Grammatical Gender in Adult Spanish Heritage Speakers & Second Language Learners

Jessica Diebowski
Teaching and Research Fellow, PhD Student at University of Wuppertal, Germany
diebowski@uni-wuppertal.de

Heritage Language Acquisition: Breaking New Ground in Methodology and Domains of Inquiry
September 19th-20th, 2016
Tromsø, Norway
Road Map

- **Introduction**
  - Who is a heritage speaker?
  - Demographic & linguistic considerations

- **Study on Gender Assignment and Agreement in Spanish**
  - Participants, Method & Material
  - Results of elicited data in terms of gender accuracy in SLA & heritage acquisition of Spanish in the USA

- **Conclusion & Teaching implications**
Definition: A heritage speaker is…

…an individual who was raised in a home where a non-English language is spoken, who speaks or only understands the heritage language, and who is to some degree bilingual in English and the heritage language. (Valdés 1997/2000:1)
Demographics

U.S. Hispanic population in 2014 (see US Census Bureau 2014)

17 % (= 55 million people)

U.S. Hispanic population in 2060 (see US Census Bureau 2014)

28.6 % (= 119 million people)
According to the US Census, 18 percent of the total population in NJ were Hispanic.
Why looking at heritage speakers matters?

There is a **high chance** for many instructors that heritage speakers will be enrolled in language classes together with L2 learners...

… despite of the fact that most language instructors have only been trained to teach Spanish as a foreign language.
Linguistic competence of heritage speakers

The linguistic competence of heritage speakers has often been shown to have distinct properties from the competence of monolingual speakers.

In contexts in which heritage speakers show distinctions in their grammars compared to monolinguals it is often claimed that they have undergone incomplete acquisition or attrition (see e.g. Montrul 2007, 2008; Polinsky 2007, 2008; Silva 2008; Silva-Corvalán 1994, 2003, Sorace et al 2009).
Incomplete acquisition?

The particular characteristics of HL acquisition in terms of quantity and quality of the input led some researchers to assume the possibility of complete acquisition of a contact variety which differs from monolingual variety due to language change (see e.g. Rothman 2009; Pires & Rothman 2009; Pires 2011)
Studies comparing HS and L2 acquisition

Over the last few decades researchers have been conducting studies comparing HS and L2 learners since they also show a high level of variability in degree of ultimate attainment.

In the case of L2 learners it is often argued that they cannot attain native-like results because of maturational constraints.
Studies comparing HS and L2 acquisition (cont.)

Studies comparing HS and L2 have shown mixed results:

**HS = L2** for some grammatical constructions (Montrul et al. 2008) and semantic acceptability (Bowden et al. 2010)

**HS ≠ L2** for other structures, including gender agreement (e.g. Bowden et al. 2010, 2012; Montrul & Potowski 2007; Alarcón 2011), word order, subject-verb agreement (e.g. Bowden et al. 2010, 2012)
Present Study

SLA and Bilingualism

Adult L2 speakers <-> Adult heritage speakers
Research Objective

- To examine the overall accuracy of gender assignment and agreement in adult L2 learners and adult heritage speakers of Spanish in the US
Research Questions

1. Are there any differences in the accuracy of gender assignment/agreement between L2 and HS?

2. Does the gender of the noun affect gender accuracy?

3. Is the accuracy of gender assignment /agreement affected by the noun morphology?
Predictions

1. HS ≠ L2 for gender agreement (see Bowden et al. 2010, 2012; Montrul & Potowski 2007; Alarcón 2011)

2. There will be differences in the gender accuracy rate among HS and L2 learners. In other words, HS will be more accurate than L2 learners due to more activation of and exposure to the target language (see Putnam & Sánchez, 2013).

3. L2 learners & HS tend to be more accurate with masculine than with feminine forms (see Alarcón 2006, 2011).

## PhD Project: Grammatical Gender in Spanish Heritage Acquisition and Foreign Language Acquisition

<table>
<thead>
<tr>
<th>Type of Participants</th>
<th>Number (N)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monolinguals</td>
<td>10</td>
</tr>
<tr>
<td>Heritage speakers (HS)</td>
<td>75</td>
</tr>
<tr>
<td>L2 learners</td>
<td>55</td>
</tr>
<tr>
<td>L3 learners</td>
<td>40</td>
</tr>
</tbody>
</table>

### Present Talk: Subset of Data

<table>
<thead>
<tr>
<th>Type of Participants* (All living in NJ at time of testing)</th>
<th>N</th>
<th>Mean Age</th>
<th>DELE Prof. Score</th>
<th>Further Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced HS</td>
<td>25</td>
<td>20.6</td>
<td>47.29</td>
<td>Acquired Spanish at birth &amp; English in US before age 6</td>
</tr>
<tr>
<td>Advanced L2</td>
<td>24</td>
<td>20</td>
<td>45.27</td>
<td>Acquired Spanish as L2 at age 14 or later</td>
</tr>
</tbody>
</table>

