TRANSFER OF STYLISTIC PHONETIC VARIABLES
INDEXING SEXUALITY IN SECOND LANGUAGE CONTEXTS

by

ISAAC W. FISHER

B.A., Washburn University, 2012

A REPORT

submitted in partial fulfillment of the requirements for the degree

MASTER OF ARTS

Department of Modern Languages
College of Arts and Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2016

Approved by:

Major Professor
Dr. Earl Brown
Copyright

ISAAC W. FISHER

2016
Abstract

This paper reports on a study that analyzes how a sequential bilingual speaker (L1 Mexican Spanish, L2 American English) uses stylistic phonetic variation in different speech types during an interview (short answer, spontaneous speech, dramatic anecdote, reading) to construct a dynamic gay persona. There are many stylistic variables that can interact when an individual is creating a persona in an interaction, and this becomes even more complex when analyzing L1 speech as well as L2 speech as there are two collections of stylistic phonetic variables (indexical fields) interacting from two different cultural ideologies available to the interlocutors.

It is problematic to assign one distinct variable to an identity, such as gay, as it homogenizes a diverse social group of individuals and underestimates members’ ability to manage perceptual salience of their identity as a gay individual based on context and social pressure(s). While the field of Lavender Linguistics (language use associated with the LGBTQ community) has shown that there are many resources that can be used to “sound gay,” this case study focuses on how a speaker stylistically creates a gay persona throughout the interview through stylistic variation of two principle variables: 1) word-final /s/ duration, and 2) center of gravity of word-final /s/.

Keywords: Lavender Linguistics, gay, stylistic variation, second language identity, bilingual identities, phonetic variation, Spanish, English, indexicality, indexical field
# Table of Contents

List of Figures .......................................................................................................................... v
List of Tables ............................................................................................................................... vi
Acknowledgements ..................................................................................................................... vii
1. Introduction ............................................................................................................................... 1
   1.1 Social Action ......................................................................................................................... 1
   1.2 Projecting gay identity with language ............................................................................... 7
2. Data and Methods ..................................................................................................................... 13
   2.1 Research questions ............................................................................................................. 13
   2.2 Interview ............................................................................................................................ 13
   2.3 Transcription and Speech Type Coding ............................................................................ 16
3. Results ....................................................................................................................................... 20
   3.1 Conditional inference, random forest, and notched box plots ......................................... 20
   3.2 Duration of /s/: Conditional Inference Tree ...................................................................... 22
   3.3 Center of Gravity: Conditional Inference Tree ................................................................. 23
   3.4 NA vs. Soundsgay in English and Spanish ......................................................................... 24
   3.5 Following Phonological Context by Language .............................................................. 25
   3.6 Speech and text type ......................................................................................................... 26
   3.7 Variable importance dot-plots ......................................................................................... 28
4. Discussion ................................................................................................................................. 29
5. Pedagogical Applications ......................................................................................................... 32
6. Conclusion ................................................................................................................................. 35
References ...................................................................................................................................... 36
Appendix ....................................................................................................................................... 41
   A. Interview question guide used for data elicitation ......................................................... 41
   B. Spanish text excerpt .......................................................................................................... 43
   C. English text excerpt .......................................................................................................... 44
List of Figures

Figure 3.1 Interpreting Notched Box Plots ................................................................. 21
Figure 3.2 Duration of /s/: Conditional Inference Tree ............................................. 22
Figure 3.3 Center of Gravity: Conditional Inference Tree ........................................... 23
Figure 3.4 NA vs. Sounds Gay in English and Spanish .............................................. 24
Figure 3.5 Following Phonological Context .............................................................. 25
Figure 3.6 Influence of Speech Type on /s/ duration and cog ...................................... 27
Figure 3.7 Variable Importance Dot Plot: dur_/s/, cog ............................................. 28
List of Tables

Table 1: Tokens by SpeechType.......................................................................................... 20
Table 2: Tokens by NA vs. Soundsgay................................................................................ 20
Acknowledgements

I would like to first thank my committee members Dr. Earl Brown, Dr. Janice McGregor, and Dr. Laura Valentín-Rivera. This study would not be possible without their guidance, support, and insight. I would especially like to recognize my committee head, Dr. Earl Brown, for his mentorship, patience, as well as his personal and professional investment. I respect and aim to emulate his passion for language which is evidenced by his teaching and investment in students.

I would also like to thank my friends, family, and Misherock for being patient, supportive, and understanding for all the times I told them, “I have to go work on my report.” How I have grown and what I have learned through this process would not have been possible without you all, and for that, ¡Gracias!
1. Introduction

Individuals use variations in their speech to create different identities\(^1\) and personas\(^2\) based on contextual influences. Social expectations in formal or professional situations are traditionally more rigid and conventionally elicit speech patterns which coincide with the desired identities or personas. As context changes, individuals have many stylistic resources which can be used to index social stances and associations. For example, the manner in which a gay individual acts and speaks in homophobic or unwelcoming social circles will undoubtedly be different from how the same individual acts in a group of supportive friends.

Section 1.1 explores the implications and motivations of using the gay sociolect\(^3\) in relation to social action. Section 1.2 presents an analysis of stylistic phonetic variations in speech that can carry social meaning and thus serve potential resources for indexing a gay identity and create persona in contexts of both American English and Mexican Spanish. The research in section 1.2 synthesizes the research that supports and motivates this case study on the transfer of stylistic phonetic variation indexing sexuality from first to second language contexts.

1.1 Social Action

The function of stylistic language use in relation to identity portrayal and negotiation is a significant uniting factor in Lavender Linguistics. While the purpose of this case study is to understand how the participant’s speech varies based on language (English or Spanish) and context, it is important to first understand why it varies. A fundamental study in modern sociolinguistics, Labov (1968) substantiated his theories on social stratification (1964) and

---

\(^1\) The term *identity* is used throughout this paper and is used to refer to the specific individual and their social identities (example: son, father, teacher, friend); used in contrast with *persona* (See footnote 2)

\(^2\) *Persona* is used to reference “the aspect of someone's character (identity) that is presented to or perceived by others” (McKean, 2005).

\(^3\) The term “gay sociolect” is used throughout this work to refer to language distinctions/variations that are associated with stereotypical gay speech and is interchangeably used with “gay-accent.”
mobility (1966) in demonstrating that phonetic variation is not random, but rather phonetic variables have the capacity to carry social meaning. His investigation (1968) analyzed the realization of the pre-consonantal and word-final /r/ (fourth floor) in the Lower East Side of New York in socially stratified contexts of different department stores (Saks, Macy’s, and Klein’s). His findings showed that the variant carried prestige in the community. Employees of Saks (upper class) had the highest occurrence of /r/, while employees from Klein’s (representing lower class) were the least likely to use the variable. Macy’s employees (middle class) showed the most variation; in their “careful” speech (when Labov asked for a clarification), the employees were more likely to pronounce the /r/ (in “fourth floor”). This indicated that their contact with both lower and upper class made them aware that the realization of /r/ carried prestige, and was thus used more in their “careful” speech in an attempt to be identified with a higher social class. Since Labov’s pioneering work, the field of variationist sociolinguistics has developed to encompass additional sub-groups, including Lavender Linguistics, which seeks to better understand how language is used by members of the LGBTQ (Lesbian, Gay, Bisexual, Transgender, Queer) community.

