BUCLD 50 Proceedings
To be published in 2026 by Cascadilla Press
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Ellipsis in Contact: VPE and Sluicing in Spanish Heritage Speakers

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1. Introduction

It has been suggested that even highly proficient heritage speakers (HSs) exhibit difficulties evaluating silent elements, such as null pronominals and object-relativization gaps (*the Silent Problem*; Laleko & Polinsky, 2017). However, ellipsis remains comparatively understudied in this population, despite its theoretical relevance and cross-linguistic variability (cf. Polinsky, 2018a; Santos & Flores, 2016). This study addresses that gap by examining two elliptical configurations—sluicing and verb phrase ellipsis (VPE)—in English-dominant, Spanish HSs.

It is commonly assumed that ellipsis is constrained by a universal identity condition, while the licensing of specific elliptical configurations varies cross-linguistically. We test whether HSs respect the identity condition by examining their judgments of Spanish sluices that either match or mismatch in voice with their antecedents. We then compare HSs' performance on this contrast with their knowledge of VPE licensing. Whereas English allows both auxiliary-stranding VPE (AuxVPE) and modal-stranding VPE (ModVPE), Spanish only allows ModVPE, creating a lesser-examined contact scenario where the dominant language (English) licenses a superset of the structures licensed in the heritage language (Spanish).

Our goal is to determine whether HSs' difficulties with silence arise from a general processing or representational burden with silent elements, in which case both constructions should show deviance in comparison to a baseline group, or whether dominant language transfer plays a role. Under transfer, we expect overacceptance of AuxVPE, allowed in English, but not of identity violations in sluicing, where both languages align.

In anticipation of our results, we find that compared to L1 Spanish-dominant speakers (DSs), English-dominant HSs overaccept AuxVPE, but they do not overaccept ungrammatical sluices, which suggests that not all properties of silent elements are susceptible to deviance in HSs: universal properties remain intact, whereas variable ones are susceptible to change. We argue that transfer plays an

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important role in HSs' evaluations of properties of silent structures that we expect could vary *a priori*. This study is thus situated against a backdrop of recent debates about the role of transfer in heritage grammars (Polinsky, 2018b). Lastly, we discuss how the [E]-feature approach to ellipsis licensing (Merchant, 2001) is well-equipped to capture the results and further propose that the observed pattern arises from HSs' reduced inhibition of the dominant language (Putnam & Sánchez, 2013; Perez-Cortes et al., 2019), which allows the [E]-feature to "seep" into the heritage grammar.

1.1. Heritage speakers and the Silent Problem

Heritage speakers (HSs) are bilingual speakers with a particular acquisition history: they acquire their first language, the heritage language (HL), naturalistically from early childhood, but around school age they generally transition into the dominant language of the region in which they live, which typically becomes their dominant language (Montrul & Polinsky, 2021). HSs are a rather heterogeneous group with great variability in proficiency, as well as language use and history (Benmamoun et al., 2013; Polinsky & Scontras, 2020). Given their particular linguistic profile, properties of HLs are informative with respect to the effects of quantity, type, and timing of input in ultimate language attainment, the resilience of different grammatical properties, and patterns of transfer and change in language contact scenarios (e.g., Lohndal et al., 2019).

When compared to L1 dominant speakers (DSs), HSs show robust maintenance of phonetic and phonological properties, particularly in perception (e.g., Au et al., 2002; Chang et al., 2008; Kim, 2024; cf. Repiso-Puigdelliura & Kim, 2021). However, their morphosyntax and properties at the syntax-pragmatics interface are more variable (e.g., Benmamoun et al., 2013; Montrul, 2018a; Sorace, 2004). Many studies report findings related to this variability that are consistent with a transfer explanation (Montrul, 2022; Montrul & Ionin, 2010; Giannakou, 2018; cf. Polinsky, 2018b; Romano, 2021; Sorace, 2011) and a simplification explanation (Montrul, 2022; Silva-Corvalán, 1994; cf. Polinsky & Putnam, 2024), e.g., a grammar with fewer available features or structures (Montrul, 2018b). For example, in the case of heritage Spanish in English-dominant contexts, it has been observed that HSs show inconsistent use of Differential Object Marking (DOM). This divergence from L1-dominant speakers could be attributed to transfer, given that English does not have DOM, or to simplification, given that the central issue with DOM is its omission (e.g., Montrul & Sánchez-Walker, 2013). Within the heritage Spanish/dominant English dyad, the same can be said of the grammatical gender system (e.g., Montrul et al., 2008), use of the subjunctive (e.g., Montrul, 2009), and use of null subjects (e.g., Montrul, 2004).

