**SHLL 2021-023 Variation in syllabification: onglides in Sonoran Spanish**

Associate Editor recommendation: revise and resubmit.

**Reviewer report 1:**

Recommendation: **Major revision**

This paper contains three components:

A) A review of the literature on the syllablification of onglides in Spanish

B) An experiment including a production task and a test of syllabification intuitions

C) OT modeling of the experimental results.

The review of the literature has been competently performed in my opinion. The review is rather comprehensive in the presentation of facts that have been considered by different authors to be relevant for determining the syllabification of onglides in Spanish and appropriately considers the strengths and weaknesses of various arguments.

The OT analysis is also fine.

The experimental part, on the other hand, is more problematic.

Neither of the two tasks included (oral syllabification and reading of words in the frame “Digo WORD para ti”) is particularly innovative. The number of participants is also smaller than in other studies on the syllabification of sequences of vocoids in Spanish.

See, e.g. https://assta.org/proceedings/ICPhS2019/papers/ICPhS\_161.pdf

and references therein.

Furthermore, the experimental procedures and results are presented in a very incomplete manner, so that it is difficult for me to know what to conclude.

The following information would need to be included in a revised version of the paper:

1) Participants: how and where were the 10 participants recruited? Are they monolingual Spanish speakers? If not, what is their degree of bilingualism in English?

2) Materials:

a. In an appendix, please provide the complete list of stimuli, including all distractors, written in exactly the same manner and order as they were presented to the participants.

b.Why did you choose made-up words instead of real Spanish words?

3) Oral syllable division:

a. how exactly was this task performed?

b. what were the exact instructions?

c. what did the participants do?

d. how were the results collected?

e. why do you think that asking participants to syllabify nonce words tells us anything about how they syllabify real Spanish words? (as opposed to their syllabification of borrowings, particularly if they are bilingual)

4) Reading task

a. Where was the reading task performed?

b. What equipment was used for the audio recording?

5) Data processing: syllable division task:

Since the paper contains no information regarding how productions tokens were classified, there is no way for readers to know how subjective your tripartite classification (Hiatus, Simplification, Triphthong) is.

a. Did you record the responses in audio?

b.Who performed the classification? Was there more than one judge? If so, what was their agreement rate? What was done in cases of disagreement?

5) Data processing: reading task

a. How were the data segmented?

b.Who performed the segmentation? Was there any blind-checking by a second annotator? if so, what was the mean difference between annotators in ms?

In particular, accurately segmenting a glide after a palatal consonant can be extremely difficult. This is not just a matter of spectrographic analysis, but of the way such sequences are articulated. You need to be extremely explicit regarding the criteria that were used for placing boundaries. You also need to show a couple of examples of segmentation.

c.What settings were used to extract F1?

6) Results of oral syllable-division task

a. In an appendix please provide a table with the number of tokens syllabified in each of the three manners that you have established for each of the 10 participants.

b. In the body of the paper present descriptive statistics. Minimally the results should be shown in histograms or barplots with error bars.

c.The Bayesian analysis is probably not such a meaningful addition to the paper, given the fact that this is an essentially exploratory experiment, with a very small number of subjects and tokens and that it is not the case that there is a large body of previous studies of the same type with quantitative results that could serve as informative priors. It is much more important for you to include very clear and complete descriptive statistics, which are absent from the present version of the paper.

5) Results of acoustic analysis

a. Duration: In order to interpret differences in duration we need to know how boundaries were placed. Again, you need to present comprehensive descriptive statistics before any Bayesian analysis. Show the durational data in boxplots and include also a table with means and standard deviations.

b. F1: A difference in F1 at the beginning of [j] after palatal vs non-palatal consonants does not necessarily mean anything other than the fact that the transitions are different, as they are expected to be. They do not tell us anything regarding syllabification. If you measure formants for any vowel after consonants with different places of articulation, you are going to find differences at the beginning of the formants. Unless you can explain more clearly why this is relevant for determining syllabification, this should be deleted.

Details:

p4. . “Languages that parse this sequence in the onset such as English do not allow [\*bw]” 🡪 this is true of English, but not necessarily of other languages. Do you have references for languages other than English?

p10. “. This explains why forms like like *família* are possible” 🡪 Add: and \**fámilia* is impossible.

p11. “as the different behavior of glides with regard to stress can be attributed to a historical fact.”🡪 historical phenomena may still result in lexical patterns that are accessible to speakers.

p.11. “antepenultimately stressed syllables” 🡪 words?

p.11. *loteiga* 🡪 I believe this should be *lóteiga*.

p.12. “*ciego*, *jelo*” 🡪 I don’t think *jelo* is a Spanish word.

p.30. “Although the small number of participants must be acknowledged as a limitation of this study, it is likely that a larger sample would not alter the finding that postconsonantal glides can be parsed in the onset in Sonoran Spanish”. 🡪 why? what makes you believe that? Of course, in a sense if you find a single case where it is unambiguously the case that one speaker has produced a postconsonantal glide as part of the onset, that’s is enough to conclude that that is a possibility. But for that you don’t need to perform any statistics.

**Reviewer report 2:**

1.  Publication recommendation: Revise and resubmit

2.  One paragraph overview summarizing the reasons for your recommendation.

This paper wants to prove with an experimental study that onglides in Spanish can be syllabified as part of either the onset or the nucleus. For the reasons I mention in the comments included in the paper, I am not convinced that the paper succeeds in proving beyond doubt the existence of this dual parsing. Nonetheless, I think that it succeeds in raising an important theoretical question and at least for this reason deserves publication (hoping that future studies further consider this theoretical possibility). I also think that some parts of the design of the experiment and the statistical analyses are excellent and could serve as an example of how to approach empirically this kind of proof.

3.  Detailed comments that will provide constructive feedback to the author(s) and allow the editorial team to better understand any issues raised in your summary paragraph.

General recommendations:

- The theoretical case for two possible affiliations should be given more prominence. The paper contains a long section that reviews the arguments in favor of onset or nucleus affiliation of onglides in Spanish. Since the position of the authors is that both are possible, there is no need to prove that any of them is right or wrong. It would be enough to mention that the two positions have been extensively defended and include the relevant references. That would provide space to focus on the theoretical implications of the proposal, considering how can both parses be possible. Generative Grammar is eminently deterministic. Syllabic constituents are assumed to be branching and the affiliation of segments to each branch is determined by rules or constrains (i.e. determined by the grammar).  A deterministic grammar gives you A or B. In the final discussion, the authors suggest that an OT stochastic grammar could be the solution, but the argumentation is too superficial and as presented arguably wrong. This needs to be fixed in the final version of the paper. The theoretical background in which the two affiliations would be possible needs to be moved to the beginning to convince the reader that what the experiment wants to prove con be accounted for in the assumed theoretical framework. Besides an A or B affiliation depending on context or linguistic variety, to make a complete theoretical case the authors could also consider the possibility of simultaneous A and B affiliation (i.e. *a la* ambysillabicity).

- The authors chose to focus on a specific dialect of Spanish, but the argument for dual affiliation could actually be made for any language.

- Some claims about the evidence for onset restrictions provided by the experimental design need to be softened and consider other alternative interpretations.

- As mentioned in the comments included in the article, section 4.2  is missing important information re. background information on informants and their selection, justification for tasks, detailed explanations of coding and phonetic analysis.

- Finally, the limitations' section also needs to take into account some comments included in the article.