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What we say when we say nothing at all: Clues to contact-induced language change in Spanish conversational pause-fillers

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Abstract: The present paper examines variation in the vowel quality of filled pauses produced by 80 Spanish-speaking residents of Boston, MA in the context of sociolinguistic interviews. Statistical analysis reveals patterns consistent with contact-induced language change: Individuals who arrived to the U.S. as adults and who speak exclusively Spanish with most of their interlocutors (i.e., family, friends, and coworkers) strongly prefer to fill pauses in spontaneous Spanish speech with *eh/em*. In contrast, those who were born in or arrived to the U.S. as children and/or who speak exclusively Spanish with fewer interlocutors are significantly more likely to use *ah/am* and *uh/um*. We interpret this difference as evidence of a rearrangement of pausing-filling norms among those with greater experience using English. Our results align with a view of language contact as a potential catalyst of linguistic innovation, one that is tightly constrained by the structure of linguistic systems.

Keywords: filled pauses, U.S. Spanish, bilingualism, language contact and change.

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1. Introduction

The next time you happen to overhear a conversation, consider paying special attention not to what the speakers are saying, but rather to what happens when they seem to be planning what they are about to say next. If the conversation is between speakers of English, you're likely to hear them produce *uhs* and *ums*. If, however, you're eavesdropping on Spanish speakers, chances are good that you'll hear *ehs* and *ems* instead. And if you're listening in on speakers of Japanese, you'll almost certainly hear them frequently saying *eto*. Units of this type, which are deployed to maintain the conversational floor while planning upcoming utterances, are pervasive in spontaneous speech. They also vary across languages. The central questions pursued in the present paper are these: What, if anything at all, are we to make of these 'filled pauses' (FPs), and what can their ubiquity and cross-linguistic variability tell us about the structure of languages like English, Spanish, and Japanese, among others?

A potential answer to both of these questions is, "not a thing," this because filled pauses are an uninteresting and unfortunate (if inevitable) byproduct of language use, which is itself characterized by any number of linguistically irrelevant errors of performance. This attitude towards FPs—that they are peripheral to the actual linguistic content of speech as well as to the underlying systems that make it possible—is a common one. We see it at work in the design and marketing of speech-to-text software that targets and eliminates FPs. For instance, the makers of [Otter.ai](#), a popular artificial-intelligence-powered speech-to-text transcription app, note that "fillers, interjections, and hesitation markers—such as *hmm* or *um*— are programmatically ignored" by their software. The makers of [Descript](#), which is

marketed as a podcast editing suite, make a similar pitch: “Ummm, using *Descript* to edit your podcast is a no-brainer, bro.” The company’s tagline underscores the message: “Easily removing audio filler words since 2019.”

A similarly dismissive attitude towards filled pauses can also be found within professional linguistic inquiry. Indeed, the presence of FPs in speech figures as evidence in Chomsky’s famous argument that spontaneous linguistic behavior, with its “numerous false starts, deviations from rules, changes of plan in mid-course, and so on” (Chomsky, 1965, p. 4), cannot be the proper object of linguistic inquiry. To this day, few linguists would feel obliged to include an inventory of FPs in a systematic accounting of the structural properties of a given language. It is perhaps unsurprising then that many descriptions of individual languages meant for public consumption, such as those on *Wikipedia*, are routinely bereft of information on FPs. For instance, the current entries for [Basque](#), [Japanese](#), [Turkish](#), [German](#), and [Yoruba](#), each of which extensively reference the work of linguists and contain thorough and informative sections on the phonology, syntax, and lexicon of these languages, make no mention of the units deployed by their users to fill pauses when they speak.

An alternative perspective on FPs is that they are genuine linguistic structures, essential to what it means to know and use a given language. This view is supported by a small but robust body of research that makes clear that FPs are, in fact, integral to the planning, production, and processing of speech (Swerts, 1998; Bell et al., 2003; Corley, MacGregor, & Donaldson, 2007). They also help to structure discourse, cue conversational turn-taking, modulate listener attention, demarcate intonation-groups, and resolve syntactic ambiguity (Mahl, 1956; Maclay & Osgood, 1959; Cruttenden, 1986; Bailey & Ferreira, 2003; Watanabe, Hirose, Den, & Minematsu, 2008). In addition, like the sound systems and vocabularies from which they are drawn, FPs are language-specific and display wide-ranging cross-linguistic variation (Watanabe, Den, Hirose, & Minematsu., 2004; Couper-Kuhlen & Ono 2007).

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Furthermore, differences in FP usage between and within speakers have been linked to various social factors, including age, sex, regional origin, and speech setting (Tottie, 2014; Fruehwald, 2016; Erker & Bruso, 2017). In short, there are very good reasons to believe that FPs merit the attention of language scholars and have the potential to shed light on a host of issues central to the study of human language.

One such issue—the one taken up in this paper—is the potential of FPs to illuminate the linguistic behavior of people who speak more than one language. This possibility is motivated by several recent studies showing that the pause-filling behavior of bilinguals—specifically Spanish-English (Erker & Bruso, 2017; Vidal-Covas, 2021), Afrikaans-Spanish (García-Amaya & Lang, 2020), and French-German bilinguals (Lo 2020)—differs from that of monolinguals. The present paper explores this topic further, framing it within a study in *contact linguistics*. The basic logic of this type of inquiry is, to quote pioneering contact-linguist Uriel Weinreich, as follows:

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Two or more languages will be said to be *in contact* if they are used alternately by the same persons. The language-using individuals are thus the locus of the contact. The practice of alternately using two languages will be called 'bilingualism', and the persons involved, 'bilingual'. Those instances of deviation from the norms of either language which occur in the speech of bilinguals as a result of their familiarity with more than one language, i.e. as a result of language contact, will be referred to as 'interference phenomena'. It is these phenomena of speech, and their impact on the norms of either language exposed to contact, that invite the interest of the linguist. The term 'interference' implies the rearrangement of patterns that result from the introduction of foreign elements into the more highly structured domains of language. (Weinreich, 1953, p. 1)

The present paper applies this logic to the study of filled pauses, asking whether the FPs of Spanish speakers in the United States might reflect the influence of pause-filling norms characteristic of English speakers. To answer this question, we focus on a group of Spanish speakers who vary in terms of their acquisition and frequency of use of English. We hypothesize that those who acquired English earlier in life and/or who use it with greater frequency are more likely to use FPs in ways that appear 'rearranged' when compared to Spanish speakers who acquired English later in life and who use it infrequently. Before proceeding to describe our study, it is worth emphasizing that there is no linguistic reason to view potential evidence of contact-

induced shifts in FP norms in an evaluative light, i.e. as either ‘good’ or ‘bad.’ That is, despite the generally negative connotation of the word *interference*, its technical use in the study of language contact has neither a positive nor negative valence. Instead, it is meant to characterize a particular mechanism of linguistic innovation and to distinguish it from other catalysts of language change, itself a hallmark of human language that merits neither grief nor celebration, but rather description and explanation.

The data for our study are drawn from the *Boston Spanish Corpus*¹ (Erker, 2022), a collection of audio-recorded interviews with nearly 200 Spanish-speaking residents of Boston, MA. The interviews, which consist of free-form unscripted spontaneous speech, were collected and transcribed by the first author and a team of student researchers between 2014 and 2018. Here we analyze a subset of the overall corpus, focusing on 6,364 FPs produced by 80 individuals in their respective interviews. Of particular interest is variability in the vowel quality of these FPs. Specifically, we are interested in the fact that our participants produced FPs using three different vowels, which, represented with the symbols of the *International Phonetic Alphabet*, are [e], [a], and [ə]. Using standard orthographic representation, these correspond to instances of *eh/em*, *ah/am*, and *uh/um*.²

Traditional descriptions of the vowel inventory of Spanish do not include /ə/ (Hualde, 2005, p. 54). Furthermore, while /e/ is often included among the vowels of English, most American speakers of English pronounce it as a diphthong, i.e. as [eɪ] (Wells, 1982, p. 426). In other words, /ə/ and /e/ represent sites of structural difference in the sound systems of Spanish and English. Among the vowel qualities

¹ The authors gratefully acknowledge the financial support of the *National Science Foundation* (BCS-1423840) as well as *Voces Hispánicas*, an initiative of the Department of Romance Studies at Boston University, underwritten by *Santander Universities Global Division*.