Laleko and Polinsky (2017) observe that many divergent structures in HLs involve silence, which they have termed the Silent Problem: even highly proficient HSs differ from their monolingual counterparts in their ability to produce and evaluate missing elements with discourse antecedents. This pattern has been documented for null pronominals (Ivanova-Sullivan, 2014; Laleko &

Polinsky, 2017; Montrul, 2004); object relativization gaps (O'Grady et al., 2001; Polinsky, 2011); and V-stranding Verb Phrase Ellipsis in heritage Russian in contact with English (Polinsky, 2016). Thus, the Silent Problem serves as an umbrella term that brings together seemingly disparate phenomena. Importantly, it also allows us to generate a testable prediction, namely that properties of silent elements pose a challenge to HSs, regardless of whether these are shared with the dominant language or not. In this study, we test two elliptical constructions to inform the transfer versus simplification debate as well as the Silent Problem hypothesis: sluicing, which shares a set of properties in Spanish and in English, and verb phrase ellipsis (VPE), in which English licenses a superset of the structures that are allowed in Spanish.

1.2. Ellipsis

We adopt the widespread view that ellipsis involves a constituent that is syntactically projected and then deleted at PF (Ross, 1969; Merchant, 2001, a.o.). Empirical evidence from acquisition studies supports the theoretical stance that there is complex structure at the ellipsis site (Mateu & Hyams, 2021; Pettenon et al., 2026). Ellipsis is further regulated by a universal identity condition that requires the elided constituent to be formally identical (at some relevant level) with its antecedent (Merchant, 2019; Ranero, 2021).[1] We also assume that ellipsis is encoded syntactically by the presence or absence of an [E]-feature on a functional head that licenses (or not) ellipsis of a constituent (Merchant, 2001).[2] Crucially for our study, this is how cross-linguistic variation in the licensing of ellipsis is accounted for: languages differ with respect to the heads that can bear the [E]-feature. This feature-based approach to the licensing of ellipsis captures our variation of interest straightforwardly: English has auxiliary-stranding VPE (AuxVPE, (3)) because the relevant head in English can bear [E], while Spanish does not have AuxVPE (4) because the relevant head cannot bear [E] (see Dagnac, 2010; López, 1999). The [E]-feature approach to licensing is consistent with theoretical models that seek to encode cross-linguistic variation via featural differences (see Roberts, 2019).

As mentioned above, we focus on two elliptical configurations in this study. First, sluicing (1)-(2), where the sentential portion of a question is silent but still interpreted, leaving only a *wh*-phrase remnant on the surface (Ross, 1969). Moving forward, note that we represent the ellipsis site in angled brackets:

(1) a. Someone$_i$ wrote this message, but I don't know who$_i$ <_$_i$ wrote this message>.

[1] Exactly how the condition should be formulated is a matter of current debate.

[2] For details on implementation and elaborations on the placement of the [E]-feature and its interaction with the ellipsis site (e.g., whether an operation *Agree* is implicated), see (among others) Aelbrecht, 2010; van Craenenbroeck & Merchant, 2013.

b. * Someone$_i$ wrote this message, but I don't know by whom$_i$ <the message was written _$_i$ >.

(2) a. Alguien$_i$ escribió este mensaje pero no sé quién$_i$ < _$_i$ escribió este
someone wrote this message but not know who wrote this
mensaje>.
message
'Someone wrote this message, but I don't know who.'

b. *Alguien$_i$ escribió este mensaje pero no sé por quién$_i$ < fue
someone wrote this message but not know by who was
escrito _$_i$ este mensaje >.
written this message
Intended: 'Someone wrote this message, but I don't know by whom.'

