

Narrow presentational focus in heritage Spanish and the syntax-discourse interface

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Abstract

The grammars of bilinguals have been found to differ from those of monolinguals especially with regard to phenomena that involve the interface of syntax and discourse/pragmatics. This paper examines one syntax-discourse interface phenomenon—presentational focus—in the grammars of heritage speakers of Spanish. The results of a contextualized acceptability judgment task indicate that lower proficiency heritage speakers show some variability in the structures they accept to realize focus, whereas higher proficiency heritage bilinguals pattern with monolinguals. These results suggest that some explanations of domain-specific vulnerability in bilingual grammars, including the Interface Hypothesis (Sorace, 2011), may need to be revised.

Keywords: focus, heritage speakers, Interface Hypothesis, syntax-discourse interface, Spanish

1 Heritage Spanish and the syntax/discourse interface

Heritage speakers are “asymmetrical bilinguals who learned language—the ‘heritage language’—as an L1 in childhood, but who, as adults, are dominant in a different language” (Benmamoun, Montrul, & Polinsky, 2013a, p. 260). In other words, they are simultaneous or early sequential bilinguals whose first language (L1), which they acquired naturalistically, is not their dominant language. Heritage speakers generally retain some competence in their heritage language, but this can vary widely, depending on several factors (Montrul, 2008; Rothman, 2009b). In the United States, the heritage language is usually an immigrant or minority language that heritage speakers grow up with at home, and the dominant language is English. In the case of Spanish in the United States, heritage speakers are Spanish/English bilinguals who grew up learning Spanish at home as an L1 and who are dominant in English but retain some competence in Spanish.

Because heritage speaker grammars are acquired in a situation of language contact, various factors can affect their forms, such as incomplete acquisition, attrition, transfer from the dominant language, different levels of activation of the two languages over time, and qualitatively and quantitatively different input, including the acquisition of a contact variety and differences in formal education (Montrul, 2008; Pires & Rothman, 2009; Polinsky, 2011; Putnam & Sánchez, 2013; Rothman, 2007, 2009b). There is debate in the field about the relative importance of each of these factors, all of which likely play some role in determining the form of adult heritage speaker grammars. Notably, though, regardless of the source of the differences, particular

domains of grammatical knowledge seem to be more affected than others by the context of heritage language acquisition.

One area in which heritage speakers' grammars are especially likely to differ from monolingual grammars is in discourse-level phenomena (Benmamoun, Montrul, & Polinsky, 2010, 2013b; Montrul & Polinsky, 2011; Montrul, 2004, 2011; Rothman, 2009b; Zapata, Sánchez, & Toribio, 2005). For instance, heritage speaker grammars have been shown to differ with regard to null arguments (Albirini, Benmamoun, & Saadah, 2011; Montrul, 2004; Silva-Corvalán, 1994), subject position (Albirini et al., 2011), and information structure, including topic and focus constructions (Fenyvesi, 2005; Zapata et al., 2005), all features governed by the surrounding discourse context.

What makes discourse/pragmatics pose special difficulty for heritage speakers? One possibility is that the vulnerability of the syntax-discourse interface is a feature of bilingualism itself. Support for this idea comes from the fact that the same discourse phenomena have been found to be unstable in other bilingual contexts, including second language (L2) acquisition (Belletti, Bennati, & Sorace, 2007; Rothman, 2009a; Sorace & Serratrice, 2009; Sorace, 2011; Tsimpli & Sorace, 2006; Wilson, Sorace, & Keller, 2009), L1 attrition (Tsimpli, Sorace, Heycock, & Filiaci, 2004; Tsimpli, 2007), and bilingual L1 acquisition (Haznedar, 2007; Müller & Hulk, 2001; Paradis & Navarro, 2003; Serratrice, Sorace, & Paoli, 2004; Serratrice, 2007; Sorace, Serratrice, Filiaci, & Baldo, 2009). One leading explanation for this instability is known as the Interface Hypothesis (hereafter, IH; Sorace, 2011).

Initially proposed to explain residual optionality in near-native L2 learners (Sorace & Filiaci, 2006; Sorace, 2003; Tsimpli et al., 2004), the IH appeals to a distinction between language-

external and language-internal interfaces to explain why certain domains are more problematic than others for bilinguals. *External* interfaces are “the link between language and non-linguistic cognitive systems” (Sorace, 2011, p. 6); they involve information outside the linguistic system such as contextual appropriateness, pragmatics, familiarity, prominence, or the interlocutor’s perspective. The syntax-discourse interface is an external interface. *Internal* interfaces are those between linguistic subsystems, like syntax-semantics or syntax-morphology. Based on this distinction, the IH claims that structures involving external interfaces are more costly to process than those involving internal interfaces or core syntax because bilinguals lack the processing resources necessary to integrate information from multiple cognitive domains at once, which is why syntax-discourse, as an external interface, has proven to be so problematic (Sorace & Serratrice, 2009; Sorace, 2011; Tsimpli & Sorace, 2006). Under this processing-based account, instability at the syntax-discourse interface is a byproduct of bilingualism itself.

Although the IH has stimulated a great deal of research (see Sorace, 2011; White, 2011 for an overview), many researchers have criticized the internal/external distinction on conceptual and empirical grounds (Duffield, 2011; Montrul, 2011; Pérez-Leroux, 2011; White, 2011). Montrul (2011) argues that all sentences necessarily involve multiple internal and external interfaces, and it may be implausible to single out one as the source of learner difficulty. She cites evidence from structures considered to involve the syntax-semantics interface, which, as an internal interface, is predicted to be completely acquirable or subject to transfer, but which in fact shows the sort of instability expected for external interfaces. Similarly, White (2011) reviews substantial evidence from L2 learners showing that both types of interfaces sometimes behave as predicted and sometimes do not.

Another potential critique, pointed out by an anonymous reviewer, is that often the IH is assumed to rest on a Minimalist ‘T-model’ of the grammar, in which linguistic knowledge is connected to other cognitive modules only by the articulatory-perceptual (A-P) and conceptual-intentional (C-I) interfaces with Phonetic Form (PF) and Logical Form (LF), respectively. This model can be difficult to apply to information structure, which generally involves connections between syntax, phonology, and discourse.¹ However, the IH need not necessarily be tied to the T-model; other proposals within the generative tradition can maintain the internal/external distinction while allowing more complex multiple interfaces between linguistic modules. For example, the Parallel Architecture proposed by Jackendoff (2002) allows for multiple language-internal interfaces, but also has external interfaces with other cognitive systems, including discourse/pragmatics. This architecture would be compatible with the predictions of the IH and, indeed, Sorace (2011) and Sharwood Smith (2011) suggest that it be adopted as an articulated model of linguistic interfaces to which the IH could be applied.

Whether assuming the Parallel Architecture or a modified version of the T-model, presentational focus—syntactically and/or prosodically marking new information as prominent depending on the surrounding discourse context—fits the definition of an external interface phenomenon. It is precisely those phenomena that are governed by “pragmatic conditions that

¹ Indeed, researchers in generative linguistics often modify the model to take into account the interactions between prosody and discourse needed to explain focus and other information-structural phenomena, as in Zubizarreta’s (1998) Assertion Structure, López’s (2009) pragmatics module, or Reinhart’s (2006) reference set computations.

determine appropriateness in context” (Sorace & Serratrice, 2009, p. 197) that belong to external interfaces. However, Sorace argues that focus pertains to an internal interface, because it “involve[s] formal semantic features internal to grammatical representations” rather than “contextual information external to the grammar” (Sorace, 2011, p. 5). Those disputing this claim argue that focus should be treated like topics and other information-structural phenomena as belonging to an external interface (Rothman & Slabakova, 2011; Slabakova, 2011; Tsoulas & Gil, 2011).