² We do not analyze the presence vs. absence of [m] in FPs in the present study, nor do we explore the topic of lexically-filled pauses such as *bueno*, *este*, *osea* etc., though see Erker and Bruso (2017) and Vidal-Covas (2021) for further information on these topics.

under investigation here, it is [a] that represents the site of greatest overlap between Spanish and English phonology. We will return to this fact later. For now, suffice it to say that the study is framed by the following research questions:

- (1) When speaking Spanish, how do participants in our study vary in their rates of use of three FP-vowel qualities: [e], [a], and [ə]?
- (2) What role, if any, do differences in speakers' ages of acquisition and frequency of use of English play in shaping patterns of variation in FP use?
- (3) What, if anything, can these patterns tell us about bilingualism and contact-induced change?

Before describing the study's data, methods, and analysis in detail, allow us to briefly signpost our primary findings: the study's results show wide-ranging inter-speaker variation in FP-vowel selection. Some speakers strongly prefer [e] while others favor [a] or [ə]. Statistical analysis of several social and linguistic factors indicates that these preferences are unrelated to speakers' sex, education, occupation, or regional origin. Additionally, the data provide little evidence that variation in FP-vowel selection is influenced by linguistic contextual factors. Those studied here include (i) the phonetic context in which an FP occurs, (ii) their position in utterances, i.e., whether they occur at the beginning, in the middle, or at the end of one, and (iii) the presence vs. absence of a following period of silence, a factor that has been widely studied in previous research on FPs (Clark & Tree, 2002). Instead, patterns of FP variation in our data are primarily shaped by aspects of the linguistic maturation, settlement history, and habitual language use of speakers. Individuals who immigrated to Boston as teenagers or older and who have primarily Spanish-speaking social networks strongly prefer [e] as their FP vowel. In contrast, speakers who were born in Boston or who arrived before their mid-teens, as well as those whose networks contain more English speakers and more bilinguals, prefer to use [a] and [ə] for filling conversational pauses when speaking in Spanish.

Overall, our results strongly suggest that FPs constitute a site of contact-induced change in the structure of Spanish, as it is used by the Bostonians in our study. That being said, the pattern of innovation that we observe is quite conservative in nature, reflecting a subtle reconfiguration of non-contact norms rather than the wholesale adoption of a novel form: shifts in FP behavior associated with more extensive bilingualism manifest primarily as a change in preference from [e] to [a], instead of replacement of [e] with [ə].

2. Data, Speakers, and Methods

As mentioned above, the study's speech data are drawn from sociolinguistic interviews, all of which were conducted in the same quiet room on the campus of Boston University. They were recorded using a *Zoom h4n* digital recorder and an *SM93* lavalier microphone at a sampling rate of 44.1 kHz. They each lasted about an hour. All interviewees completed a questionnaire that contained items relating to their personal demographic and social background as well as their habitual language use. The eighty participants selected for our study of FPs included forty-four women and thirty-six men, ranging in age from 18 to 73 years-old, with an average age of 33. They or their families have origins in one of thirteen locales: Colombia (11 participants), Dominican Republic (10), Ecuador (1), El Salvador (19), Spain (2), Guatemala (3), Honduras (1), Mexico (10), Nicaragua (1), Paraguay (1), Puerto Rico (11), Peru (5), and Venezuela (5). Fifty-seven participants are immigrants³ to the U.S. and twenty-three are U.S.-born. While all participants in the study speak Spanish in their daily lives, some do so with greater frequency and with a larger fraction of their interlocutors. Participants' frequency of use of English also varies, with some

³ Participants born and raised on the island of Puerto Rico who then migrated to the mainland U.S. are, for the purposes of the present study, considered to have immigrated to the Boston area.

reporting routine use of English across numerous social domains while others use English rarely. Further details regarding habitual language use will be discussed in the *Results* section.

Each interview was orthographically transcribed and time-aligned with its associated audio recording using the acoustic-phonetic software program *Praat* (Boersma and Weenink, 2022). Identification of filled pauses in participants' speech was based on the protocol outlined in Erker and Brusó's 2017 study, which relies on the characteristic acoustic and syntactic properties of FPs. Acoustically, FPs contain vowel sounds that are relatively long in duration and steady in terms of their 'formant structure.' Formants are peak resonances of the vocal tract that vary across vowels and give different vowel sounds their unique quality, i.e. the formants associated with [e] are different than those of [a], which are in turn different than those for [ə]. Syntactically speaking, FPs are structurally independent of the phrasal contexts in which they occur. That is, the well-formedness of the utterances in which they occur does not depend on the presence of an FP. Figure 1 illustrates the data collection protocol, showing the segmentation of the FP *eh* as it occurred in the speech of one of the study's participants in the utterance "entonces, eh, mandó una operación." Note that the [e] of the FP is considerably longer in duration—here length corresponds to width on the horizontal axis—than the [e] that occurs in the last syllable of the word "entonces" as well as the [e] that occurs in the second syllable of the word "operación." Note also, that the overall grammaticality of the utterance is unrelated to the presence or absence of the FP.

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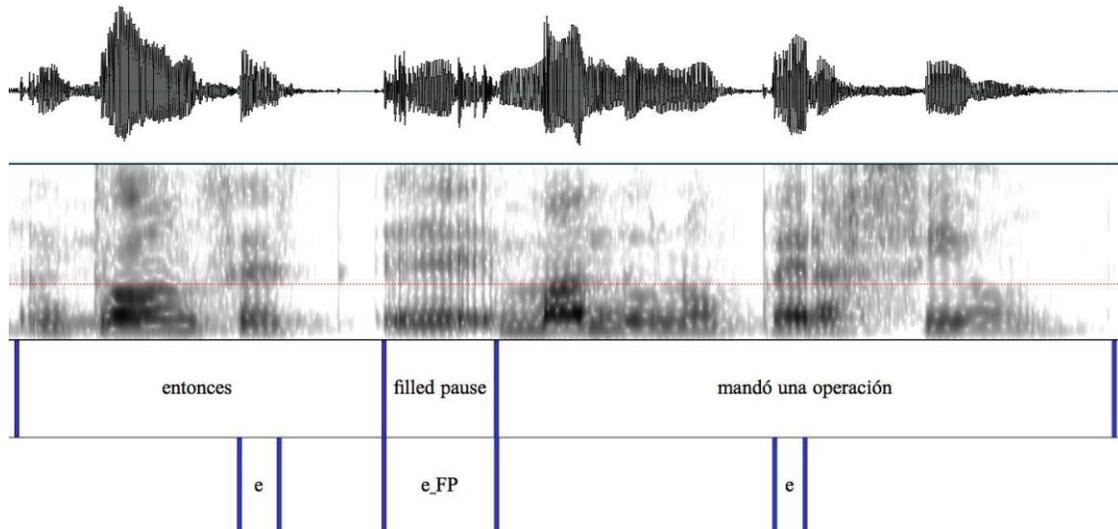


Figure 1. Waveform, spectrogram, and annotation of the phrase “Entonces, eh, mandó una operación.”

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All occurrences of *eh*, *em*, *ah*, *am*, *uh*, and *um* produced by study participants were identified in the manner illustrated in the figure. The vocalic portions of these units were segmented in an interval tier and coded for vowel quality—either [e], [a], or [ə]—on the basis of both auditory impressions and spectrographic evidence, a methodology that combines the acoustic precision of computationally-derived phonetic measures with the qualitative sophistication of human auditory perception (Erker and Reffel, 2021). Measurements of the first and second formants, which are the primary acoustic cues of vowel quality (Peterson and Barney, 1952), were taken at the midpoint of each vocalic segment. In addition, FPs in a subset of 35 interviews were coded for a set of linguistic factors, to assess the potential effects of the contexts in which FPs occurred. These factors included:

- *Phonetic context*: The segmental identity of the sounds immediately preceding and following the FP as well as the stress-bearing status of the immediately preceding and following syllables. Preceding and following segments were assigned one of three values: *consonant*, *vowel*, or *pause*. The last of these

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was defined as a silence of at least 200 milliseconds. Syllable-stress was coded as either *unstressed* or *stressed*. For the example *eh* shown in Figure 1 above, the preceding and following segments were coded as *consonant*, i.e. the FP *eh* is preceded by the final [s] of “entonces” and is followed by the initial [m] of “mandó.” The syllables immediately preceding and following this FP were both coded as *unstressed*, since neither the last syllable of “entonces” nor the first syllable of “mandó” bear primary stress in either of these two words.

