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Mi mama es bonito: Acquisition of Spanish Gender by Native English Speakers

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Acquisition of Spanish Gender by Native English Speakers[*]

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1. Introduction

For an adult, learning a second language can be a complex and demanding task. Differences between one's native language and the target language can contribute to the complexity of the task. One significant way in which languages can differ is the system of gender. The difference between gender in English and Spanish provides a challenge for adult native English speakers learning Spanish as a second language. The aim of the current study is to examine gender marking on a variety of tasks by adult NS of English as beginning learners of Spanish, with hopes that such examination will provide insight into the nature of their acquisition. This paper will first examine differences in gender in English and Spanish and then review previous research in acquisition of gender in a second language before presenting the current study.

1.1 The form

Spanish distinguishes two grammatical genders: masculine and feminine. In Romance languages, gender is "an idiosyncratic diacritic feature" of nouns that "has to be acquired individually for every lexical entry stored in the mental lexicon" (DeWaele & Véronique 2001:276). Masculine gender is most commonly marked by the inflectional morpheme /-o/ (*el libro*), while feminine gender is usually marked with /-a/ (*la mesa*). Caroll (1999) notes that specifiers such as determiners and adjectives derive their gender from the noun they modify.

Spanish nouns differ according to animacy; nouns referring to animate objects (i.e., people, animals, etc.) can generally have both masculine and feminine forms. Nouns with inanimate referents can have only one of the forms and usually have to be memorized. Pérez-Pereira (1991) identifies three indicators that allow speakers to establish the gender of a noun: syntactic information—revealed by gender agreement, extralinguistic information (sexual dimorphism), and morpho-phonological information coming from the suffix of the word.

In contrast, gender in English is only marked grammatically in cases of third person singular pronouns and possessive determiners (i.e., he/she, his/her). English gender is not indicated by syntactic or morpho-phonological cues and is considered an extralinguistic characteristic. Syntactically encoded gender is not part of the native English speaker's paradigm.

1.2 Previous research

Studies on the acquisition of gender in a second language have established it as a challenging process worthy of investigation. Though correct gender marking may not always be essential to meaningful communication, its ubiquitous presence in Romance languages makes errors particularly salient to native speakers, even to the point of irritation (Latorre 1991). Researchers who have

investigated this area have found the acquisition of gender in Romance languages to be difficult for adult native speakers of English at all levels (Cain et al. 1987, Dewaele & Véronique 2001, Guillelmon & Grosjean 2001, Latorre 1991). Difficulties may arise from the difference in the gender systems of these languages as it takes time to acquire an L2 contrast not present in one's L1.

Difficulties may also result from the fact that adult L2 learners produce and perceive gender differently than do children learning an L1. Children rely on syntactic and morpho-phonological cues more heavily than extralinguistic or semantic cues to assign gender (Pérez-Pereira 1991). On the other hand, adult learners tend to utilize semantic or extralinguistic cues when assigning gender (Cain et al. 1987). For example, the English-French bilinguals studied by Guillelmon and Grosjean (2001) exhibited differing abilities in production and perception of gender according to the time at which they acquired French. Those who learned French after adolescence were less able to accurately produce and perceive gender markings. Since adult learners do not rely as heavily on syntactic cues, they are prone to errors when gender agreement is required. Nouns carrying gender markings are generally marked more accurately than determiners and adjectives agreeing with these nouns.

Given the complexities of acquiring an L2 with a different gender system, learners have been found to simplify their production. Simplification strategies may include overgeneralization of the unmarked form--the masculine form, as found by Tarone et al. (1976) and Dewaele and Véronique (2001). Similarly, Cain et al. (1987) and White et al. (2003) found that L2 learners were significantly more accurate in their use of masculine articles and adjectives than they were with feminine forms. A greater facility with the unmarked form could lead them to overgeneralize, to use the more common unmarked form in instances where the marked form is required. Likewise, Finneman (1992:134) concluded that the default is the unmarked form (masculine), and found learner behavior with respect to the marked form to be "the most accurate measure of actual acquisition and provide[s] the greatest insight into acquisitional processes." However, Bruhn de Garavito and White (2000) and Fernández-García (1999) found that while the masculine gender may serve as a default for some, there was individual variation, meaning some individuals chose feminine as a default (overgeneralizing feminine determiners to masculine contexts).

