

Cross-linguistic acquisition of
gender and number
morphology: a study of
intermediate L2 French and L2
Spanish

Problem

- In the process of second language (L2) acquisition learners must acquire parameters in the L2 that exist in the first language (L1), as well as those that do not.
- Can learners reset parameters?
- Is there an observable difference between how learners acquire new vs. familiar parameters?

Examples of Pronouns

1. Mi hermana tiene tres libros. Yo **los** leo.

Ma sœur a trois livres. Je **les** lis.

My sister has three books. I read **them**.

2. Hay un perro. Ella **lo** ve.

Il y a un chien. Elle **le** voit.

There is a dog. She sees **it**.

3. Mi amigo tiene la sopa. Yo **la** como.

Mon ami a la soupe. Je **la** mange.

My friend has soup. I eat **it**.

L1 Transfer

- At the beginning stages of language learning, learners transfer the parameters of their L1 into their L2 (Schwartz & Sprouse, 1996).
- In English, number is marked on inanimate direct pronouns, but gender is not (it, them).
- In Spanish, gender *and* number are marked on these same pronouns (lo/la/los/las).
- In French, gender is marked on singular pronouns (le/la) but only number is marked for the plural (les).
- Participants with English L1 whose L2 is Spanish or French must therefore acquire gender as a new parameter, whereas number is transferable.

L1 English, L2 Spanish

- Sagarra and Herschensohn found that beginner and intermediate level Spanish learners were more sensitive to number errors than they were to gender errors in adjectives, and felt more confident correcting them (2010).
- Intermediate learners showed difficulty with the comprehension of gender in pronouns and adjectives (McCarthy, 2008).
 - When producing a word with gender, participants defaulted to the masculine. When interpreting gender, they defaulted to the feminine.

L1 English/French, L2 Spanish

- White, Kozłowska–Macgregor, and Leung found a small difference in performance between gender and number, but that difference decreased as proficiency increased (2004).
- They tested L1 English or French speakers whose L2 was Spanish, with two production tasks
- English speakers and French speakers performed similarly when producing gender and number in adjectives
- Contradicts the idea that gender and number in the L1 influence that acquisition in the L2

Research Question and Hypothesis

- This study tests whether English speakers whose L2 is either French or Spanish show sensitivity to number and gender markers in direct object pronouns.
- Additionally, we ask if there is a difference between the acquisition of these markers between Spanish and French as the L2.
- Hypothesis: English speakers will show more sensitivity to number morphology, but this difference will be less apparent at the Intermediate level.
- Hypothesis: There will be a difference between learners of Spanish and learners of French in how gender is interpreted in pronouns.

Participants

- L1 English speakers learning Spanish or French in a university setting
- Four Spanish participants, seven French participants
- Fourth semester students

Materials

- Forced Choice Task
 - Spanish: 34 items, 10 distractors and 24 content items
 - French: 30 items. 10 distractors and 20 content items
- Elicited Production as measure of proficiency

Forced Choice Task

- Participants see a question about where/when/how someone is doing something, and must then pick the correct response from two sentences
- The two possible responses differ only in the pronoun used to refer to the object

Gender Difference

1a. Question: *¿Dónde trae **su** **trabajo** Carla?*

where bring **her.SING** **work** **Carla**

Where does Carla bring her work?

Sentences: *Carla **lo/la** trae a la escuela.*

Carla **it.MASC/it.FEM** bring to the school.

Carla brings it to school.

2a. Question : *Où **est-ce que** **Carla** prend **le** **devoir** ?*

where does **Carla** bring **the.MASC** **work**

Where does Carla bring the work?

Sentences : *Carla **le/la** prend au lycée.*

Carla **it.MASC/it.FEM** bring to school

Carla brings it to school.

Number Difference

1b. Question: *¿Cuándo cocinan **el desayuno** Juan y Pablo?*
when cook **the.SING breakfast** **Juan and Pablo**
When do Juan and Pablo cook breakfast?

Sentences: *Juan y Pablo **lo/los** cocinan a las siete y media.*
Juan and Pablo **it.SING/it.PL** cook at the seven and half
Juan and Pablo cook it at 6:30.

