These data support our claim. Advanced and intermediate HSs exhibit invariable *gusta*, i.e. they rate *gusta* higher than *gustan* across conditions. We discuss the implications of these results in the following section.

7. Discussion

The research questions posed in this project were guided by the evidence found in previous literature of emergent regular mapping of reverse psychological predicates in HS Spanish. In particular, we were interested in examining clitic and verb agreement hence the testing of speakers' acceptance of grammatical sentences and ungrammatical sentences due to verbal, clitic, and verbal+clitic agreement violations. Several options are discussed, based on previous claims on HS Spanish: a change towards direct mapping and the emergence of invariable *le*. For speakers to exhibit direct mapping they would have to accept sentences where the clitic agrees with the theme and the experiencer with the verb. This is not the case in our data, all speakers reject sentences with *clitic+verb agreement violations. In addition, all speakers consistently reject clitic agreement violations, thus, these data provide no evidence for invariable *le*. Nonetheless, there was, in fact, evidence of simplification in verb agreement. HSs exhibit a trend towards invariable *gusta*. Note, however, that the experiencer does not control the agreement as sentences with a plural experiencer and plural verb form were largely rejected. What is then the nature of this simplification? Is it phonological, morphological or syntactic? With the present data we can only offer hypotheses that require further testing. There is evidence of rare -n deletion in Caribbean Spanish (Lipski 1986). Because the speakers were from different origins and we did not find a correlation between place of origin and the emergence of invariable *gusta*, this option seems unlikely. It is true that Caribbean speakers outnumber speakers of other origins in South Florida, but this is not the case in our data sample which was taken from North-Central Florida. Given that -n deletion is infrequent in Caribbean speakers and the interaction between speakers of Caribbean heritage and speakers of other Hispanic heritage is not guaranteed, we lean towards a non-

phonological interpretation. Further testing with oral samples and different contexts of -n deletion (e.g. with nouns) is, nonetheless, necessary. Morphological simplification in the verb paradigm has been reported for HSs (Bullock & Toribio 2006). Thus, it is possible that these speakers are not evidencing a change in the argument structure of *gustar*, just a simplification of the verbal paradigm. In order to test this claim, we need to examine their acceptance of singular verb forms with plural subjects with verbs with different argument structure (i.e., transitives, unaccusatives and unergatives) and different verbal forms of *gustar* (*gusto*, 'I like'; *gustas*, 'you like' etc). One last possibility that we would like to discuss is the emergence of an expletive subject with these constructions. It is possible that the syntactic simplification does not change the argument structure to direct mapping (i.e. the verbal agreement is not controlled by the experiencer). Note that unaccusative predicates allow for expletive insertion (there-insertion in English). Rizzi & Belletti (1988) analyze reverse-psychological predicates of the *gustar*-type as unaccusative predicates. As such, they have a null subject in Spec, TP. These data may be indicating a change into an expletive *pro* in Spanish. In order to test this claim, we would need to find evidence of variability in judgments of unaccusative predicates with plural subjects and singular verbs. If this variability is only found with unaccusative and reverse psychological predicates but not with transitive verbs, this would be evidence of a syntactic change. Otherwise, a morphological change where *gusta* is both singular and plural seems more explanatory. For now we leave the specific analysis of invariable *gusta* for future research.

In this paper we argue that the variability found in the native control data is the locus of inter-language influence. While the nature of invariable *gusta* is left unanswered, whatever the nature is, this variability is generalized in the bilingual data. Thus, we propose contact with English targets the structures that are variable in the native controls. Although in general there are no group effects, the intermediate proficiency speakers seem to be the furthest from the control and the low proficiency speakers are the closest. Even though low proficiency HSs seem closer to the control group, we find that the indeterminacy in their judgments is evidence against this. It seems that their grammars are more indeterminate than the grammars of more advanced HSs and, thus, just appear to be more targetlike. We would like to argue, then, as we do elsewhere (de Prada Pérez & Pascual y Cabo forthcoming) that language contact outcomes in HS speech are due to both the contact-altered input in addition to contact with English.

8. Conclusion

In the previous sections we have provided evidence that supports the idea that HSs move away from monolingual-like structures in different ways. Reverse psychological predicates are inherently complex due to the interplay that takes place between an unusual reverse word order which ultimately has effects in verb-agreement and clitic-agreement issues.