Other methods of simplification include avoidance and phonological neutralization. Avoidance refers to the omission of specifiers or structures that require them. For example, Cain et al. (1987) found that adult learners consistently failed to produce definite articles. Omission could also be prompted by other factors, such as the low semantic load carried by the article. Phonological neutralization could be present in instances where gender is marked by a vocalic suffix; learners may opt for a neutralized vowel somewhere between those representing the feminine and masculine genders. Tarone et al. (1976) attested to this process in French, where the masculine *le* and the feminine *la* were neutralized to [lə].

In addition to simplification strategies, several studies have addressed the issue of human referents. Finneman (1992:134) found gender agreement to be "strongly influenced by the referential properties of the modified entity," noting that all three of his subjects (first-year Spanish students) showed a high rate of agreement with self and with human female referents. Fernández-García (1999:13) also concluded that gender of the referent may play a role in gender agreement in adult second language acquisition, noting that semantics seem to help second language learners to make correct gender assignments. In contrast, Bruhn de Garavito and White (2000) found no difference in accuracy between nouns with natural gender and those without. The current study focused on gender marking with human referents to make the task as concrete as possible for beginning learners.

Previous research has often relied on a single task such as an interview or picture description or matching task. The effect of task type on second language production is well recognized in SLA research (e.g., Lafford & Salaberry 2003, Skehan & Foster 1996). The present study seeks to measure learners' language production with a variety of more and less structured tasks, providing a description of their usage of gender markers. Such a variety of tasks will afford a fuller picture of learners' gender marking.

1.3 Research questions:

1. How accurately do beginning adult learners of Spanish mark gender for human referents?
2. How does gender marking vary according to task type (from free conversation to grammar translation)?
3. When learners are inaccurate, what kinds of strategies are observable in their usage?

2. Research methodology
2.1 Subjects

The subjects were 17 native speakers of English, 7 females and 10 males, ranging in age from 18 to 22 years. They were all studying Spanish at a large Midwestern university and were selected as an intact class taught by one of the researchers. All of the tasks were completed by all of the students in the class; data were analyzed for the students who gave their consent to participate and were present in class for all of the activities (17 of 22 students). The subjects were enrolled in an accelerated second-semester Spanish class designed for students with two years or less of high school Spanish experience. The experiment was conducted during the eighth and ninth weeks of a 15-week semester.

2.2 Instruments

All instruments were designed to be relevant to the material covered in the syllabus. They were piloted with two students one semester prior to the current study. The production tasks were designed to capture different points on a continuum of structure/openness. Greater structure entails more explicit focus on form, while greater openness involves more focus on meaning. A description of each task follows.

2.2.1 Oral interview task: most open

All students enrolled in the course had a one-on-one oral interview with the instructor midway through the course. The interview consisted of information giving and getting; the student answered a series of questions from the instructor and then asked a series of questions of the instructor according to a scenario selected at random. The topics consisted of the major content studied in the course: family, likes/dislikes, weather, food, daily routine, etc. Description of self and family members was an integral part of the interview, providing opportunities for production of articles and adjectives requiring gender agreement with human referents. For the purpose of the class, students were evaluated on the quantity, quality and comprehensibility of their language. No single form was assessed in isolation; the aim was a general evaluation of overall production. Students worked in pairs to prepare for the interview and received a copy of possible scenarios.

This task was selected for the present study both because it provided opportunities for the production of the forms in question and because it was a very open and unstructured activity that did not focus on any particular form. Effective communication of meaning was the primary objective.

2.2.2. Narration of a video clip task: more open

This task called for students to work in pairs to describe a woman depicted in a two-minute mime video. The woman was the main character of this clip; she entered a party and interacted with several different men. Students were to watch the video and take notes in preparation for jointly composing a written description of the woman. The description was to include 3-5 traits in each of the following categories: personality, emotion and physical characteristics.