Recall that sluicing (and all ellipsis) is subject to a universal identity condition; therefore, the *antecedent clause* and the *target clause* must match in voice if the head that encodes voice is within the ellipsis site (Merchant, 2013; see Ranero, 2021 for cross-linguistic nuances). For example, in (1a, 2a) the antecedent is active *Someone wrote this message* and the *wh*-remnant in the target clause *who* forces the active voice reading inside the ellipsis site *I don't know who <wrote this message>*. Since there is a voice match, the examples are well-formed. Any attempt to force a voice mismatch between the antecedent and the elided clause, as in (1b, 2b), renders the sentences ill-formed. Our study will manipulate the voice specification (active or passive) of antecedent and target clauses, with a subset of items with a voice match and a subset with a voice mismatch.[3]

The second configuration we focus on is VPE, which broadly refers to ellipsis of a verbal phrase where the remnant includes elements such as auxiliaries, modals, and polarity-sensitive elements (e.g., *también* 'also'). Our languages of interest differ regarding the licensing of VPE in relation to the remnant: while English allows for an auxiliary such as *have* or *be* to be stranded as a remnant (AuxVPE, (3)), Spanish does not (4). However, both Spanish and English allow for a modal to be stranded as a remnant (ModVPE, (5) and (6)).[4]

(3) Marcos is studying linguistics, and Pedro is <studying linguistics> too.

[3] Note that we are not claiming that sluicing is identical in all respects across languages: e.g., English allows *swiping* (Sprouse, 2006) whereas Spanish does not. What is crucial for our purposes is that the identity condition can be detected via voice manipulations in both languages.

[4] There has been a debate in the literature on Spanish regarding whether ModVPE involves true ellipsis or is instead a flavor of *null complement anaphora*, a configuration involving silence that lacks complex structure (Depiante, 2000). Recent work has argued that the totality of the evidence favors the elliptical approach (Fernández Sánchez, 2023; see Ranero, To appear).

(4) *Marcos está estudiando lingüística y Pedro también está < estudiando
Marcos is studying linguistics and Pedro also is studying
lingüística>.
linguistics
Intended: 'Marcos is studying linguistics, and Pedro is, too.'

(5) Marcos can attend the conference, and Pedro can <attend the conference>, too.

(6) Marcos puede asistir a la conferencia y Pedro también puede <asistir a
Marcos can attend to the conference and Pedro also can attend to
la conferencia>.
the conference
'Marcos can attend the conference, and Pedro can, too.'

In (3), the verbal constituent *studying linguistics* can be elided in English and the auxiliary *is,* stranded. In contrast, in Spanish (4) eliding the verbal constituent *estudiando lingüística* and stranding the auxiliary *está* ('is') yields an ill-formed sentence. On the other hand, in both English (5) and Spanish (6), eliding the verbal constituent *attend the conference/asistir a la conferencia* and stranding the modal *can/puede* is well-formed. Notice that the status of examples like (4) is independent of the identity condition regulating ellipsis, since an identical antecedent *is* available, but the example is nevertheless ill-formed. In sum, sluicing will be our window into HSs' knowledge of the identity condition of ellipsis, whereas VPE will provide a window into the licensing of ellipsis.

2. The current study

In the current study, we test sluicing and VPE structures in HSs of Spanish whose dominant language is English with a bimodal Acceptability Judgment Task (AJT). We ask: Does the Silent Problem apply to all aspects of silent structures? Specifically, do HSs and DSs differ in their judgments of both sluicing and VPE? If the Silent Problem applies to all aspects of silent structures, we expect HSs to differ from DSs in their evaluation of both VPE and sluicing. Alternatively, there may only be a difference between groups with VPE, which would suggest dominant language transfer resulting in an innovation in the HL regarding the licensing of ellipsis. If there are no differences between groups, the Silent Problem would become suspect, and perhaps transfer is not as prevalent among HSs as traditionally proposed, as recently argued (Polinsky, 2018b; Romano, 2021).

