Language choice and accommodation

Casual encounters in San Ysidro and Nogales

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The present study investigates language choice in two bilingual speech communities in the United States: Nogales, AZ and San Ysidro, CA. Ethnically distinct fieldworkers approached members of these two communities under the guise of being lost tourists in order to engage in casual speech encounters. It was found that language choice varied between the two communities, with participants of the San Ysidro community more likely to engage in codeswitching. Ethnicity was also found to be a significant predictor of language choice, with more codeswitching taking place with the fieldworker of a Hispanic phenotype. Potential explanations and factors for future research are discussed.

Keywords: language choice, casual encounters, codeswitching, US Spanish

1. Introduction

Anytime a bilingual speaker participates in a speech act he/she must make a decision regarding which code to use in a given situation. This decision, or language choice, can be conditioned by many factors internal to the speaker (i.e. language dominance, motivation, etc.) as well as factors external to the speaker (i.e. location, dominant language prestige, etc.). The presence of Spanish-English bilingual communities in the U.S. has motivated research on language choice in the workplace and related domains. Previous investigations have largely focused on language choice in service encounters (Alarcón and Heyman 2013; Callahan 2005, 2006, 2007, 2009; Francom 2012; among others). While non-service encounters have been marginally studied in the workplace (Alarcón and Heyman 2013; Callahan 2011), to the best of our knowledge, only Zentella (1997) reports on non-service interactions outside of the workplace. Previous research looking at the effect of ethnicity of language choice suggests that it is often a determining factor in both
children and adults (see Genessee 2003; Schiffman 2002; Villa 2002; Zentella 1997). That said, ethnicity alone does not tell the entire story. Callahan (2009) posits that the interlocutor’s perceived linguistic competence as determined by physical appearance can also play a role. Zentella (1997) further explains that the ethnicity factor becomes obscured by many other relevant factors that can also determine language choice, such as gender of the interlocutors (Spanish for women, English for men), age (Spanish for infants and the elderly, English for others) or level of acquaintance with the interlocutor (English for strangers) in determining language choice.

The current study explores the influence of external factors on the speakers’ language choice outside of service encounters. Specifically, the main goal of this investigation is to report on language choice in casual encounters in two bilingual speech communities along the Mexico–United States border: (i) Nogales, Arizona and (ii) San Ysidro, California. Under the guise of being a lost tourist, two ethnically distinct fieldworkers separately approached members of these two communities in similar public spaces (one in each city). One of the fieldworkers was considered to be of a Hispanic phenotype (i.e. dark hair, dark eyes, dark skin) and the other of an Anglo phenotype (i.e. blond hair, blue eyes, light skin). Both fieldworkers addressed the participants in Spanish and asked for directions to a local restaurant. The manner in which the participants accommodate – or fail to accommodate – to the fieldworkers (i.e. by responding in English, Spanish or codeswitching) based on phenotype can shed light on the underlying factors that affect language choice and linguistic attitudes in the aforementioned speech communities.

1.1 Speech accommodation theory

Speech accommodation, which Giles and Powsland (1977) refer to as the adaptation of a speaker’s verbal and non-verbal behaviors in order to more closely resemble the person with whom they are speaking, was formalized as a theory by Giles and Coupland (1991). Specifically, it deals with how and why an individual’s speech can either converge or diverge in social interactions, in part, due to the necessity to fulfill identity expectations. Giles and Coupland (1991) define convergence as “a strategy whereby individuals adapt to each other’s communicative behaviors in terms of a wide range of linguistic/prosodic/nonvocal features including speech rate, pausal phenomena and utterance length, phonological variants, smiling, gaze, and so on” (p. 35). In practice, convergence can also be measured by the use of the other speaker’s dialect or by codeswitching. Namely, it is observed when a speaker–consciously or subconsciously–attempts to influence their conversation partner. This can occur in many situations. For example, differences in status could possibly provoke desire to gain approval or to show solidarity (Giles
Divergence, on the other hand, is “the way in which speakers accentuate speech and nonverbal differences between themselves and others” (Giles & Coupland 1991, 36), and can generally surface as a change in volume or rate of speech, more or less careful pronunciation, or the use of a different dialect or language. Callahan notes that choosing a language other than that of one’s conversation partner does not always imply non-accommodation by the speaker, particularly in speech communities in which the use of more than one language is the unmarked behavior. However, codeswitching is considered to be less acceptable in a speech act in which the two people in question do not know each other (Callahan 2005, 2006, 2007, 2009; Poplack 1993, 1980; Meyers-Scotton 2006, 2009; Toribio 2011; among many others). The convergent/divergent dichotomy of Speech Accommodation Theory has been the basis of many investigations into language choice in service encounters (Alacrón and Heyman 2013; Callahan 2005, 2006, 2007, 2009; Francom 2012; Valdés, García, and Storment 1982) and also in non-service encounters (Alacrón and Heyman 2013; Callahan 2011; Zentella 1997). This theory is also appropriate for the present investigation because it offers a framework that can explain language choice in other situations, including casual encounters in which the interlocutor is unknown to the bilingual being observed.