- *Utterance position*: This refers to whether the FP occurred at the *beginning*, *middle*, or *end* of an utterance, defined here as an *intonation unit*, or a “segment of speech uttered under a single, coherent intonation contour” (Edwards & Lampert, 2014). The example in Figure 1 was coded as occurring in the *middle* of its associated utterance.
- *Presence vs. absence of a following silence*: This variable relates to whether or not the FP was followed by a period of silence of at least 200 milliseconds. Inclusion of this factor is motivated by the work of Clark & Fox Tree (2002), who claim that (i) FPs tend to be followed by periods of silence, and (ii) different FPs favor following pauses of different durations.
- *Interviewer FPs*: To assess the potential for a relationship between the FP usage of interviewers and interviewees, a profile of the pause-filling behavior of interviewers was also created for the subset of 35 interviews that were coded for the preceding linguistic factors.

3. Results

Results are presented in three parts. We first provide a general description of variation in FP-vowel selection in the data. This is followed by an analysis of potential relationships between FP-vowel variability and the study’s linguistic contextual factors. We then provide an analysis of the social factors included in the study.

3.1 Distribution of variants

The total data set of 6,364 FPs contained 2,707 tokens, or instances, of [a], 2,704 tokens of [e], and 953 tokens of [ə], corresponding to 42.5, 42.5, and 15 percent of the data, respectively. To get a sense of how the tokens vary acoustically we created a *vowel plot*, which is a kind of visualization based on formant measurements. In a vowel plot, individual data points are typically plotted according to two formant measurements (reported in Hertz), here the first and second formant values at the midpoint of each FP-vowel. The first formant (F1) is plotted on the x-axis while the second formant (F2) is plotted on the y-axis. The vowel plot appears in the left panel of Figure 2. The location of the data points is determined by their F1 and F2, and their color and shape correspond to the vowel category to which they belong. Tokens of [e] are green, [a] are red, and [ə] are blue.

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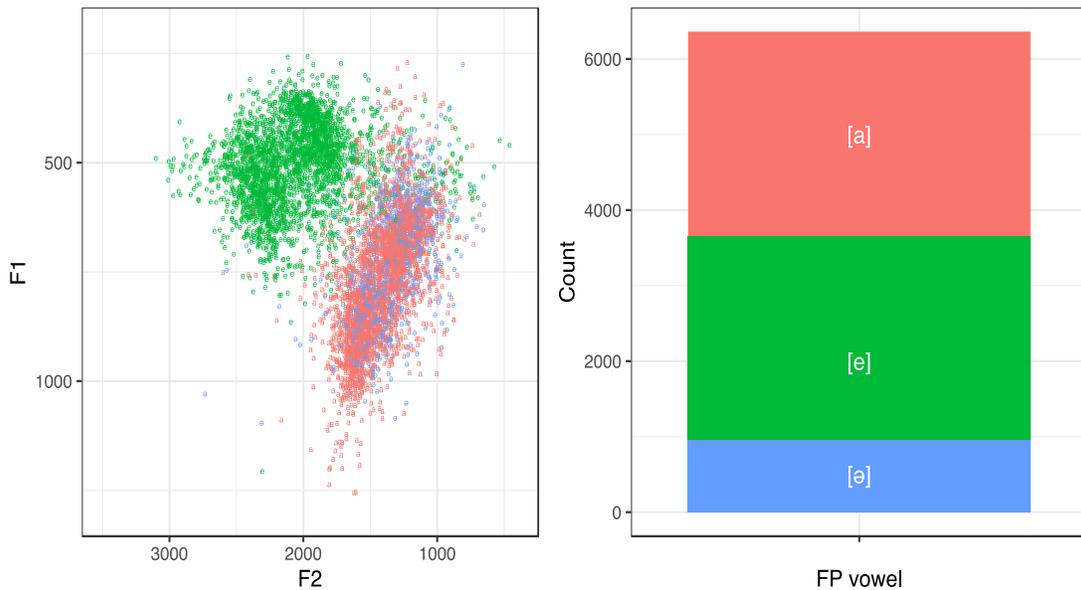


Figure 2. Vowel plots and proportional bar plot of the overall data.

The right panel of Figure 2 is a proportional bar plot showing the percentage of the overall data represented by each of the three vowel categories. Two generalizations emerge from Figure 2: (1) Participants selected [e] and [a] as FP-vowels much more frequently than [ə], and (2) while [e] tokens are concentrated in the upper left corner of the vowel plot, there is considerable overlap in the distribution of tokens of [a] and [ə], which occur primarily in the center of the plot. For these reasons, in the statistical analysis that follows we collapse tokens of [a] and [ə] into a single category, centralized, keeping in mind that the overwhelming majority of centralized tokens are instances of [a] rather than [ə].

3.2 Linguistic Factors

At present, linguists have a relatively limited understanding of the role that linguistic context plays in shaping how speakers choose from among their FPs. That is, while it is clear that FPs are most likely to occur when speakers are planning or reformulating utterances, it is much less clear whether certain linguistic contexts favor the selection of particular FPs. While some significant patterns emerge from our data along these lines, they co-occur with other results that are inconclusive. First, with respect to preceding phonetic context, there is no evidence in our data of a relationship between preceding segment type and FP-vowel type. That is, whether an FP is immediately preceded by a vowel, consonant, or pause is not predictive of the vowel quality of the following FP. Nor is there any evidence that the stress-bearing status of preceding or following syllables shapes FP-vowel selection. There is, however, some evidence that the vowel [e] is significantly more likely to precede a period of silence than are the centralized FP variants ([a] and [ə]), a finding that aligns with previous research claiming that specific FPs favor following periods of silence more than others do (Clark & Fox Tree, 2002). Figure 3 visualizes the distribution of [e] vs. centralized variants ([a] and [ə]) across the various levels of four linguistic contextual factors in the study.

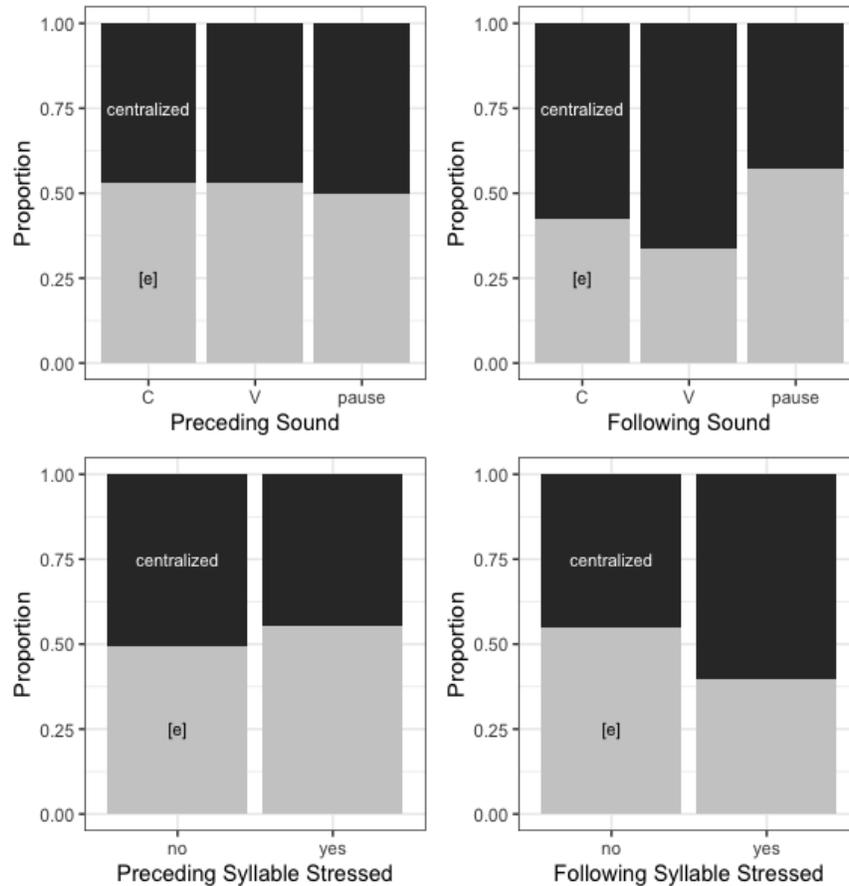


Figure 3. Proportion of [e] vs. centralized FPs by linguistic contextual factors.