To prepare for this task, students were to complete a warm-up activity individually. Approximately thirty adjectives were selected from vocabulary in the course textbook relating to the three categories mentioned. These adjectives were listed in random order, showing both possible markings for gender (e.g., *agresivo/a*) when appropriate, as presented in the textbook. Only two of the

adjectives (*alegre*, *triste*) were not marked for gender. Students were to check the category to which the adjective belonged: personality, emotion or physical characteristics.

The warm-up activity was to serve as a primer, exposing students to the vocabulary necessary to complete the task. The aim was to lessen the cognitive load to some degree, in hopes that they would be able to produce 9-15 descriptors. Less effort expended searching for a lexical item would provide more opportunity to focus on the form.[1]

After watching the video, one student in each pair was to be the scribe as the pair compared notes and collaborated to complete a single written description. The directions encouraged students to use their best Spanish.

2.2.3 Dictogloss (text reconstruction task): more structured

This task required students to listen to a tape recorded description of two individuals, one male and one female. The description consisted of 9 sentences, which were read by a native speaker of Spanish at a moderate conversational speed. Students were to listen to the description twice, once listening for meaning and the second time taking notes. After listening to the description, the participants were to collaborate to reproduce the passage as accurately as possible in writing. The opposite partner was to be the scribe for this task.

The description was divided into two parts: 5 sentences about the male and 4 sentences about the female. Each description used adjectives that were marked with gender agreeing with the referent (either the male or the female), providing 7 obligatory contexts for the unmarked (masculine) form and 7 obligatory contexts for the marked (feminine) form. This task was intended to be very structured in that the exact forms used were to be understood (receptive listening skills) and then recreated (written production).

2.2.4. Written translation task: most structured

The written translation task required the students to translate 9 sentences from English to Spanish. The 9 sentences were the English versions of those in the text reconstruction task, thus providing identical forms and meanings for both tasks. This parallelism aimed to provide maximal opportunities to focus on form.

2.2.5 Follow-up survey on language usage

A survey was designed to ask learners about how they assign gender in Spanish. Several sentences were taken from their actual production on other tasks, some with errors and some correct. A variety of multiple choice reasons were supplied as to why these sentences might have appeared in their data. For example:

> If you were to write: '*Ella se siente deprimido*' it would be because…
> a. The sentence is fine
> b. I noticed it wasn't perfect but I didn't care
> c. It was a mistake due to carelessness
> d. I forgot to proofread my work
> e. I would never write this sentence
> f. Other: _____

In addition, there were open-ended questions about what learners might consider when determining the gender of a noun and adjective.

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[1] It should be noted that such an opportunity does not guarantee that the freed resources will be used to focus on form.

2.3. Data collection procedures

All of the tasks were completed during class time. Tasks involving aural and visual input (text reconstruction task and the video clip) and pair work were conducted in the language laboratory, where the students were accustomed to working. When working in pairs, the students were seated on the opposite side of the room from their partners and thus had to depend on oral negotiation via headset to complete the tasks. Students were paired according to the teacher's observations about their usual self-selected pairs during group work in the classroom. The subjects' interactions were recorded digitally as .wav files as they collaborated orally in pairs on the video task and the dictogloss task.

The tasks were completed starting with the most open and ending with the most structured, so as not to draw the students' attention to the target form under study. Only after completing the production tasks did the students give explicit feedback about their gender agreement in the follow-up survey.

The instructor who carried out the oral interviews was trained in the process and had taught the course four times previously.

2.4. Data analysis procedures

The total number of adjectives and articles corresponding to human referents was tallied for each student for each task. Each token was analyzed according the gender of the referent (masculine or feminine) and then the percentage of correct usage for masculine and feminine forms was tabulated. Coding was straightforward because of the binary nature of the forms, either masculine or feminine.

Intercorrelations of tokens produced and percentage correct for both masculine and feminine forms on all tasks were calculated. Kendall's tau was used as a nonparametric statistic to determine the significance of these correlations. The biological gender of students was cross-tabulated with each of these task variables, as well.