1.2 Previous research

As noted above, Speech Accommodation Theory has been at the center of research on codeswitching and language choice in many different speech communities, for instance in Zimbabwe (Bernsten 1994), Kenya (Myers-Scotton 1993), Hong Kong (Kong 1998), China (Pan 2000a, 2000b), France (Gardner-Chloros 1997), Canada (Heller 1982), Spain (Nelson 2009), and the United States (Callahan 2009; among others). These investigations consist of various methodological procedures, which include language questionnaires, sociolinguistic interviews and census analyses (Francom 2012). With regard to Spanish in the United States, the seminal work of Callahan (2006, 2007, 2009) on language choice in service encounters provides crucial insight for the present investigation.

Beginning with her 2006 work and subsequently in 2007, 2009, Callahan sent fieldworkers to local businesses in New York City to initiate conversations in Spanish with the employees. The dependent variable under investigation was the language in which the employees responded to the fieldworker’s questions as a function of (i) the fieldworker’s ethnic background (Latino vs. non-Latino), (ii) the employee’s age, and (iii) the neighborhood in which the conversation took place. Callahan (2006) found that, in the majority of the service encounters, the employees accommodated to the fieldworkers’ language (Spanish). Surprisingly, in
the cases in which the employees did not accommodate, the age of the fieldworker was the important facto – the younger fieldworkers were more often responded to in English –, followed by ethnicity. Using the same methodology, this work was expanded in Callahan (2007) to include speech community as an independent variable, comparing data collected in San Francisco with that collected in New York City. Of the 715 service encounters analyzed, the majority showed accommodation to the fieldworker’s language choice by using Spanish throughout the conversation or by codeswitching. Alarcón and Heyman (2013) found a similar tendency for call center operators to accommodate to the clients’ language choice.

Together, these investigations lead to the conclusion that, in service encounters in these U.S. cities, the tendency is for employees to accommodate to the language choice of the customer. Interestingly, Callahan’s data showed that, in a high percentage of the encounters that did not display accommodation towards the fieldworker, one of the underlying reasons was his/her ethnic background. Specifically in Callahan (2006), the employees accommodated to the non-Latino fieldworkers half as often as they did to the Latino fieldworkers. Possible reasons for this effect were not further discussed. Moreover, in her conclusion, Callahan (2006) emphasizes the need to extend this research to casual non-service encounters. A possible explanation is put forth in Callahan (2009) and lies in the out-group status of the non-Latino fieldworkers. As to how language choice is modulated by perceived ethnic background and group affiliation in casual, non-service encounters remains to be seen.

To address the roles of perceived ethnic background and group affiliation on language choice, Francom (2012) analyzed service encounters in a panadería in Tucson, Arizona. She hypothesized that the ethnic phenotype of the customers would play an important role in language choice of the shop workers in first-time service encounters. Her analysis found that ethnic phenotype was not an important factor and that the female workers always used Spanish as the default language with all customers. However, it is difficult to draw any definitive conclusions about the role of perceived ethnicity in this case for several reasons. As Francom (2012) notes, the clientele that frequented the panadería was composed mainly of monolinguals in Spanish or bilinguals. No information was gathered about language dominance of the bilinguals. Moreover, the two shop workers were Mexican immigrants for whom no information was given with regard to proficiency in English. Thus, the possibility that English was not used in these service encounters for other reasons (i.e. limited English proficiency) must still be a viable explanation. In other words, it should not be assumed that Spanish is the default language because perceived ethnicity is not a factor. An alternative explanation, such as L2 proficiency, may offer a more suitable account of Francom’s data. Therefore, it remains unclear how language choice is affected by perceived ethnic background.
and group affiliation. Furthermore, this research, as well as that of Callahan (2005, 2006, 2007), is specific to service encounters, which, as Callahan (2007) notes, are “[…] characterized by a power differential in favor of the customer […] there is an impetus to please or at least not to anger the service consumer” (p. 16). This creates a situation that favors accommodation towards the customer with regard to Callahan’s investigations, and it is left unclear if this would have motivated the use of English in Francom’s data.