Lavender Linguistics, like Labov’s (1964) analysis on social stratification, is possible due to the ability of variation in speech to acquire social meaning through the interlocutor’s ability to contrast their speech with other styles. For example, Campbell-Kibler (2011) shows that when an interlocutor says, "I was talki[n]" with an alveolar nasal, colloquially represented by an apostrophe "talkin'", it carries social meaning regarding informality, competence, and masculinity due to realization distinctly different from, “I was talking” with a velar nasal [ŋ].

The study of these phonetic contrasts, a subfield of variationist sociolinguistics, has developed through three “waves” (Eckert, 2005) or periods since Labov’s pioneering
contribution (1964, 1966, 1968). Eckert (2005, p. 3) characterizes the First Wave as “Developing the big picture,” since it focuses on indexing social categories through language variation in a larger social framework. First Wave studies focused on geographically defined communities and their socioeconomic hierarchy. Labov’s (1964, 1966) research is a quintessential example as it used language variation to identify geographically defined communities (example: Lower East Side versus New Jersey), speakers’ socioeconomic standing, and mobility through hyper-corrective practices motivated by prestige associated with the articulation of syllable- and word-final /r/.

The first wave was followed by the Second Wave (Eckert, 2005, p. 15) period which is characterized by ethnographic studies emphasizing the role of language variation to index categories on a smaller, more local scale. These Second Wave studies view variation as a stylistic marker showing alliance or membership with distinct, locally defined social groups, which can range from gender conformity (Eckert & McConnell-Ginet, 1992), high school jocks and burnouts (Eckert, 1989), to homosexual men (Crist, 1997; Gaudio, 1994; Johnstone & Bean, 1997), etc.

The creation and negotiation of an identity in a local social sphere is not the result of one discrete variable, but rather an aggregate of multiple. Take a cowboy identity for example. Neither the boots, the cowboy hat, the flannel shirt, or the pliers on their belt individually portray a cowboy identity; however, they each contribute to social meaning and can be selectively and stylistically used to portray said identity. As these objects can be used as stylistic variable markers to show alliance or affiliation with a social group on a more local level, they would illustrate an example of the Second Wave approach to language variation (Eckert, 2005).

Though identity portrayal and negotiation are influenced by a multitude of extralinguistic
factors, such as clothing styles, the phonetic variations indexing a gay identity can play a meaningful and significant role in the perception and negotiation of persona among homosexual men. The field of Lavender linguistics illustrates that individuals employ extensive strategies out of a desire to show endorsement or acceptance as well as rejection or repudiation of a social group identity. This group identity is the product of individuals who are unified or brought together based on shared characteristics, such as relations, beliefs, interests, occupations, etc. People may be born into a group, such as family, or may choose to join or create one as their perception of self-identity finds commonalities with the interests/hobbies, beliefs and religions, or occupations of other individuals. Community is created through the shared characteristics that bring these individuals together. This is illustrated by Labov’s (1963) Second Wave study on the social motivation for sound change in Martha’s Vineyard, Massachusetts A common feeling of resistance to the incursion from the mainlanders, their shared identity as a fisherman loyal to local norms brought them together.

Visual elements or clues are often used to show group identity. In some cases, such as the ladies of the Red Hat Society (RHS), this may be highly perceptually salient; wearing their elaborate hats shows a strong and open acceptance of the identity of the social group. While participants in this community proudly display their membership, they rarely don their red and purple sequined and feathered attire outside of their group outings. This group consists of members whose social identity (how they perceive themselves based on inclusion in different social groups) correlates with the communal identity of the RHS. However, each hat-owner’s degree of association varies based on the strength of the interrelationship between self-identity

________________________________________________________________________

4 Red Hat Society: social group with the primary purpose of fostering social interaction and bonding among women (generally aged 50+). They are known for wearing elaborately decorated red and purple hats to their social gatherings.
and that of the RHS. Choosing to wear the hat (or not) is a visual representation of social action; they have the ability to show (or hide) membership based on their visual presentation.

While group membership and social identity with the RHS can be easily identified by the red and purple hats, not all social group-identifying markers are as easily perceived. Judgments on social group and identity are made based not only on visual characteristics, but also on linguistic variations. Proficient individuals regularly use knowledge of regional and distinct social group associations (e.g. British with refinement or education, southern with inferior competence, valley-girl with superficiality, among others) to stylistically create a persona in a group.

However, it is problematic to assert that one distinct variation in speech equates to one unique social identity; the inverse is also difficult as defining an entire community (e.g. gay men) based on a single variant underestimates the heterogeneity of the group. Gumperz (1962) argues that, within a society, the linguistic complexity “is not a function of internal patterning within a single homogeneous system, but can be understood in terms of the relation among diverse systems of different extent” (p. 29).

While two interlocutors’ identities may share a mutual social group (for example, two members of the RHS), their social action of alignment or rejection is realized in an identity is influenced by multiple diverse systems within society. These systems in different social spheres impact the framework which dictates what is pragmatically acceptable or inappropriate. In a situation that is hostile or unwelcoming to an element of an individual’s social identity, it becomes beneficial to conceal said quality. For example, in a country with laws banning homosexual behavior, it would be disadvantageous for a gay man to show said identity in the local public sphere.
While the study of variation previously emphasized the importance of describing systematic variation in First Wave (Developing the Big Picture) and Second Wave (Developing the Local Picture) studies (Eckert, 2008), Johnstone and Bean (1997) proposed a shift in the study of language variation as a function of social action through self-expression in stating that:

Self-expression mediates between linguistic choices and social facts such as gender, occupation, linguistic ideology, and place of origin, as speakers use language not only to express their identification with or rejection of social groupings, but also to express their individuality (p. 221).

Though Johnstone and Bean’s approach was not directed specifically at Lavender Linguistics, their influence became apparent in the field when Podesva, Roberts, and Campbell-Kibler (2002) suggested the distinction between “linguistically conveyed meanings relating directly to the immediate context of the discourse participants, and those involving the construction of personal or stylistic identities. Further, we argue that indexical relationships relate these different types of social meaning to each other, as well as to linguistic resources” (Podesva et al., 2002, p. 175).

The theoretical frameworks on self-expression and the concept of individuality within social groups (Johnstone & Bean, 1997), and that of Podesva et al. (2002), fall under the category of the Third Wave: The Stylistic Perspective (Eckert, 2005, p. 30) approach to linguistic variation. While Johnstone and Bean’s research did not explicitly study “style as persona construction (Eckert, 2005, p. 30),” it proposed the shift to detailed ethnographic studies in order to explicate the interplay of extralinguistic factors and discourse.

After differentiating the Third Wave, Eckert further developed the concept and function of the “indexical field” which she defined as a “constellation of ideologically related meanings, any one of which can be activated in the situated use of the variable. The field is fluid, and each
new activation has the potential to change the field by building on ideological connections” (2008, p. 453).

While local populations and social groups influence speech, individuals participate in communities of practice (Wenger, 2008) which is a fundamental element in Eckert’s (2005) description of the Third Wave of analytic practice regarding variationist sociolinguistics. By focusing on ethnographic studies of these communities, we can begin to understand the meaning potential of a phonetic variation. Eckert exemplifies this through an analysis of how individuals use hyperarticulation of the word-final stop, /t/, as a stylistic variable in different communities, including high school female geeks (Bucholtz, 1999), gendered use among Orthodox Jews (Benor, 2001), gay speech (Podesva et al., 2002), and situational gay speech (Podesva, 2004). These studies highlight that linguistic variations are not a product of social categories, but rather potential resources which are stylistically as micro-social acts to index meanings and, as an aggregate, create social categories.

