

# A QUALITATIVE PILOT STUDY: ON THE EFFECTS OF PROFICIENCY AND INPUT IN THE ACQUISITION OF GRAMMATICAL GENDER IN SPANISH

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This qualitative pilot study explores the effect of proficiency and teaching input to which English-speaking second language learners (L2ers) are exposed in their acquisition of grammatical gender in Spanish. Two English-speaking learners at different proficiency L2 learner, both in undergraduate Spanish courses in a Liberal Arts College in New York Upstate. In the intermediate Spanish course, the instructor uses an explicit teaching approach in terms of grammatical gender, whereas in the advanced Spanish course implicit teaching of grammar takes place. Qualitative research was conducted by administering a written test to the two L2 learners and a heritage speaker of Spanish. The results show that intermediate L2 learners produce more gender errors than advanced L2 learners, suggesting that the proficiency level and the underlying vocabulary and grammar knowledge affect gender accuracy. The linguistic findings provide scholars and instructors with an understanding of the nature of second language acquisition versus heritage acquisition. Furthermore, the results can serve to develop efficient pedagogical strategies for L2 learners and heritage speakers to address their specific needs.

Keywords: Gender acquisition, Second language acquisition, Gender marking

# Introduction

The study of the acquisition of gender has attracted a lot of attention in the research literature since it is a grammatical feature that poses a difficulty for learners of languages such as English, in which this category is absent. Thus research indicates that these L2 learners acquire gender late in the learning process. Scholars, among them, Finnemann, 1992; Hawkins, 1998; Fernández-García, 1999; Bruhn de Garavito & White, 2000; Alarcón, 2004; and Montrul, 2006, conducted several studies in second language acquisition (SLA). For the most part, researchers have focused heavily on linguistic variables and their effect on gender agreement accuracy. There are only a few studies exploring the effect of proficiency and the quantity and quality of input in second language learning (SLL) (cf. Dewaele & Véronique 2001, Alarcón 2004; Hulk and Cornips 2006; Unsworth 2008). In this sense, the research focusing on the effects of proficiency and input in gender acquisition process is in its nascent stages. The present study attempts to make a significant contribution in this field. The study differs from previous research by investigating the accuracy of gender assignment and agreement of nouns and their modifiers in second language learners.

Data from 73 English-speaking second language learners at different proficiency levels and bilingual heritage speakers were analyzed for the number of errors and error patterns of gender assignment and agreement (Diebowski 2013 in prep.). In the scope of the qualitative study, the researcher presents and discusses gender competency of the average intermediate

#### 314 Jessica Diebowski

and advanced proficiency L2 learner and heritage speaker of Spanish. Furthermore, the paper provides qualitative data descriptions of the research findings and subsequently proposes practical applications for the L2 classroom based on its findings.

### Literature Review

The existing research on the L2 acquisition of Spanish grammatical gender by adults is ample. Numerous studies have focused on error in noun gender assignment and agreement among L2 learners. Recent studies also have investigated the differences in the acquisition process between adult L2 learners and heritage speakers. In general, most of these studies followed either a traditional error analysis or focus on accuracy rates (Alarcón 2006: 26) and thus provide research findings for the effect of morphology, noun class, gender congruency, etc. This section presents previous studies that address adult L2 learners. With regard to the noun's morphology, Finnemann (1992) studied the speech of three first year college students over a period of six months. In an interview, students were asked to establish gender agreement in the noun phrase with overt and non-overt noun morphology. He found that students display lower error rates with the inflectional morphemes (-o and -a) than with the ones that are not overtly marked for gender. The researcher attributed his findings to the effect of morphology on gender agreement accuracy, suggesting that overt noun endings help students to produce the correct gender.

In a similar study, Fernández-García (1999) investigated the effect of morphology on gender agreement accuracy. Her results were comparable to the ones from Finnemann (1992). The participants produced higher accuracy rates with nouns that have overt gender markings than those that are not overtly marked. Furthermore, she reported that the participants of the study tend to change the non-overt noun ending into an overt ending, for instance, in \**la clarineta* vs. *el clarinet* (—the clarinet $\Box$ ). Previous empirical findings by Cain et al. (1987) report similar findings regarding the fact that the subjects alter the morphology of a non-overt noun ending into an overt one.