Research by Weyers (1999) complements Callahan’s finding (2007) and sheds more light on the issue. In his investigation of language choice in service encounters, he found that questions asked in Spanish by an Anglo male were responded to in English with a higher frequency. Weyers (1999) concludes that language choice by members of this speech community is influenced by the perceived ethnicity of the interlocutor. When conversation partners were perceived as being more similar (i.e. of the same ethnicity), they received more responses in the language of the in-group. This begs the question as to what factors influence perceived similarity. Callahan (2005) reports that when bilingual employees were shown photographs of hypothetical customers and were asked to describe how they decided what language they would use to speak to them, many participants stated physical appearance and age were the deciding factors. The fieldworkers participating in the New York City and San Francisco experiments (Callahan 2006, 2007) had differing physical attributes. Callahan classified the non-Latino confederates based on hair and eye color (blond and blue, respectively). Other studies have shown that native-like production is also an important factor in the perception of ethnicity (Urciuoli 1996; Callahan 2005, among others). That is, one is more likely to be perceived as part of a certain ethnic group if their pronunciation of the corresponding language is native-like.

In sum, a tendency has been seen towards accommodation in service encounters in some speech communities. However, a key factor, the proficiency of the participants in either of their languages, has been missing from the analysis, specifically English in the case of Francom (2012). Spanish and English were impressionistically assessed in the case of Callahan (2005, 2006, 2007) by the fieldworkers via observation. Outside of service encounters, perceived similarity has been shown to be an important factor regarding language choice, and, in turn, can be affected by other factors, such as physical appearance and degree of foreign accent. Moreover, being perceived as more similar to the in-group is more likely to result in prosocial behavior (in the context of language choice, prosocial behavior would be accommodating to the language of the interlocutor). As noted previously, the factors influencing language choice can vary from community to community. The following section examines the two speech communities under investigation: Nogales, Arizona and San Ysidro, California.
1.3 The speech communities

This investigation examines language choice in two speech communities along the Mexico-U.S. border: Nogales, Arizona and San Ysidro, California. As Hidalgo (1995) notes, the use of Spanish in border towns can differ as a function of many factors, such as date of settlement, proximity to Mexico, density of the Hispanic population, and economic development. Nogales, Arizona is the largest border town of Arizona. According to the U.S. Census Bureau (2010), the population of over 20,000 is predominantly Hispanic (93%). While there are no known studies on language choice in this community, much more is known about the bilingual community of Tucson, which is just 60 miles to the north. Jaramillo (1995) notes that in this area there is evidence for both maintenance and shift of Spanish due to the continuous influx of new Spanish monolingual immigrants. For the purposes of the present investigation it is assumed that this is also the case for Nogales; however, it should not be assumed that language choice is manifested in the same ways in the two communities, as this has not yet been researched.

In the case of San Ysidro, which is a district of San Diego, the area boasts the world’s busiest border crossing (Dibble 2010), and, like Nogales, sees constant immigration from Mexico. The population of 26,000 is 90% Hispanic (U.S. Census Bureau 2010). In comparison with Nogales/Tucson, the relationship between San Ysidro and San Diego is much less opaque due to the closer proximity between the two (thirteen miles). Bustamante-López (2008) notes that San Diego is the wealthiest border town of the United States. In his research on negotiation and construction of linguistic identity in Mexican-American bilinguals in Southern California, he finds that the members of this speech community typically assume various linguistic identities when communicating—English, Spanish, and code-switching—which depend not only on the situation, but also on the interlocutor, giving evidence in support of the notion that linguistic identity is not a fixed category. The factors that modulate the use of these various identities could disambiguate the role of perceived ethnicity on language choice in this community.