1.2 Projecting gay identity with language

Lavender Linguistics has sought to understand what speech variations are used by members of the LGBTQ community to index meaning by differentiating from heteronormative discourse patterns to create a gay identity and individual persona. Attempts to identify these variables have ranged from different levels of language, including discourse (Smyth, Jacobs, & Rogers, 2003), intonation/pitch (Gaudio, 1994; Rogers & Smyth, 2003), lexical choice (Zwicky, 1997), pragmatic (Campbell-Kibler, 2009), and phonetic (Campbell-Kibler, 2011; Crist, 1997; Eller, 2013; Levon, 2006, 2011, 2014; Mack & Munson, 2012; Munson & Babel, 2007; Podesva, 2007; Podesva et al., 2002; Smyth et al., 2003). These studies highlight that there are many potential variations available to individuals wishing to index a gay identity.
While there is a significant body of research on correlates of phonetic variables and the indexical field in American English (specifically in relation to a gay persona), literature in Lavender Linguistics in Mexican Spanish is limited to Sánchez’ (2009) research on lexical creativity of bilingual (Mexican Spanish and American English) gay men and Eller (2013). While Sánchez (2009) analyzed bilingual speakers, Eller (2013) focuses on phonetic variation, stereotypes, beliefs and attitudes of monolingual gay men in Mexico City; her contributions to understanding the indexical field of gay Mexican speech serve as a principal point of reference for this study.

Assigning meaning to variations in the indexical field is complicated even more when analyzing bilingual speech, evidenced by the lack of literature regarding sexual identity portrayal in second language contexts. The only research investigating the sexuality in bilingual (Spanish/English) contexts is Sánchez’s (2009) investigation on the creativity of gay slang in bilingual context between the United States and Mexico (emphasizing on the triangular region between Tijuana, Tecate, and San Diego). This work analyzed how individuals in bilingual contexts creatively incorporate lexical, morphological, semantic, and metathoric processes from two languages (Spanish and English) to “create a psychosocial space in which each of the group members can negotiate and construct their socio-sexual identity from multiple cultural elements5” (Sánchez, 2009, p. 152).

Sánchez’s (2009) position that the innovative lexemes in the studied community served to negotiate and construct gay identity is effectively the application of Eckert’s indexical field of phonetic variation (2008) to the lexemes. Research is just beginning to understand how individuals use resources from the indexical field in their first language to construct persona, a

---

5 Translated from original: “…crear un espacio psicosocial en el que cada uno de los miembros del grupo pueda negociar y construir su identidad sociosexual a partir de multiples elementos culturales” (Sánchez, 2009, p. 152).
process made even more complicated in bilingual contexts as it integrates ideologies, stances, and identities from two languages and cultural practices from two different countries. The morphological processes involved in word derivation and formation allow for analysis that are more concrete as morphemes carry definite meaning. For example, when a Spanish speaker adds the diminutive suffix –ito (little), to the word niño ‘boy’, to create niñito ‘little boy’ it is easy to understand that the morphological change changes meaning. Sánchez (2009) illustrates this with the analysis of the use of “closetero” (p. 145) (closeted; gay male who is not publically pen about his sexuality) and “doñita” (p. 149) (diminutive form for “miss”) as examples of effeminization and diminutization. In this case, there is a definite source for analyzing the process and resources used by an individual to give a word a new meaning. Sánchez gives the example of closetero (2009, p. 146), in which the lexeme and semantic meaning is loaned from English closet, and the suffix is loaned from the Spanish morpheme –ero. With doñita, the concrete product of a lexeme allows for a more straightforward analysis of the process used by the individual to create and negotiate an identity in the situation. By using the root word doña (miss) to refer to a gay male, whether themselves or a different individual, the interlocutor is breaking from heteronormative patterns of discourse by using a feminine prefixed title to refer to a male. Secondly, the feminine diminutive –ita (little) augments the semantic meaning by going against conventional ideologies of masculinity (large, powerful, etc.).

In the previously mentioned cases (closetero, doñita), the morphemes used facilitate the analysis of the social action behind the speech acts. However, when the analysis focuses on phonetic variation, it becomes more complex as there is a shift from morphemes, which carry meaning (such as –o/-a masculine/feminine gender in Spanish), to allophonic realizations of phonemes. For example, the semantic meaning of “female talk” can encode different
connotations based on suprasegmental variation: rising/falling intonation (question vs. statement), sentential emphasis (SHE talks vs. she talks), elongated vowels to show doubt/uncertainty or exaggeration (sh[i:] talks vs. she t[ɔ:]ks), sibilant duration/center of gravity (she talk[s:] vs she talk[“]). In each of these cases, stylistic suprasegmental variation and allophones of the same phoneme have the potential to encode different messages or index social categories/meaning.

While there have been many studies on the (homosexual) indexical field in American English, Eller (2013) is the only researcher who has investigated phonetic variations associated with gay Mexican Spanish. Eller conducted interviews with 21 self-identified “gay” individuals in Mexico City to investigate not only stylistic phonetic variation (of /s/ and /r/), but also beliefs and perceptions of gay speech (from both the gay participants and random volunteers), stereotyped gay speech, and the gay lexicon.

From the thirty interviews Eller conducted with both heterosexual and homosexual identified participants, there were four who specifically noted /s/ as a variation indexing gay speech; five gay-identified participants mentioned adding an /s/ in the context of [-Vr] as a way to joke when in a gay context (gay bar, or with gay friends). They gave the examples of vamos a chupars ‘we’re going to go drink’, estoy harsta ‘I am up to…’ and mi amors ‘My love’ (Eller, 2013, p. 56).

In each of these examples, the non /s/ suffix or infix serves a social marker, according to Eller’s interviewees. It appears that the social meaning associated with this variation is known outside the gay community in Mexico as this phenomenon also appeared in the analysis of heterosexual actors playing gay roles in television shows. Eller cited the following examples: Muerstos ‘dead, plural’, por favorls ‘please’ and encuerars ‘undressed’ (2013, p. 71).
Interestingly enough, the gay TV personalities had a higher occurrence of elongated sibilants (12.8%) than the gay participants in (3.4%); Eller interprets this as a joking over extension of the stereotypical gay speech (2013, p. 98).

As the information collected from the interviews indicated that participants associated sibilant /s/ with a gay identity, Eller compared the mean sibilant duration of two individuals, one heterosexual, and the other gay. The gay individual was chosen specifically because his speech was “markedly gay” (2013, p. 82). The analysis used ten tokens from each individual, occurring between vowels [VsV] in disyllabic, paroxytone words (stress on the second syllable, or grave words in Spanish). While analysis found that the gay participant had a longer average sibilant duration (0.090) than the heterosexual male (0.082), the difference was not statistically significant.

