Inalienable possession in Spanish-English code-switching

Bryan Koronkiewicz  |  bjkoronkiewicz@ua.edu
The University of Alabama
Introduction

• Inalienable possession occurs when a noun (N) is obligatorily possessed by its possessor

• Common examples include:
  • Body parts (e.g., someone’s hand)
  • Kinship (e.g., someone’s mother)
  • Part-whole relations (e.g., something’s top)

• Languages can vary when expressing inalienable possession\(^1\)

\(^1\) Guéron (2006)
### Inalienable Possession in English and Spanish

| English Possessive D | (1) a. He raised **his** hand.  
| b. He washed **his** face.  
| c. He has a lemon in **his** hand. |
|---|---|
| Spanish Definite D | (2) a. Él levantó **la** mano.  
| b. Él se lavó **la** cara.  
| c. Él tiene un limón en **su** mano. |
| Spanish Cl + Definite D |  |
| Spanish Embedded Possessive D |  |
Puzzle

• This asymmetry between Spanish and English creates a potential conflict:
  • What happens when a Spanish-English bilingual uses both their languages in the same sentence? How is inalienable possession expressed?

• Yet to be tested experimentally is inalienable possession in intrasentential code-switching
<table>
<thead>
<tr>
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<th>CODE-SWITCHING INALIENABLE OBJECTS</th>
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<tbody>
<tr>
<td></td>
<td><strong>SPANISH-to-ENGLISH V-D Switch</strong></td>
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</tbody>
</table>
| (4) | **Él (se) lavó the / his face.**  
he 3SG washed  
‘He washed his face.’ |
|   | **ENGLISH-to-SPANISH V-D Switch** |
| (5) | **He washed la / su cara.**      
the / his face  
‘He washed his face.’ |
|   | **SPANISH-to-ENGLISH D-N Switch** |
| (6) | **Él (se) lavó la / su face.**   
he 3SG washed the / his  
‘He washed his face.’ |
|   | **ENGLISH-to-SPANISH D-N Switch** |
| (7) | **He washed the / his cara.**    
face  
‘He washed his face.’ |

Critical elements (i.e., Cl, V, D) are from a mixture of the two languages:

Critical elements are all from the same language (i.e., there is no conflict):
Heritage speaker bilinguals

• Although we can outline general differences between the grammars of Spanish and English, bilinguals are not just “two monolinguals in one”

• Heritage grammars differ from monolingual grammars
  • Research regarding US heritage speakers of Spanish has noted variation in linguistic structures such as focus, \textit{gustar}, causatives, and more
  • Inalienable possession has been shown to vary as well

\begin{footnotesize}
\begin{enumerate}
\item Silva-Corvalán (1994), Montrul (2008), among many others;
\item Hoot (2017);
\item de Prada Pascual y Cabo (2011);
\item Zyzik (2014);
\item Giancaspro & Sánchez (2021), Montrul & Ionin (2010, 2012), Silva-Corvalán (1994)
\end{enumerate}
\end{footnotesize}
Inalienable possession in Spanish

• Regarding the syntactic structure, Giancaspro and Sánchez (2021) argue that the different structures in Spanish are derived from the presence or absence of an Applicative Phrase (AppP)
  • Extends Cuervo’s (2003) analysis of datives to Guéron’s (2006) work on French inalienable possession (which is parallel to Spanish)
  • Essentially, verbs that select an AppP are the ones that require a preverbal clitic
Spanish-English inalienable possession

• Following that structure, Giancaspro and Sánchez (2021) argue that Spanish-English variation can be understood as combinations of (i) ± AppP and (ii) ± possessor person features in D
  • Based on Sánchez’s (2019) concept of permeable bilingual alignments, with the former being an alignment of V and the latter being an alignment of D