1.4 The present study

Taking the work done by Callahan (2005, 2006, 2007, 2009, 2012) and Francom (2012) as a starting point, the current study expands on research regarding language choice by investigating casual encounters in two distinct bilingual communities: San Ysidro, California and Nogales, Arizona. The main goal of this study is to determine if the two communities differ in their language accommodation practices. A secondary aim is to shed light on the effect of perceived similarity on language choice as examined through the ethnic phenotypes of the fieldworkers.
Are participants of these communities more or less likely to accommodate to an unknown person based on perceived ethnicity? This question has not been fully answered in previous research. A key contribution of the present investigation is that it collects data on the proficiency of the participants in English and Spanish. This research offers a direct comparison of San Ysidro and Nogales that has not been explored in past studies. Furthermore, the present investigation adds to our knowledge on prosocial behavior and in-group/out-group status by analyzing the participants’ willingness to help a stranger. Are speakers in these communities more likely to help when the solicitor is considered part of the in-group? The following section outlines the methodology used to answer these questions.

2. Method

2.1 Data collection

Data collection took place in a public location in the border communities of San Ysidro, San Diego, California and Nogales, Arizona. In San Ysidro, public interactions were conducted in an outdoor market located close to the border. In Nogales, interactions were conducted at the local Walmart. These two locations were selected because they are high traffic areas and in sectors of the community where we expected to encounter the largest amount of possible participants. The data collection consisted of the following two parts: (1) a short interaction in which the fieldworker asked the participant if he/she knew of a good, nearby restaurant; (2) a follow-up questionnaire.

The short interaction would begin with a fieldworker (one of an Anglo phenotype and the other of a Hispanic phenotype) approaching a potential participant (of a Hispanic phenotype) in one of the areas described, as can be seen in Step 1 in Appendix 1. The fieldworker would then ask the participant a question in Spanish in the format “Where is X?”, for example, “Disculpe, ¿sabe si hay un cine por aquí cerca?” (“Excuse me, do you know if there is a movie theatre nearby?”) or “Disculpe, ¿me puede recomendar un buen restaurante por aquí cerca?” (“Excuse me, could you recommend a good restaurant nearby?”), see Step 2. The participant would then respond in English, Spanish, or Codeswitching, Step 3. In Step 4–5 the fieldworker would politely thank the participant and end the interaction. As the participant walked away, the fieldworker would use a hand signal to the second fieldworker indicating in what language the participant had responded, Step 6. As the participant neared the second fieldworker, the fieldworker would ask in English if the participant was willing to answer questions about the interaction that took place, Step 7. If the participant was willing, the questionnaire was
presented to the participant, and if the participant was not willing, then he/she was excluded from the study, Step 8.

The follow-up questionnaire contained 10 questions regarding the interaction (see Section 2.2 for a detailed description). In summary, the interaction involved the participants being approached at random by one of two fieldworkers (one of an Anglo phenotype and the other of a Hispanic phenotype). The fieldworkers conducted the interactions in Spanish, taking note of how the participants responded to their question (i.e. in Spanish, English, or code switching). After the initial interaction, a different fieldworker approached each participant to ask permission to include him/her in the study and to facilitate the questionnaire. At this stage, participants were asked about the languages they speak and those who self-reported a competence in either language lower than a three on a ten point scale were excluded. Interactions continued until the fieldworkers of both phenotypes conducted fifty interactions with participants that could be included in the study in both the San Ysidro and the Nogales communities.

2.2 Questionnaire

The questionnaire presented seven questions that required a numeric answer, two questions that required an open-ended answer, and four demographic questions (see Appendix 2 for a copy of the questionnaire).¹ The answers to these questions provided both quantitative and qualitative data included the analysis.

The majority of the questions were presented in Spanish (all seven numeric questions and one of the two open-ended answers), and one of the open-ended questions as well as all of the demographic questions were presented in English. One of the functions of the bilingual questionnaire was to ensure that the participants were able to understand and speak both English and Spanish. Since competence in both languages was one of the requirements for participants to be included in this study, this tool provided a way for the participants to demonstrate that they were in fact bilingual in a practical non-self-reported way. Thus, inclusion in this study did not only rely on the participants' self-reported degree or state of bilingualism extracted from the initial part of the questionnaire, but was also based on their ability to answer some of the questions in Spanish and some of the questions in English. Participants that did not demonstrate bilingual competence using the criteria above were not included in the study.