To statistically assess the combined effects of the study's linguistic contextual factors, we built a *mixed effects logistic regression model*⁴ using the *lme4* software package (Bates et al., 2015) that runs in the statistical computing environment *R* (R-Core-Team 2022). The dependent variable in the model was *FP-vowel type*, with the values [e] vs. [a]/[ə]. The independent variables were the study's linguistic contextual factors: *preceding sound*, *following sound*, *preceding stress*, *following stress*, and *interviewer FP preference*, each of which was treated as a fixed effect in the model.

⁴ For further information on the underlying logic and mathematics of these models as well their application to linguistic data, see Johnson (2009).

The variable *speaker* was included as a random effect. The model returned significant results only for *following pause*, which, as mentioned above, favored the selection of [e] ($\beta = 0.73$, $SE = 0.27$, $z = 2.7$, $p < 0.008$). The overall model-fit was poor, with an R-squared value associated with the fixed effects of just .023. This value means that the study's linguistic contextual factors account for just over two percent of the variance in the data.

3.3 Social Factors

Turning now to the study's social factors, we may recall that our central hypothesis was that Spanish speakers who have had greater contact with English will differ in their FP usage from speakers with less English contact. More specifically, we expect increased bilingualism to be associated with increased use of central vowels, given that English speakers' preferred FP-vowel, that of *uh* and *um*, is itself a central vowel. As a first step in testing this hypothesis, we examined the potential effect of several social factors that we did not expect to shape variability in FP-vowel choice, which were speaker sex, *regional origin*, and *social class* (based on their education levels and occupations). We once again constructed a mixed effects logistic regression with FP-vowel type as the dependent variable. The preceding social factors were specified as fixed effects and *speaker* was included as a random effect. This model did not return any significant results. This means that in our data, FP-vowel selection is unrelated to whether a speaker is either a man or woman, whether they are working-, middle-, or upper-class, and whether they or their families originated in a particular locale of the Hispanophone world. Instead, what appears to best predict variation in FP-vowel selection is, as we hypothesized, participants' settlement history and habitual language use.

To explore these aspects of our participants' sociolinguistic experiences we focused on a specific section of the questionnaire data. Of particular importance were their answers to the following question: "¿Cuál(es) idioma(s) habla [o hablaba]

con su(s): papá, mamá, hermanos, hijos menores, hijos mayores, amigos, jefe, compañeros de trabajo, compañeros de escuela, esposa/o o novia/o?” Participants were asked to answer the question with either “español,” “inglés,” or “ambos.” An aggregate measure, which we termed *Percent of Interlocutors Spanish Only*, was calculated on the basis of a participant’s combined answers such that a person who answered “español” for all interlocutors received a value of one hundred percent while a person who answered “español” for only half of their interlocutors received a value of fifty percent, etc. This measure, along with information regarding participants’ reported ages of arrival to the U.S. were then modeled using regression analysis.

Before turning to the details of the regression, let us first consider a series of visualizations. Figure 4 presents two scatter plots. The one in the left panel plots each participant in the study along two parameters. On the x-axis is the variable *Percent Interlocutors Spanish Only*, which was described above. On the y-axis is the rate of centralized FP-vowel use. A participant who produced only [e] in their FPs would have a value of zero for this variable while one who produced only [a] and/or [ə] would have a value of one hundred percent. According to our hypothesis, the prediction is for an inverse correlation between these two parameters. A linear fit of the data returned significant results that align with this prediction ($r = -.498$, $t(78) = -5.7$, $p < .001$). In other words, participants who speak exclusively Spanish with a larger fraction of their interlocutors use centralized vowels in their FPs at lower rates. Or, put in terms of the use [e] as an FP-vowel, as speakers use greater amounts of English with their interlocutors (and their exclusive use of Spanish decreases), frequency of use of [e] decreases. The second panel in Figure 4 once again plots speakers in terms of rates of centralized FP-vowel use but with a different x-axis, namely, *Age of Arrival* to the U.S., in years. These two measures are also significantly negatively correlated ($r = -.464$, $t(78) = -4.6$, $p < .001$). Those who arrived to the U.S. at older ages have lower rates of centralized FPs.

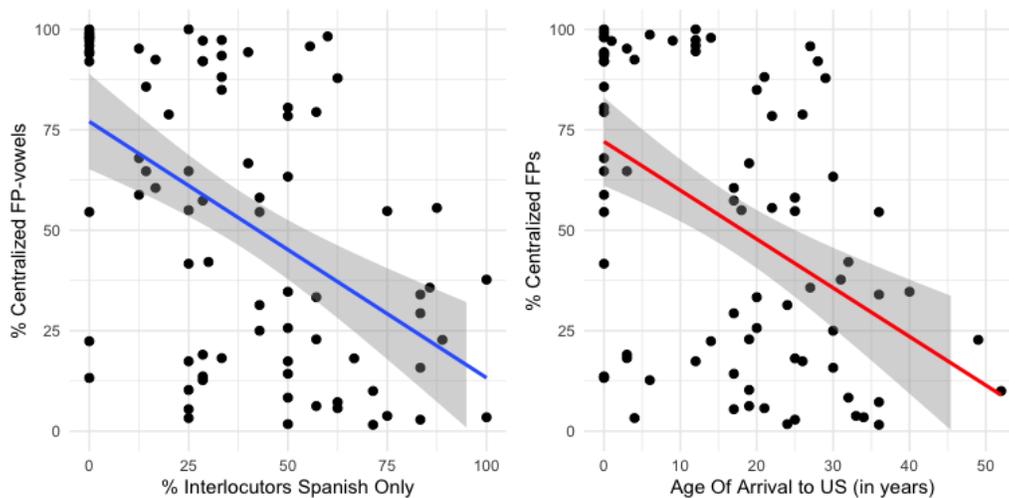


Figure 4. Rate of Centralized FP-vowel by Percent Interlocutors Spanish Only and Age of Arrival.

An additional visualization, Figure 5, provides a sense of how age of arrival and habitual language use relate to one another in the data. This figure is a *conditional inference tree* that is the result of a binary partitioning algorithm included with the *party* package for *R* (Hothorn, Hornik, & Zeileis, 2006). The algorithm is designed to create maximally homogeneous groups of observations for a given dependent variable on the basis of predictor variables. Here the dependent variable is the rate of centralized FPs observed for each individual in the study. The predictor variables are age of arrival (AOA in the image) and *Percent Interlocutors Spanish Only* (*Percent_Intl_Span_Only* in the image). The algorithm searches for significant divisions among the 80 data points—one for each speaker, in this case—creating ‘branches’ at various values of the predictors until it has arrived at maximally internally homogeneous groups.