Although Eller’s analysis did take into consideration the importance contrasting allophones in the same linguistic context, it was problematic in two principal areas. The focus on variation between the heterosexual and gay participants underestimates the innate interspeaker and intraspeaker variability of language. The heterosexual speaker’s sibilant duration may naturally be slightly longer than heteronormative, but not long enough that it is perceptually salient as a differentiating characteristic. Thus, when compared with the ten tokens sourced from the “gay speech,” statistical insignificance would be expected. If interspeaker variation was her focus, it would be better to source a higher number of tokens from multiple heterosexual males to find a heteronormative mean duration of /s/ in the previously mentioned context in Spanish.

The second oversight in her methodology was the assumption that the individual consistently indexed his speech in all instances of vowel-medial, paroxytone words. As Podesva (2007) showed with his analysis of phonation with a participant, stylistic variables are dynamic.
and based on context; perceptual salience increases and decreases even in settings where the gay identity is more relevant (in Heath’s case, with friends at a barbeque). Even though Heath identified as gay, it does not indicate that he is always indexing said identity; within social settings, the pragmatic context and speech acts must be accounted for. A comparison of the aggregate of tokens from neutral contexts versus contexts in which the gay identity is relevant would be more informative.

Eller’s focus on sibilant duration is rational based on the reports from the interviews, and the significant attention. In the context of American English, elongated sibilant duration has been associated with perceived sexuality (Cartei & Reby, 2012; Crist, 1997; Levon, 2006, 2007; Munson B, 2007; Munson & Babel, 2007; Rogers & Smyth, 2003; Smyth et al., 2003) and high sibilant frequency or center of gravity has been correlated with perceptions of less-masculine and with femininity (Avery & Liss, 1996; Cartei & Reby, 2012; Gaudio, 1994; Levon & Holmes-Elliott, 2013). While sexuality and gender are two different aspects of identity, Gaudio (1994) showed that the perceived sexual orientation is highly related to gender identity. This is important to note, as gender performativity and the associations of femininity may coincide with an interlocutor’s attempt to show a gay identity. These aforementioned studies iterate that both elongated sibilants and a higher corresponding center of gravity may serve as stylistic resources available in the indexical field.
2. Data and Methods

This case study was designed to analyze the influence of social action, identity portrayal and perception through stylistic speaker variation, focusing specifically on word-final voiceless alveolar sibilant duration (/s/) and center of gravity in first and second language contexts (Mexican Spanish and American English respectively).

2.1 Research questions

RQ1: Does the participant index his gay identity in his L1 through variation in word-final /s/ duration and/or center of gravity? If so, how?

RQ2: How does the participant’s word-final /s/ duration and center of gravity differ between Spanish and English?

2.2 Interview

Data analyzed in this work was sourced from a 55-minute interview conducted in Guadalajara, Mexico from a participant\(^6\) who was a sequential bilingual (Mexican Spanish->English), from the middle class, and openly gay.

The scarcity of research in the field of acquisition of stylistic phonetic variation in second language contexts motivated the first criterion (sequential bilingual). While often subconscious, proficient native speakers have the ability to modify their speech based on a desire to construct an identity (social class, intelligence, rural background, etc.). As Podesva (2007) highlights, stylistic phonetic variations acquire meaning based on their contrast with other speech styles. For example, the phrase, “We’re going camping” carries different social meaning than when an interlocutor says, "We’re going camp[i][n]" with an alveolar nasal, colloquially represented by an

\(^{6}\) The participant began learning English at the age of five and was in his early twenties at the time of the interview. He regularly interacted in English with both native and non-native speakers at a hostel.
apostrophe “campin’”. In this example, the speaker is able to index a different social identity (rural, less formal) due to the contrast in their speech. As shown by Podesva (2007), context (work, home, etc.) and social roles (professional, family, friends) of other interlocutors play a significant role in how and when speakers modify their speech. The overarching objective of the interview was to understand how topic and speech type influence the participant’s speech in his first and second language.

In accordance with the approved IRB (Institutional Review Board) application, the participant was briefed regarding the general aim of the research, however, specific variables to be studied were not disclosed prior to the interview to prevent speech monitoring by the participant. Before beginning the interview, the participant was instructed to attempt to respond in the language corresponding to the language of the question, whether Spanish or English; this allowed the interviewer to guide the language of the responses without requiring explicit direction, that would have interrupted the conversation during the interview.

The interview questions and discussion prompts (see Appendix) were chosen to elicit responses varying in length. Each of the four general sections of the interview lasted approximately fifteen minutes, and included: (1) first language (L1) interview (Spanish), (2) second language (L2) interview (English), (3) hypothetical situations and anecdotes, and (4) readings in both Spanish and English.

The decision to divide the interview into four sections was based on the desire to elicit tokens of the variable in question in different speech contexts in both English and Spanish. The interview began with general demographic information and the participant’s answers were generally short and less elaborated. After completing the first two sections, the participant was asked to recall and narrate (in Spanish) a dramatic story which occurred in a gay-positive
context. After completing the first part of the “gay story,” the participant was guided to continue in English. Eliciting dramatic “gay stories” was motivated in order obtain tokens of the variable in more spontaneous speech where the individual’s identity as a gay man would be more present.

In the final part of the interview, the participant read two short texts, one in English and one in Spanish. Both texts used for the reading section were sourced from Wikipedia and had the following characteristics: Spanish, 221 total words, 27 tokens of word-final /s/, two excluded due to being followed by a word-initial /s/; English, 97 total words, 16 tokens of word-final /s/.

In their research on the influence of discourse type (reading a scientific passage, a dramatic passage, and spontaneous speech) on listeners’ perception of speaker’s sexuality, Smyth, Jacobs, and Rogers (2003) found that heterosexual men were more likely to be rated as “sounds gay” when the speech sample was sourced from a scientific passage than a dramatic passage or spontaneous speech ($p=0.002$). This motivated the selection of a scientific reading relatively devoid of emotion.

The participant was asked to read the two texts in his “normal” voice; upon completion, he was instructed to re-read the texts while attempting to “sound gay.” While not representative of contextualized natural speech, the “gay reading” offers a point for comparative analysis between the participant’s intentionally affected speech and other speech types collected during the interview (neutral reading, short answer, anecdotal spontaneous speech, etc.).

The interview was coded according to language, English and Spanish, and according to the following four speech type categories: neutral speech or short answer (henceforth NA), GayStory, Reading, ReadingGay. Responses from general demographic questions eliciting a short answer (What is your name? Where are you from? How did you learn English, etc.) were

---

7 The Rainbow Passage was used by Smyth, Jacobs, & Rogers (2003) for the “Scientific Passage”
coded as “NA.” Tokens from the section in which the participant recounted the gay story in English and Spanish were coded as “GayStory,” and those from the two reading sections (neutral and intentionally “gay” sounding) were coded as either “Reading” or “ReadingGay” respectively.

Crist’s (1997) research on stereotypical gay speech production concluded that, while speakers exhibited distinct variations in the elicited “‘queeny’ voice” (1997, p. 53), the findings indicated not all speakers employ the same variations in producing a gay male stereotype. This motivated the “ReadingGay” in both English and Spanish in order to ascertain whether the participant’s attempt at a stereotypical gay speech in Spanish and English had similar center of gravity and duration of word-final /s/. For example, if the participant’s “ReadingGay” speech is characterized by a higher center of gravity or elongated sibilant duration in English or Spanish, it would indicate that he perceives those characteristics as stylistic variations within those languages with the potential to project a gay identity, or index femininity (Avery & Liss, 1996).