A partial explanation for this uneven treatment of focus with regard to the IH is that the evidence is mixed. For instance, Tsimpili and Sorace (2006) found that L1 Russian learners of Greek had more target-like behavior with focus than with the use of subject pronouns, leading them to conclude that focus does not pertain to an external interface. On the other hand, Belletti, Bennati, and Sorace (2007) found that L2 learners of Italian (L1 English) had acquired the syntactic features relevant for producing post-verbal subjects but differed from monolinguals on discourse features, as the IH predicts for an external interface. For Spanish, some evidence suggests that focus is acquired late and/or exhibits protracted optionality for L2 learners, as the IH predicts (Hertel, 2003; Lozano, 2006a, 2006b). However, other evidence indicates that learners can eventually acquire discourse-related word order alterations, with target-like performance on information-structural categories at advanced proficiency levels (Domínguez & Arche, 2008, 2014; Hertel, 2003; Leal Méndez & Slabakova, 2011; Slabakova, Kempchinsky, & Rothman, 2012; Slabakova, Rothman, & Kempchinsky, 2011).

For heritage speakers of Spanish, the evidence on focus is also mixed. Zapata et al. (2005) investigated focus using a forced-choice judgment task. Participants were given a question

containing an intransitive verb (both unaccusatives and unergatives were tested) and were asked to judge whether SV or VS order, or both, constituted an acceptable answer to the question. The questions created an appropriate context for broad focus (*¿Qué pasó?* 'What happened?') and for narrow focus on the subject (*¿Quién estornudó?* 'Who sneezed?'). The 24 heritage speakers who participated differed significantly from expectations based on the literature (although there was no control group) in terms of the discourse/pragmatic restrictions on argument position: though they clearly had acquired the syntax of post-verbal subjects, they accepted significantly more pre-verbal subjects under narrow focus than expected, which the authors interpret as convergence with English. On the other hand, de Prada Pérez and Pascual y Cabo (2012), also investigating intransitive predicates under both broad and narrow subject focus with a judgment task, found that heritage speakers made the same distinctions as the control group. Participants rated post-verbal subjects higher in narrow subject focus contexts than in broad focus contexts, which, de Prada Pérez and Pascual y Cabo argue, indicates that these speakers have knowledge of the pragmatically licit and illicit uses of post-verbal subjects. However, they also note that within the narrow focus context, the groups did not generally distinguish between pre-verbal and post-verbal subjects, indicating that these speakers (including the control group, interestingly) had some "indeterminacy" in their grammars.

In sum, focus has received uneven treatment with regard to the IH, which may be partially because the evidence is unclear. Sometimes it behaves like an internal interface phenomenon, other times like an external interface phenomenon. Of course, as Duffield (2011) points out, if the IH is to have any explanatory power, the interface to which particular grammatical structures belong cannot depend on learners' difficulty with them; rather, it should be determined in a

principled way *a priori*, at which point the predicted learner difficulty can be tested. Yet it is interesting to note that, crosslinguistically and with different bilingual populations, the evidence for focus does not match expectations for either type of interface; thus, regardless of the type of interface assumed, its behavior is problematic, which require the rethinking of the internal/external distinction as a whole.

In fact, Sorace recognizes that this distinction may need to be revised to “instead allow for a range of interface conditions, graded according to their computational complexity and their dependence on extra-linguistic factors” (Sorace, 2012, p. 213). An alternative to the mainstream formulation of the IH, then, would be to view instability in bilingual grammars as the result of more general issues of computational or processing complexity (Hopp, 2009, 2011; O’Grady, 2011) or variability (de Prada Pérez, 2010). Under this view, phenomena at the syntax-discourse interface have been shown to be especially problematic because they tend to be computationally complex or variable. However, the amount of complexity will vary from structure to structure even at external interfaces, and computationally complex structures not at external interfaces will also behave the same way, such that which interface a particular construction belongs to is less important than its computational complexity. Focus, which has generated ambiguous evidence but fits the definition for an external interface construction, might be a valuable testing ground for this sort of revision to the IH, as it could support the view that certain discourse phenomena cannot be neatly distinguished as belonging either to internal or external interfaces.

Even if reformulated in terms of complexity rather than type of interface, the IH and related alternatives propose that bilinguals’ difficulty with discourse/pragmatics is ultimately an inherent part of bilingualism itself, and therefore should logically be applied to heritage speakers.

After all, adult heritage speakers often were child simultaneous bilinguals, a population to which the IH explicitly does apply. Montrul and Polinsky (2011) argue convincingly that the IH should in fact apply to heritage speakers just as with other bilinguals. As we've seen, some evidence supports this move, because heritage speakers have been found to have difficulty with precisely the same syntax-discourse interface structures as other bilinguals included in the IH (Benmamoun et al., 2010, 2013b; Montrul, 2004, 2011; Rothman, 2009b), and several previous researchers (de Prada Pérez & Pascual y Cabo, 2012; Hoot, 2012; Montrul, 2011; Pascual y Cabo, Lingwall, & Rothman, 2012) have assumed that IH is as applicable to heritage speakers as to other bilinguals.

However, with heritage speakers, whose heritage language is generally a societal minority language, there is an additional factor beyond bilingualism itself, namely that the input they receive likely differs from that of other bilinguals. That is why Sorace (2011) excludes heritage speakers from the reach of the IH. The parents and other family members who provide the primary input in the heritage language are generally bilingual themselves, and their L1 may have undergone attrition or other effects related to language contact. If discourse/pragmatics is especially vulnerable to L1 attrition, it may well be that any difficulty with focus observed in heritage Spanish could be due to instability already present in the attrited input. If so, one might observe variability or differences from monolinguals in heritage Spanish that are not due to the sort of processing limitations observed in other bilinguals, but rather to the successful acquisition of the grammars to which they are exposed, grammars already affected by language contact or attrition.

Without good data on the prevalence and form of focus constructions in the input that heritage speakers of Spanish in the U.S. receive (and I am not aware of any), it is hard to determine whether the appearance of any observed differences is due to their presence in the input or not. However, the empirical predictions should be somewhat similar: we should still expect greater differences or variability with discourse/pragmatics than with internal interfaces or core syntax. Further, even if heritage speakers receive attrited input, they should have the same cognitive/processing restrictions as other bilinguals, so it is possible that both factors play a role. What is important is that the unique context in which heritage speakers acquire their heritage language should be part of any explanation of why their grammars differ from those of monolinguals.

To summarize, we have thus far examined evidence showing that the syntax-discourse interface is especially problematic for bilinguals, including heritage speakers, and we have discussed one influential explanation for this divergence, as well as some alternatives. We have also discussed the unique circumstances of heritage language acquisition and previous research on focus in bilinguals but have not yet examined focus in detail. That is the subject of the next section.