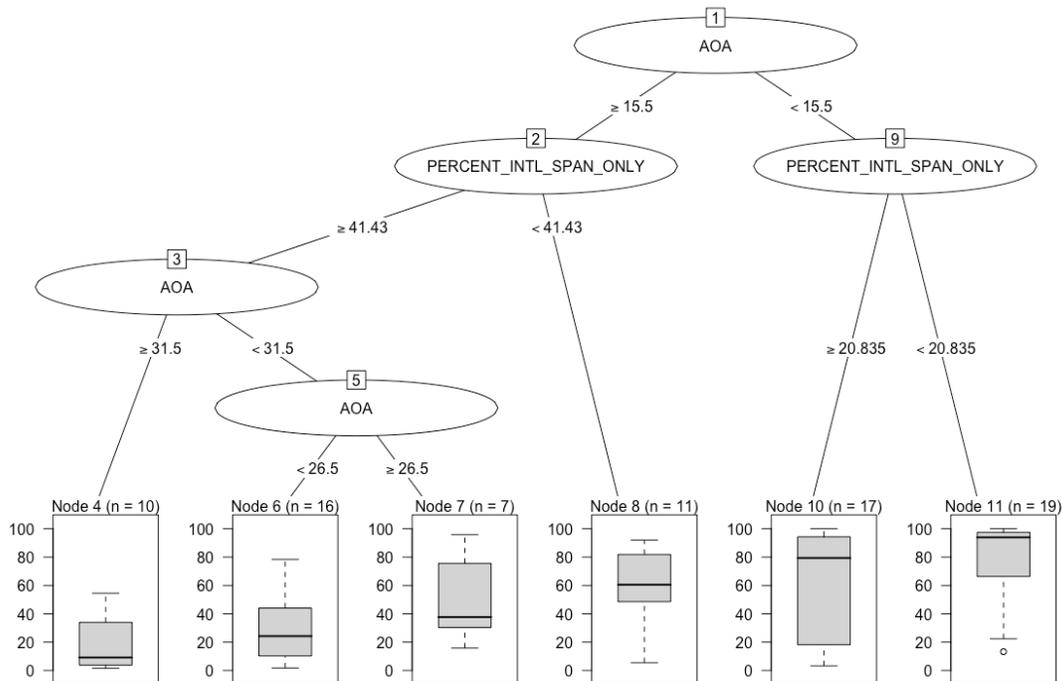


Figure 5. Conditional interference tree; y-axes in boxplots correspond to rate of Centralized FP-vowels.

The first partition in the tree is made on the basis of age of arrival, with a branching of participants at 15.5 years old, meaning that the most important point of contrast between our participants' FP-vowel choices is based on age of arrival, and, in particular, an age of arrival that corresponds roughly to the late adolescence. Following the right branch of the first division leads to a split in terms of *Percent Interlocutors Spanish Only* at a value of 20.8 percent. This division terminates in nodes 10 and 11, the latter of which contains 19 participants. These are individuals who arrived in the U.S. before they were 15 and-a-half years-old and who speak exclusively Spanish with less than one in five of their interlocutors. Members of this group have a strong preference for centralized FP vowels, with a median rate (the black line in the box) of 95 percent centralized FP-vowels. Contrast this group with node 4 at the far-left edge of the tree. The ten individuals in this group all arrived to the U.S. after their 31st birthdays, and they speak exclusively Spanish with at least

40 percent of their interlocutors. They strongly disfavor the use of centralized FP vowels; that is, they have a strong preference for [e] as their filled-pause vowel. The nodes in between 4 and 11 show a gradual increase in rates of centralized FP vowels from left to right, a pattern that can be distilled into the generalizations that participants who arrived to the U.S. earlier in life and who use exclusively Spanish with fewer of their interlocutors are more likely to use [a] and [ə] when filling pauses.

With the preceding visualizations as context, we can now consider the results of a linear regression, with rate of centralized FP vowels as the dependent variable and two predictor variables: (i) the now familiar variable *Percent Interlocutors Spanish Only* and (ii) a categorical treatment of age arrival based on the results of the partitioning algorithm; participants who arrived before age 15-and-a-half are considered *child arrivals* in the model while those who arrived after that age are categorized as *adult arrivals*. The overall result of the model was significant ($F(2,77) = 15.24, p < .001$), and it returned significant main effects for each predictor. That is, both independent variables—*Percent Interlocutors Spanish Only* and *Age of Arrival*—are significantly predictive of variation in rates of centralized FPs. The model details are as follows:

- The estimated rate of centralized FPs for a child arrival who speaks exclusively Spanish with none of their interlocutors is 78.3 percent.
- A change in the factor value from *child arrival* to *adult arrival* corresponds to a reduction of 18 percent in the estimated rate of centralized FPs ($SE = 9.23 t = -1.95, p < .05$).
- Every one percent increase in exclusive Spanish use corresponds to an estimated .4 percent reduction in the rate of centralized FPs ($SE = .17 t = -2.47, p < .02$).

Together, these two variables account for a little over a quarter of the variance in the data (*Adjusted R-squared* = .265), more than ten times as much as was accounted for by the study's linguistic contextual factors in the models discussed above. Overall, the regression results parallel those of the conditional inference tree and provide further evidence in support of our main hypothesis.

4. Discussion

We began this paper by highlighting the pervasive and cross-linguistically variable nature of filled pauses. We cited a number of studies that show how FPs are integral to the production and processing of spontaneous speech. We then proposed, on the logic that FPs are part of the structural makeup of linguistic systems, that they might serve as a window into the behavior of users of multiple such systems. In particular, on the view that bilinguals' alternating use of two languages puts these languages into contact, we hypothesized that Spanish speakers who make routine use of English in their daily lives would fill pauses in a way that reflects this fact. The results presented above strongly align with our hypothesis. Spanish-speaking Bostonians who arrived to the U.S. as adults and who speak exclusively Spanish with most of their interlocutors —and who are therefore most representative of *non-contact norms*— strongly prefer to fill pauses in spontaneous Spanish speech with [e]. In contrast, those who were born in or arrived to the U.S. as children and/or who speak exclusively Spanish with fewer interlocutors are more likely to use the centralized variants [a] and [ə]. We interpret this difference (to again quote Weinreich) as evidence of a contact-induced “rearrangement of patterns” in the domain of Spanish conversational filled pauses.

Insofar as this is the correct interpretation of the data, which we believe it is, several new questions arise:

- What is the precise nature of the rearrangement of FP norms?
- What does this suggest about possible constraints on linguistic innovations that are triggered by bilingualism?
- How do shifts in FP-vowel selection fit with other evidence of contact-induced change among Spanish speakers in the United States?

We will try to sketch answers to these questions here. First, recall that we combined tokens of [a] and [ə] in our statistical analysis. The main reason for doing so was that collapsing [a] and [ə] into a single category made for a simple contrast between the use of these vowels and [e], which is clearly the favored FP-vowel among Spanish speakers with relatively little English contact experience. A related reason for combining [a] and [ə] is that doing so allowed us to make use of quantitative tools designed to work with binary dependent variables, i.e. logistic regression. Given that we now know that increased bilingualism is associated with decreased use of [e] and increased use of centralized vowels, what of the distribution of [a] vs. [ə]? The reader may recall from the *Results* section that the overall use of [ə] is relatively low, constituting just twelve percent of the total data, which amounts to twenty-six percent of centralized FPs. This means that when speakers choose a centralized vowel to fill a pause, that is, when they choose either [a] or [ə], they select the latter in only one of every four such instances. It is perhaps unsurprising then that among the 43 speakers in the study who might be called *centralizers*—which is to say, those who prefer using centralized FP-vowels over [e]—the vast majority of them overwhelmingly prefer [a] to [ə]. Only five of the study’s *centralizers* use [ə] more frequently than they use [a]. In other words, the reconfiguration of pause filling norms is essentially a shift away from [e] towards [a], with relatively minimal adoption of [ə].

This pattern is somewhat contrary to what might superficially be viewed as the simplest contact outcome, namely the substitution of [e] with the prevailing pause-filling norm of English, i.e. the use of *uh/um*. Why then do the study's *centralizers* do something different? Why do they gravitate towards [a] rather than [ə]? A potential explanation is offered by the linguist Carmen Silva-Corvalán, whose own research has shed considerable light on language contact in general and on Spanish in the United States in particular. On the basis of her observations of Spanish speakers in Los Angeles, Silva-Corvalán remarks that “in language-contact situations bilinguals develop strategies aimed at lightening the cognitive load of having to use and remember two different linguistic systems” (Silva-Corvalán 1994, p. 207). When it comes to filled pauses, a person who speaks both Spanish and English presumably bears the cognitive load of having to remember to use *eh/em* when speaking the former and *uh/um* when using the latter. This load could potentially be lightened by simply substituting one of these FP strategies for the other and generalizing its use across all speech, regardless of the language being used. But, as Silva-Corvalán also observes, “even under conditions of intense contact and strong cultural pressure speakers [...] do not introduce elements that would cause radical changes in the structure of the language” (p. 6).

