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**Two-Cultures? Latino and Asian Language
Assimilation Along the U.S.-Mexico Border**

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Abstract

The assimilation of recent immigrants to the United States has been a topic of considerable debate. Conservative scholars argue that Latinos are developing a Spanish monolingual society on the United States-Mexico border. More progressive scholars maintain that Latinos assimilate at rates similar to other immigrant groups. This study evaluates these claims using responses from a large-representative survey in San Diego, California. We find that Latinos are much less linguistically assimilated than Asians and characteristics negatively associated with assimilation are more prevalent among Latinos than Asians. While social-environmental predictors suggest that Latinos are assimilating at slower rates than Asians, Latinos appear to be making steady ground in their assimilation patterns. The findings provide a nuanced perspective falling between disparate accounts of language assimilation.

Keywords: language assimilation, immigration, two-cultures

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Introduction

Assimilation—the changing of attitudes, beliefs, and behaviors to be more consistent with the dominant culture—has been a topic of much political debate.¹ Social scientists have proposed several interpretations of contemporary immigrants' assimilation progress in the United States (U.S.), but two perspectives dominate what has been called the “two-cultures” debate (Citrin et al., 2007). Some argue that Latinos are forming a separate culture rather than assimilating (Huntington, 2004), while others maintain that Latinos are assimilating at rates similar to other immigrants (Citrin, 2007). Despite the attention this debate has drawn, most claims (e.g., Huntington, 2004) have fallen outside the realm of systematic analysis.

This study adds to the debate on immigration incorporation by focusing on linguistic assimilation, which we argue is important for both socio-economic and civic assimilation. In many ways, linguistic assimilation provides the nexus by which immigrants enter their host society *and* become part of it. As such, this study tests the competing contentions of the “two-cultures” debate by proposing a behavioral theory of language assimilation. It does so by focusing on reported behaviors associated with the first steps of language assimilation—English language fluency and

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use. Employing data from a public opinion survey of San Diego County residents conducted from 2005 to 2006, the findings suggest that (1) Latinos were much less linguistically assimilated than Asians and (2) that characteristics, *a priori*, assumed to be negatively associated with assimilation were consistently more prevalent among Latinos than Asians. Finally, (3) while social-environmental predictors suggest that Latinos are assimilating at slower rates than similar Asians, these data also indicate that Latinos appear to be making steady ground in their assimilation patterns.

This study, then, goes beyond previous explanations of language assimilation and contends that the choices for English versus Spanish use require a different and more nuanced understanding than previously thought. In effect, this study facilitates our understanding of immigrant incorporation by unpacking the processes that speed or retard linguistic assimilation among immigrants.

The rest of the paper is organized as follows. First, it reviews the literature on immigrant assimilation in the United States, with special emphasis given to the “two-cultures” debate and the evidentiary limitations of previous studies. The second section discusses the logic of language assimilation and introduces a behavioral theory to identify the mechanisms behind this process. This section also specifies six testable hypotheses. The third section discusses the data and methodology employed in the study. This is followed by a discussion of the key findings. The fifth section discusses the substantive significance of the findings in the previous section. The final section concludes and proposes avenues for future research.

Immigrant Assimilation and Debate in the United States

According to the 2000 U.S. Census 82% of U.S. households spoke only English and 11% spoke either Spanish and English or Spanish alone (U.S. Census Bureau 2000). While these enclaves generally lay beyond the immediate view of many English-speaking populations, they are “out of sight but never out of mind” (Portes et al., 1994, 642). As a result, the presence of sizable Spanish language enclaves in southwest border towns and the emergence of these enclaves in the interior of the United States have spurred intense political and social debate.

Though the United States does not have an official language policy, English persists as the dominant language and communicating in English promotes economic advantages (Hughey, 1990; Stolzenberg, 1990; Gordon, 1964). National studies from the early ‘90s suggested the vast majority of Latinos believed speaking English was “somewhat” or “very important” (de la Garza *et al.*, 1992; Pachon and DeSipio, 1994). In fact, some states and lower -level jurisdictions have promoted English only measures (Crawford, 1992).

Huntington's thesis, positing that Latinos are forming a separate culture rather than assimilating, centers on the claim that Latino immigrants have remained culturally and linguistically isolated since the 1970s (Huntington, 2004; Brimelow, 1995; Ling Lin, 2004). According to Huntington (2004), Latinos, particularly of Mexican ancestry, are establishing a Spanish-language based society on the U.S.-Mexican border. Latino immigration on the border is expanding, resulting in a set of contingencies that favor Spanish language. Between 1960 and 2000 immigration changed from a relative mix of sending nations to a principal agent, Mexico, which accounts for about 27.6% of the total U.S. foreign-born population (Huntington, 2004). Many Mexican immigrants settle near the southwest border, though these populations are growing elsewhere.

According to Huntington (2004), assimilation is restricted by greater enclave patterns, social ties with other immigrants, and ties with the immigrant's country of origin. Since immigration by non-Latinos is much lower in number, one cannot expect the same level of nonassimilation as that of Latinos on the border. Indeed, when Latinos migrate away from the border the opportunities to maintain their host culture are diminished. Although part of Huntington's thesis is predictive and unfalsifiable (e.g., Latinos assimilation in 2025), another part has focused on existing border conditions. Huntington argued that the process of nonassimilation among Latinos will begin on the border, spread to the south-southwest and ultimately the entirety of California, Arizona, New Mexico, and Texas. The initial claims for the border should be presently evident (Huntington, 2004; Brimelow, 1995; Ling Lin 2004). Since additional predictions depend on a sequential process, if this claim is not observed it falsifies other related claims.