2 Focus

The presentational focus is generally that part of the sentence that corresponds to the new, non-presupposed information. Constituents in focus are made prominent in some way, but the syntactic and prosodic realization of focus varies crosslinguistically. In Spanish it is generally claimed (e.g., Bolinger, 1954; Büring & Gutiérrez-Bravo, 2001; Contreras, 1978; Costa, 2001;

Domínguez, 2004a, 2004b; Gutiérrez-Bravo, 2002, 2008; Ortega-Santos, 2006; Samek-Lodovici, 2001; and, most prominently, Zubizarreta, 1998) that the focus is made prominent primarily through word order, as in (1), with the focused constituent appearing rightmost (1a). Under this view, making the focus prominent by stressing it in non-rightmost position (1b) is not an available strategy (though see Casielles-Suárez, 2004; Olarrea, 2012 for an alternate view). Stress still plays a crucial role in focus marking, though, given that the rightmost focus must be stressed and a mismatch between the focus and the main stress (1c) is infelicitous.

(1) Context: Who saw a movie? (Subject focus)²

a. Vio una película [mi **mamá**]_F.

saw a movie my mom

‘My mom saw a movie.’

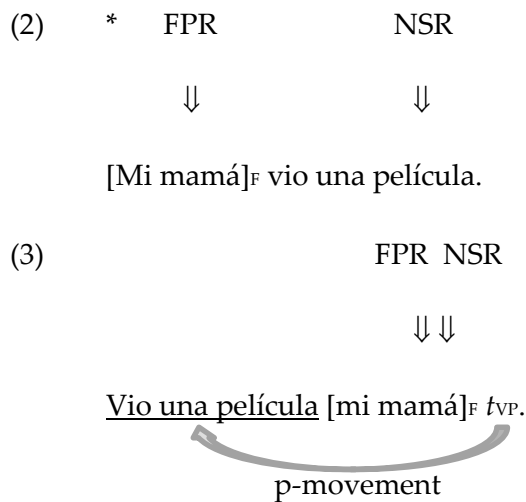
b. # [Mi **mamá**]_F vio una película.

c. # [Mi mamá]_F vio una **película**.

The most influential analysis of focus in Spanish is Zubizarreta’s (1998) *p-movement*. Zubizarreta attributes movement in (1a) to the conflict between two rules on stress: the Focus Prominence Rule (FPR), which requires that focal constituents bear main stress, and the Nuclear Stress Rule (NSR), which requires that the most deeply embedded constituent bear main stress. When these two rules stress different constituents (2), discourse-given constituents undergo p-

² Here, and throughout, the focus is marked with brackets labeled with the subscript ‘F,’ the main stress is indicated with **boldface**, and infelicity (inappropriateness in context, as distinct from ungrammaticality) is indicated with the hash mark ‘#.’

movement to a position above the focal constituent leaving the focus in the most deeply embedded position, where both rules will stress it (3).



English, on the other hand, does not employ movement for focus the way Spanish does. Instead, the most common strategy is to shift the stress to the focal constituent in its canonical position (4).

(4) [My **mom**]_F saw a movie.

In Zubizarreta's analysis, non-final stress to mark focus is possible in English because non-focal constituents are metrically invisible in English, so they are not in the domain of the NSR. There is thus no potential for conflict between the FPR and NSR in English, which is why English does not exhibit movement for discourse reasons. Others view the English strategy as involving an operation of deaccenting or stress shift that alters the canonical stress pattern in order to make the focus and stress correspond (Büring & Gutiérrez-Bravo, 2001; Reinhart, 2006; Rochemont, 1986; Samek-Lodovici, 2005). The important difference generally claimed between the two languages is that Spanish has flexible word order but rigidly final stress, whereas English has flexible stress but more rigid word order.

Note that these examples are of what É. Kiss (1998) calls ‘information focus’ and Rochemont (1986) calls ‘presentational focus,’ the term adopted here, which generally corresponds to the new or non-presupposed information in a sentence, as opposed to the given information. It is worth clarifying that the present study excludes what is sometimes called ‘identificational,’ ‘contrastive,’ or ‘correction’ focus, where the utterance not only provides new information, but negates something in the previous discourse. These types of focus must be excluded because they are generally considered separate phenomena with different properties than the presentational focus being studied here (Belletti, 2004; López, 2009; Selkirk, 2002; Zubizarreta, 1998; but see Brunetti, 2004 for an alternate view). Among other differences, Spanish contrastive focus can uncontroversially be realized by shifting the stress to the contrastively focused constituent in its canonical position, unlike presentational focus.

However, the claim that Spanish focus must be rightmost has been challenged by several recent experimental studies (Gabriel, 2007, 2010; Gupton & Leal Méndez, 2013; Hoot, 2012, forthcoming; Leal Méndez & Shea, 2012; Leal Méndez & Slabakova, 2011; Muntendam, 2009, 2013), which found instead that Spanish speakers accept and produce focus in non-final position in addition to or in preference to rightmost focus. For example, Hoot (forthcoming) found that monolingual speakers of Mexican Spanish rated sentences like (1b), with the focus stressed in non-final position, higher than sentences like (1a), with the focus rightmost, in subject focus contexts. Furthermore, they accepted both types of structures in contexts with focus on a direct object. Despite this growing challenge to the consensus view on focus in Spanish, no theoretical account of non-final focus in Spanish has emerged as a commonly accepted analysis comparable to p-movement. Presumably such an account would involve making available in Spanish the

same mechanism used to shift the stress to the focus in English, be that metrical invisibility, deaccenting of non-focus constituents, a stress shift operation, or something else.

The discrepancy between the theoretical and the experimental literature highlights the need for continued research on discourse-conditioned word order in Spanish and for including a monolingual control group in the study as a basis of comparison for the bilingual results. Additionally, because the previous literature is unclear regarding both how focus is realized in Spanish and its treatment by hypotheses on bilingual acquisition, the predictions that the present study is designed to test should be made as explicit as possible.

3 The present study and predictions

Previous work on focus in heritage Spanish tested only intransitive sentences, with the additional goal of examining the impact of unaccusative and unergative verbs on subject position (Pascual y Cabo et al., 2012; Zapata et al., 2005), building on work with L2 speakers that did the same (Hertel, 2003; Lozano, 2006a, 2006b). The present study contributes novel findings by investigating focus in sentences with transitive and ditransitive predicates, which have not previously been studied with heritage speakers of Spanish. Studying transitive and ditransitive sentences also helps link the present study to previous work on monolingual and bilingual Spanish in other contexts that included those sentence types (Gabriel, 2010; Hoot, forthcoming; Leal Méndez & Slabakova, 2011; Muntendam, 2013).

With this in mind, two types of focus were tested: transitive sentences with focus on the subject (5) and ditransitive sentences with focus on the direct object (6). Within each condition, three structures were tested. The first, *Focus Final*, has the focused constituent stressed in

rightmost position. The second, *Stress Shift*, has the focused constituent stressed in its canonical position, so that the stress is not rightmost but canonical word order is maintained. The third, *Mismatch*, has a stress-focus mismatch, in that both canonical word order and canonical stress are maintained at the cost of the stress not falling on the focused constituent.

(5) **Subject focus condition**

Context: Who bought a car?

- | | |
|--|--------------|
| a. Compró un carro [mi tío] _F . | Focus Final |
| bought a car my uncle | |
| ‘My uncle bought a car.’ | |
| b. [Mi tío] _F compró un carro. | Stress Shift |
| c. [Mi tío] _F compró un carro . | Mismatch |

(6) **Object focus condition**

Context: What did your mom give to your nephew?