Proficiency levels: Intermediate & advanced
## TEST ITEMS - STIMULI

<table>
<thead>
<tr>
<th>S T I M U L I</th>
<th>Test Items</th>
<th>Grammatical Gender</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18 inanimate nouns</td>
<td>9 masculine 9 feminine</td>
<td>Canonical &amp; non-canonical endings</td>
</tr>
<tr>
<td></td>
<td>18 adjectives</td>
<td>9 masculine 9 feminine</td>
<td>Overt gender marking</td>
</tr>
</tbody>
</table>

## STRUCTURES

<table>
<thead>
<tr>
<th>Determiner + Noun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determiner + Noun + Adjective</td>
</tr>
</tbody>
</table>
Results:

1st Research Question
Gender Accuracy
Distribution of DN Accuracy in Percentage (%) by Task and Group

Differences are statistically significant, as revealed by several ANOVAs:

Preference Task: $F(1, 47)=5.440; p=.024$

GJT: $F(1, 47) = 14.314; p<.001$

Oral: $F(1, 47) = 39.356;$
Distribution of NAdj Accuracy in Percentage (%) by Task and Group

Differences are statistically significant, as revealed by several ANOVAs:

GJT: $F(1, 47) = 7.530; p = .009$

Oral: $F(1, 47) = 23.963; p < .001$
Results:

2nd Research Question - Noun Gender
Distribution of Accuracy in Percentage (%) by Noun Gender and Group

Differences are statistically significant, as revealed by several ANOVAs:

Noun Gender (masc): F(1, 47) = 24,129; p<.001

Noun Gender (fem): F(1, 47) = 16,552; p<.001
Results:

3rd Research Question - Noun Morphology
Differences are not statistically significant, as revealed by ANOVA:

Noun ending in –a (masc): F(1, 47) = 3.273; p > .05

Noun ending in –a (fem): F(1, 47) = 4.031; p > .05
Distribution of Accuracy in Percentage (%) by Noun Morphology, Gender and Group

Differences are statistically significant, as revealed by ANOVA:

Noun ending in –o (fem): F(1, 47)=5,649; p=.022
Differences are statistically significant, as revealed by several ANOVAs:

Noun ending in –e (masc): $F(1, 47) = 37,454; p < .001$

Noun ending in –e (fem): $F(1, 47) = 16,344; p < .001$
Summary of Results

- L2 learners and heritage speakers possess knowledge of gender

Observed difference in the accuracy rates:
- HS are more accurate than L2 in general

No observed difference in the accuracy rates between gender assignment/agreement:
- L2 learners & HS are equally accurate with DN & NAdj.

No observed effect of the noun gender

Observed effect of the noun morphology:
- L2 learners more accurate with canonical nouns than deceptive and non-canonical nouns
- HS are less accurate with nouns ending in -a (masc.)
Discussion

1. Are there any differences in the accuracy of gender assignment/agreement between L2 and HS?

YES! (HS perform equally better on gender assignment/agreement than L2 learners; By implication: Frequency of input and use make a difference)

2. Does the gender of the noun affect gender accuracy?

NO! HS and L2 learners produce equal accuracy rates regardless of the noun gender. Thus, no effect of the noun gender is found, contrary to research findings on the effect of the noun gender (see Alarcón, 2006)
Discussion (cont.)

3. Is the accuracy of gender assignment/agreement affected by the noun morphology? 
YES? Noun morphology predicative: L2 learners are less accurate in deceptive & non-canonical nouns (ending in -e) L2 learners overgeneralize the gender assignment rules (esp. the error type D (masc.) + N (fem) ending in -o)

HS perform accuracy rates at ceiling > 90%  
Decreasing accuracy rates with nouns ending in -a (masc.) due to performance or dialectal variation e.g.  
El pijama vs. la pijama
Conclusion

In the literature arguments tend to characterize bilingual speakers as intrinsically deficient regarding native competence in the heritage language, however, they are native speakers varying from the monolingual norm.

When it comes to gender agreement, a grammatical area that is very difficult for L2 learners to master, heritage speakers show remarkable native abilities.

Heritage speakers can be really advanced speakers of the language as well, not just “incomplete native speakers”.
Looking ahead to language teaching

• Linguistic theory applied to L2 acquisition and adult early bilinguals is a crucial tool for constructing linguistic instruments to identify systematic and measurable differences and similarities between these two bilingual populations.

• Once we know what type of linguistic knowledge HS and L2 learners have or lack, practitioners will be in a better position to address their linguistic and pedagogical needs, especially when they find themselves in the same L2 class.

• Critical factors to take into consideration: input, context of acquisition, exposure to target language etc. → Future research and studies necessary.
Acknowledgements

• DAAD - German Academic Exchange Service for the Research Grant

• Rutgers University, NJ USA
  ➢ Prof. Liliana Sánchez
  ➢ David Giancaspro
  ➢ All the participants

• University of Wuppertal, Germany
  ➢ Jun. Prof. Katrin Schmitz
Contact
Jessica Diebowski
University of Wuppertal, Germany
Email: diebowski@uni-wuppertal.de