Franceschina (2001) studied the speech of two Italian (aged 71 and 73) and two English speaking learners (aged 50 and 55), who were first exposed to Spanish post-puberty. Her results showed similarities to Finnemann's (1992) and Fernández-García's (1999) study findings where there was more accuracy with overt than non-overt gender nouns.

To date, however, there are only a few studies exploring the effect of proficiency and input on the linguistic gender behavior of L2 learners and heritage speakers. Concerning the effect of proficiency, Alarcón (2006) studied one hundred thirty nine English speakers of three different proficiency levels. She tested gender assignment and agreement in a written grammar test. The subjects were asked to provide the correct definite article and adjective based on the given noun. The results indicated that the proficiency level has a significant effect on the gender accuracy. Advanced learners achieve a high degree of accuracy of gender agreement. A study by Gess and Herschensohn (2001) examining the gender acquisition of Spanish by French speakers supports this finding. They reported that advanced proficiency learners of French achieved a high degree of accuracy on gender agreement, while learners at lower proficiency level are more inaccurate (cf. White 2003: 137). There have been very few studies that have investigated the differences in the number of errors and error patterns between intermediate and advanced L2 learners compared to heritage speakers. Martínez-Gibson (2011) conducted a comparative study on gender agreement errors in spoken Spanish of heritage and L2 learners. She interviewed a total of forty-four participants. They were asked to describe a picture that was presented to them. The results of the study revealed the L2 learners are more inaccurate in gender assignment and agreement than the heritage speakers. Furthermore, she noted a higher rate of inaccuracy in gender agreement between noun-adjectives than with article-nouns. This finding is in accordance with previous studies carried out by Finnemann (1992) and Fernández-García (1999), who attribute this high number of errors in the domain of noun-adjectives to the fact that L2 learners acquire adjective agreement later than article-noun agreement. Earlier findings by Montrul, Foote and Perpiñán (2008) show similar results. Regarding the extralinguistic variable input, Montrul, Foote, and Perpiñán (2008) analyzed data from heritage speakers of Spanish. Their findings reveal that despite exposure to the language in early childhood, heritage speakers make similar kinds of errors to adult L2 learners. According to them, the non-target-like performance results from insufficient input. Similarly, Gathercole and Thomas (2005) examined the effect of input and exposure in a study of the acquisition of the grammatical gender system in Welsh and reported that both input and exposure to Welsh at home and/or at school have an impact on the target-like productions than at school.

Based on this research of literature, a grammar test was administered to the three different types of subjects in order to compare their gender performance and to further analyze the effects of proficiency and input on gender agreement. The following section outlines the specific research questions guiding this qualitative pilot study.

# **Research Questions**

The previously mentioned studies suggest that gender is a problematic grammatical category and a common source of errors for adult L2 learners. Despite the ample research in this field, the investigation of similarities and differences between L2 learners and heritage speakers of Spanish is yet not fully explored. Thus, the present pilot study addresses the following key questions among many others: Which similarities or differences in the gender competency do exist between each type of speaker? Which errors are associated with each type of learner? Are the proficiency level and the quality and quantity of input of vital importance in assigning grammatical gender? The study attempts to answer these questions by focusing on gender agreement in the noun phrase (NP) and examining the gender accuracy assessed by different task types.

### Method

#### **Participants**

The participants in the present study were two English-speaking L2 learners at different proficiency levels (intermediate and advanced) and one heritage speaker, aged between 18 and 21. All participants were selected from the larger study in Diebowski (2013 in prep.). They completed a socio-biographical questionnaire which included questions about their age, proficiency level, type and frequency of contact with the target-language (TL). The selection of subjects was not random. A general problem in selecting and comparing L2 and heritage speakers is the natural heterogeneity between and within the groups. In order to reduce the heterogeneity as much as possible, the subjects were resident in New York at the time of testing. They all attended the same College in Upstate New York, USA and were from middle class families.