- | | |
|--|--------------|
| a. Mi mamá le dio a mi sobrino [un chocolate] _F . | Focus Final |
| my mom cl.dat gave to my nephew a chocolate | |
| ‘My mom gave a chocolate to my nephew.’ | |
| b. Mi mamá le dio [un chocolate] _F a mi sobrino. | Stress Shift |
| c. Mi mamá le dio [un chocolate] _F a mi sobrino . | Mismatch |

For both conditions and for all speakers, the Mismatch condition is predicted to be infelicitous, as it is uncontroversially agreed that the stress must correspond with the focus in Spanish. The Mismatch condition thus serves as a category against which to compare the other two conditions—if they are rated significantly higher than the Mismatch structure, I take that to

be evidence of felicity in context. The main predictions we can make, then, center on the other two conditions.

If one takes the p-movement account to be accurate for Spanish, the Focus Final structure would be predicted to be the only acceptable one for monolinguals in both conditions. Stress Shift is predicted to be infelicitous because Spanish requires rightmost stress. However, given that previous experimental work, including work with speakers of the same variety examined here (Hoot, 2012, forthcoming), has shown that p-movement is not a requirement for these speakers, I will instead use those findings as the baseline from which to make predictions. Based on that previous work, for the subject condition monolinguals are predicted to accept the Stress Shift condition and to reject the Focus Final condition, and for the object condition they will accept both Focus Final and Stress Shift. Clearly, there is an asymmetry between the two conditions: both allow stress shift, but only the object condition allows discourse-related movement. This does indicate, though, that discourse-related movement exists in the grammars of these speakers, even though it is most likely not motivated by prosody (as evidenced by the fact that the stress is not required to be rightmost).

Predictions for the heritage speakers, on the other hand, are more complex, as they depend on several assumptions. First, does something like the IH apply to this population? For the sake of predictions within this study, I will follow previous researchers (de Prada Pérez & Pascual y Cabo, 2012; Hoot, 2012; Montrul, 2011; Pascual y Cabo et al., 2012) and assume that it does, keeping in mind the possible alternatives discussed in section 1. If this is the case, then the predictions that fall out from applying the IH further depend on which interface one assumes focus to belong to.

If focus pertains to an external interface (or under a reformulation in terms of complexity, if it is a high complexity construction), then we would expect bilinguals to display optionality in its realization and/or interpretation. We would expect this optionality to be persistent, even at higher levels of proficiency, and we would expect instability or variability rather than transfer from English. Under this view, processing difficulties manifest as inconsistent application of contextual restrictions, so even if the same construction exists in both monolingual varieties, we would not expect cross-linguistic influence of the English structure on the Spanish, but rather variable acceptance of possible sentences in Spanish, similar to what was found in work on null and overt subjects with Italian/Spanish bilingual children, whose languages have similar restrictions on subject realization but who nonetheless show the same type of instability as other bilinguals (Serratrice, Sorace, Filiaci, & Baldo, 2012; Sorace et al., 2009; Sorace & Serratrice, 2009). This is not to say that anything goes or that bilinguals will accept even ungrammatical sentences, but rather that, given two grammatical sentences that differ in their contextual appropriateness, bilinguals will variably accept both.

For the subject condition, then, we would expect the bilinguals to accept both Stress Shift and Focus Final. Even though Focus Final appears to be dispreferred for realizing focus in Mexican Spanish (Hoot, 2012, forthcoming), it is nonetheless the case that sentence-final subjects are possible in this variety — they are not ungrammatical, although they appear not to be preferred in subject focus contexts. Since both Stress Shift and Focus Final represent grammatical sentences in Mexican Spanish but differ in their contextual appropriateness, bilinguals would be expected to accept both.

For the object focus condition, though, the picture is less clear, due to the fact that monolinguals already display optionality in the relevant structure. Thus, the bilinguals' complete acquisition of the monolingual form, which includes variability, would be indistinguishable from inconsistent application of the discourse restrictions on focus, which would also result in variability. Thus, we would expect heritage speakers to accept both Stress Shift and Focus Final but could not draw conclusions from that about the IH or related proposals.

If focus pertains to an internal interface, on the other hand, the predictions would be different. The IH predicts that internal interface phenomena can be completely acquired but, if not, may be affected by transfer from one language to another. In this case, what form the constructions take in the two languages is relevant. Further, we may observe a change based in proficiency, with the lower proficiency group demonstrating transfer from English and the higher proficiency group fully acquiring the monolingual realization.

If that is the case, for the subject condition, we should see both bilingual groups accepting Stress Shift and rejecting Focus Final, though possibly for different reasons. Rather than demonstrating optionality, the low proficiency group might transfer the stress shift operation from English, whereas the higher proficiency group might have acquired the monolingual usage. Regardless, both groups will accept Stress Shift and reject Focus Final, which is different than what would be predicted for the external interface case.

For the object focus condition, the optionality expected of monolinguals is again a complication. The complete and unproblematic acquisition of focus marking in ditransitive sentences would be indicated by accepting both Stress Shift and Focus Final. However, the IH also predicts that internal interface structures are susceptible to transfer. What would transfer

from English look like for this construction? English has two ways to realize ditransitives: with a PP indirect object (7) and with the double-object construction (8), in which the indirect object is a DP.

(7) My mother gave a chocolate to my nephew.

(8) My mother gave my nephew a chocolate.

The Spanish clitic-doubled indirect object construction used in the present experiment has the same underlying structure as the English double-object construction, as demonstrated by binding and scope facts (Bleam, 2003; Cuervo, 2003; Demonte, 1995); further, information structure affects the choice between the two constructions in English, with new information more likely to appear sentence-finally (Collins, 1995). These facts might lead to the expectation that a construction like (8) would be transferred into Spanish. However, despite having the same underlying structure, Spanish ditransitive sentences with a dative clitic differ from the English double-object construction: (i) Spanish admits both word orders (DO-IO and IO-DO), whereas the English double-object construction has fixed word order; (ii) the canonical word order for Spanish is DO-IO, and deriving the IO-DO word order requires an additional movement operation not required to achieve the same word order in English; (iii) the Spanish indirect object must be a PP, but the English double-object must be a DP. The Spanish and English constructions are not exactly equivalent, and in each language neither construction is derived from the other, instead being independently generated (Bleam, 2003). When the indirect object is a PP in English, the only felicitous way to mark the direct object as focused is with stress shift (unless the direct object is phonologically heavy, which the present experiment controlled for; see section 4.1). If one considers stress shift the main characteristic of English focus marking, and the only strategy

available when the indirect object is a PP, transfer from English should involve transferring the availability of stress shift (or extrametricality of given constituents, or deaccenting, or whichever operation one assumes undergirds English non-final focus realization). If that is the case, because all the Spanish examples contained indirect objects that were PPs, we would predict that if focus pertains to an internal interface, bilinguals would prefer Stress Shift to Focus Final.³

Table 1 summarizes the predictions made based on the prior literature. As discussed previously, trying to analyze focus in terms of internal or external interfaces may not be the most fruitful approach; a reformulation in terms of computational complexity or variability might be more valuable. Evidence for such a move would be found if the experiment were to find results consistent with a mixture of the predictions for the two different types of interfaces.

Table 1. Predictions

Structure		Monolinguals	If focus is external		If focus is internal	
			High prof. heritage	Low prof. heritage	High prof. heritage	Low prof. heritage
Subject focus	Stress Shift	✓	✓	✓	✓	✓
	Focus Final	✗	✓	✓	✗	✗
	Mismatch	✗	✗	✗	✗	✗
Object focus	Stress Shift	✓	✓	✓	✓	✓
	Focus Final	✓	✓	✓	✓/✗?	✗
	Mismatch	✗	✗	✗	✗	✗

³ That said, I recognize that a question like *What did your mother give to your nephew?* could be answered in English by a double-object construction like (8), making it impossible to rule out that the bilinguals' judgments may have been influenced by that.