2b. Question : *Quand est-ce que **Jean et Paulo** cuisinent **le petit-déjeuner** ?*
when do **Jean and Paulo** cook **the.SING breakfast**
When do Jean and Paulo cook breakfast?

Sentences : *Jean et Paulo **le/les** cuisinent à sept heures et demie.*
Jean and Paulo **it.SING/it.PL** cook at seven hours and half
Jean and Paulo cook it at 7:30.

Gender and Number Difference

1c. Question: *¿Dónde descubren **el tesoro** **las exploradoras**?*
where discover **the.MASC.SING treasure** **the.FEM.PL explorer.PL**
Where do the explorers discover the treasure?

Sentences: *Las exploradoras **lo/las** descubren en una casa.*
the.FEM.PL explorer.PL **it.MASC.SING./it.FEM.PL** discover in a house
The explorers discover it in a house.

2c. Question : *Où est-ce que **les exploratrices** découvrent **le trésor** ?*
where do **the.PL explorer.PL** discover **the.MASC.SING treasure**
Where do explorers discover treasure?

Sentences : *Les exploratrices **le/les** découvrent dans une maison.*
the.PL explorer.PL **it.MASC.SING/it.PL** discover in a house
The explorers discover it in a house.

Simple and Complex Sentences

- Simple sentences look like the previous examples: one subject, one object, and one verb
- Complex sentences are constructed with two verbs

Elicited Production



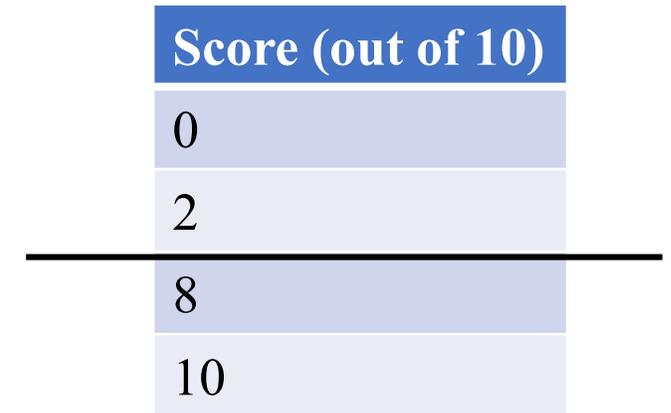
- La mujer hace un pastel y entonces _____ come. → **lo**
- La femme fait un gâteau et _____ mange. → **le**
- The woman makes a cake and then eats _____ . → **it***

Production Task Results

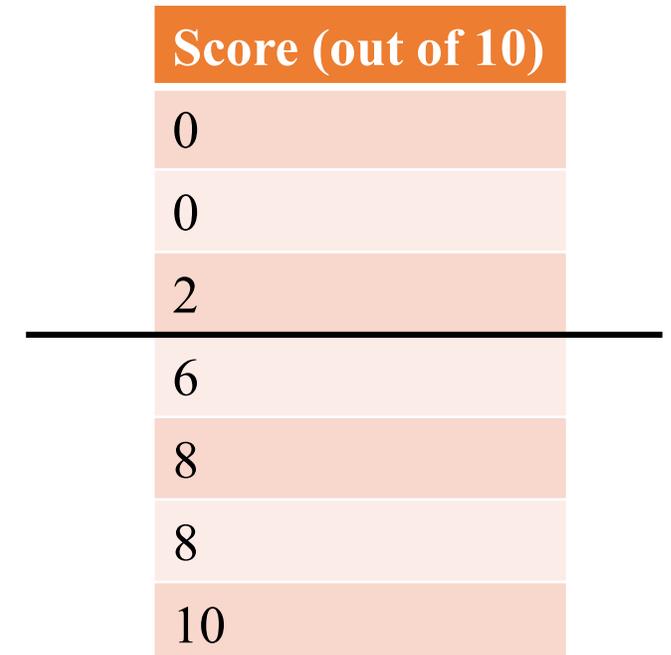
Participants' scores were ranked on a ten point scale as follows:

- Five items, each worth up to two points
- If no third person direct object pronoun was used, no points were awarded for that item.
- If the correct type of pronoun was used with the incorrect gender *and* number, no points were awarded for that item.
- If the correct type of pronoun was used with either the correct gender *or* number, one point was awarded for that item.
- If the correct type of pronoun was used with the correct gender *and* number, two points were awarded for that item.