First, three demographic questions concerning the biological sex, place of origin and place of residence of the participant were recorded. The following seven

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¹ Some of the questions were extracted or adapted from the questionnaire used in Nelson (2009).
questions elicited information relating to several domains: bilingual language use and competence, perception of the fieldworker’s phenotype, perception of linguistic features of the fieldworker, and opinion on the interaction. The first three questions aimed to determine whether the participant considered him/herself bilingual through a language use question (1. How often do you speak Spanish versus English?) and through self-reported-competence questions (2. Can you evaluate your proficiency in Spanish? 3. Can you evaluate your competence in English?). The first question presented an answer scale from zero to ten, with zero being 100% of English usage and ten being 100% of Spanish usage. Questions (2) and (3) presented an answer scale from zero to ten, with zero meaning low competence and ten meaning high competence. Questions (4), (5) and (6) required answers about the linguistic features of the fieldworker and presented an answer scale from zero to ten, with zero meaning not at all and ten meaning yes, very much. (4. Did the man talk like you? 5. Did the man have a foreign accent? 6. Were you able to understand the man when he was speaking with you?). The last numeric question referred to the participants’ feelings of comfort during the interaction (7. Did you feel comfortable during the interaction?).

The final two questions were open-ended. They aimed at providing insight about the language used to respond during the initial interaction between the fieldworker and the participant (8. Why did you choose to speak to the man in the language that you did?), and on the usage of Spanish in the community under study (9. In this community, do you usually speak in Spanish in public areas? Does this include with strangers or just with acquaintances?).

3. Results

The data was fit using step-wise logistic regression (as implemented in base R, version 3.0.3) in order to see if language response (Spanish/codeswitching) varied as a function of 10 predictor variables (community, phenotype, biological sex and the seven Likert-type questions described in Section 2.2). The omnibus model also included a community by phenotype interaction. Step-wise regression is a method of empirically selecting the relevant predictors using a combination of forward se-

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2. Originally, the dependent variable had three categories (Spanish, codeswitching, and English), however, only two responses were given entirely in English. As a result the categories of Codeswitching and English were collapsed. For the remainder of the study the term ‘codeswitching’ applies to this new collapsed category.
lection and backwards elimination. The model removed biological sex, questions 4, 5 and 6, as well as the community by phenotype interaction. The remaining factors—community, phenotype and questions 1, 2, 3, and 7—were re-fit to obtain parameter estimates. Statistical significance was tested via hierarchical partitioning of variance using nested model comparisons. That is, a full, inclusive model was compared to a reduced model that excluded one of the factors in order to assess its contribution to predicting the criterion variable (codeswitching).

The analysis revealed that language choice varied as a function of community ($\chi^2(1) = 14.50; p < 0.001$) and phenotype ($\chi^2(1) = 4.33; p < 0.04$), with more Spanish being used in Nogales (86% of all interactions) than in San Ysidro (68% of all interactions) and more codeswitching being used with the fieldworker of a Hispanic phenotype (31% of all interactions) than with the fieldworker of an Anglo phenotype (14% of all interactions). Table 1 provides the averages and count data of language choice as a function of city, biological sex and phenotype.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Language</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spanish Codeswitching</td>
<td></td>
</tr>
<tr>
<td>City</td>
<td>Nogales</td>
<td>43 (86%) 7 (14%)</td>
</tr>
<tr>
<td></td>
<td>San Ysidro</td>
<td>35 (68%) 16 (31%)</td>
</tr>
<tr>
<td>Biological sex</td>
<td>Female</td>
<td>50 (75%) 17 (25%)</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>28 (80%) 7 (20%)</td>
</tr>
<tr>
<td>Phenotype</td>
<td>Anglo</td>
<td>43 (86%) 7 (14%)</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>35 (68%) 16 (31%)</td>
</tr>
</tbody>
</table>

Figure 1 plots the relationship between language choice and phenotype in San Ysidro and Nogales. The two lines represent the proportion of codeswitches for the Hispanic and Anglo phenotypes in both communities. One can see that, overall, more codeswitching is associated with the Hispanic phenotype and with the San Ysidro community.