4 Methods

4.1 Stimuli

The experiment used to test the predictions was a contextualized, aural acceptability judgment task. As mentioned above, there were two conditions—subject focus and object focus—with three structures tested in each. There were five token sets for each stimulus type, yielding 15 critical stimuli per condition, for a total of 30 stimuli. Additionally, there were 20 filler stimuli.⁴

In all the sentences, the subject was definite and animate, the direct object was indefinite and inanimate, and the indirect object (in the object focus condition) was definite and animate. Because phonological weight affects argument pre- and post-posing (Heidinger, 2013), all arguments in a given sentence had the same number of syllables. This is especially important for the object focus condition, where we know that English permits IO-DO word orders when the DO is phonologically heavy, and thus might influence the predictions we could make, which is why constituent length was carefully controlled. All words used were among the 5,000 most common Spanish words (Davies, 2006), to control for frequency effects. Further, an intelligibility pretest was conducted in which two native speakers of Spanish who were students of linguistics

⁴ The filler stimuli were similar to the experimental items, testing presentational focus, but for a different context—focus on a pre-nominal modifier, such as *How many boys took a book?* [*Three*]_F boys took a book. The filler items served to test a different hypothesis, described in more detail in (Hoot, 2012). Four structures were tested. With five token sets for each structure, there were twenty fillers.

listened to all items with instructions to flag any that were problematic or confusing (but not to worry about contextual infelicity); confusing stimuli were discarded or revised.

Because the stimuli were auditory, and because stress plays such a significant role in the realization of focus, two additional pretests were conducted to control for the perception of main stress.⁵

First, a pitch accent uniformity pretest was conducted, using Praat (Boersma & Weenink, 2012) to ensure that the constituents in focus bore an L+H* pitch accent. This pitch accent consists of a low tone at the beginning of the stressed syllable in the accented word that rises to a high tone within the same syllable. It is one of the pitch accents most commonly used to mark main sentence stress on focused constituents in Spanish (Face, 2003; Henriksen, 2011; Kim & Avelino, 2003). Although more than one pitch accent in Spanish can be associated with sentence stress, one pitch accent was chosen in order to control for the perception of stress as much as possible. Given that the L+H* accent may be the most common, the use of stimuli in which all the constituents intended to bear stress had this pitch accent helped ensure that participants perceived that word as stressed, even if in actual production they produce a variety of pitch accents for stress. This same pretest also ensured that constituents not intended to be stressed did not bear this pitch accent.

Although pitch accent is “the most powerful cue for the perception of main stress” (Gussenhoven, 2004, p. 17), there is no single acoustic correlate to sentence stress in Spanish. It is largely a perceptual phenomenon in which duration, amplitude, and other factors play a role

⁵ For a more detailed explanation of these pretests and stress in Spanish, see Hoot (2012, forthcoming).

alongside pitch accent. The second pretest, a perceptual stress correspondence pretest, takes the perceptual nature of stress into account by relying on the intuitions of native speakers to identify stress. Three native speakers of Spanish who were also linguists listened to all the stimuli in isolation and identified the word with the main stress. Any stimulus on which all three consultants did not agree was discarded. During this pretest, the consultants were also asked to flag any stimulus they perceived to be overly emphatic, expressing contrast or contradiction, or otherwise unusual. These stimuli were also discarded, diminishing the likelihood that participants might interpret the stimuli as expressing contrastive focus rather than presentational focus by eliminating emphatic- or contrastive-sounding stimuli.

Stimuli were recorded by a male native speaker of Mexican Spanish, as isolated sentences. There were repeated takes; the consultant recorded multiple instances of each stimulus, and the best example was chosen using the pretests. The same speaker recorded the contexts in which the stimuli appeared.

Each stimulus appeared embedded in a context, a short story in which the given and new information were made clear (without creating a context for expressing contrast) and which ended in a *wh*-question, to which the stimulus was the answer. A sample context is in (9).

- (9) Tú y tu amiga Sara están en la casa de ella, haciendo algo de comer en la cocina. Ella va a buscar unos ingredientes que había dejado en el carro, cuando suena tu celular. Es tu tío, quien acaba de comprarse un carro nuevo. Cuando regresa Sara, estás hablando del color y el modelo del carro, y del precio de la gasolina, y ella se da cuenta de que alguien que conoces acaba de comprar un carro. Cuando cuelgas, Sara te pregunta: "¿Quién compró un carro?"

'You and your friend Sara are at her house, making something to eat in the kitchen. She goes to get some ingredients she'd left in the car when your cell phone rings. It's your uncle, who just bought a new car. When Sara comes back, you're talking about the color and model of the car, and about the price of gasoline, and she realizes that someone you know just bought a car. When you hang up, Sara asks you: "Who bought a car?" '

4.2 Procedure

The experiment took place on a computer in 15 trials. In each trial, participants first saw the context presented on the screen while they heard it read aloud via headphones, finishing with the *wh*-question (these remained on the screen for the whole trial). Then the first stimulus was shown on the screen under the question and was heard. Participants rated the stimulus on a five-point Likert scale from 1 (*muy raro* 'very strange') to 5 (*perfecto* 'perfect'), with the intermediate values unlabeled, by pressing the appropriate number on the computer keyboard. After participants judged the first stimulus, it disappeared and the *wh*-question from the context—but not the whole context story—was repeated, followed by a second stimulus. After the second stimulus was judged, the *wh*-question was repeated again, and the third stimulus was heard and judged. After judging all three stimuli (four for filler items), the next trial began, beginning with the context.

To control for ordering effects, stimuli within trials were distributed with a pseudo-Latin square design to ensure that the different stimulus types (Focus Final, Stress Shift, and Mismatch)

did not always follow the same order.⁶ For the same reason, trials were pseudo-randomized in two rotated blocks, with no condition occurring in more than one consecutive trial. Because there were three conditions—subject focus, object focus, and fillers—with five token sets (different words for the same structures), there were fifteen trials in all.

In addition to the judgment task, participants completed a language background questionnaire and two proficiency tests: one in Spanish, a multiple-choice test used previously with heritage speakers (Montrul, 2002, 2004), and one in English, a cloze test also used in previous studies (Ionin, Montrul, & Crivos, 2013; Ionin & Montrul, 2009, 2010; Montrul, 2001). They were also prepared for the main task by a training phase in which they judged sample stimuli similar to but not the same as the experimental stimuli, to get used to performing the judgment task and using the Likert scale. The training also made explicit that they were to judge stimuli for appropriateness in context and not grammaticality.

4.3 Participants

There were three groups of 22 participants each: two heritage speaker groups divided by proficiency and a monolingual group. Demographic and educational characteristics of the participants, including age, gender distribution, years learning Spanish and English, and proficiency test results and self-ratings in both languages, are given in Table 2.

⁶ For a more extensive discussion of how the ordering of the stimuli affects the results produced by this experiment design, see Hoot (forthcoming).