2.3 Transcription and Speech Type Coding

The interview was transcribed with ELAN, produced by the Max Planck Institute for Psycholinguistics (http://tla.mpi.nl/tools/tla-tools/elan) with tiers for speaker (interviewer and interviewee) and language (Spanish/English) and had a total duration of slightly less than an hour. This file was exported to PRAAT (Text Grid) and Excel. From the initial 596 tokens, there was a total of 545 (English=372, Spanish=173) usable tokens of word-final /s/ after removing those occurring in contexts of unresolvable beginning or end point ambiguity (N=51). For example, when the following word began with a sibilant (example, “entonces se” or “…place so…”), the token was not included in the data calculations as it would be difficult to establish reliable boundaries for calculation of the sibilant duration. With the reading section in Spanish,
there were two tokens in the text (…informales son…, and …individuos se…) that were excluded from the data, and there were no tokens in the English reading excerpt that required exclusion.

In order to measure speaking rate immediately around each token of /s/, a gradient variable of segments-per-second was created within a three-word window. For example, in the participant’s statement, “But it’s less in Guadalajara,” the three-word context was marked at the beginning of “But” and at the end of “less” for the token in “it’s.” If the token occurred in the first or last word of an intonational unit, the preceding or following pause was annotated (using #) to account for the influence of a pause on the sibilant duration and the three-word context speech rate. For example, in “Como, pues…” ‘Like, well…’ the token was followed by a pause, therefore the speech rate was calculated using the beginning of the /k/ from “Como”, and the end of the /s/ token in “pues” served as the end boundary for calculating the speech rate.

The words appearing in the three-word context were mutated into phonemic representations to calculate phonemes per second to determine speech rate. For example, in “¿Eres de ambiente?” ‘Are you part of the (gay) community?’ the token occurred in the first word of the intonational unit, thus the three-word speech context consisted of “# eres de” and a total phoneme count of five phonemes (/eresde/ minus /s/). These five phonemes were divided by duration of the, in this case, two-word context (0.4 sec) minus the duration of /s/ (0.069 sec) to establish a speech-rate of 16.466 segments per second for this one token of /s/.

Calculating sibilant duration and center of gravity for each speech type (English/Spanish, short answer, spontaneous speech, reading, etc.) only yields median values for the interlocutor’s different modes of communication. However, stylistic phonetic variation can take on social meaning by contrasting with other realizations of the sound (Campbell-Kibler, 2011; Cartei &
Reby, 2012; Eller, 2013; Podesva, 2007; Zwicky, 1997). Thus, four speech types in each language (NA, GayStory, Reading, ReadingGay) were used as baselines for calculating whether the participant was using stylistic variation in his sibilant duration and center of gravity when creating a gay persona.

In his analysis of contextual (professional vs. informal) influence on stylistic variation, Podesva (2007) showed that the speech of the doctor (Heath) changed based on the situation. In the context of friends, where Heath felt his identity as a gay man to be more important, there were more “gay” phonation tokens than when compared to his interactions at his workplace or when talking with his father. However, that does not indicate that Heath stylistically used falsetto in all instances possible when with his friends; when pertinent to the context, he used the variation to contribute in building a gay persona. There were more instances of falsetto when with his friends at the picnic, but it was not present 100% of the time when talking; analysis of the interaction showed that the context of the conversation (whether Heath’s “diva”/gay identity were applicable or relevant) influenced the likelihood of Heath using falsetto.

Thus, during the coding of the interview, in instances when the participant was perceived by the researcher to be intentionally joking or in which a gay identity became more pertinent or salient to the situation or context, the tokens were coded as “Soundsgay.” For example, when asked how/if his speech changed when talking with other gay men, he laughed and replied “¡Puesss, joteas mucho!” ‘Well, you gay-joke around!’ “Joteas” is the present, second-person singular (you) conjugation of the verb “jotear,” which is one of two key words, jotear and ambiente, identified as pertaining to the gay community in Mexico during Eller’s (2013) interviews with gay-identified men. Ambiente designates either being with other gay men, or in a gay environment (Eller, 2013, p. 50). The verb jotear, as defined by one of Eller’s participants
describes “taking on your role in the ambiente. That is, speaking and acting gayer. It is done consciously and on purpose. Jotear involves really using the gay stereotype that appears in media, and making fun of it” (2013, p. 51)\(^8\). The semantic meaning encoded in the participant’s statement is the reasoning behind coding the token as “Soundsgay.”

In an attempt to mitigate the circular reasoning, the interview was first transcribed, then the “Soundsgay” tokens were selected based on the transcription without listening to the recording. If the tokens were to be coded as “Soundsgay” while delineating the sibilants in PRAAT, it would create a stimulus bias. For example, if I were to hear a token with an extended duration or a high center of gravity, and subsequently code it as “Soundsgay,” it would be problematic because of circular reasoning. However, as meaning and identity are constructed and negotiated in conversation by the interlocutor, removing the individual completely from the analysis of the interaction can result in semantic ambiguity. These “Soundsgay” identity-marking tokens were used to understand whether the speaker was using word-final /s/ duration and center of gravity as stylistic variations in gay-positive contexts. Identifying tokens occurring in contexts where the individual’s gay identity was more expressed allows calculating whether the individual is using word-final sibilant duration and center of gravity as stylistic resources for creating a gay identity.

\(^8\) Translated from original: “…asumir su rol dentro del ambiente. Esto es, hablar y actuar más gay. Es algo que se hace conscientemente y a propósito. Jotear involucra utilizar mucho el estereotipo del gay que aparece en los medios de comunicación y burlarse de él.”
3. Results

The final data analysis was based on a total of 545 tokens, with 372 in English and 173 in Spanish. Table 1 provides a breakdown of tokens by language, and the corresponding speech type. Table 2 shows the tokens coded within each of the four coded speech types and separated by language.

The results discussed in this section are illustrated by figures which have been organized to illustrate the comparison of each context by presenting first the analysis of word-final /s/, followed by center of gravity. For example, Figure 3.2 shows a conditional inference tree of word-final /s/; Figure 3.3 shows a conditional inference tree for the center of gravity; Figure 3.4 illustrates the duration of /s/ in NA vs. Soundsgay in English and Spanish, and Figure 3.5 shows the center of gravity for the same context.

3.1 Conditional inference trees, random forest, and notched box plots

The data is presented in three different figures, including conditional inference trees (Figures 3.2 and 3.3), notched-box plots (Figures 3.4-3.9), and random forest variable importance dot plots (Figures 3.10 and 3.11). All three figures were calculated using R (Team, R. C., 2013), a program for statistical computing which has become increasingly significant in linguistics (Levshina, 2015). Both conditional inference trees and random forest are computational models introduced to linguistics by Tagliamonte and Baayen (2012), which used the “party” R package to create conditional inference trees and random forests where are used in this report. These two models use a binary split as a response to a test on whether there is an
association between the independent variable and the response variable; the variable with the most significant influence is selected and the $p$ value is provided to indicate significance$^9$.

Random forest and conditional inference trees are applicable when calculating probability distribution models of regression and classification, and are particularly important when there are “many high-order interactions and in situations when the sample size is small, but the number of predictors is large” (Levshina, 2015, p. 291). As the tokens collected during the interview were divided first into languages (English and Spanish), then into speech type (NA, GayStory, Reading, ReadingGay), identity (NA and Soundsgay), and following phonological context (pause, vowel, or consonant), there was a potential for 48 different distinctions for each token. The high quantity of predictors resulted in a smaller sample size and made these two models effective in ranking the influence of each variable.