2.1. Participants

The final sample of participants included in this study is 33 L1-dominant Spanish speakers (DSs) and 39 heritage speakers (HSs) of Spanish. Fifteen additional participants completed our experiment but were excluded due to failing the control items (see Section 2.2.). In one web-based session, participants

completed a linguistic profile questionnaire, a lexical proficiency task, and the experiment on PCIbex (Zehr & Schwarz, 2018).

A lexical proficiency test, the LexTale-Esp (Izura et al., 2014), was employed to assess participants' Spanish proficiency level. Although vocabulary size does not directly index the full complexity of language proficiency, lexical knowledge has been shown to correlate strongly with grammatical competence across a range of morphosyntactic domains, including agreement, case marking, tense-aspect morphology, and embedding (Benmamoun et al., 2013). Consistent with this broader literature, the LexTale correlates well with independent proficiency measures for L2 learners (Izura et al., 2014) and has been shown to successfully distinguish between bilingual groups even at relatively high proficiency levels (Ferré & Brysbaert, 2017).

This test consists of 60 real words that range from very high to very low frequency, and 30 nonce words. Participants are asked to decide whether each string is a real word of Spanish or not. DSs scored an average of 48.39 out of 60 points (range: 29-60) while HSs scored an average of 24.59 out of 60 (range: 0-58). The answers from the language history questionnaire and results from the lexical proficiency tasks demonstrate the wide variability of the HS group.

No participants with third language experience before age 11 or home use of a third language during childhood were included in the study. DSs were recruited through the online platform Prolific. All DSs were born in Mexico, except one participant who was born in Guatemala, and all reported currently living in Mexico, except one participant who moved to the United States at the age of 19. Their exposure to Spanish during childhood averaged 98.34% (range = 80-100%), and their current use of Spanish averaged 79.85% (range = 10-100%).

Our HSs were recruited through courses at UCLA and Prolific. They were all born in the United States, except for three participants who were born in Mexico (n = 2) or El Salvador (n = 1) but moved to the United States at the age of 2. Except for these three participants, none of the HSs indicated living abroad for any period of time. Their exposure to Spanish during childhood averaged 66.67% (range = 10-100%), and their current use of Spanish averaged 24.09% (range = 0-70%).

2.2. Materials

Participants rated 72 sentences, which were presented simultaneously in written and aural modes, on a Likert scale from 1, *nada aceptable* 'not acceptable at all', to 7, *completamente aceptable* 'completely acceptable'. Audio stimuli were recorded by one male dominant speaker of Guatemalan Spanish. The experiment was presented on PCIbex (Zehr & Schwarz, 2018). The control items (7) (n = 12) were sentences manipulating the presence/absence of an obligatory preposition: grammatical sentences included the preposition (e.g., *sin* 'without' in (7a)), and ungrammatical sentences lacked the preposition (e.g., *en* 'at', in (7b), notated via _ here). The prepositions targeted in these items were required in both Spanish and English. Participants had to rate at least 3 of 6 grammatical controls between 5-7 and at least 3 of 6 ungrammatical controls between 1-3 to be included

in the study. This resulted in the exclusion of 10 HSs and 5 DSs, which are not included in the participant information above. An additional 12 items manipulating clitic placement were included in the study in order to test a separate research question, but these items are not discussed here as they fall beyond the scope of this paper.

(7) a. Hasta hoy, el acusado no hablaba sin su abogado, pero ahora
until today the accused not spoke without his lawyer but now
está colaborando.
is collaborating
'Until today, the accused did not speak without his lawyer present, but now he is collaborating.'

b. *Anoche, el crítico cenó _ ese restaurante, y debe dar una opinión.
last.night the critic dined that restaurant and must give an opinion
Intended: 'Last night, the critic had dinner (at) that restaurant, and he must give an opinion.'

Target sentences with Sluicing included either a VoiceMatch (active-active, passive-passive) (8a) or VoiceMismatch (active-passive, passive-active) (8b) between the antecedent and the clause with ellipsis.