3. Initially the language choice data was analyzed using chi-squared tests as in Callahan (2006); however, we ultimately decided to use a Generalized Linear Model (GLM) over raw percentages or chi-squared in order to analyze the categorical and continuous predictors under a single, parsimonious model. Moreover, the use of a GLM allows for the inclusion of the community by phenotype interaction term. The results from the chi-squared tests showed the same main effects of community and phenotype, and there was no main effect of biological sex.
Figure 1. Proportion of codeswitches as a function of city (San Ysidro, Nogales) and phenotype (Hispanic, Anglo)

The model also showed that language choice varied as a function of self-reported Spanish proficiency (question 2; $\chi^2(1) = 6.69; p < 0.02$). There was a higher propensity to codeswitch in participants that reported being less competent in Spanish. Finally, there was a main effect of degree of comfort during the interaction (question 7; $\chi^2(1) = 5.76; p < 0.02$). The participants who reported lower levels of comfort during the interaction were more likely to codeswitch. Table 2 reports the significant predictors of language choice and parameter estimates derived from the model.

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$\beta$</th>
<th>SE $\beta$</th>
<th>z-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nogales (constant)</td>
<td>2.70</td>
<td>3.07</td>
<td>0.88</td>
<td>$p &gt; 0.05$</td>
</tr>
<tr>
<td>San Ysidro</td>
<td>-2.93</td>
<td>0.74</td>
<td>-3.32</td>
<td>$p &lt; 0.001$</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2.35</td>
<td>0.78</td>
<td>2.17</td>
<td>$p &lt; 0.04$</td>
</tr>
<tr>
<td>Anglo</td>
<td>-0.54</td>
<td>0.62</td>
<td>2.02</td>
<td>$p &lt; 0.04$</td>
</tr>
<tr>
<td>Q1: Language use</td>
<td>-0.22</td>
<td>0.14</td>
<td>-1.56</td>
<td>$p &gt; 0.05$</td>
</tr>
<tr>
<td>Q2: Spanish proficiency</td>
<td>-1.67</td>
<td>0.17</td>
<td>-2.40</td>
<td>$p &lt; 0.02$</td>
</tr>
<tr>
<td>Q3: English proficiency</td>
<td>0.55</td>
<td>0.29</td>
<td>1.56</td>
<td>$p &gt; 0.05$</td>
</tr>
<tr>
<td>Q7: Comfort</td>
<td>-1.47</td>
<td>0.13</td>
<td>-2.36</td>
<td>$p &lt; 0.02$</td>
</tr>
</tbody>
</table>

Nagelkerke $R^2 = 0.574$
4. Discussion

The present study explored the factors that modulate language choice in two bilingual communities: Nogales, AZ and San Ysidro, California. The main findings can be summarized as follows. With regard to the main research question, whether or not the two communities differ in their language accommodation practices, the results showed that more participants used codeswitching in San Ysidro (31%) than in Nogales (14%). It was also found that more participants responded with codeswitching with the Hispanic fieldworker (31%) than with the Anglo fieldworker (14%), and that slightly more female participants responded with codeswitching than male participants (females: 25%, males: 20%). Of these three, the only predictor that was not statistically significant was biological sex of the participant (refer to Table 1).

As a whole, there were more instances of codeswitching in the San Ysidro community than in Nogales, suggesting that these two communities do differ with regard to their overall amount of language accommodation. The participant responses to questions nine (asking why the participant responded in the language he/she did) and ten (asking if the participant normally speaks Spanish in public areas in the community) from the questionnaire reflect the attitudes and mind-set of the participants in relation to their own personal practices and to the language practices in the communities. The majority of the responses to question nine in both communities was that the participants spoke in Spanish with the fieldworker simply because the fieldworker had approached them in Spanish, suggesting a general willingness toward accommodation. One Nogales participant noted, “I wouldn’t want to talk in English if he doesn’t understand English.” However, in Nogales only one participant reported having answered using codeswitching because “codeswitching is a habit”, while in San Ysidro eleven participants reported having answered in codeswitching because it is a habit they have. In response to question ten, the vast majority of the participants reported that they do speak both Spanish and English in the community. In Nogales there were only three dissenting responses, while in San Ysidro there were ten. These observations from the participants together with the differing language responses during the initial interaction form an indication that the general language practices of these two communities are different.