Table 2. Participant characteristics

	High Prof. Heritage (n = 22)	Low Prof. Heritage (n = 22)	Monolingual (n = 22)
Age range	18-22	18-29	18-26
Mean age	19.95	20.45	21.22
Gender (# male / # female)	7M / 15F	6M / 16F	5M / 17F
Mean age of acquisition of Spanish	Birth	Birth	Birth
Mean age of acquisition of English	4.57	2.09	13.09
Mean Spanish proficiency test score (max. 50)	41.64	30.05	46.29
Mean English proficiency test score (max. 40)	35.95	36.32	2.32
Mean daily English use (self-reported %)	62.52	70.44	0
Mean daily Spanish use (self-reported %)	47.29	31.44	100
Mean # of years in the U.S.	19.73	20.27	N/A
Mean years of formal study of Spanish	3.16	2.64	13.57
Mean years of formal study of English	11.71	12.68	2.90
Mean self-reported English proficiency (1-5, 1=low, 5=high)	4.4	4.59	1.55
Mean self-reported Spanish proficiency (1-5, 1=low, 5=high)	3.95	3.34	4.38
Mean # of years of schooling	14.27	13.86	14.16

The heritage speaker groups were composed of adults who learned both Spanish and English before age 6, had no significant exposure to another language, and were born in the U.S. or immigrated to the U.S. before age 6. To control for dialect variation, all participants were of Mexican background (those with parents or grandparents from another Spanish-speaking country were excluded). They were recruited in Chicago.

Because proficiency is known to play a role in the grammatical competence of heritage speakers, the heritage speakers were divided into two groups based on their scores on the Spanish proficiency test, which has a maximum possible score of 50. Those scoring above the median score for all heritage speakers on the proficiency test (which was 38.5) form the *high proficiency*

heritage speaker group and those scoring below the median form the *low proficiency heritage speaker group*. An independent samples t-test performed on the proficiency scores of the two groups confirms that the groups differ in their performance on the proficiency test ($p < .001$). As shown in Table 2, the low proficiency group not only scored lower on the proficiency test, but also learned English at an earlier average age, reported more daily English usage and gave a lower self-evaluation of Spanish proficiency. The heritage speaker groups thus differ in their exposure to and experience with their two languages, but they are otherwise fairly similar; indeed, they are drawn from the same population, are enrolled in the same Spanish for heritage speaker courses, have the same overall education levels, and speak the same dialect of Spanish.

The *monolingual group* was recruited in Guanajuato, Mexico, a site chosen to control for dialect variation as much as possible, because the majority of Chicago Latinos of Mexican heritage are from the central or western Mexican states of Michoacán, Jalisco, and Guanajuato (Farr, 2006). More than 22 people participated in the study, but to control for the possible influence of English even in the Spanish of Mexicans living in Mexico (especially because English classes are common in Mexican schools, and nearly all the participants had taken an English course at some point), the most monolingual group possible was chosen, by excluding participants who reported any amount of daily English use or who scored above the median for all Guanajuato participants on the English proficiency test.⁷ In age and total years of education, though, the monolingual group closely resembled the heritage speaker groups.

⁷ For results of the study with all monolingual participants and a more thorough discussion of the monolingual results, see Hoot (forthcoming).

5 Results⁸

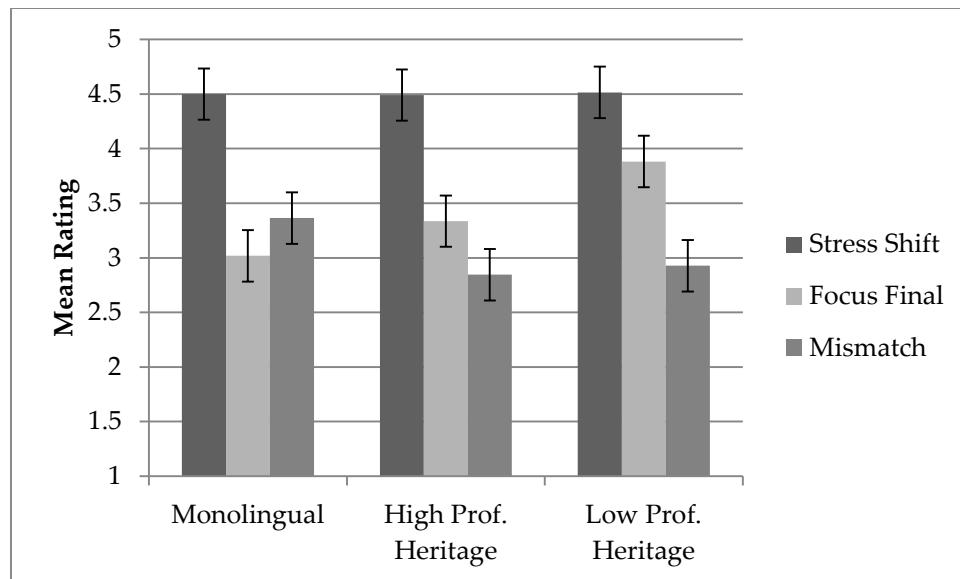
A linear mixed-effect model was fit for each condition (subject and object focus), with *group* (monolingual, high proficiency heritage, and low proficiency heritage) and *structure* (Stress Shift, Focus Final, and Mismatch) as fixed effects and with random effects for participant and item. The two conditions were analyzed separately because no meaningful comparisons can be made between them; rather, the purpose of the analysis was to discover which structure(s) within each condition the participants in each group preferred. To that end, post hoc pairwise comparisons were conducted for significant fixed effects and interactions using the Bonferroni correction for multiple comparisons.

Table 3. Subject focus condition results

Structure	Example	Monolingual	High Prof. Heritage	Low Prof. Heritage
Stress Shift	My [uncle] _F bought a car.	4.50 (0.89)	4.49 (0.91)	4.52 (0.70)
Focus Final	Bought a car my [uncle] _F .	3.02 (1.35)	3.34 (1.32)	3.88 (1.23)
Mismatch	My [uncle] _F bought a car .	3.36 (1.21)	2.85 (1.29)	2.93 (1.22)

⁸ A version of these results with a preliminary analysis was initially reported in Hoot (2012).

Figure 1. Mean ratings by group (subject focus)



The estimated marginal mean ratings given by each group to the three structures in the subject focus condition are presented in Table 3, with the sample standard deviation in parentheses. The same data is presented in Figure 1, where each cluster of bars represents the ratings of one group, each bar representing a different structure and error bars showing the 95% confidence interval. Type III tests of fixed effects found significant effects for structure ($F_{2,841.9} = 167.16, p < .001$) and the group by structure interaction ($F_{4,841.9} = 11.24, p < .001$), although there was no main effect for group ($F_{2,145.2} = 1.6, p = .196$). Pairwise comparisons revealed that all the groups made a three-way distinction between the structures; within each group, the differences in mean ratings between all the structures were statistically significant ($p < .05$).

The monolingual group rated the Stress Shift structure significantly higher than Mismatch, which was in turn rated higher than Focus Final. If we take the Mismatch structure as the baseline of infelicity—because it is widely agreed that for Spanish (and many other languages) a stress-focus mismatch is not possible, and it was expected that all speakers would reject this

option—these results seem to indicate that the monolinguals accept the Stress Shift structure but reject Focus Final in this context.

If the Mismatch structure is infelicitous, why didn't participants rate it lower? In fact, its ratings hover around the middle of the scale for all the groups and in both conditions. Keep in mind that what participants are judging here is not grammaticality, but rather appropriateness in context, which is much more subtle. Although some participants did use the full range of possible ratings, it is not surprising that perfectly grammatical sentences (indeed, the Mismatch sentences have canonical word order and stress) would not necessarily provoke the lowest ratings, despite the lack of contextual fit, because at worst they sound a bit 'off' rather than outright impossible. Of course, it is impossible to truly know how participants were interpreting the scale; nonetheless, the fact that all the groups distinguished between the different structures shows that they attended to information structure, word order, and stress. Ultimately, the differences in ratings between categories are more important than the ratings themselves, which can only be interpreted in relation to the other categories being tested.