The intermediate and advanced L2 learners were all raised as English monolinguals and started to learn Spanish during middle and high school, implying that they had been studying Spanish for 6-8 years. At the time of data collection, the intermediate L2 learner was enrolled in a *Spanish 202* course and the advanced L2 student in a Spanish 302 course at their College.

The Spanish 202 Intermediate course was grammar-based in which the teacher explicitly focused on grammar instruction, whereas the 302 course was content-based using an implicit approach of teaching grammar. The Intermediate L2 learner reported that he had a regular functional use of Spanish which is occasionally used outside of the classroom, while the advanced L2 learner declared that he uses and feels comfortable in speaking Spanish regularly outside the classroom.

The heritage speaker (male and 20 years old) was included in the study to serve as a baseline of comparison. *The participant was born in the Dominican Republic and* moved to the USA between ages 2 and 3. He attended U.S. schools where he was exposed to English. *According to the sociolinguistic questionnaire, the heritage speaker reported that* Spanish was the dominant language at home and English was spoken in a majority language *context. The heritage speaker completed the same test administered to the L2 learners and was tested under the same conditions.* 

#### **Materials and Procedure**

To investigate the participant's knowledge of grammatical gender-marking on definite determiners and adjectives, a grammatical test consisting of five elicitation tasks was administered (cf. Diebowski 2013 in prep.). The participants were tested individually and completed the test at their own pace, which took between 25 and 35 minutes. At the beginning of the session, they were given instructions on the procedure of the test without informing them that their accuracy in terms of gender is tested. The grammar test consisted of 26 multiple-choice questions presented in meaningful contexts, as exemplified below.

- 1. Los aborígenes desean que la gente preserve
- Las idiomas indígenas
- Los idiomas indígenos
- Las idiomas indígenos
- Los indiomas indígenas
- 2. A Sandra le disgusta que tiene por la tarde.
- la clase aburrido
- el clase aburrida
- el clase aburrido
- la clase aburrida

The participants were asked to tick the best option in each sentence. As part of the 26 multiple choice questions, 10 of these included also grammatical judgment, that is the subjects were asked to judge whether each sentence was acceptable. In the case the subject deemed the sentences as unacceptable; s/he had to provide a correction.

Furthermore, the test included scrambled sentence exercise, in which the participants had to construct five meaningful, coherent and grammatically correct sentences from a string of words as well as five verbal classification tasks, also known as the "odd man out" test. In the latter case the participants had to identify the item that does not correspond with the other three words in term of the grammatical gender. The administered test consisted of grammatical structures that were covered in the intermediate and advanced Spanish courses at their College such as definite article, inflected adjectives in predicative use, non-canonical, canonical and deceptive nouns, direct and indirect objects, the verb *gustar*, tenses (present, imperfect, preterit, and subjunctive) and prepositions. Proper nouns and adjectives that are invariant to gender did not form part of the assessment.

#### **Data Analysis**

In order to examine the production for gender assignment and agreement, the data extracted for observation included only those nouns and modifiers such as articles and adjectives with gender markings, that is, those with inflectional morphemes. The data have been analyzed with respect to the following factors:

- number of errors
- error patterns
- proficiency level
- input

Correct responses received one point and incorrect responses a score of zero. Responses containing an elliptical construction in which the article or adjective modifying the noun was missing, for instance,  $\emptyset$  paises  $\emptyset$  (countries), were excluded, since the gender information with regard to the noun's modifying elements is missing. The results for the two tasks are presented for each participant separately in the next section.

# **Results and Discussion**

Following the outlined research questions, we make a distinction between the number of errors and the error patterns made. The first subsection presents the results of the number of errors made, to test if there are differences between the participants due to their proficiency level. The second subsection will have a closer look at the varying error patterns between the learners.

#### **Distribution of Gender Errors**

The results of the study indicate that there are indeed differences in the number of gender errors between each type of speaker. Most of the gender inaccuracies are made by the intermediate L2 learner, followed by the advanced L2 learner and then the heritage speaker. These findings are consistent with previous studies of L2 Spanish language acquisition which found differential distribution rates concerning the gender assignment and agreement errors between the intermediate and advanced L2 learners (cf. Martínez-Gibson, 2011 and Alarcón, 2006, 2011). The results may be explained by several factors such as the frequency of exposure inside and outside the classroom, the level of proficiency as well as teaching input.