The factors biological sex of the participant and phenotype of the fieldworker were the only two considered in previous studies. The findings of the present study are consistent with Callahan (2006) in that biological sex of the participant does not affect language choice. These results contrast with the ones found in Valdés, García, and Storment (1982), a study in which female servers accommodated to all customers, and male servers accommodated 100% of the time to male customers.
but only 85% of the time to female customers’ language choice. The phenotype factor appears to differ from previous findings in Callahan (2006) in that the author reports more than double the amount of non-accommodation responses for the Anglo fieldworkers than for the Hispanic fieldworkers, although this result was not further explored in her analysis. The phenotype factor also differs from Weyers (1999) who found that questions asked by male Anglo fieldworkers were more often responded to in English.

In terms of phenotype, it is also important to mention that while in service encounters, workers often default to perceived ethnicity when they have knowledge of the interlocutor’s language proficiency (Callahan 2009). In our study, the participants did not have previous knowledge of the fieldworkers’ proficiency in Spanish. Thus any assumptions about language competence was likely based on perceived ethnicity. Importantly, non-native speakers “[…] often provoke different reactions depending on their ethnicity” (Callahan 2009, 3). Additionally, previous research looking at the effect of ethnicity of language choice suggests that it is often a determining factor in both children and adults (see Genessee 2003; Schiffman 2002; Villa 2002; Zentella 1997). In the same vein, Callahan (2009) posits that the interlocutors’ perceived linguistic competence as determined by physical appearance can also play a role, but is not always accurate.

The results for phenotype, while preliminary due to there being only one fieldworker of both phenotypes in this study, seem to be counterintuitive, meaning that one would expect that more participants would use Spanish with the Hispanic fieldworker than with the Anglo fieldworker. One possible explanation for this result can be found in research that studies codeswitching where it has been found that codeswitchers are more likely to codeswitch when interacting with people who are in the in-group, those who seem to belong to the community (Poplack 1993, 1980; Meyers-Scotton 2006, 2009; Toribio 2011; among others). The pattern is that, overall, the participants accommodated to the language of the interlocutor (choosing Spanish); however, more participants codeswitched with the Hispanic fieldworker. It could be, then, that the fieldworker of the Hispanic phenotype was perceived to be part of the in-group, and thus a person who codeswitches, while the fieldworker of the Anglo phenotype (while perceived as Spanish speaking) was not perceived as a person who codeswitches, and thus only Spanish was used.

The data collected from questionnaire provides a possible alternative explanation for the results of codeswitching based on phenotype of the fieldworker. As observed in Table 3 below, the average values of the participants for questions one and two (1. How often do you speak Spanish versus English?; 2. Can you evaluate your proficiency in Spanish?) are higher amongst those that interacted with the Anglo fieldworker, and lower in the group that interacted with the Hispanic fieldworker. Additionally, the average value of the responses of the participants for question
Table 3. Mean scores and standard deviations for questions 1–7 as a function of community and language response and phenotype

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
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<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
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three (Can you evaluate your competence in English?) is lower amongst the participants that interacted with the Anglo fieldworker than the Hispanic fieldworker. Assuming that the participants responded honestly, it is possible that by random chance the participants who interacted with the Anglo fieldworker are more, self-reported, Spanish dominant as a group than the participants who interacted with the Hispanic fieldworker. The responses in questions one through three, therefore, could actually be better predictors of whether or not a participant will accommodate to the Spanish language choice of the fieldworker. The fact that phenotype was a significant predictor and the inclusion of question two (self-reported Spanish proficiency) in the logistic regression suggests that it may be true that the group sampled by the Hispanic fieldworker was different than the group sampled by the Anglo fieldworker in terms of their language background.

The logistic regression identified community, self-reported Spanish proficiency (question two) and level of comfort during the interaction (question seven) as the most relevant predictor variables for the language response (Spanish/codeswitching) in Nogales and San Ysidro. As discussed previously, community was tested as an independent variable in this analysis and also proved to be significant when tested using the chi-square of independence test. The self-reported Spanish proficiency of the participants influenced language response in that the average of self-reported Spanish proficiency of the participants who responded by codeswitching was lower than the average of the participants who responded in Spanish. Similarly, in terms of how comfortable the participants felt during the interaction, the average of the participants who responded by codeswitching was lower than the average of the participants who responded in Spanish. It is important to note that the results of the logistic regression analysis were meant to be exploratory, and only indicate that in future research on language accommodation these variables should be included as factors. That is, the presence of the community factor indicates that not all of the communities in the United States behave in the same way in terms of their language accommodation practices and as such, more communities need to be studied. The presence of the predictor variables of Spanish proficiency and the level of comfort during the interaction should be treated as independent variables and tested separately in future studies.