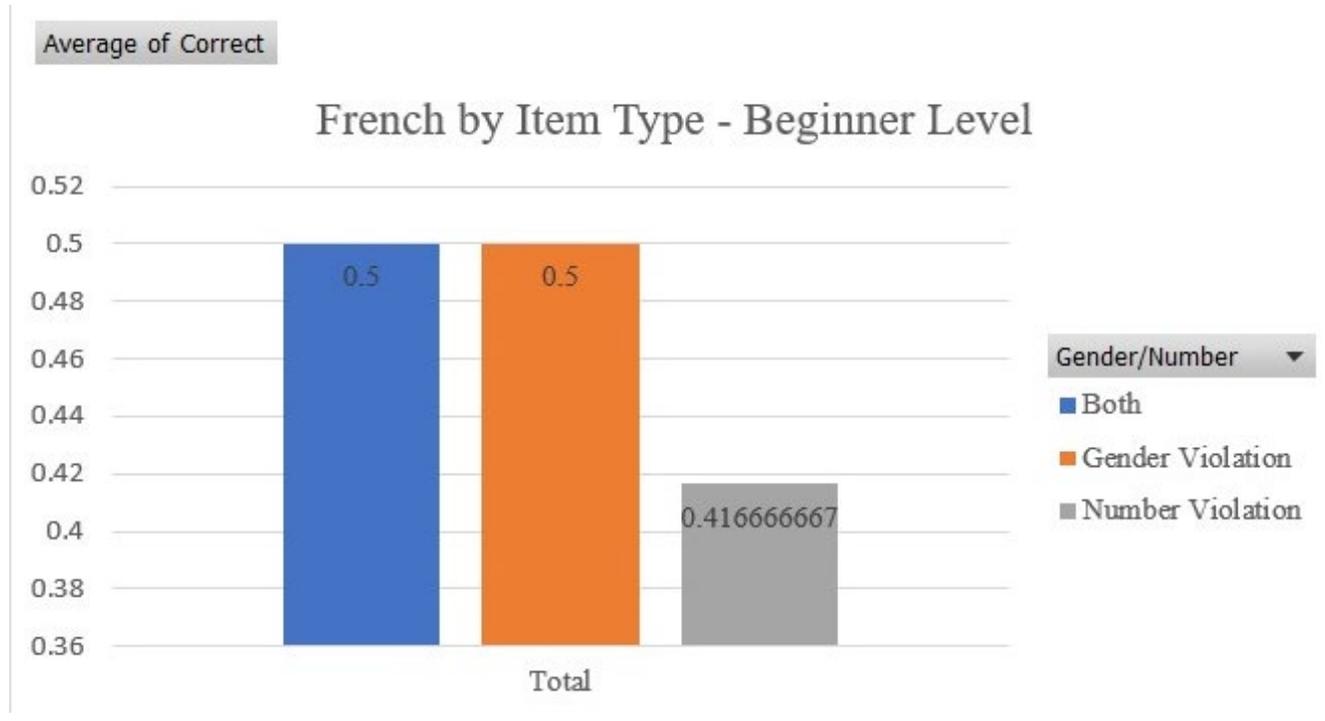
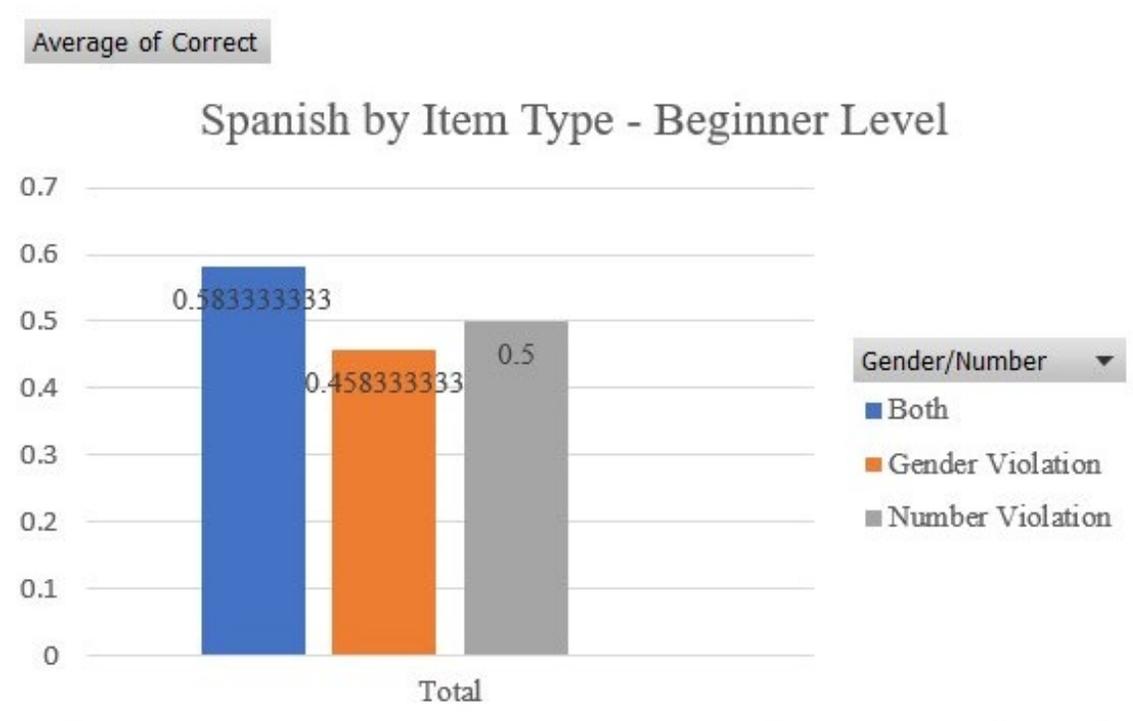
Spanish production task median split