Considering the results from amount of exposure to the target language, the results reveal that the advanced L2 learner, who was exposed to the target-language outside the classroom and had the opportunity to acquire more native-like gender behavior, provides higher accuracy rates in gender assignment as well as agreement than the intermediate L2 learner. The exposure of the advanced L2 learner to monolinguals from whom they receive input without explicit instruction is similar to the experience of the heritage speaker. Consequently, it seems to have a positive effect on gender assignment and agreement.

Looking at the results from the perspective of material and input, the teaching paradigms of grammar and vocabulary instruction are of vital importance and affect the L2 learners' gender accuracy. The intermediate L2 learner does not display higher gender accuracy than the advanced learner, who focuses more on communication than grammar skills. These differential accuracy rates between the intermediate and advanced L2 learner can be explained by the different teaching approaches and materials. The intermediate L2 learner receives explicit grammatical explanation of the uses of gender followed by practice

#### 318 Jessica Diebowski

exercises focusing on form and explicit feedback regarding their performance. It might be the case that the focused instruction in the classroom does not help the intermediate L2 learner to acquire an understanding of gender. In comparison to the latter, the advanced L2 learner does not primarily focus on form in their classroom setting. In the advanced Spanish course, the teacher reactivates grammatical phenomena, such as gender which is problematic for L2 learners. Thereby, the teacher does not only rely on specific grammar handouts, but also creates pairs consisting of a heritage language and a L2 learner completing, for example, twoway information gap communicative tasks in written or oral modality. Comparing the teaching approaches between intermediate and advanced L2 learner, the conclusion can be drawn that heavily form-focused instruction is not helpful and beneficial for acquiring gender in Spanish. Researchers such as Dewaele & Véronique (2001: 292) and Alarcón (2006: 92) are in line with this view. Dewaele & Véronique (2001: 292) point out, "the TL [target language] must be used actively in situations of spontaneous communication with native speakers for correct gender agreement to be acquired." In the present study, the teaching approach used for the advanced L2 learners, who have the opportunity to interact with heritage speakers, positively correlates with target-like gender assignment and agreement productions.

# **Distribution of Error Patterns**

Concerning the second research question, the data showed differences in the error patterns among the two types of intermediate and advanced L2 learners. From the data elicited, the paper discusses the error patterns in the grammatical domain of article/noun assignment.

# Article Noun gender Agreement Error

The data for the error of article-noun agreement reveals that the intermediate L2 learner indicates the highest rate in this domain. In contrast, the advanced L2 speaker clearly provides few errors of this pattern, followed by the heritage speaker. Taking a closer look at the distribution of this error type according to the specific noun gender and across all three participants, one can see that for all three subjects most of the errors are of the type masculine article/feminine noun. This error pattern merits closer examination and discussion. Notably, all the three types of speakers provide error patterns of masculine article with a feminine noun (e.g. \*la dilemma, \*la problema, \*la sistema). What is especially interesting in these cases is that those nouns are of Greek origin. Although these nouns end in the inflectional morpheme -a, there are considered to be masculine. Both types of L2 learners seem not to be aware of these exceptions and supply overgeneralization errors, since they learned from early on nouns ending in -a are feminine. Alarcón (2006, 2011) as well as Montrul, Foote & Perpiñán (2008) reported similar results. According to these authors, L2 learners and heritage speakers overuse the default masculine over the feminine form when assigning gender to the noun. As suggested by previous research, the overextension of the masculine form in the L2 and heritage acquisition is a "revealing feature of the learner's basic cognitive acquisition strategy" (Finnemann 1992: 134; see also Montrul et al. 2008). Thus, as Montrul et al. (2008: 534) point out: "[I]t makes sense for learners to rely on the default when they do not know or cannot retrieve fast enough the gender of feminine nouns during oral production" (see also Bruhn de Garavito & White, 2000/2002). With regard to the heritage speaker, worthy of mention is that this error pattern occurs mainly with nouns such as *alma* (soul) and *águila* (eagle), as exemplified below.