The notched box plots show graphical representation of the results. The data in the box (IQR, or interquartile range between the 75$^{th}$ percentile marker and the 25$^{th}$ percentile marker, represents the middle 50% of the data. Notched box plots are effective as they show the confidence interval of the data; if the notches of two adjacent boxes do not overlap, there is strong evidence (95% confidence) that the medians have a statistically significant difference ($p \leq 0.05$) (Chambers, 1983, pp. 62–63). See figure 3.1 for a graphical explanation (Doyle, 2016).

![Figure 3.1 Interpreting Notched Box Plots](image)

$^9$ For a more complete description of how these models are used in linguistic analysis, see Levshina (2015) chapter 14.
3.2 Duration of /s/: Conditional Inference Tree

The first node (1) in the conditional inference tree in 3.2 shows that the most significant factor in word-final /s/ duration is the following context of a pause (#) or a consonant or vowel (C, V) \( p<0.001 \). The second node (2) shows that when the /s/ is followed by a pause, Soundsgay or NA is the most significant factor in predicting the duration of /s/ \( p<0.001 \). After Soundsgay, nodes (4, 7 and 8) are made according to speaking rate (speak_rate), showing that, when word-final /s/ was followed by a pause and the speaker was trying to sound gay, the speaking rate was the second most significant in deciding the duration of /s/ \( (\text{node } 4 \ p=0.023, \ \text{node } 7 \ p<0.001, \ \text{node } 8 \ p=0.008) \)

![Figure 3.2 Duration of /s/: Conditional Inference Tree](image-url)
3.3 Center of Gravity: Conditional Inference Tree

For the center of gravity, Figure 3.3 shows that language (English or Spanish) was the most significant factor in the conditional inference tree ($p<0.001$), with a comparatively higher center of gravity of /s/ in English than Spanish. In both English and Spanish, a lower speaking rate (Speak_rate) favored a higher center of gravity. Nodes 3 and 6 show that in English, after speaking rate, speech type (ReadingGay, GayStory, NA, Reading) was the most significant factor in center of gravity ($p=0.04$, $p<0.001$). In Spanish, node 9 shows that speaking rate was the most significant factor in deciding center of gravity, with a lower speaking rate ($<17.268$) favoring a higher center of gravity.

Figure 3.3 Center of Gravity: Conditional Inference Tree
3.4 NA vs. Soundsgay in English and Spanish

Figure 3.4 analyzes word-final /s/ duration (dur_s, left-hand side) and center of gravity (cog, right-hand side) in tokens from Soundsgay and NA in both English and Spanish. In Spanish, the box-plot notches from Soundsgay and NA overlap, suggesting that the word-final /s/ duration is not likely a significant factor. In English, however, the lack of notch overlap provides prima facie evidence indicating a 95% confidence that the difference in median /s/ duration in English and Spanish significant ($p<0.05$). Figure 3.4 (right) shows that the center of gravity was not significantly influenced by NA or Soundsgay; however, the lack of overlap in the box-plot notches between languages suggests that center of gravity in English was significantly ($p<0.05$) higher than Spanish.

Figure 3.4 NA vs. Sounds Gay in English and Spanish
3.5 Following Phonological Context by Language

Figure 3.5 shows the influence of the following phonological context on word-final /s/ duration (dur_s, left) and center of gravity (cog, right). Aspects analyzed for following context (fol_context) were: pause (#), consonant (c), and vowel (v). In both languages, a pause (#) correlated with an /s/ duration significantly longer ($p<0.05$) than when followed by a consonant or vowel. Figure 3.5 (cog, right) illustrates that language has more influence on the center of gravity than the following phonological context. In English, the fact that the notches in the two boxes do not overlap provides prima facie evidence that suggests that the following phonological context does not influence the center of gravity; in Spanish, however, when the /s/ was followed by a pause or a vowel, the center of gravity of /s/ is higher than when followed by a consonant.

![Figure 3.5 Following Phonological Context]
3.6 Speech and text type

Figure 3.6 illustrates the analysis of the influence of speech type (GayStory, NA, Reading, ReadingGay) on /s/ duration (dur_/s/, top) and center of gravity (cog, bottom) respectively. Figure 3.6, dur_/s/ (top) shows that, in English, speech type was not a significant factor in predicting /s/ duration. However, in Spanish, Reading tokens were significantly shorter than NA, and the lack of overlap between the notches suggests that /s/ duration was longer with GayStory than when reading. Figure 3.6, illustrates that, while speech type did not significantly influence the center of gravity in Spanish, it was a significant factor in English. The 95% confidence intervals for GayStory and NA overlapped in English, but were both different from Reading and ReadingGay. While the median center of gravity for Reading and ReadingGay in English were similar (6,405 and 6,597 Hertz respectively), there was less range in the tokens of ReadingGay than in Reading. The notches suggest that GayStory was the only speech type that showed potential overlap of the confidence intervals in English and Spanish. All other speech types (NA, Reading, and ReadingGay) were significantly different between languages, with English exhibiting higher center of gravity than Spanish.
Figure 3.6 Influence of Speech Type on /s/ duration and cog
3.7 Variable importance dot-plots

The variable importance dot-plots, based on two random forests, Figure 3.7 (dur_/s/, and cog) shows a simplified version of the data presentation in Figures 3.2 (dur_/s/) and 3.3 (cog). These models show a hierarchy of variable importance, points further from zero (y-axis, in this case, further to right) indicate a higher level of influence of the variable on /s/, whether duration (dur_/s/) or center of gravity (cog). In Figure 3.10 dur_/s/, variables influencing the duration of /s/ were selected in the following order (ordered from most to least significant): fol_context (pause, consonant, vowel), speak_rate, Soundsgay (NA or Soundsgay), Speechtype (GayStory, NA, Reading, ReadingGay), and lang (English or Spanish). For center of gravity, Figure 3.11 ranks lang (English or Spanish) as the most significant factor, followed by speak_rate, Speechtype, fol_context, and Soundsgay.

![Variable Importance Dot Plot: dur_/s/, cog](image)

Figure 3.7 Variable Importance Dot Plot: dur_/s/, cog
4. Discussion

The purpose of this study was to understand how two elements (word-final /s/ duration and center of gravity) of the participant’s first and second language changed based on speech type and stylistic variation to create persona. During the interview, the participant stated that he felt he sounded “gayer” in Spanish since he felt more comfortable in his first language than his second language, English. However, and somewhat ironically, the data indicates that the participant showed more variation in /s/ duration and center of gravity in English than in Spanish.

In the first conditional inference tree (Figure 3.2), it shows that the following context (pause, consonant, or vowel) is the most important factor influencing word-final /s/ duration. However, this is to be expected as articulation of the following sound is not influencing or truncating the /s/. As /s/ was elongated the most when followed by a pause, when the speaker was sounding gay, future research should consider variation within the intonational-unit final /s/. The result could indicate that interlocutors are more attuned to stylistic variation at the end of an intonational unit. Even though Dubois’ (2003) research focused on preferred argument structure in relation to noun and pronoun phrases, his findings show that interlocutors tend to put the new or most important information at the end of the sentence. Figure 3.2 indicates that the same may be true with phonetic variation; when an individual is intentionally trying to construct persona, it would be expected that they would follow a similar pattern and index the identity at the end of the intonation unit or sentence to increase perceptual salience for the other interlocutor.