French production task median split



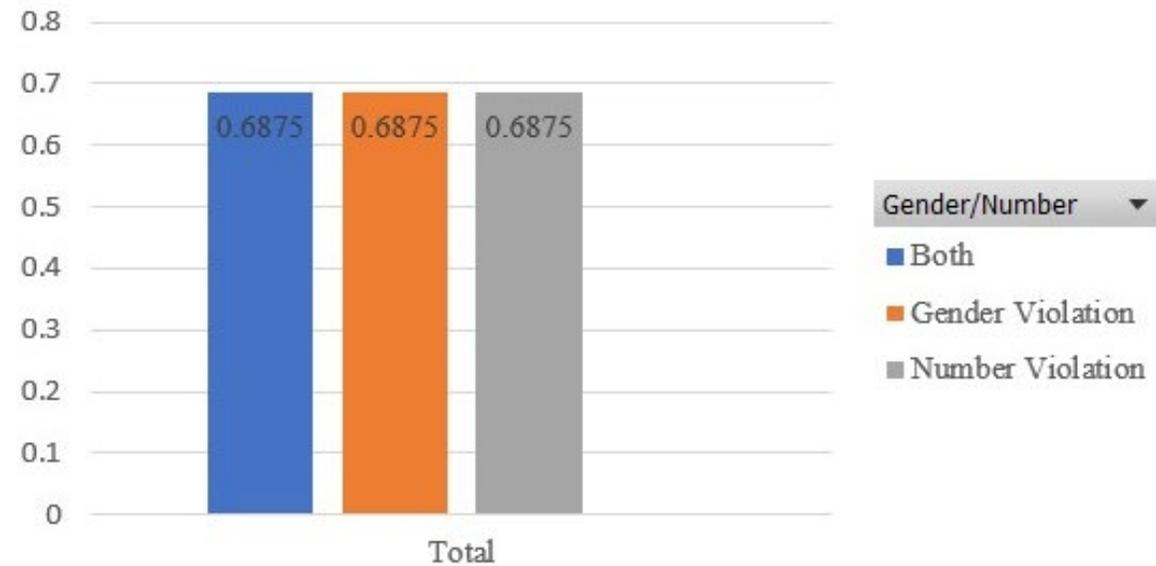
Forced Choice Task Results – Beginner



Forced Choice Task Results - Intermediate

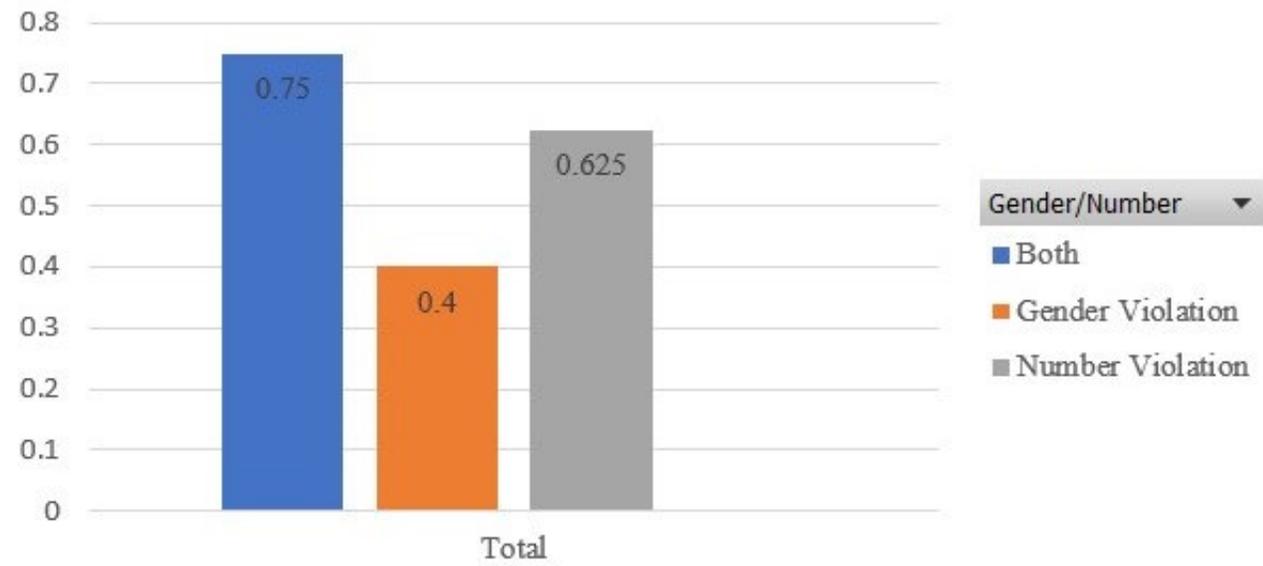
Average of Correct

Spanish by Item Type - Intermediate Level



Average of Correct

French by Item Type - Intermediate Level



Conclusions

- At the Beginner level, Spanish L2 learners behaved as the hypothesis predicted; they scored on average the highest on the items that differed by number and gender, second highest on number-based items, and lowest on gender-based items.
- At the Intermediate level, Spanish L2 learners showed no effect for item type; they performed the same regardless of whether the interpretation relied on gender or number.
- Supports previous findings that any observable difference between learners' acquisition of gender versus number decreases as proficiency increases (White, Kozłowska–Macgregor, and Leung, 2004).

Conclusions Cont.

- At the Beginner level, French L2 learners did not behave as predicted; instead, they showed more sensitivity to gender errors than number errors.
- Additionally, French L2 learners at this level performed higher than the Spanish learners on the items that differed in both gender and number, despite this distinction being more noticeable in Spanish.
- At the Intermediate level, French L2 learners did behave as the hypothesis predicted, although it was unexpected that this pattern would be observable at the Intermediate level but not the Beginner level.

Conclusions Cont.

- There is evidence here that the acquisitional process for gender and number in pronouns is different between Spanish and French.
- The L2 Spanish learners behaved exactly as predicted; Beginner level learners were more sensitive to number than gender, and that difference was less apparent at higher levels of proficiency.
- The L2 French learners behaved inversely of the hypothesis.
- More research is warranted in regards to the difference between languages, as well as the difference between acquiring number and acquiring gender.

Works Cited

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- White, L., Valenzuela, E., Kozłowska–Macgregor, M., & Leung, Y. I. (2004). Gender and number agreement In Nonnative Spanish. *Applied Psycholinguistics*, 25(01), 105-133.