Both heritage speaker groups also rated Stress Shift significantly higher than the other two structures, indicating that shifting the stress to the pre-verbal focus was the most acceptable option for these speakers, as it was for the monolinguals. However, unlike the monolinguals, both heritage speaker groups also rated the Focus Final structure significantly higher than the Mismatch structure. The two groups' ratings were not the same, though. The low proficiency heritage speakers rated Focus Final much higher than the high proficiency heritage speakers, even though both groups distinguished it from the Mismatch structure. In a pairwise comparison conducted for Focus Final across groups, the ratings given by the monolinguals and the high

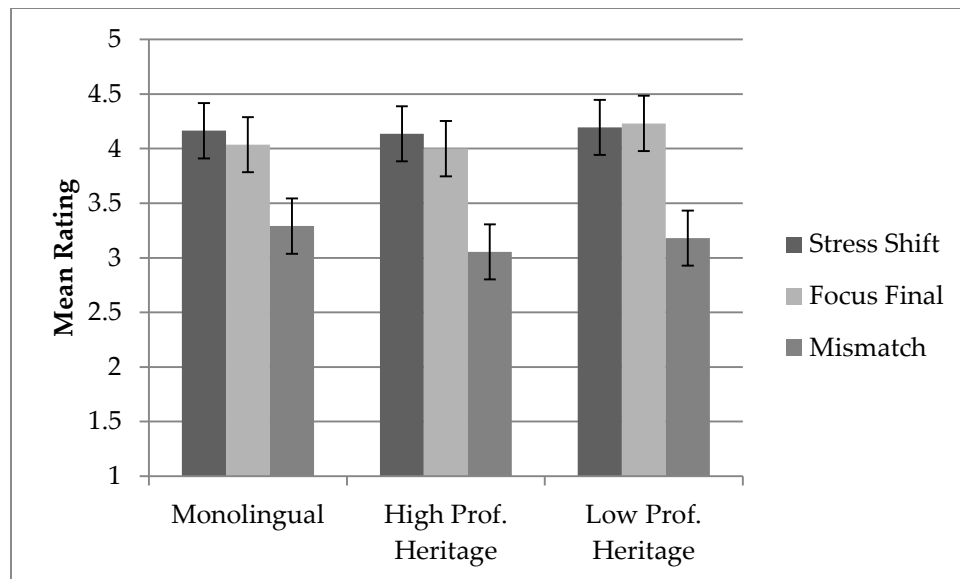
proficiency heritage speakers did not differ from each other, but both were different than the low proficiency group's rating, which was notably higher. So although both heritage speaker groups distinguished between Mismatch and Focus Final, they did not make the same distinction.

For the object focus condition, the estimated marginal mean ratings given by each group to the three structures are presented in Table 4, with the sample standard deviation in parentheses, and the data is represented in Figure 2 (again, each cluster represents one group, each bar represents a different structure, and error bars show the 95% confidence interval). Type III tests of fixed effects found a significant effect for structure ($F_{2,819.1} = 100.2, p < .001$), but no effect for group ($F_{2,136.6} = 0.7, p = .492$) and no group by structure interaction ($F_{4,819.1} = 0.8, p = .512$). Here, unlike in the subject condition, pairwise comparisons revealed that all three groups rated the Mismatch structure significantly lower than the Stress Shift and Focus Final structures ($p < .05$), which did not differ from one another.

Table 4. Object focus condition results

Structure	Example	Monolingual	High Prof. Heritage	Low Prof. Heritage
Stress Shift	My mom gave a [chocolate] _F to my nephew.	4.16 (1.08)	4.14 (1.06)	4.19 (1.00)
Focus Final	My mom gave to my nephew a [chocolate] _F .	4.04 (1.10)	4.00 (1.19)	4.23 (0.97)
Mismatch	My mom gave a [chocolate] _F to my nephew .	3.29 (1.17)	3.06 (1.11)	3.18 (1.06)

Figure 2. Mean ratings by group (object focus)



Unlike the subject condition, then, there were no differences between the groups—all groups accepted both the Stress Shift and Focus Final structures while rejecting Mismatch.

6 Discussion

As outlined in Table 1, it was expected that monolinguals would prefer Stress Shift in the subject focus condition and would accept both Stress Shift and Focus final in the object focus condition, because that is what a previous experiment with the same population found, and the results of the present experiment were the same. This supports the growing challenge to the most common view on focus realization in Spanish (discussed in section 2), in that these speakers did not reject non-final realizations of focus. A more thorough discussion of this finding and its implications for Spanish and for linguistic theory is undertaken elsewhere (Hoot, forthcoming); the predictions of interest here are those for the heritage speakers, which were based on what

interfaces were assumed to be involved in focus realization. The heritage speaker predictions are repeated and compared to a summary of the results in Table 5.

Table 5. Heritage speaker predictions and results

Structure		Predictions if focus is external		Predictions if focus is internal		Observed results	
		High prof. heritage	Low prof. heritage	High prof. heritage	Low prof. heritage	High prof. heritage	Low prof. heritage
Subject focus	Stress Shift	✓	✓	✓	✓	✓	✓
	Focus Final	✓	✓	✗	✗	✗	✓
	Mismatch	✗	✗	✗	✗	✗	✗
Object focus	Stress Shift	✓	✓	✓	✓	✓	✓
	Focus Final	✓	✓	✓/✗?	✗	✓	✓
	Mismatch	✗	✗	✗	✗	✗	✗

If focus belongs to an external interface, it was predicted that for subject focus both heritage speaker groups would show persistent optionality, accepting both Focus Final and Stress Shift. And the low proficiency group appears to have displayed precisely the predicted optionality, rating both Focus Final and Stress Shift high (although they do distinguish between them).

If the monolinguals reject Focus Final, and it is thus presumably absent from the heritage speakers' input, where does it come from in the grammars of the low proficiency group? As discussed in section 3, sentence-final subjects are not ungrammatical in Mexican Spanish, but rather they appear to be infelicitous with subject focus. Further, it is clear from the object condition results that some movement for discourse reasons is permitted in the grammars of both the monolinguals and bilinguals. It may be the case that the low proficiency heritage speakers, lacking complete control over discursive restrictions on movement, generalize the availability of

movement in other contexts to the subject context, and thus do not distinguish between the two possible structures in terms of their contextual appropriateness. This type of variability fits with the predictions made by the IH and related proposals.

The high proficiency heritage speakers also differentiated Focus Final from Mismatch, which might indicate similar optionality. However, the high proficiency group's ratings of Focus Final were not any higher than the monolingual group's ratings; in fact, the statistical difference found for the heritage speaker group appears to be largely because they are even less tolerant of the Mismatch condition than the monolinguals. Because the high proficiency heritage speakers' rating of Focus Final is the same as the monolingual group's and significantly different than the low proficiency heritage group's, it seems reasonable to conclude that the high proficiency speakers are in fact converging on the monolingual form. On the whole, then, this data partially confirms the prediction made for the subject condition if focus is an external interface phenomenon: the low proficiency group displays variability, while the high proficiency group may display some optionality but appears to be converging.