| 1. | *Fernando tiene <b>una alma buena</b> . | Fernando has a good soul. |
|----|---|---------------------------|
| 2. | *Juana ve <b>una águila negra</b> .     | Juana sees a black eagle. |

Although the gender of the nouns is feminine, a masculine article has to follow since the singular nouns begin with a stressed /a/. To support a rationale for this type of error, it can be assumed that the heritage speaker is aware of the feminine noun gender, but has not yet acquired the phonological rule. This observation is reaffirmed by some results of previous research suggesting that heritage speakers provide these error patterns due to lacking input (cf. Gathercole 2002, Montrul 2004). In this context, it is interesting to note that the words given in the example (3) and (4) are not frequency words. L2 learners and especially heritage speakers do not use these words in their daily communication.

Overall, the results addressing the error patterns of noun gender assignment and agreement show that all three types of speakers provide these errors but for different reasons. The present pilot study indicated that both L2 learners are not aware of the exceptions regarding Greek calques and thus overgeneralize the common gender assignment rule. In contrast to both L2 learners, the heritage speaker makes these errors due to a possible lack of input and knowledge regarding the phonological gender assignment rule in cases of singular nouns beginning with a stressed first syllable.

### Conclusion

The current study investigated the overall accuracy of gender assignment and agreement in second language learners at various levels of proficiency and heritage speakers of Spanish in the United States. Based on these results, the study reveals that second language learners and the heritage speaker possess knowledge of Spanish gender. With respect to the research questions that guided the study, the researcher observed a difference in the number of gender assignment and agreement errors and types of errors between the three participants. The findings of the study show that there was a difference in the number of errors between intermediate proficiency, advanced proficiency L2 learner and heritage speaker. Furthermore, the error analysis revealed that both learner groups and heritage speakers are more likely to incorrectly assign masculine gender to a feminine noun due to generalizations of rules or lack of input as well as knowledge of these gender assignment rules. The study also presents the effect of exposure to and proficiency level in the target language regarding gender agreement accuracy. The lack of exposure and proficiency affects the intermediate L2 learner to correctly assign and establish gender agreement between article/noun. The advanced L2 learner, whose grammar and vocabulary knowledge is more extensive and complex, produce more target-like gender realizations that in some cases come close to the realization of heritage speakers.

From these results, several conclusions for teaching L2 learners and heritage speakers can be drawn. From the perspective of SLA, the category gender is a difficult grammatical phenomenon for L2 learners despite many years of instruction in the formal classroom-setting. The approach to explicitly teach the gender assignment rules and let L2 learners practice this grammatical category in exercises solely focusing on form appears to be less productive and beneficial. In accordance with the findings in the present study and proposed teaching implications by researchers, a communicative approach can help L2 learners to acquire the Spanish gender system. It is important that grammatical structures are taught in order to develop communicative competence in the target-language. The approach of communicative grammar teaching equips the learners with strategies and activities to develop communicative competence marked by fluency as well as grammatical accuracy. With respect to heritage speakers, whose profile differs from monolinguals and L2 learners,

teachers have to be aware of the special needs of these speakers. A Spanish class in which heritage speakers and L2 students are taught together provides many challenges and often does not address the linguistic needs of heritage speakers. Therefore, it is important to develop pedagogies and policies suitable for teaching Spanish to heritage speakers (cf. Valdés 2001: 12). As Valdés (2001: 16) states:

There is little information available to the practitioner about how certain classroom practices—for example, consciousness raising about language and identity, the teaching of sociolinguistic principles, or the teaching of overall language skills—can contribute to students' views of themselves as lifetime Spanish speakers who will make the effort to transmit the language to their children.

Existing studies on the instruction of heritage speakers are very rare. Montrul and Bowles (2009) conducted a study to examine the effectiveness of instruction types. According to their findings, explicit instruction and feedback is very beneficial to heritage speakers when reacquiring their language.

The conduction of further comparative studies between L2 learners and heritage speakers may help clarify the grammatical needs (e.g. gender acquisition) of heritage speakers. Furthermore, future research should further explore the reported results of form-focusing and processing instruction. Future studies should also continue to investigate the effect of course books and materials in general on the accuracy of gender assignment.

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