(8) a. Alguien escribió esta evaluación recientemente pero Miguel no sabe
someone wrote this evaluation recently but Miguel not knows
quién.
who
'Someone wrote this evaluation recently, but Miguel doesn't know who.'

b. *Un jardinero plantó las flores cuidadosamente, pero el dueño no
a gardener planted the flowers carefully but the owner not
sabe por cuál.
knows by which
Intended: 'A gardener planted the flowers carefully, but the owner doesn't know by which one.'

In the active-passive example (8b), the antecedent *Un jardinero plantó las flores cuidadosamente* is an active transitive structure, but the remnant *por cuál* forces a passive structure, *por cuál* <*fueron plantadas las flores*> 'by which <the flowers were planted>'. The violation of the identity condition yields an ill-formed sluice.

Sentences with verb phrase ellipsis (VPE) either included a stranded modal, ModVPE, (9a), or a stranded auxiliary, AuxVPE, (9b).

(9) a. María puede bailar salsa bien, y Patricia también puede.
María can dance salsa well and Patricia also can
'María can dance salsa well, and Patricia can, too.'

b. *Heidi no está prestando atención últimamente, y Luna tampoco está.
Heidi not is paying attention lately and Luna neither is
Intended: 'Heidi is not paying attention lately, and Luna isn't, either.'

ModVPE sentences were balanced between sentences with *poder* 'can' and *deber* 'must'. AuxVPE sentences included both *estar* 'be' and *haber* 'have'. We used the imperfective *había* in the *haber* sentences to match the prosodic weight of the *estar* sentences and to avoid the low phonetic salience of the monosyllabic present forms of *haber* (e.g., *ha* 'have.3SG.PRS'). The latter could be a confound that might have degraded our AuxVPE items independently of the status of *haber* as a stranded auxiliary (see Fábregas, 2023, pp. 59-60).

2.3. Procedure

Participants first completed the LexTale-Esp task, followed by the experiment and the linguistic profile questionnaire in a web-based session of approximately 30 minutes. At the beginning of the experiment, participants completed three unrelated training items designed to encourage the use of both the high end and the low end of the scale. Test sentences were randomized, and responses were recorded in PCIbex.

3. Results

Figure 1 shows the mean ratings for the two VPE subconditions (ModVPE, AuxVPE), the two Sluicing subconditions (VoiceMatch, VoiceMismatch), and the two Control subconditions by the two Groups, DSs and HSs.

We analyzed our data with a cumulative link mixed model on Likert ratings using the *ordinal* package in *R* (Christensen, 2023) with fixed effects for Group (DS/HS), Grammaticality (G/U), and Sentence Type (Control/Sluicing/VPE), and random intercepts by Participant and Item. We found significant main effects for Grammaticality (β = -5.425, SE = .506, z = -10.718, $p < .0001$) and Sentence Type (Sluicing: β = -2.206, SE = .414, z = -5.323, $p < .0001$; VPE: β = -2.537, SE = .413, z = -6.148, $p < .0001$),[5] as well as significant interactions between Group and Grammaticality (HS*U: β = .719, SE = .293, z = 2.449, p = .014) and Grammaticality and Type (U*Voice: β = 1.944, SE = .633, z = 3.072, p = .002; U*VPE: β = 3.188, SE = .671, z = 4.747, $p < .0001$). Post hoc pairwise comparisons with a Tukey adjustment, conducted with the *emmeans* package in

[5] Both participant groups rated grammatical control sentences, e.g., (7a), significantly higher than grammatical sentences containing ellipsis, e.g., (8a), (9a). This pattern is unsurprising: although all sentence types consisted of two clauses, items involving ellipsis required participants to recover elided material, a process that may be more cognitively demanding than processing sentences that are fully realized on the surface.

R (Lenth & Piaskowski, 2025), showed: both groups distinguished between VoiceMatch and VoiceMismatch sluices (DSs: β = 3.48, SE = .389, z = 8.944, p < .0001; HSs: β = 2.786, SE = .385, z = 7.228, p < .0001) as well as ModVPE and AuxVPE (DSs: β = 2.236, SE = .366, z = 6.108, p < .0001; HSs: β = 1.33, SE = .363, z = 3.644, p = .0003), indicating that both groups distinguished between expected grammatical and ungrammatical sentences.