As we mentioned in the Introduction section, the phonemic inventories of general Spanish and American English lack /ə/ and monophthongal /e/, respectively. The wholesale adoption of *uh* into Spanish or *eh* into English in the context of pause-filling would therefore presumably qualify as a “radical change,” something that, according to Silva-Corvalán, is generally disfavored by bilinguals. The vowel [a], on the other hand, is common to the vocalic inventories of both languages, thus making it a more attractive option for a generalized pause-filler. While this interpretation of our results would be further strengthened if we had data showing that *centralizers* also preferred *ah/am* to *uh/um* when speaking in English, it is nonetheless an appealing account of our results for FPs in Spanish. It also serves as

a reminder of the generally conservative nature of much contact-induced language change, especially in settings characterized by relatively stable intergenerational bilingualism –as opposed to situations of contact characterized by very rapid language shift, such as that which has occurred in instances of military and political conquest, enslavement, and other kinds of extreme social disruption (Thomason & Kaufman, 1992).

The conservative reconfiguration of FP norms observed in our data –that is, the re-purposing of an existing structure, [a], as the primary FP-vowel by speakers with more extensive contact with English– aligns well with a number of other studies of the outcomes of language contact among Spanish speakers in the United States. Several studies show that intergenerational Spanish-English bilingualism is, in and of itself, no guarantee of linguistic innovation in the first place. For instance, in a large-scale study of Spanish-English bilinguals in New Mexico, Rena Torres Cacoullos and Catherine Travis examined variation in the use of subject personal pronouns, i.e. the presence vs. absence of pronouns in structures like “(yo) hablo” or “(tú) pintas,” in which the pronouns are syntactically optional. A hypothesis of structural convergence with English in this domain of Spanish grammar predicts that increased bilingualism will correspond to higher rates of subject pronoun use, aligning Spanish pronominal norms with those of English, in which subject pronoun use is much more frequent. But Torres-Cacoullos and Travis’s data are inconsistent with this hypothesis. They write that “the hypothesis of convergence is firmly rejected” (Torres-Cacoullos & Travis, 2018, p. 203), further remarking that “grammatical change through contact is far from a foregone conclusion in bilingual communities, where speakers are adept at keeping their languages together, yet separate” (p. 1).

Other studies of subject pronominal variation *have*, in fact, uncovered evidence of shifts in subject pronoun use in the direction predicted by a hypothesis of contact-induced structural convergence. Among the strongest evidence for contact-induced change in this area of Spanish grammar are studies of subject pronoun use

among Spanish speakers in New York City and Boston (Otheguy & Zentella, 2012; Erker & Otheguy, 2021), which show that increased experience with English does indeed correspond to statistically significant increases in rates of use of pronouns in Spanish. However, evidence of shifts in overall rates of pronoun use in these studies are small —on the order of few percentage points. Furthermore, these incremental increases in rates co-occur alongside strong evidence of structural continuity. There are, for instance, very few intergenerational differences in speakers’ sensitivity to an elaborate constellation of linguistic contextual factors underlying pronominal presence vs. absence. That is, while U.S.-born Spanish speakers in New York City and Boston may use subject pronouns somewhat more frequently, they make their choice to either do so or not on the basis of the same criteria that guide Spanish monolinguals. For instance, there is strong intergenerational continuity in speakers’ preferences for pronoun use with singular as opposed to plural verbs, with non-reflexive vs. reflexive verbs, and with verbs that constitute a change in referent from the immediately preceding verb. In other words, the strongest evidence in favor of contact-induced change in Spanish subject pronominal norms manifests not as radical change, but rather as a relatively minor reconfiguration of existing norms (primarily at the level of rates of use). Studies of several other structures report parallel findings. For example, analyses of subjunctive verbal morphology (Bookhamer, 2013), syntactic constituent order (Raña-Risso, 2010; Erker et al., 2017), and the realization of fricatives (Erker & Reffel, 2021) all show that contact-induced innovation among Spanish speakers in the U.S. is likeliest to manifest, when it occurs, as a reconfiguration of existing norms rather than as the wholesale introduction of novel structures or properties. Our findings related to FPs thus further exemplify the typically conservative nature of contact-induced linguistic innovation.

5. Conclusion

In this paper we examined patterns of variation in pause-filling in the speech of 80 Spanish-speaking Bostonians. Our results provide further evidence of the value of studying FPs, structures of speech that have long been dismissed by many as incidental noise in genuine linguistic signals. While there is still much to be learned about Spanish FPs, especially in terms of the influence of linguistic contextual factors on FP-vowel selection, a very clear pattern emerges in our data when inter-speaker differences in settlement history and habitual language use are systematically considered: Increased bilingualism coincides with a reconfiguration of FP-norms, the subtle nature of which aligns with a view of contact-induced language change as a tightly constrained process. Our study also motivates several lines of further research, including an analysis of the FPs of Spanish-English bilinguals in both of the languages they speak. Future research would also do well to consider the perceptual salience of and speaker attitudes towards variation in FPs. While FP-vowel choice does not currently figure in popular ideologies of variation in the Hispanophone world, it may yet someday, especially if eavesdropping on Spanish conversations in the U.S. continues to turn up *ahs* instead of *ehs*.

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Works Cited

- Bailey, K., & Ferreira, F. (2003). Disfluencies affect the parsing of garden-path sentences. *Journal of Memory and Language*, 49(2), 183–200.
- Bates, D., Mächler, M., Bolker, B., & Walker, S. (2015). Fitting linear mixed-effects models using lme4. *Journal of Statistical Software*, 67(1), 1–48.
- Bell, A., Jurafsky, D., Fosler-Lussier, E., Girand, C., Gregory, M., & Gildea, D. (2003). Effects of disfluencies, predictability, and utterance position on word form variation in English conversation. *The Journal of the Acoustical Society of America*, 113(2), 1001–1024.
- Boersma, P., & Weenink D. (2022). Praat: Doing phonetics by computer [computer program]. <https://www.fon.hum.uva.nl/praat/>
- Bookhamer, K. (2013). *The variable grammar of the Spanish subjunctive in second-generation bilinguals in New York City*. [Ph.D. Dissertation, City University of New York].
- Chomsky, N. (1965). *Aspects of the theory of syntax*. Cambridge, MA: MIT Press.
- Clark, H., & Fox-Tree, J. (2002). Using *uh* and *um* in spontaneous speaking. *Cognition*, 84(1), 73–111.
- Corley, M., MacGregor, L. J., & Donaldson, D. (2007). It's the way that you, er, say it: Hesitations in speech affect language comprehension. *Cognition*, 105(3), 658–68.
- Couper-Kuhlen, E., & Ono, T. (2007). 'Incrementing' in conversation. A comparison of practices in English, German and Japanese. *Pragmatics*, 17(4), 513–52.
- Cruttenden, A. (1986). *Intonation*. New York: Cambridge University Press.
- Edwards, J., & Lampert, M. (2014). *Talking data: Transcription and coding in discourse research*. New York: Psychology Press.