In addition to this quantitative analysis, qualitative analysis was used to determine possible strategies in use, such as overgeneralization, avoidance or neutralization.

3. Results

We return to our research questions:

3.1. How accurately did beginning adult learners of Spanish mark gender for human referents?

Since the number of obligatory contexts for use of marked and unmarked forms varied according to task, percentage of correct usage was determined for each task. Though this may serve to give a general overview of accuracy, the tasks differed greatly in the number of tokens produced for both masculine and feminine forms. Given the relatively small number of tokens produced on some tasks and varying number of obligatory contexts, the total token count included both articles and adjectives. Note that there was no context for masculine adjectives in the video task. Table 1 reports correct usage for both masculine and feminine forms (articles and adjectives) on all tasks. Standard deviation is reported in parentheses.

	Translation	Dictogloss	Video	Oral Interview	Overall
Masc. % (s.d.)	90% (15.97)	71% (38.70)	87% (18.51)	100% (0)	87%
Fem. % (s.d.)	67% (35.14)	96% (9.47)	N/A	55% (33.20)	73%

Table 1: Correct gender use in % with standard deviation

Though the data in Table 1 represent performance on different tasks with different numbers of tokens required, they do present some interesting trends. During the translation task, subjects were

generally more accurate (90%) with much less variation (15.97) when producing masculine forms compared to feminine forms (67%, 35.14). The exact opposite seemed to be true for the dictogloss task. Considering the parallel nature of these tasks, this discrepancy illustrates a lack of consistency that may indicate a general confusion about gender assignment. Overall, the participants were slightly more accurate with the masculine forms (87%) than feminine forms (73%). These findings differ from those of Cain et al. (1987), who found that L2 learners were significantly more accurate ($p < .0001$) in their use of masculine articles and adjectives than they were with feminine forms.

3.2. How did gender marking vary according to task type (from free conversation to grammar translation)?

Results of the application of Kendall's tau yielded very few significant correlations between task type, number of tokens produced, and accuracy with both forms of gender. This lack of significant correlations is logical considering the varying nature of the tasks and the number of possible obligatory contexts (definite for some tasks and variable for others).

One finding of relevance, however, was the correlation between the number of feminine tokens in the oral interview and the percentage correct: r = .59, significant at the $p < .05$ level. This indicates that as more tokens of feminine forms were produced, accuracy increased. Since the oral interview was open-ended with no required number of forms, this correlation could indicate that the students' overall proficiency was demonstrated by the frequency of and accuracy with which they produced the feminine form. This observation supports Finneman's (1992:134) finding that "learner behavior with respect to the marked form is the most accurate measure of actual acquisition and provides the greatest insight into acquisitional processes." Conversely, students that did not produce many forms were also not very accurate, suggesting possible avoidance strategies on the part of these less proficient students. This leads us to our next research question:

3.3. When learners are inaccurate, what kinds of strategies are observable in their usage?

Though quantitative analysis cannot expose what motivated the learners' strategies, it did reveal a great deal of variation in production of both forms. Given the overall accuracy with each form, masculine 87% and feminine 73%, the corresponding inaccuracy was indicative of incorrect use of the opposite form. We will term incorrect use as "overuse" for the purposes of this discussion. Table 2 shows 27% overuse of the masculine and 13% overuse of the feminine.

	Overall Accuracy with the Form		Overuse of the Form
	Accurate	Inaccurate	
Masculine	87%	13%	27%
Feminine	73%	27%	13%

Table 2: Overall accuracy and use of both forms

On the language usage survey, students were presented with short sentences, some of which contained errors in article and/or adjective agreement. When asked to give a reason why particular sentences might appear in their writing, they most commonly credited carelessness or lack of proofreading. Though some of the subjects overused the feminine form on the production tasks, on the language usage survey many indicated that they would never produce the sentence with such an error. In response to the open-ended questions, a few students indicated that they would mark an article or adjective as masculine if they were unsure of the gender of the noun. Others reported that they would look up the word in the dictionary, think of words with similar endings or make a guess according to what sounded right.