In each figure analyzing the center of gravity (Figures 3.3, 3.5, 3.7, 3.9, 3.11), it can be seen that word-final /s/ in the individual’s second language has a higher center of gravity than when compared with the same speech context in Spanish. Thus, although the individual states
that he believes he sounds “gayer” in Spanish, there is research associating high sibilant frequency (which would result in a higher center of gravity) with perceptions of less-masculine or feminine speech (Avery & Liss, 1996; Cartei & Reby, 2012; Gaudio, 1994; Levon & Holmes-Elliott, 2013). While perception of performance of femininity does not equate to gay speech, it does carry social meaning and connotations when used by a homosexual male as a form of rejection of heteronormative practices of masculine speech.

However, Figures 3.3 and 3.11 highlight that, after language (English or Spanish), the most influential factor was speaking rate (speak_rate). This is exemplified in the box plots in the conditional inference tree in Figure 3.2; as speech rate decreased, the center of gravity increased. The lowest center of gravity was in the participant’s first language, which also had a higher speak_rate than when compared with Spanish. The slower speak rate in English could stem from an increased cognitive load in the participant’s L2; by being forced to slow down, his resulting speech is more articulated. Hyper articulation has been shown carry associations with gay speech (Munson & Babel, 2007; Podesva et al., 2002), thus the participant’s increased cognitive load resulting in hyper articulation in his L2 could increase the likelihood of being perceived as gay.

Eller (2013) compared the peak frequency (which would influence the center of gravity measurement) of a heterosexual male and a homosexual with a “gay” voice in the word cosas ‘things’ and así ‘like that,’ and concluded that the homosexual men had a higher peak frequency than the heterosexual participants (2013, pp. 83–87). Her analysis was limited as it used examples that were deemed to be particularly salient, which fails to consider if or how the variation in /s/ duration in peak frequency were being used stylistically by the participants across different speech type sand contexts. However, her study highlights that there is a likelihood
associating a higher center of gravity with gay speech in Spanish. As illustrated by Figure 3.9, the individual has a higher center of gravity in his L2, and was made even more acute when he intentionally tried to sound gay (ReadingGay). If Eller’s conclusion that gay men have a higher /s/ peak frequency in Spanish, Figure 3.9 indicates that he is transferring the indexicality of the higher peak frequency to his L2 even though he appears to not be using the variation in his L1.

It is important to note that the recordings were made on a Tascam D-05 solid-state recorder, using the internal microphone. Logistical constraints did not allow the interview to be conducted in a sound-attenuating room, which may have influenced the results. This factor is not likely problematic in calculating /s/ duration as this is easily distinguishable between speech and background noise. However, the recording setting may have influenced the measurement accuracy of the center of gravity and is a limitation of this study. Additionally, further research would benefit from a larger sample size from more participants.

This research has built on the contributions of many others in the field of variationist sociolinguistics and has sought to understand how a bilingual individual uses variations in the indexical field from English and Spanish and two different cultural practices to construct identity. The findings indicate that future research may benefit from focusing on stylistic variation at the end of intonational units, and from establishing a more empirical correlation between center of gravity and perceptions of femininity and sexuality in both English and Spanish.
5. Pedagogical Applications

The motivation to learn a second or foreign language brings together students representing a multitude of identities and backgrounds resulting in increasingly diverse classrooms. Ignoring the potential contributions stemming from students’ identities and background undermines their role in the classroom and fails to capitalize on prospective learning opportunities.

In her book on Sexual Identities in English Language Education, Nelson (2009) illustrates that research on social identities brought to the classroom has traditionally focused on contributions from students from other regions, countries, ethnic backgrounds, religious beliefs, etc. However, Nelson argues that, in order to keep education “socially relevant and up-to-date,” teaching practices must change “given the worldwide proliferation of increasingly visible lesbian, gay, bisexual, transgender and queer identities…” (2009, p. 3). This is essential, as understanding sexuality and using language to create and negotiate persona can be difficult in a first language as it goes against hegemonic practices and assumptions of heterosexuality, and it is complicated even more for an individual in their second language as persona is often the result of nuanced linguistic variation.

In the case of the participant in this study, it appears he follows a similar over-application paradigm, which is often associated with grammar rules. In Spanish, his “Sounds gay” tokens were not significantly different from the neutral (NA) tokens. However, in English, he over applies the stylistic variation of word-final /s/ duration. If a higher center of gravity is associated with femininity, and by association, a gay identity, the center of gravity for Reading and ReadingGay would indicate that he has acquired better control of the variation. An analysis of the center of gravity from the scientific readings from Smyth et. al (2003) would provide insight.
into whether this variation is being used by the participant at a more native-like level than his /s/ duration.

While it can be seen as an over-application of a stylistic variation, Eller highlights that exaggeration of a “gay” variation may also be a mechanism to affirm and strengthen their gay identity for having recently come out of the closet through building ties with other gay men (2013, p. 95). Over-application is a natural phenomenon in grammar patterns, and appears to also be present in stylistic L2 phonetic variation. This indicates that nuances of L2 identity portrayal are advanced features of language acquisition. Learning nuanced features of the L2 has been shown to reach more native-like resemblance through explicit instruction (Shively, 2011). While Shively focused on L2 pragmatics, the same theoretical approach would indicate that second language students would benefit from explicit instruction on potential stylistic sociophonetic variation as the opportunities arise in class.

A second pedagogical application, as stressed by Nelson (2014), is the reminder that students sexual identity diversity cannot be overlooked in the classroom. Outside the classroom, two native speakers expect the other interlocutor to effectively manage the nuances of their first language. However, when one or more participants in a conversation are non-native, as is the case in language classrooms, false or unfounded assumptions of sexuality can cause potential teacher-student or student-student mismatches. When I first started studying in France as an undergraduate student, I was in a French language class, and the first day the teacher went in a circle asking each student to introduce themselves. We were instructed to share our names, home-country, and whether we came to France alone or with someone. At that point, I had been with my then boyfriend for two years and we had gone to France to study together. As it neared my turn, I remember getting nervous and my palms getting sweaty while trying to decide
whether to lie and say that I came alone, or tell the truth. I settled on the latter and said, “…Je suis venu en France avec mon ami.” ‘I came to France with my boyfriend.’ The teacher tried to correct me twice and say, “Non, c’est ‘ma amie’” ‘no, it is “my girlfriend.”’ After the second time, a Colombian student I had met prior to the class stepped in to help in saying that I just had the wrong pronunciation, “it’s not ‘mon ami,’ it’s ‘ma amie.’” ‘It’s not boyfriend, it’s girlfriend.’ Both the teacher and the other student’s false assumption created an uncomfortable situation and a mismatch that could have been avoided. Both displayed presumptions about sexuality and gender identities that reflect heteronormative discourses; in doing so, this limits possible identity trajectories for learners.