However, when compared across groups, DSs rated AuxVPE sentences lower than HSs (β = -.908, SE = .224, z = -4.06, p = .0003). In comparison, there were no statistically significant differences between groups with respect to ungrammatical sluices (β = -.353, SE = .23, z = -1.532, p = .418) or ungrammatical controls (β = -.39, SE = .281, z = -1.39, p = .506). In other words, HSs' higher ratings of AuxVPE are *not* the result of a general *yes*-bias (see Polinsky, 2018b; Romano & Guijarro Fuentes, 2024), but rather, they are evaluating AuxVPE sentences differently than DSs—i.e., HSs consider AuxVPE to be more acceptable than DSs do.

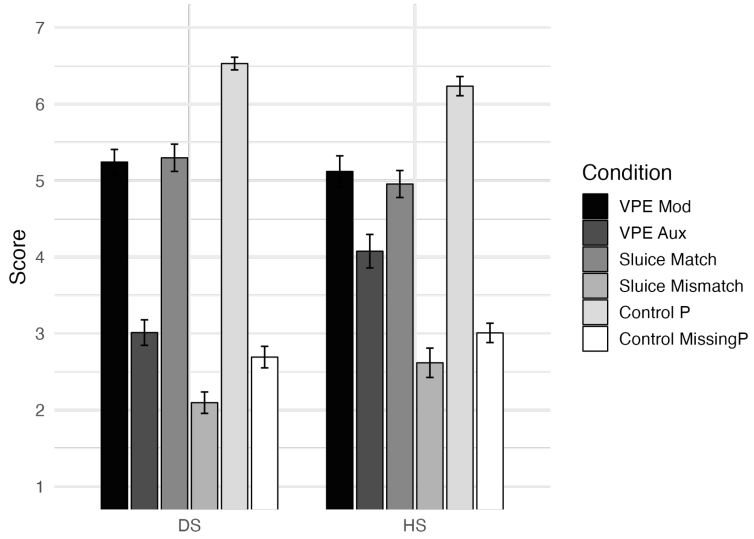

Figure 1. Mean ratings for each condition by group. Bars represent standard error of the mean.

Since HSs behaved differently than DSs in the AuxVPE condition, we analyzed the effect of (normalized) individual variables on their ratings of AuxVPE. Interestingly, we found that no individual variable predicted their evaluation of this construction: neither lexical proficiency score (β = -.47, SE = .42, z = -1.12, p = .263), percent of current Spanish use (β = 1.02, SE = .65, z = 1.57, p = .116), or percent of childhood Spanish use (β = .077, SE = .561, z = .138, p = .891) predicted AuxVPE ratings among HSs. For example, it is not the case that participants with lower Spanish proficiency also rated AuxVPE higher.

We further examined whether the HS group exhibited a bimodal pattern such that some participants consistently rated AuxVPE items low and others consistently high. However, HSs' ratings of AuxVPE were normally distributed (Shapiro-Wilk test, $W = 0.955$, $p = 0.124$).

4. Discussion

In this study, we tested two elliptical structures to assess the Silent Problem in heritage speakers, as well as transfer and individual factors that are known to contribute to divergence between heritage and dominant grammars. We found that HSs distinguish between modal-stranding VPE (ModVPE) and auxiliary-stranding VPE (AuxVPE), as well as voice-matched and voice-mismatched sluices. However, when compared to the DSs in our study, the HSs overaccepted sentences with AuxVPE, a structure which is present in their dominant language but illicit for baseline speakers of the HL. There was no such difference with respect to grammatical and ungrammatical sluices or our control items.

These results suggest that the Silent Problem does not necessarily apply to all properties of silent structures in heritage grammars: the identity condition, as evidenced by the requirement of voice matching in sluicing, seems to be unproblematic for HSs, who behaved like DSs with respect to this construction. We take this convergence between HSs and DSs to reflect that the representation and processing of the identity condition is shared between the HL and the dominant language. This result is consistent with the argument that universal properties may be less susceptible to change (divergence or attrition) in heritage grammars (Benmamoun et al., 2013; Polinsky, 2018b; Scontras et al., 2015).