The object condition, on the other hand, is less informative. Because of the optional realization of object focus by monolinguals, and thus presumably in the input to which these heritage speakers are exposed, the fact that both bilingual groups display optionality like the monolinguals could be due to interface processing difficulties or because they had no problem processing the relevant structure, so the result is inconclusive relative to this prediction.

If focus belongs to an internal interface, on the other hand, the predictions were different. In this case, for the subject condition, it was predicted that both groups would prefer only Stress Shift, either because of transfer from English or complete acquisition of the monolingual form. In

particular, the low proficiency group might be expected to demonstrate transfer from English, which would lead them to reject the Focus Final structure, but instead they accepted it along with Stress Shift. The high proficiency group's performance, on the other hand, was compatible with this prediction; they appear to be converging on the monolingual usage, which might be expected if focus were an internal interface phenomenon.

For the object condition, it was predicted that if transfer from English occurred both groups would favor Stress Shift over Focus Final, with the possibility of the high proficiency group accepting both structures if they completely acquired the variable usage in the input. However, both groups accepted both structures, and no transfer from English was observed.

In sum, the data fulfills neither set of predictions completely, instead meeting some predictions for belonging to an external interface and some for belonging to an internal interface. These results support the view that a distinction between internal and external interfaces is not the best way to describe focus (or other linguistic phenomena), and that hypotheses that propose to explain why certain linguistic domains are more susceptible to being affected by bilingualism could be recast in terms of a gradient of complexity or variability. For the subject condition, with the low proficiency group, a non-directional optionality that does not depend on transfer from English was found, which supports the IH, but only if focus is at an external interface (cf. Serratrice et al., 2012; Sorace et al., 2009; Sorace & Serratrice, 2009). At the same time, convergence occurs at higher proficiency levels, as for internal interface phenomena. But unlike an internal interface construction, no transfer was observed in the object condition. In light of these mixed properties, it may be that focus falls in between, and that we should pursue a model based on

complexity, with focus falling along a gradient spectrum of complexity, as suggested by Hopp (2009, 2011), O'Grady (2011), and Sorace (2012).

In fact, these heritage speakers behave much like other bilinguals in this regard. For instance, Hertel (2003) found that lower proficiency L2 learners had difficulty interpreting focus but higher proficiency learners behaved like native speakers, which is exactly the pattern found here. These results are generally in line with the inconclusive treatment focus has had in the literature. The failure of these results to pattern with one interface or another is not surprising considering that focus necessarily involves contextual appropriateness, word order, and main sentence stress; thus it certainly applies to multiple interfaces, both internal and external. This is in line with the critiques of Montrul (2011) and White (2011), which the results found here support. Although I have concentrated on focus as a discourse phenomenon, the syntax-phonology interface (at least) is also obviously involved.

Indeed, it is possible that the convergence of the high proficiency heritage speakers on subject focus and of all the groups on object focus could occur at least partly because focus involves prosody. First, heritage speakers may have an advantage when it comes to prosody, as has been shown with other aspects of the phonology (Benmamoun et al., 2013b). Second, as an anonymous reviewer points out, perhaps prosodic stress has a universal interpretation, and a stressed constituent is always interpreted as focused. Furthermore, there is some evidence that Spanish speakers are able to acquire English prosodic focus without significant difficulty (Klassen, 2013; Zubizarreta & Nava, 2011), so these speakers might be applying the English rules or a universal interpretation of prosodic prominence, leading them to accept Stress Shift even if they do not have a grammar that marks focus prosodically. Although this cannot be ruled out, it

would still be unclear why the monolinguals and high proficiency heritage speakers would reject the Focus Final option in the subject condition, in which the focus was appropriately stressed, rather than accept both options.

On the other hand, the fact that the monolinguals prefer Stress Shift to Focus Final for subjects (and allow it for objects) means that the differences between the Spanish grammar and the English grammar to which these heritage speakers are exposed are not that great, which could explain the convergence exhibited for the heritage speakers. Perhaps the typological distance between the two languages with regard to focus is small enough that its acquisition is less problematic than other discourse phenomena. For instance, perhaps topics or null pronouns, cases in which the English and Spanish structures differ more, would exhibit more problems for the bilinguals. That is a possibility, but the typological similarity can also be a boon, in that it permits us to distinguish between difficulties in processing that produce optionality even in cross-linguistically similar structures and transfer from one language to another.

Another alternative explanation is that there is some evidence that heritage speakers tend to have more rigid word order than monolinguals (Benmamoun et al., 2010), which could help explain why they rejected the Focus Final structures that involved non-canonical word order. However, the monolinguals also rejected the Focus Final order, indicating that its low ratings may be independent of any word order restrictions unique to heritage speakers. Further, all groups, including both heritage speaker groups, accepted word order alterations in the object focus condition, showing that movement for discourse reasons is available in their grammars.

A final alternative possibility, previously discussed in section 1, is that the input heritage speakers receive may already have undergone attrition, which means that any differences found

between heritage speakers and monolinguals could be because heritage speakers are completely acquiring a variety that was already affected by language contact. If that is the case, though, it is unclear why the low proficiency group would show optionality but the high proficiency group would move toward convergence on the monolingual form. That is, if the input to these heritage speakers is already variable because their bilingual parents have experienced attrition, there would be no reason to expect the high proficiency speakers to resemble the monolinguals any more than the low proficiency group does. Of course, the present study cannot rule out the possibility of attrited input, but the convergence at high proficiency plus the parallels found with L2 learners may indicate that an explanation based on processing or other cognitive factors related to bilingualism itself may be more promising in the present case.

It is also worth mentioning some limitations of the present study. First, I recognize that the experimental judgment methods used here have drawbacks. In particular, Sorace (2011) and Benmamoun et al. (2010) point out the problems with using acceptability judgments for studies of the IH and of heritage speakers, respectively. While I recognize these concerns, Slabakova et al. (2012, p. 340) note that “prior to Sorace and Filiaci (2006), all evidence used to support the IH, which by Sorace’s (2011) own account has not changed in its tenets since its genesis, was exclusively derived from offline measures” like the task used here, and such tasks are also commonly used with heritage speakers. Like any method, the experiment used here has its advantages and disadvantages; the results are offered as one piece of a larger puzzle. Nonetheless, to the extent that the vulnerability of discourse/pragmatics in bilinguals is due to processing, I agree that future studies using online measures are needed. Another potential issue with the experiment design is that it is ultimately impossible to control for how participants

interpret the stimuli. It remains possible, despite the controls put in place on the contexts and the intonation of the stimuli (described in section 4.1), that participants interpreted the stimuli as contrastive or emphatic, which could skew the results (toward more acceptance of Stress Shift).

7 Conclusion

This paper has presented new empirical evidence of what structures felicitously realize presentational focus in heritage Spanish. In so doing, it expands the descriptive database on heritage Spanish by describing structures that have received little previous study, in particular going beyond previous work that only examined intransitive verbs. In addition to the empirical contribution, the present work also contributes to the ongoing debate about what factors affect heritage speaker (and other bilingual) grammars. It considers possible explanations to the apparent vulnerability of the interface of syntax and discourse/pragmatics in bilingual grammars, focusing especially on the influential Interface Hypothesis and some alternatives to it. The experiment results are argued to show that, for these heritage speakers as with other bilinguals, focus belongs neither entirely to language-internal nor to language-external interfaces, which lends support to the view that such a distinction may not be the best way to explain how bilingualism affects certain grammatical domains. Instead, it may be more valuable to reframe the discussion around a gradient notion of complexity, variability, or some other metric.

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