Though there was no explicit mention of avoidance as a strategy in marking gender, it seems apparent in the production data. Avoidance is considered a method of simplification, where specifiers

or structures that require them are simply omitted. Like Cain et al. (1987), we found that adult learners consistently failed to produce definite articles and our subjects also produced very few indefinite articles. However, we again acknowledge the difficulty of determining when or if it is accurate to attribute omission to avoidance since articles carry a low semantic load and are often neglected by beginning learners.

In the oral production data, there was only one instance of phonological neutralization of the morphemes marking gender of a human referent. For example, one student, in talking about her family produced *cuñad*[ə] (*cuñada* 'sister-in-law,' *cuñado* 'brother-in-law'). There was a reference to her brother preceding this so it is likely that she was referring to her sister-in-law but was unsure how to end the word. While this is one example of a possible phonological neutralization, it was not a common occurrence or a strategy widely employed by the participants.

Subjects in this study apparently did not employ observable strategies in categorical ways according to their biological gender. Cross-tabulation of the subjects' biological gender with the number of tokens and accuracy for both forms on all tasks revealed no consistent pattern and yielded no significant results.

By listening to the students' interaction as they completed the tasks, we hoped to better understand how they determined which forms to use and negotiated to produce language. The students' interaction is not part of the current analysis, but it will be considered in a follow-up study.

4. Discussion and conclusions
4.1 Summary

The present study examined gender agreement of adjectives and articles pertaining to human referents by 17 beginning adult learners of Spanish. Subjects in this study were slightly less accurate when marking feminine forms than when marking masculine forms. There seems to be a bi-directional confusion about gender marking, evidenced by their overuse of both forms.

4.2. Discussion and conclusions

As noted, our findings differ from those of Cain et al. (1987), who found that L2 learners were significantly more accurate in their use of masculine articles and adjectives than they were with feminine forms. The present study did not find such a significant difference in accuracy between use of the masculine and the feminine forms. The participants of the present study exhibited a great deal of variation, overusing both forms.

Since overgeneralization of the unmarked form—the masculine form—has been found by other researchers (Dewaele & Véronique 2001, Finneman 1992, Tarone et al. 1976), the finding here was not surprising. It is common for learners to simplify the rules of a language by eliminating marked features or irregular patterns in favor of unmarked, general or regular patterns. However, there was also overuse of the marked form—the feminine—among our students. Along with the aforementioned variability on parallel tasks, this may indicate a general confusion about gender that is not always solved by overgeneralizing the unmarked form.

These findings prompted the survey about language usage and the participants' self-reported methods for assigning gender. Interestingly, several participants did report a tendency to use masculine forms if they were unsure of the gender of a noun. There was no report of using the feminine when unsure of gender. It appears from the results of the survey that students were aware, at some level, that the masculine form is more common. This awareness, however, was not fully reflected in their production. Overgeneralization of the masculine form was not the only strategy evident in the data; we found a great deal of individual variation, like Fernández-García (1999) and Bruhn de Garavito and White (2000).

The correlation between number of tokens produced and accuracy with feminine tokens on the open-ended interview task leads us to posit that avoidance might have played a role in the low numbers of tokens. There are myriad reasons why the students may not have produced more tokens; they may not have known the adjective required or they may have elided the obligatory context

choosing to express the idea in another way. For example, in the sentence *José está muy cansado* 'José is very tired' a similar idea can be expressed with the reflexive verb *cansar(se)* 'to tire': *José se cansa mucho* 'José gets tired a lot.' This would eliminate the need for the adjective *cansado* 'tired' and the obligatory context for gender agreement, although such a replacement might be unlikely since the reflexive verb construction is more difficult. It is not easy to be sure, however, whether or not or why learners are engaging in avoidance without online data.