- Erker, D. (2022). How social salience can illuminate the outcomes of linguistic contact: Data from Spanish in Boston. In G. R. Guy & K. V. Beaman (Eds.), *The coherence of linguistic communities. Orderly heterogeneity and social meaning* (pp. 145–62). London: Routledge.
- Erker, D., & Bruso, J. (2017). *Uh, bueno, em*: Filled pauses as a site of contact-induced change in Boston Spanish. *Language Variation and Change*, 29(2), 205–44.
- Erker, D., Ho-Fernández, E., Otheguy, R., & Shin, N. (2017). Continuity and change in Spanish among Cubans in New York: A study of placement of subjects of finite verbs. In A. Cuza (Ed.), *Cuban Spanish dialectology: Variation, contact and change* (pp. 63–82). Washington, DC: Georgetown University Press.
- Erker, D., & Otheguy, R. (2021). American myths of linguistic assimilation: A sociolinguistic rebuttal. *Language in Society*, 50(2), 197–233.
- Erker, D., & Reffel, M. (2021). Describing and analyzing variability in Spanish/s: A case study of Caribbeans in Boston and New York City. In E. Núñez-Méndez (Ed.), *Sociolinguistic approaches to sibilant variation in Spanish* (pp. 131–63). London: Routledge.
- Fruehwald, J. (2016). Filled pause choice as a sociolinguistic variable. *University of Pennsylvania Working Papers in Linguistics*, 22(2), 41-49.
- García-Amaya, L., & Lang, S. (2020). Filled pauses are susceptible to cross-language phonetic influence: Evidence from Afrikaans-Spanish bilinguals. *Studies in Second Language Acquisition*, 42(5), 1077–1105.
- Hothorn, T., Hornik, K., & Zeileis, A. (2006). Unbiased recursive partitioning: A conditional inference framework. *Journal of Computational and Graphical statistics*, 15(3), 651–74.
- Hualde, J. I. (2005). *The sounds of Spanish*. Cambridge, UK / New York, NY: Cambridge University Press.
- Johnson, D. E. (2009). Getting off the GoldVarb standard: Introducing rbrul for mixed-effects variable rule analysis. *Language and linguistics compass*, 3(1), 359–83.

- Lo, J. (2020). Between Äh(m) and euh(m): The distribution and realization of filled pauses in the speech of German-French simultaneous bilinguals. *Language and speech*, 63(4), 746–68.
- Maclay, H., & Osgood, C. E. (1959). Hesitation phenomena in spontaneous English speech. *Word*, 15(1), 19–44.
- Mahl, G. F. (1956). Disturbances and silences in the patient's speech in psychotherapy. *The Journal of Abnormal and Social Psychology*, 53(1), 1-15.
- Otheguy, R., & Zentella, A. C. (2012). *Spanish in New York: Language contact, dialectal leveling, and structural continuity*. New York, NY: Oxford University Press.
- Peterson, G. E., & Barney, H. L. (1952). Control methods used in a study of the vowels. *The Journal of the Acoustical Society of America*, 24(2), 175-184.
- R-Core-Team (2022). R: A language and environment for statistical computing. <https://cran.microsoft.com/snapshot/2014-09-08/web/packages/dplR/vignettes/xdate-dplR.pdf>
- Raña-Risso, R. (2010). Subject pronoun placement as evidence of contact and leveling in Spanish in New York. *International Journal of the Sociology of Language*, 203(203), 101–114.
- Silva-Corvalán, C. (1994). *Language contact and change: Spanish in Los Angeles*. New York, NY: Oxford University Press.
- Swerts, M. (1998). Filled pauses as markers of discourse structure. *Journal of Pragmatics*, 30(4), 485–496.
- Thomason, S. G., & Kaufman, T. (1992). *Language contact, creolization, and genetic linguistics*. Berkeley, CA: University of California Press.
- Torres-Cacoullos, R., & Travis, C. E. (2018). *Bilingualism in the community: Code-switching and grammars in contact*. Cambridge, UK / New York, NY: Cambridge University Press.
- Tottie, G. (2014). On the use of *uh* and *um* in American English. *Functions of Language*, 21(1), 6–29.

- Vidal-Covas, L. A. (2021). *Hesitation phenomena as a site of dialectal and language contact among Spanish-speaking Bostonians*. [Unpublished Master's Thesis, Boston University].
- Watanabe, M., Den, Y., Hirose, K., & Minematsu, N. (2004, September 25-26). *Types of clause boundaries and the frequencies of filled pauses*. The 18th General Meeting of the Phonetic Society of Japan, Tokyo University of Foreign Studies.
- Watanabe, M., Hirose, K., Den, Y., & Minematsu, N. (2008). Filled pauses as cues to the complexity of upcoming phrases for native and non-native listeners. *Speech communication*, 50(2), 81–94.
- Weinreich, U. (1953). *Languages in contact*. The Hague: Mouton.
- Wells, J. C. (1982). *Accents of English (Vol. 1)*. Cambridge, UK / New York, NY: Cambridge University Press.

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40. Rosana Hernández Nieto, Francisco Moreno-Fernández (dir.). *Reshaping Hispanic Cultures. 2017 Instituto Cervantes Symposium on Recent Scholarship. Vol. II. Spanish Teaching / Enseñanza de español* (En español: 040-04/2018SP). Abril 2018.
41. Andrés Enrique-Arias, *Evolución de los posgrados de español en las universidades estadounidenses / The Evolution of Graduate Studies in Spanish in American Universities* (En español: 041-05/2018SP; in English: 041-05/2018EN). Mayo/May 2018.
42. Luis Javier Pentón Herrera, *Estudiantes indígenas de América Latina en los Estados Unidos / Indigenous Students from Latin America in the United States* (En español: 042-08/2018SP; in English: 042-08/2018EN). Agosto/August 2018.
43. Francisco Moreno Fernández (ed.). *El español de los Estados Unidos a debate. U.S. Spanish in the Spotlight* (En español: 043-09/2018SP; in English: 043-09/2018EN). Septiembre/September 2018.
44. Rosana Hernández y Francisco Moreno Fernández (dir.). *Mapa hispano de los Estados Unidos 2018 / Hispanic Map of the United States 2018.* (En español: 044-10/2018SP; in English: 044-10/2018EN). Octubre/October 2018.

45. Esther Gimeno Ugalde. *Panorama de los Estudios Catalanes en los Estados Unidos / Catalan Studies in the United States* (En español: 045-11/2018SP; in English: 045-11/2018EN). Noviembre/November 2018.
46. Silvia Betti. *Apuntes sobre paisaje lingüístico. Un paseo por algunas ciudades estadounidenses / Notes on Linguistic Landscape: A Look at Several U.S. Cities.* (En español: 046-12/2018SP; in English: 046-12/2018EN). Diciembre/December 2018.
47. Rosana Hernández. *Legislación lingüística en los Estados Unidos. Análisis nacional / Language Legislation in the U.S. A Nationwide Analysis.* (En español: 047-01-2019SP; in English: 047-01/2019EN). Enero/January 2019.
48. Kate Seltzer y Ofelia García. *Mantenimiento del bilingüismo en estudiantes latinos/as de las escuelas de Nueva York. El proyecto CUNY-NYSIEB / Sustaining Latinx Bilingualism in New York's Schools: The CUNY-NYSIEB Project.* (En español: 048-02/2019SP; in English: 048-02/2019EN). Febrero/February 2019.
49. Francisco Moreno Fernández (ed.). *Hacia un corpus del español en los Estados Unidos. Debate para la génesis del proyecto CORPEEU.* (En español: 049-03/2019SP) Marzo/March 2019.
50. Rosana Hernández y Francisco Moreno-Fernández (eds.). *Reshaping Hispanic Cultures. 2018 Instituto Cervantes Symposium on Recent Scholarship. Vol. I. Literature.* (En español: 050-04/2019SP) Abril/April 2019.
51. Rosana Hernández y Francisco Moreno-Fernández (eds.). *Reshaping Hispanic Cultures. 2018 Instituto Cervantes Symposium on Recent Scholarship. Vol. II. Linguistics, Communication and Sociology in the Hispanic World.* (En español: 051-05/2019SP) Mayo/May 2019.
52. Clara González Tosat. *Cibermedios hispanos en los Estados Unidos 2019: evolución, calidad e impacto. / Hispanic Digital Newspapers in the U.S., 2019: evolution, quality, and impact.* (En español: 052-06/2019SP; in English: 052-06/2019EN) Junio/June 2019.

Estudios del Observatorio/Observatorio Studies

53. José María Albalad Aiguabella. *Periodismo hispano en los Estados Unidos: análisis de cuatro modelos referentes. / Hispanic journalism in the United States: analysis of four key models.* (En español: 053-09/2019SP; in English: 053-09/2019EN) Septiembre/September 2019.