Stories like these are not isolated events; they not only happen in the classroom, but also in textbooks. For fear of going outside the traditional expectations, relationships depicted in textbooks avoid non-heteronormative identities which can result in further isolation of non-heterosexual or cisgender students. Separating gender from language, especially a romance language, is impossible. However, inclusive teaching strategies can make LGBTQ students feel welcome in an increasingly diverse classroom.
6. Conclusion

This study analyzes how an individual uses stylistic variation in the duration of word-final /s/ and center of gravity to create persona in a bilingual interaction. The interview was conducted with the bilingual participant in a mixture of his first language, Mexican Spanish, and his second language, American English. Tokens of the variation were coded according to four speechtypes and acoustically analyzed in PRAAT. The data analysis using the program R showed that the most significant variables for word-final /s/ duration were: following context (Pause, consonant, vowel), Soundsgay, and speak rate. Comparatively, language was the most significant factor in predicting the center of gravity, followed by speaking rate, speech type, and following context.

With center of gravity and /s/ duration, the data indicated that the participant ironically showed more variation in his second language than in Spanish. This can be interpreted this as an over-application of a rule, a common phenomenon in second language acquisition grammatical structures. This study shows that sexual identity is indexed not only in first language contexts, but potentially even more so in an individual’s second language speech. Studies on second language identities show that, through the acquisition process, the learner is given the opportunity to construct second language identities (Bucholtz & Hall, 2004). Whether the higher level of variation in the participant’s second language is the result of over-application of the stylistic variable, or the product of an invented L2 identity, it serves as a reminder that teachers cannot ignore the diversity in second language education.
References


http://doi.org/10.1016/j.pragma.2010.10.030

http://doi.org/10.1017/S0047404503323024


Appendix

A. Interview question guide used for data elicitation

INTERVIEW QUESTIONS
1. When/where were you born?
   a. Did you grow up in this location?
   b. Where have you lived?
   c. Where are your parents from?
2. What kind of school did you attend? (Private, public, etc.)
   a. Were you ever part of any bi-lingual education program?
3. What is your occupation?
   a. Do you use English with your occupation?
      i. If so, how much/often?
   b. Do you feel comfortable being “you” at work? Why/why not?
4. What language(s) do you speak/have you studied?
   a. How did you learn English?
   b. In your opinion, how proficient are you in English?
5. Which features of language behavior are people conscious of using? Which are below the level of their conscious awareness?
6. Do you think people/groups use language to define themselves (their identity) or show non-membership (I’m not part of X group)?
   a. Can you give me examples in Spanish? In English?
   b. Can you think of specific words/phrases that you use to show that you are/aren’t part of a social group (work, social class, etc.)?
7. Do you think people’s language change based on context? (Who they are talking to, where they are located, etc.).
   a. What factors cause individuals or groups to change their language in order to sound either similar to or different from others?
   b. Can you give me examples of three groups in which membership is considered positive (That you would like to be associated with)? (In a Mexican context? In an American context?)
i. Three negative groups?
   c. How do these people sound when they speak?

(If the interviewee does not mention LGBTQ social group membership, they will be guided to that topic).

8. How do you feel the LGBTQ group is perceived in Mexico?
   a. In the US? In your opinion, how do they compare?
9. How do you view yourself in relation to this social group?
10. Was there a point in your life that you realized you were gay or did it happen over a period of time?
11. How hard was it for you to come to terms that you liked men?
12. How long after that did you feel comfortable coming out.
13. Who did you come out to first? Why that person?
14. What is the most common misconception about gay relationships?
15. Are you a religious person?
   a. Would you ever get married? If so, would you get married in a church?
16. Why do you think so many people are opposed to same sex relationships?
17. Has being a gay man in Mexican society positively/negatively influenced your career?
18. Are you out of the closet with all your social groups? (Friends, family, professional, etc.)
   a. If not, which social groups do not know?
   b. What social group do you feel most comfortable being gay?
   c. Do you act/speak differently in these groups? How so?
19. Do you think you sound “gay” in Spanish/English?
   d. What do you think makes men sound gay in Spanish/English?
      i. NOTE: Mention gendered language in Spanish if the interviewee does not mention it.
   e. Can you think of words/phrases (Both Spanish/English) that you would only use with your gay friends?
20. How do individuals and groups change the features of their language and the ways in which they use language?
21. What factors cause listeners to perceive one type of language as higher in status than another?
f. Do you think there is a “better/worse” gay-sounding speech?
g. Is there any kind of gay accent that particularly bothers you?
22. How do you think social class influences features gay language?
23. How do social networks affect gay language?
   h. Can you think of any examples of slang/terms, abbreviations that people may see on gay social networks (Example: Grindr)?
   i. How does your texting differ with gay friends/straight friends?
24. Can you think of words you would only use with your friends?
   j. What about words you would only use with your gay friends? Make a list of ten lexical items which you would use with your gay friends but which you would not likely use with straight people. Why would you not use them with your parents or people of their generation?
25. Is there any kind of gay speech (English/Spanish) that would be a turn-off/deal-breaker for you?
26. INSTRUCTIONS: In the following situations, you will be asked to tell a short story.
   k. SITUATION 1: I (interviewer) am your best gay friend and I only speak English. Tell me a story from a vacation in a gay-positive environment. (Example: Last weekend you went with your three best gay friends to Playa los Muertos, a gay beach in Puerto Vallarta.) What happened? Try to include dialogues and details.
      i. This may be hypothetical or real.
      ii. If you choose to tell a true story, any references to actual acquaintances will be changed to protect the identity of the individual.
      iii. All individuals referenced in your story (even if you use pseudonyms) will be referenced with another name.

B. Spanish text excerpt

Un grupo social es un sistema formado por un conjunto de individuos que desempeñan roles recíprocos dentro de la sociedad.

---

10 Sourced from: https://es.wikipedia.org/wiki/Grupo_social
Este conjunto puede ser fácilmente identificado, tiene forma estructurada y es duradero. Las personas dentro de él actúan de acuerdo con unas mismas normas, valores y objetivos acordados y necesarios para el bien común del grupo y la prosecución de sus fines. Se puede definir a partir de una serie de variables mensurables en el nivel económico, laboral, educativo, etc.

Para la identificación de un grupo social es necesaria una distintiva identidad común o pertenencia, que puede manifestarse en una cultura semejante, y no necesariamente en la semejanza en el nivel económico. Los miembros de un grupo social interactúan para un proyecto común o formando un subgrupo discordante, que finalmente adquiere un carácter de controlador. La potencialidad de un grupo social es robusta tanto al formar la trama de la sociedad como en su negación (partido opositor en el Parlamento, subgrupo en el aula). Los líderes formales o informales son el punto fuerte de la trama de interacciones en un grupo social.

Cuando la adscripción a determinado grupo social está fuertemente determinada por criterios económicos, el grupo social de los individuos se suele denominar clase social, y está fuertemente influída por la clase de la familia en que nace el individuo. (27 total tokens of word-final /s/, two excluded due to being followed by a word-initial /s/)

**C. English text excerpt**

A social group within social sciences has been defined as two or more people who interact with one another, share similar characteristics, and collectively have a sense of unity.[1] Other theorists disagree however, and are wary of definitions which stress the importance of interdependence or objective similarity.[2][3] Instead, researchers within the social identity tradition generally define it as "a group is defined in terms of those who identify themselves as

---

11 Sourced from: https://en.wikipedia.org/wiki/Social_group
members of the group". Regardless, social groups come in a myriad of sizes and varieties. For example, a society can be viewed as a large social group. (16 total tokens of word-final /s/)