• Four logical options:
  • - AppP, - Poss D = Spanish verbs like *levantar* ‘raise’
  • + AppP, - Poss D = Spanish verbs like *lavar* ‘wash’
  • - AppP, + Poss D = English verbs
  • + AppP, + Poss D = Not traditionally attested in English or Spanish
    • “Has been found in Spanish in contact with indigenous languages in Latin America, as well as some other regional varieties” (Escobar, as cited in Giancaspro & Sánchez, 2021, p. 9)
Spanish-English inalienable possession

- Giancaspro and Sánchez (2021) found all four options in the expression of Spanish inalienable possession by heritage speakers
  - Mostly produce the target Cl + Def D (e.g., *se lavó la cara*) and the innovative Poss D (e.g., *lavó su cara*)
    - English-like innovative form more common with speakers who scored at intermediate proficiency
    - Also instances of the other two options, showing that it isn’t just wholesale English transfer which has developed into an underlying grammar

- At the same time, they found systematic knowledge in a receptive task
  - These same participants were more likely to accept the target form than the innovative forms

- How do we reconcile this?
  - AJT is tapping into their underlying grammar, whereas the more variable production data is a result of English to Spanish influence at one or both of two alignment loci (i.e., V and D)
Framework

• Adopting a generative approach to code-switching¹
  • Specific predictions can be made about restrictions on code-switched inalienable possession
  • Similar work using such an approach has targeted pronouns², wh-questions³, pro-drop⁴, causatives⁵, sluicing⁶, and more

• Unclear what to expect regarding bilingual alignments in code-switching⁷
  • Exploratory first step; neutral hypothesis is that we should expect the same behavior regardless of whether the utterance is switched or not

In Spanish-English switches between a finite verb and an inalienable object, do US heritage speakers of Spanish **accept** definite and/or possessive determiners? And what role does a preverbal clitic play?

In Spanish-English switches between a finite verb and an inalienable object, do US heritage speakers of Spanish **produce** definite and/or possessive determiners? And what role does a preverbal clitic play?
Predictions

- No broader reason to expect a restriction on the type of D
  - Both languages have definite and possessive D forms that can be switched outside the context of inalienable possession, as attested in the literature

- In the receptive task, if they retain systematic knowledge of inalienable possession in Spanish (creating a Spanish-English conflict), they should prefer a different type of D for each switch direction, with two options:
  - Language of the verb drives the possessor person features in D (e.g., English-to-Spanish → washed mi cara)
  - Language of the object drives the possessor person features in D (e.g., English-to-Spanish → washed la cara)

- In the production task, there should be more variation
  - Should see a mixture of alignments (i.e., ±AppP, ±Poss), but beyond that it is unclear to know specifics
Participants

• US heritage speakers of Spanish ($N = 18$)
  • 19-30 years old ($M = 21.9$)

• General language profile
  • Exposed to Spanish ($M = 0.7$) and English ($M = 3.2$) at a young age
  • Intermediate-to-advanced proficiency in Spanish
    • Modified cloze test$^1$ ($M = 36.8$ out of 50); LexTALE-Esp$^2$ ($M = 20.6$ out of 60)
  • Advanced proficiency in English
    • Modified cloze test$^3$ ($M = 36.0$ out of 40); LexTALE$^4$ ($M = 87.6$ out of 100)
  • Slightly English dominant
    Bilingual Language Profile$^5$ ($M = 26.9$ out of ±218)
  • Self-reported code-switchers

$^1$ Montrul & Slabakova (2003); $^2$ Lemhöfer & Broersma (2012); $^3$ O’Neill et al. (1981);
$^4$ Izura et al. (2014); $^5$ Birdsong et al. (2012)
Overall Procedure

**DAY 1: QUALIFICATION**
- Informed Consent
- LexTALE\(^1\)
- LexTALE-Esp\(^2\)
- Brief Background Questionnaire

**DAY 2: ACCEPTABILITY**
- Informed Consent
- Code-switching Judgments via an Acceptability Judgment Task (AJT)
- Monolingual AJTs
- Modified Cloze Tests\(^3, 4\)
- Extended Background Questionnaire\(^5\)

**DAY 3: PRODUCTION**
- Informed Consent
- Code-switching Utterances via an Elicited Production Task (EPT)
- Open-ended Interview
- Debriefing