5. Conclusion

In this study it has been shown that the bilingual communities of Nogales and San Ysidro differ in regard to language choice in casual encounters. Specifically, the participants of San Ysidro were more likely to use codeswitching when approached by unknown fieldworkers, and, overall, the participants of both communities used
more codeswitching when interacting with the fieldworker of a Hispanic phenotype. Due to there only being one fieldworker of each phenotype and the fact that, as a group, the participants who interacted with the fieldworker of Hispanic phenotype reported having lower Spanish proficiency, future studies should explore the relationship between phenotype and Spanish proficiency. The results of this investigation also suggest that future research should take a closer look at the role of level of comfort with the interlocutor in language choice. Moreover, this research should be extended to the neighboring communities of Tucson, AZ and San Diego, CA to see if language choice in these communities is modulated by the same factors. The findings of the present study further research in accommodation theory. Previous research has found that in service encounters in the United States there is a general trend toward language accommodation. The present study shows that this trend holds true for casual encounters as well.

References


Valdés, Guadalupe, Herman García, and Diamantina Storment. 1982. “Sex-related speech accommodation among Mexican-American bilinguals: a pilot study of language choice in


Appendix 1. Steps in the initial interaction between fieldworker and participant
Appendix 2. Questionnaire

Demographic Info:

Sex of the participant: ____________________________________________

Where were you born/did you grow up? ______________________________

Where do you currently live? _______________________________________

Encuesta:

1. ¿Qué tanto tiempo habla el español versus el inglés?

100% inglés  50%/50%  100% español

0 1 2 3 4 5 6 7 8 9 10

2. ¿Puede evaluar su competencia en el español?

Baja Competencia   Alta Competencia

0 1 2 3 4 5 6 7 8 9 10

3. ¿Puede evaluar su competencia en el inglés?

Baja Competencia   Alta Competencia

0 1 2 3 4 5 6 7 8 9 10

4. ¿Hablaba el señor como usted?

No, para nada   un poco   Sí, bastante

0 1 2 3 4 5 6 7 8 9 10
5. ¿Tenía el señor un acento extranjero?

<table>
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<th>Sí, bastante</th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
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</tbody>
</table>

6. ¿Pudo entender usted al señor cuando le hablaba?

<table>
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<tr>
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<th>un poco</th>
<th>Sí, bastante</th>
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<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
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</table>

7. ¿Se sintió cómodo durante la interacción?

<table>
<thead>
<tr>
<th>No, para nada</th>
<th>un poco</th>
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<tbody>
<tr>
<td>0</td>
<td>1 2 3 4</td>
<td>5 6 7 8 9 10</td>
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</tbody>
</table>

8. Why did you choose to speak to the man in the language that you did?

_____________________________________________________________
_____________________________________________________________
_____________________________________________________________

9. ¿En esta comunidad, suele usted hablar español en lugares públicos? ¿Esto incluye con gente desconocida o sólo con gente conocida?

_____________________________________________________________
_____________________________________________________________
_____________________________________________________________

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**Ryan M. Bessett** is a PhD candidate in Hispanic Linguistics at the University of Arizona. His major research interests center around language variation and change, Spanish in contact, and Spanish phonology. He is especially interested in the Spanish spoken around the US-Mexican border and through variationist methodology differentiating contact-induced change from language-internal variation by comparing Sonoran Spanish to the Arizonan Spanish of speakers who come from families from Sonora.

**Joseph V. Casillas** is a doctoral candidate in Hispanic Linguistics at the University of Arizona. His main interests are in phonetics, laboratory phonology, and second language acquisition. His aim is to better understand the relationship between language use and sound representation in the mind, as well as the structure of sound systems in human languages. His recent research has focused on native phonetic experience and its influence on L2 speech production, perception and lexical processing.

**Marta Ramírez Martínez** is a Ph.D. Candidate in Spanish at the University of Arizona. Her research interests include phonetics, laboratory phonology, sociolinguistics, second language acquisition and language contact and change. She is especially interested in the Catalan-Spanish language contact situation on the island of Majorca. She has analyzed several phonetic variables in Majorcan Catalan and their relationship with language dominance of Catalan-Spanish bilinguals. She is currently working on velar palatalization in Majorcan Catalan.

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