Regarding clitic-agreement, we predicted that since clitics regularly agree with a less prominent argument in the thematic tier (Grimshaw 1990), bilingual participants would simplify *gustar* constructions with the theme controlling clitic agreement. Based on previous results from Dvorak & Kirschner (1982) and Toribio & Nye (2006), we also predicted the production of a non-agreeing invariable *le*. Contrary to both predictions, our results suggest that HSs, regardless of proficiency level, have robust intuitions regarding clitic agreement. These preferences are in fact comparable to those of monolingual speakers, although they become more dissimilar as proficiency decreases.

Regarding verb-agreement, we predicted that since the external argument is the most prominent in the thematic tier (Grimshaw 1990), bilingual participants would simplify *gustar* constructions judging more positively the sentences in which the experiencer and not the theme controls verbal agreement. Another simplification would consist of producing a non-agreeing invariable *gusta*. Our results provide support for our second claim rejecting the first one. An important question arises at this point, Why invariable *gusta* and no invariable *le* or clitic omission? We interpret these results in terms of the type of input that HSs receive on a regular basis. If the native grammar exhibits less categorical rejection of *gusta* where the theme is plural than the use of *gustan* where the theme is singular, the HSs are simply less responsive to variable input.

In conclusion, while we have provided strong supporting evidence in favor of invariable *gusta* among Spanish HSs, there are still important questions that remain unanswered. First and foremost, one must wonder whether this change in progress responds to a phonological, morphological or syntactic change. At this point in time, and with the limited data at our disposal, it is impossible for us

to make any definite conclusions. In order to find a valid answer to this question, additional research testing verbal agreement (with 1st and 2nd person, singular and plural), as well as changes in argument structure (with unaccusative and transitive predicates) is necessary. Also, in this paper we have based our claims on HSs' grammaticality judgments. A necessary step in the right direction would mean to find out whether there is evidence of invariable *gusta* in HSs production.

References

- Au, Terry Kit-fong, Knightly, Leah M., Jun, Sun-Ah, & Oh, Janet S. 2002. Overhearing a Language During Childhood. *Psychological Science*, 13, 238-243.
- Belletti, Adriana & Rizzi, Luigi. 1988. Psych-Verbs and θ -Theory. *Natural Language and Linguistic Theory*, Vol. 6, No. 3, pp. 291-352.
- Beretta, Alan, & Campbell, Carrie. 2001. Psychological verbs and the double-dependency hypothesis. *Brain and Cognition* 46, (1/2), 42-46.
- Bouchard, Dennis. 1995. *The Semantics of Syntax*. University of Chicago Press: Chicago
- Brekke, Magnar. 1976. *Studies in the Grammar of Psychological Predicates*. Doctoral dissertation, University of Michigan.
- Bullock, Barbara & Toribio, Almeida Jacqueline. 2006. Intra-System Variability and Change in Nominal and Verbal Morphology. In *Historical Romance Linguistics: Retrospective and Perspectives*, ed. by Gess, Randall S. & Artega, Deborah, Amsterdam, NE: John Benjamins, pp 305-325.
- Dvorak, Trisha & Kirschner, Carl. 1982. Mary Likes Fishes: Reverse Psychological Phenomena in New York Puerto Rican Spanish. *The Bilingual Review/La revista bilingue*, 9, 1, Jan-Apr, 59-65
- Figueira, Rosa. 1984. On the development of the expression of causativity: A Syntactic hypothesis. *Journal of Child Language* 11: 109-127.
- Grimshaw, Jane. 1994. *Argument Structure*. MIT Press: Cambridge, MA (Martí & Fernández 1997).
- Lipski, John. 1986. Reduction of Spanish Word-final /s/ and /n/. *The Canadian Journal of Linguistics*, 31(2), pp.139-156.
- López Jiménez, María Dolores. 2003. Grammar instruction and the acquisition of *gustar*-type verbs by English-speaking learners of Spanish. *ELIA* 4, 2003, pp. 255-279 .
- Lord, Carol. (1979). "Don't you fall me down": Children's generalizations regarding cause and transitivity. *PRCLD*, 17, 81-89.
- Manouilidou, Christina. 2008. Thematic Roles in Alzheimer's disease: Hierarchy violations in psychological predicates. *Journal of Neurolinguistics*. 22, 2. pp.167-186. Predicates. *New Perspectives on Romance Linguistics*. John Benjamins: Amsterdam. pp. 263-277.
- Montrul, Silvina. 1997. Spanish Psych Verbs and the Unaccusative *se* Construction: The Case of Dative Experiencers in SLA. *Contemporary Perspectives on the Acquisition of Spanish*. Ed. Perez-Leroux & Glass. Vol. 1. Cascadilla Press: Somerville, MA.
- , 1998. The L2 Acquisition of Dative Experiencer Subjects. *Second Language Research* 14; 27-61.
- , 2000. Causative psych verbs in Spanish L2 acquisition. In R. Leow and C. Sanz (Eds.). *Spanish Applied Linguistics at the Turn of the Millennium: Papers from the 1999 Conference on the L1 & L2 Acquisition of Spanish and Portuguese*, (pp. 97-118). Somerville, MA: Cascadilla Press.
- , 2004. Convergent outcomes in second language acquisition and first language loss. In M. Schmid, B. Köpke, M. Keijzer and L. Weilemar (Eds.), *First Language Attrition: Interdisciplinary Perspectives on Methodological Issues*, (pp. 259-280). Amsterdam: John Benjamins.
- , 2005. Second language acquisition and first language loss in adult early bilinguals: Exploring some differences and similarities. *Second Language Research* 21, 199-249.
- , 2008. Incomplete acquisition in bilingualism: Re-examining the age factor. Amsterdam: John Benjamins.
- , 2010. How similar are L2 learners and heritage speakers? Spanish clitics and word order. *Applied Psycholinguistics* 31, 167-207.
- Parodi-Lewin, Claudia. 1991. *Aspects in the syntax of Spanish psych-verbs*. Doctoral dissertation. University of California, Los Angeles.
- Perlmutter, David. 1987. Binding problems with experiencer verbs. *Linguistic Inquiry*, 18:126-140.
- Pesetsky, David. 1995. *Zero Syntax: Experiencers and cascades*. MIT Press: Cambridge
- Postal, Paul. 1971. *Cross-over phenomena*. Holt, Rinehart & Winston, New York.
- Prada Pérez, Ana de & Pascual y Cabo, Diego. Forthcoming. Interface Heritage Speech across Proficiencies: Unaccusativity, Focus, and Subject Position in Spanish. In (Eds.) Geesling, K. & Díaz-Campos, M. Selected proceedings of Hispanic Linguistics Symposium held at Bloomington, IN. Cascadilla Press: Somerville, MA.
- Rothman, Jason. 2009 Understanding the Nature and Outcomes of Early Bilingualism: Romance Languages as Heritage Languages. *International Journal of Bilingualism*, 13,2, 145-155
- , 2007. Heritage Speaker Competence Differences, Language Change and Input Type: Inflected