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\(^1\) Lemhöfer & Broersma (2012); \(^2\) Izura et al. (2014); \(^3\) Montrul & Slabakova (2003); \(^4\) O'Neill et al. (1981); \(^5\) Birdsong et al. (2012)
AJT Stimuli

• Target items adapted from Giancaspro and Sánchez (2021) \((N = 18)\)
  • 3 different lexicalizations using body parts (i.e., *face*, *mouth*, *tongue*) and verbs that (traditionally) include a preverbal clitic in Spanish
  • 4 types based on the different possible V-D switch structures

<table>
<thead>
<tr>
<th>Type</th>
<th>Example 1</th>
<th>Example 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poss D</td>
<td>...lavó <strong>his</strong> face</td>
<td>...washed <strong>su</strong> cara</td>
</tr>
<tr>
<td>Def D</td>
<td>...lavó <strong>the</strong> face</td>
<td>...washed <strong>la</strong> cara</td>
</tr>
<tr>
<td>Cl + Poss D</td>
<td>...<em>se</em> lavó <strong>his</strong> face</td>
<td>N/A</td>
</tr>
<tr>
<td>Cl+ Def D</td>
<td>...<em>se</em> lavó <strong>the</strong> face</td>
<td>N/A</td>
</tr>
</tbody>
</table>
AJT Stimuli

• Control sentences with switch at the clausal boundary ($N = 18$)
  • Leaves the inalienable possession entirely in one language or the other (i.e., no V-D switch)

| CONTROL     | Gregory had two ugly pimples, así que antes de dormir se lavó su cara |
| CONTROL     | Gregory had two ugly pimples, así que antes de dormir se lavó la cara |
| TARGET      | Gustavo tenía dos granitos feos, así que antes de dormir se lavó his face |
| TARGET      | Gustavo tenía dos granitos feos, así que antes de dormir se lavó the face |

• Filler items with other types of constructions ($N = 40$)
  • Targeted adverb order and pronouns
<table>
<thead>
<tr>
<th>LANGUAGE OF V</th>
<th>TYPE</th>
<th>CONDITION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGLISH</td>
<td>Possessive D</td>
<td>Control</td>
<td>...washed <strong>his</strong> face.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td>...washed <strong>su cara</strong>.</td>
</tr>
<tr>
<td></td>
<td>Definite D</td>
<td>Control</td>
<td>...washed <strong>the</strong> face.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td>...washed <strong>la cara</strong>.</td>
</tr>
<tr>
<td>SPANISH</td>
<td>Possessive D</td>
<td>Control</td>
<td><em><strong>lavó su cara</strong></em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td><em><strong>lavó <strong>his</strong> face</strong></em>.</td>
</tr>
<tr>
<td></td>
<td>Definite D</td>
<td>Control</td>
<td><em><strong>lavó la cara</strong></em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td><em><strong>lavó <strong>the</strong> face</strong></em>.</td>
</tr>
<tr>
<td></td>
<td>Clitic + Possessive D</td>
<td>Control</td>
<td><em><strong>se lavó su cara</strong></em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td><em><strong>se lavó <strong>his</strong> face</strong></em>.</td>
</tr>
<tr>
<td></td>
<td>Clitic + Determiner D</td>
<td>Control</td>
<td><em><strong>se lavó la cara</strong></em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Target</td>
<td><em><strong>se lavó <strong>the</strong> face</strong></em>.</td>
</tr>
</tbody>
</table>
Gustavo tenía dos granitos feos, así que antes de dormir se lavó su cara.

¿Qué le parece esta oración?