On the other hand, VPE licensing does seem to be problematic even for advanced HSs. Specifically, they tend to overaccept AuxVPE, which is illicit in baseline Spanish. The question thus becomes, what underlies HSs' divergence with respect to these structures? We suggest that transfer from the dominant language may be a key source, given that the overaccepted structure is allowed in their dominant language (e.g., Montrul, 2010, 2023, cf. Polinsky, 2018b; Romano, 2021).

A conceivable alternative explanation for the observed performance advantage with sluicing over VPE could be attributed to frequency effects. Mateu and Hyams (2025) analyzed all adult speech across the available Spanish corpora in CHILDES (MacWhinney, 2000) (311,498 utterances) and found 725 instances of sluicing. We analyzed the same set of Spanish corpora and identified 242 instances of VPE. Therefore, it is reasonable to hypothesize that HSs' reduced performance with VPE could be related to its low frequency in an already reduced input environment. However, further analysis of the corpus data suggests that this explanation is unlikely. Of the 242 VPE instances identified, 240 involve *poder* 'can' as the stranded modal, whereas only two involve *deber* 'must'. Despite this extreme frequency imbalance, HSs did not rate *poder* ModVPE sentences any higher than *deber* ModVPE sentences ($\beta = -0.501$, $SE = 0.360$, $z = -1.390$, $p = .506$), as would be expected if frequency effects were driving the contrast between their judgments of the sluicing and VPE conditions.

Our hypothesized transfer effect constitutes an instance of innovation as complexification among HSs, a pattern that is comparatively rare relative to the more commonly documented cases of simplification. Specifically, we observe a case of structural elaboration (Dahl, 2004; McWhorter, 2007) in that HSs are permitting a broader set of structures in the HL than the set that is licensed in the baseline grammar. Similar patterns of structural elaboration have been reported for preposition stranding in HL Spanish in contact with dominant English (Pascual y Cabo & Soler, 2015), as well as for parasitic gaps in HL German in contact with dominant English (Sewell & Salmon, 2014). Taken together, these findings underscore the importance of avoiding blanket accounts of heritage language divergence in terms of "simplicity" alone (see Laleko & Scontras, 2021).

In examining the factors that might modulate transfer of AuxVPE among HSs, we found that none of the individual variables included in this study—childhood Spanish use, current Spanish use, or language proficiency—significantly predicted HSs' performance with AuxVPE. We therefore propose a language activation account (Putnam & Sánchez, 2013; Perez-Cortes et al., 2019) to explain our results: reduced inhibition of the dominant language (English) allows the English [E]-feature (Merchant, 2001) to "seep" onto the head that hosts Spanish auxiliaries, potentially resulting in the restructuring or reassembly of Spanish auxiliary projections in heritage Spanish. The flexibility of this account deemphasizes—though does not dismiss—the role typically attributed to language proficiency, at least as it is commonly measured in the literature, viz. through short standardized lexical assessments. This account also opens the door to alternative predictors of HS performance, such as levels of linguistic activation in both production (Perez-Cortes et al., 2019) and comprehension (our study). Developing principled ways to operationalize linguistic activation thus represents a promising direction for future research.

5. Conclusion

In this study we found that Spanish HSs distinguish between grammatical voice-matched and ungrammatical voice-mismatched sluices as well as modal-stranding VPE and auxiliary-stranding VPE. Because they behave like DSs with respect to sluicing, we conclude that the Silent Problem does not apply to all silent structures in heritage grammars, i.e., not all silent structures are difficult for HSs. However, the HSs in our study overaccepted AuxVPE, a structure that is allowed in their dominant language but not in the baseline Spanish. Neither lexical proficiency nor Spanish use currently or previously predicted performance on this structure, so we suggest that reduced inhibition of the dominant language (English) may lead to transfer of the [E]-feature into the HL head that licenses AuxVPE, resulting in a heritage grammar that seemingly exhibits complexification, as opposed to simplification.

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