Phonological neutralization is not present in our Spanish data to the extent it was in the French data (Tarone et al. 1976). This may be due to the fact that the Spanish gender marker vowels, /o/ and /a/, are distinct from those in French. Neutralization of the Spanish markers is not equivalent to the neutralization process in French. The lack of neutralization in the current Spanish data may also be due, however, to the nature of the instruments involved in collecting data. The oral interview was the only task in which neutralization was observed. Analysis of less structured tasks and of the students' interactions may provide more insight into phonological neutralization as a strategy to cope with gender marking.

While this study examined a relatively small population and its findings cannot be widely generalized, it presents important information regarding the learning of gender norms in Spanish. Further research is needed on adult second language learners acquiring a language with a different system of gender. Future studies should examine a greater number of subjects, while also studying individual patterns. Tasks eliciting greater numbers of articles and adjectives would be valuable to examine effects of word class on accuracy. Analysis of students' collaboration in pair work could also provide insight into the strategies used and provide some on-line data about gender marking. Such insight could inform pedagogical practice.

In conclusion, this study has examined adult NSs of English and their marking of gender as beginning learners of Spanish. Is has been found that students do not only overgeneralize the masculine form, but also overuse the feminine form. This is indicative of a bi-directional confusion about which form to use. For the less structured task, there was a positive correlation between the number of feminine (marked) tokens produced and accuracy, suggesting a connection between accuracy with the marked form and acquisition. The primary simplification strategies observed were overgeneralization and avoidance, while phonological neutralization was not a common occurrence.

References

Bruhn de Garavito, Joyce, and Lydia White. 2000. L2 acquisition of Spanish DPs: the status of grammatical features. Proceedings of the 24th Annual Boston University Conference on Language Development, ed. by S. Catherine Howell, Sarah A. Fish, and Thea Keith-Lucas, 164-75. Somerville, MA: Cascadilla Press.

Cain, Jacquelin; Marcia Weber-Olsen; and Rosslyn Smith. 1987. Acquisition strategies in a first and second language: are they the same? Journal of Child Language 14.333-52.

Carroll, Susanne E. 1999. Input and SLA: adults' sensitivity to different sorts of cues to French gender. Language Learning 49.37-92.

DeWaele, Jean-Marc, and Daniel Véronique. 2001. Gender assignment and gender agreement in advanced French interlanguage: a cross-sectional study. Bilingualism: Language and Cognition 4.275-97.

Fernández-García, Marisol. 1999. Patterns of gender agreement in the speech of second language learners. Advances in Hispanic linguistics: papers from the 2nd Hispanic Linguistics Symposium, ed. by Javier Gutiérrez-Rexach and Fernando Martínez-Gil, 3-15. Somerville, MA: Cascadilla Press.

Finnemann, Michael D. 1992. Learning agreement in the noun phrase: the strategies of three first-year Spanish students. International Review of Applied Linguistics in Language Teaching 30.121-36.

Guillelmon, Delphine, and François Grosjean. 2001. The gender marking effect in spoken word recognition: the case of bilinguals. Memory & Cognition 29.503-11.

Lafford, Barbara A., and Rafael Salaberry (eds.) 2003. Spanish second language acquisition: state of the science. Washington DC: Georgetown University Press.

Latorre, Guillermo. 1991. Some empirical data on Spanish gender acquisition by intermediate students. Taller de Letras 19.77-86.

Pérez-Pereira, Miguel. 1991. The acquisition of gender: what Spanish children tell us. Journal of Child Language 18.571-90.

Skehan, Peter, and Pauline Foster. 1996. The influence of planning and task-type on second language performance. Studies in Second Language Acquisition. 18.299-324

Tarone, Elaine; Uli Frauenfelder; and Larry Selinker. 1976. Systematicity variability and stability/instability in interlanguage systems. Papers in second language acquisition, ed. by H.Douglas Brown, 93-134. Ann Arbor: University of Michigan Press. [Language Learning Special Issue #4]

White, Lydia; Elena Valenzuela; Martyna Kozlowska-Macgregor; and Ingrid Leung. 2003. Gender agreement in L2 Spanish: evidence against failed features. McGill Working Papers in Linguistics 17.153-82.