- Completely unacceptable
- Mostly unacceptable
- Somewhat unacceptable
- Unsure
- Somewhat acceptable
- Mostly acceptable
- Completely acceptable
Average z-score by Language of V, Type, and Condition

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>English V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possessive</td>
<td>0.57</td>
<td>0.23</td>
</tr>
<tr>
<td>Definite</td>
<td>-0.66</td>
<td>-0.79</td>
</tr>
<tr>
<td>Spanish V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possessive</td>
<td>0.26</td>
<td>-0.38</td>
</tr>
<tr>
<td>Definite</td>
<td>-0.30</td>
<td>-0.74</td>
</tr>
<tr>
<td>Clitic + Poss</td>
<td>0.69</td>
<td>-0.02</td>
</tr>
<tr>
<td>Clitic + Def</td>
<td>0.62</td>
<td>-0.84</td>
</tr>
</tbody>
</table>
EPT Experimental Items

• Target items adapted from Giancaspro and Sánchez (2021) (N = 6)
  • Word-pair prompts included a finite V in one language and the object in another language
  • Same 3 lexicalizations as the AJT

\[\begin{array}{ccc}
\text{washed} \_ \text{cara} & \text{burned} \_ \text{boca} & \text{bit} \_ \text{lengua} \\
\text{lavó} \_ \text{face} & \text{quemó} \_ \text{mouth} & \text{mordió} \_ \text{tongue}
\end{array}\]

• Filler items with various other types of constructions (N = 40)
  • Targeted adverb order and pronouns
...always washed her cara con un cleanser.

...she burned la boca.

She bit su lengua.

Ella se mordió her tongue...

Él se lavó la face con jabón.
Produced tokens by Language of V and Structure

Percentage of Tokens

English V

- 46%...always washed her cara con un cleanser.
- 13% She bit su lengua.

Spanish V

- 20% Ella quemó her tongue.
- 15% Ella se mordió her tongue...
- 13% Él lavó su face.
- 31% Él se lavó la face con jabón.
- 7% Ella se quemó su mouth.
- 7% ...she burned la boca.
- 13% Mistrial

(English Poss D)Ø
(Cl +) English Def D = Ø

Languages and Structures:
- English Poss D
- Cl + English Poss D
- Spanish Poss D
- Cl + Spanish Poss D
- Spanish Def D
- Cl + Spanish Def D
- Mistrial
Overall Results Summary

• Two tasks complement each other, in that:
  • English definite D essentially ruled out, as it was highly rejected across the board in the AJT and never produced in the EPT
  • Preference for a preverbal clitic with a Spanish V

• Two tasks diverge, in that:
  • Preverbal clitic preference more strongly demonstrated in the AJT, whereas in the EPT no clitic appeared with a third of the Spanish V tokens
    • This can be seen as evidence of the same flexible bilingual alignments
  • Although they show evidence of retaining the target Cl + Def D (e.g., se lavó la cara) in the AJT, they very rarely produced Spanish definite D in the EPT (e.g., se lavó la face)
    • This could suggest that the bilingual alignments of D for English are more prevalent in code-switching
Next Steps and Limitations

• Current project
  • Run statistical analyses
  • Dig deeper into the syntactic theories for inalienable possession
    • AIT suggests there is something at the grammatical level causing a dispreference for these V-D switches
  • Flesh out how bilingual alignments can be used to understand the structure of code-switching
    • Moves the discussion away from absolute restrictions

• Future directions
  • Test *levantar*-like verbs to better flesh out the paradigm
  • Include alienable possession as a comparison
  • Test lexicalizations that are not body parts
  • In the AIT, test the “no conflict”-type switches where all the critical elements are in the same language but there is still a switch at D-N (since these were about half of the production tokens)
Acknowledgments

• Thanks to those who helped recruit participants:
  • Clara Burgo, Mariška Bolyanatz Brown, Kathryn Bove, Jennifer Cabrelli, Salvatore Callesano, Andie Faber, Mandy Faretta-Stutenberg, Claudia Fernández, David Giancaspro, Alexandra Gonzenbach Perkins, Xabi Granja, Bradley Hoot, Chad Howe, Cristina Lozano Argüelles, Silvia Perez-Cortes, Sara Stefanich, Inma Taboada, María Turrero García, Dani Vergara González, and Janire Zalbidea

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¡gracias! bjkoronkiewicz@ua.edu