54. José María Albalad Aiguabella. *La apuesta de The New York Times por el mercado hispanohablante (2016-2019): luces y sombras de un proyecto piloto. / The New York Times' Bet on the Spanish-speaking Market (2016-2019): Highs and Lows of a Pilot Project.* (En español: 054-10/2019SP; in English: 054-10/2019EN) Octubre/October 2019.
55. Marta Mateo, Cristina Lacomba y Natalie Ramírez (eds.). *De España a Estados Unidos: el legado transatlántico de Joaquín Rodrigo. / From Spain to the United States: Joaquín Rodrigo's Transatlantic Legacy.* (En español: 055-11/2019SP; in English: 055-11/2019EN) Noviembre/November 2019.
56. Juan Ignacio Güenechea Rodríguez. *La herencia hispana y el español en la toponimia de los Estados Unidos. / Hispanic Heritage and the Spanish Language in the Toponymy of the United States.* (En español: 056-12/2019SP; in English: 056-12/2019EN) Diciembre/December 2019.
57. Daniel Moreno-Moreno. *Lo híbrido hecho carne. El legado de un pensador hispano-americano: Jorge/George Santayana. / The Hybrid Made Flesh. The Legacy of a Hispanic-American Thinker: Jorge/George Santayana.* (En español: 057-01/2020SP; in English: 057-01/2020EN) Enero/January 2020.
58. Rolena Adorno y José M. del Pino. *George Ticknor (1791-1871), su contribución al hispanismo, y una amistad especial. / George Ticknor (1791-1871), his Contributions to Hispanism, and a Special Friendship.* (En español: 058-02/2020SP; in English: 058-02/2020EN) Febrero/February 2020.
59. Mónica Álvarez Estévez. *Entre dos orillas: la inmigración gallega en Nueva York. Morriña e identidades transnacionales. / Between Two Shores: Galician Immigration to New York. Morriña and transnational identities.* (En español: 059-03/2020SP; in English: 059-03/2020EN) Marzo/March 2020.
60. Marta Mateo, María Bovea y Natalie Ramírez (eds.). *Reshaping Hispanic Cultures: 2019 Instituto Cervantes Symposium on Recent Scholarship. Vol. I. Identity, Language & Teaching.* (060-04/2020SP) Abril 2020.
61. Marta Mateo, María Bovea y Natalie Ramírez (eds.). *Reshaping Hispanic Cultures: 2019 Instituto Cervantes Symposium on Recent Scholarship. Vol. II. Art and Literature.* (061-05/2020SP) Mayo 2020.
62. Godoy Peñas, Juan A. *Are you Black or Latino? Ser afro-latino en los Estados Unidos. / Are You Black or Latino? Being Latino in the United States.* (En español: 062-06/2020SP; in English: 062-06/2020EN) Junio/June 2020.
63. Eduardo Viñuela. *El pop en español en EE.UU.: Un espacio para la articulación de la identidad latina / Pop in Spanish in the U.S.: A Space to Articulate the Latino Identity.* (En español: 063-09/2020SP; in English: 063-09/2020EN) Septiembre/September 2020.

64. Marjorie Agosín, Emma Romeu, Clara Eugenia Ronderos. *Vida en inglés, poesía en español: Escribir desde la ausencia / Living in English, Writing in Spanish: The Poetry of Absence*. (En español: 064-10/2020SP; in English: 064-10/2020EN) Octubre/October 2020.
65. Cristina Lacomba. *Hispanos y/o latinos en Estados Unidos: La construcción social de una identidad / Hispanics and/or Latinos in the United States: The Social Construction of an Identity*. (En español: 065-11/2020SP; in English: 065-11/2020EN) Noviembre/November 2020.
66. Lucía Guerra. *Translaciones literarias. Difusión y procesos de traducción de la obra de María Luisa Bombal en los Estados Unidos / Literary Shifts. María Luisa Bombal: Circulation and Translation Processes in the United States*. (En español: 066-12/2020SP; in English: 066-12/2020EN) Diciembre/December 2020.
67. Leyla Rouhi. *Translaciones literarias. Sobre La Celestina y sus traducciones al inglés / Literary Shifts. On La Celestina and English Translations*. (En español: 067-01/2021SP; in English: 067-01/2021EN) Enero/January 2021.
68. Miriam Perandones Lozano. *La recepción del hispanismo musical en Nueva York en el cambio de siglo XIX-XX y el boom del teatro lírico español a través de Enrique Granados y Quinito Valverde / Reception of Musical Hispanism in New York at the Turn of the 20th Century and the Boom in Spanish Lyric Theatre through the Work of Enrique Granados and Quinito Valverde*. (En español: 068-02/2021SP; in English: 068-02/2021EN) Febrero/February 2021.
69. Raquel Chang-Rodríguez. *Luis Jerónimo de Oré y su Relación (c. 1619): el testimonio de un peruano en La Florida española / Luis Jerónimo de Oré and his Relación (c. 1619): A Peruvian's Account of Spanish Florida*. (En español: 069-03/2021SP; in English: 069-03/2021EN) Marzo/March 2021.
70. Zuzanna Fuchs. *El español como lengua de herencia en los EE. UU.: contribución de las lenguas de herencia a la confirmación de factores que impulsan el desarrollo lingüístico / Heritage Spanish in the US: How Heritage Languages Can Contribute to Disentangling Factors Driving Language Development*. (En español: 070-04/2021SP; in English: 070-04/2021EN) Abril/April 2021.
71. María Luisa Parra Velasco. *Los talleres del español: un proyecto colaborativo de formación docente para profesores de español como lengua de herencia en educación media y superior / Los talleres del español: A Collaborative Training Project for Teachers of Spanish as a Heritage Language in Secondary and Higher Education*. (En español: 071-05/2021SP; in English: 071-05/2021EN) Mayo/May 2021.

72. Marta Mateo, Juan Manuel Arias, and María Bovea-Pascual (eds.). *New Perspectives on Hispanic Cultures: Hispanism and Spanish in the U.S. over the Last 30 Years*. *Observatorio Instituto Cervantes Symposium 2021*. (072-09/2021SP) Septiembre/September 2021.
73. Diego Pascual y Cabo, Gabriela Rivera-Marín. *Entender y confrontar las agresiones lingüísticas en la enseñanza del español como lengua de herencia / Understanding and Addressing Linguistic Aggressions in the Spanish Heritage Language Classroom* (En español: 073-11/2021SP; in English: 073-11/2021EN) Noviembre/November 2021.
74. Javier A. Cancio-Donlebún Ballvé. *Los esclavos del rey de España en San Agustín de La Florida (1580–1618) / The King of Spain's Slaves in St. Augustine, Florida (1580–1618)* (En español: 074-12/2021SP; in English: 074-12/2021EN) Diciembre/December 2021.
75. Francisca González Arias. *Traslaciones literarias. Las primeras traducciones al inglés de las obras de Emilia Pardo Bazán en los Estados Unidos / The English Translations of Works by Emilia Pardo Bazán in the United States of the Fin-de-Siècle* (En español: 075-01/2022SP; in English: 075-01/2022EN) Enero/January 2022.
76. Marta Pérez-Carbonell. *Traslaciones literarias. Las traducciones al inglés de la obra de Javier Marías y su presencia en los Estados Unidos / Literary Shifts. English Language Translations of the Works of Javier Marías and Their Presence in the United States* (En español: 076-03/2022SP; in English: 076-03/2022sEN) Marzo/March 2022.
77. Ángel López García-Molins. *Reflexiones multidisciplinares sobre el espanglish / Multidisciplinary Reflections on Spanglish* (En español: 077-04/2022SP; in English: 077-04/2022EN) Abril/April 2021.
78. Enrique Martínez García y María Teresa Martínez García. *El valor económico del español en Estados Unidos: Oportunidades y retos para el futuro / The Economic Value of Spanish in the United States: Opportunities and Challenges for the Future* (En español: 078-05/2022SP; in English: 078-05/2022EN) Mayo/May 2022.
79. Félix Fernández de Castro. *Textos fonéticos del español hablado en Estados Unidos (1912 - 2006) / Phonetic Texts of Spanish Spoken in the United States (1912-2006)*. (En español: 079-06/2022SP; in English: 079-06/2022EN) Junio/June 2022.