- Infinitives in Heritage Brazilian Portuguese. *International Journal of Bilingualism*, 11, 4; pp. 359-389
- Rubio, Fernando. 2001. Psychological verbs in Spanish: Two teaching approaches," *Academic Exchange Quarterly*. 136-141.
- Sanchez, Liliانا. 2004. Functional Convergence in the Tense, Evidentiality and Aspectual Systems of Quechua-Spanish Bilinguals." *Bilingualism: Language and Cognition*. 7, 2. 147-162.
- Sorace, Antonella. 2003. "Near-Nativeness". In *The handbook of Second Language Acquisition*, C. Doughty, M. and Long (eds.), 130–153. Oxford: Blackwell Publishers.
- Thompson, Cynthia & Miseon, Lee. 2009. Psych Verb Production and Comprehension in Agrammatic Broca's Aphasia. *Journal of Neurolinguistics* 22 ; pp. 354–369.
- Toribio, Almeida Jacqueline. 2004. Convergence as an optimization strategy of bilingual speech: Evidence from code-switching. *Bilingualism: Language and Cognition* 7, 165-173.
- Toribio, Almeida Jacqueline & Nye, Carlos. 2006. Restructuring of reverse psychological predicate in bilingual Spanish. In J. Montreuil & C. Nishida (Eds.), *New Perspectives in Romance Linguistics*. 263-277. Amsterdam: Benjamins.
- Torrens, Vincent, Linda Escobar & Kenneth Wexler. 2006. The Acquisition of Experiencers in Spanish L1 and the External Argument Requirement Hypothesis. *The Acquisition of Syntax in Romance Languages*, 41, pp. 183-202. John Benjamins: Amsterdam.
- White, Lydia, Cynthia Brown, Joyce Bruhn-Garavito, Dongdong Chen, Makiko Hirakawa, and Silvina Montrul. 1999. Psych verbs in second language acquisition. In *The Development of Second Language Grammars. A Generative approach*, E. Klein and G. Martohardjono (eds.) 173-199, Amsterdam: John Benjamins.
- Whitley, Stanley. 1995. Gustar and Other Psych Verbs: A Problem in Transitivity. *Hispania*. Vol. 78, No 3. pp. 573-585.

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