In contrast to Huntington, a 2008 study using nearly a century of census data suggested positive assimilation gains among recent immigrants. This study found, however, that "the set of immigrant groups making substantial progress today excludes the largest group [Mexicans]" (Vigdor, 2008). Notwithstanding this finding, scholars assert that differences in assimilation are minimal and like other historical immigrant groups, Latinos are becoming fully integrated within two or three generations (Alba et al., 2002; Alba and Nee, 2003; Bean and Stevens, 2003; Citrin et al. 2007). These scholars note that patterns of European immigration from the 19th century match the patterns of Mexican and Latino immigration today—indeed, there are no expanses of Dutch Language Unions in the U.S. For instance, Bean and Stevens (2003) suggested that only 10% of immigrants did not speak English at the time of the 2000 U.S. Census and length of residence increased English ability. Using 1990 U.S. census data, Alba and colleagues (2002) found that about 66% of third-generation Mexicans did not speak any Spanish. One review used this evidence as a clear example that Latinos immigrants are assimilating (Waters and Jimenez, 2005). In most cases, however, the evidence of both expectations for

and against assimilation rest on limited empirical foundations based on broad generalizations using national data not designed for their purposes; for exceptions see Davila and Mora (2000).

Evidentiary Limitations

In the most comprehensive test of Huntington's claims to date, Citrin and colleagues (2007: 38) relied solely on English language ability as a measure of language assimilation, as have many other investigators (de la Garza, Falcon, Garcia, 1996; Rumbaut, 1994; Yang 1994). However, as language fluency and language use are separate linguistic characteristics, their causes and consequences may be quite different (Espenshade and Fu, 1997; Johnson et al., 2003). Leighley (2001) notes that language preference is best understood as an indicator of attachment to minority culture, while proficiency is not necessarily associated with attachment. Following straight-line assimilation expectations (Gordon, 1964), one would expect English language acquisition to be the first step for general assimilation, while complete reliance on English is a later step in the process. In short, full language assimilation follows from English proficiency and eventually leads to English monolingualism (Portes et al., 1994). As a result, English use is a preferred indicator of language assimilation.

Fishman (1972) and Alba et al. (2002) argue that immigrants' native tongues become confined to more private spheres as English becomes the dominant language in public spheres. In some cases lingual communities will counteract assimilation trends among immigrants, especially within narrow geographic contexts (Alba et al., 2002). According to Portes and Hoa (1998), Spanish retention is strongly supported by Spanish-language opportunities, like minority enclaves, which slow the process of assimilation. Some studies have evaluated enclave patterns at the county level (Citrin et al., 2007; Espenshade et al., 1997). However, this high level of aggregation does not permit precise estimates of enclaves, which are usually in smaller aggregations than entire counties (Baybeck, 2006).

It is even more important to include measures of social contact, given the error that may be associated with spatial measures. Brown (2006) outlined how spatial and social context are inherently different where these influence assimilation, since one is most often used as a surrogate of the other. It is likely that social interaction more strongly influences assimilation than social context. In fact, the principal studies in the "two-cultures" debate have not considered social influences of assimilation, like social contact.

A central aspect of the "two-cultures" debate is that Latino immigrants maintain strong ties with their country of origin (Huntington, 2004). Some fear that the pres-

ence of these ties will result in less motivation for assimilation; however, studies we reviewed did not include measures of ties to country of origin.

Both sides of the “two-cultures” debate agree the focus should be on the U.S. border (Citrin et al., 1997, 33). Yet analyses have largely used nationally representative data (Citrin et al., 1997, Huntington, 2004) and more make the same error that study assimilation generally (Alba et al., 2002; Alba and Nee, 2003; Bean and Stevens, 2003). National studies are ill suited for identifying sufficient numbers of minority respondents who reside in majority-minority communities (Stein, Post, and Rinden, 2000), and cannot generalize to border settings that operate under different theoretical contingencies. Research should evaluate factors influencing language assimilation using data on the point of interest, the border (Davila and Mora, 2000).

This study presents evidence that speaks to the relative inferential strengths and weaknesses of previous research. In doing so a behavioral theory is proposed to identify the mechanisms of language assimilation.

The Logic of Language Assimilation

Fuchs (1990), among others (Gordon, 1964; Portes and Rumbaut, 2001), assumes “straight-line assimilation” by which ethnic differences erode over time as immigrants and their children are exposed to their new country. Ethnic incorporation likely occurs in three stages: (1) Immigrants learn norms and behaviors consistent with the dominant society; (2) Immigrants learn to achieve economic and educational status consistent with natives; (3) Immigrants identify with the host country (Fuchs, 1990). Gordon (1964) and Stevens and Swicegood (1987) assert that linguistic assimilation is the initial process within the first step, since language is a mechanism by which immigrants acquire host country attributes. A common assumption is that assimilation is irreversible and must follow sequential stages (de la Garza et al., 1996). Even if assimilation differs from a “straight-line” process (Portes and Rumbaut, 2001; Zhou and Bankston, 1998; Alba and Nee, 2003; Bean et al. 2003), it is still probable that language precedes other forms of assimilation, though these other aspects may not follow a common order.

To understand the specific mechanisms responsible for immigrants becoming linguistically similar over time, we attempt to identify how immigrants are exposed to their new country. The process of language assimilation is dynamic (Mora and Davila, 2006), as increased opportunities and pressures to speak the dominant language result in increased English fluency and decreased native language fluency (Arriagada, 2005). A behavioral framework (Watson, 1994) focusing on contingencies that provide opportunities and incentives for English among immigrants may explain the causal relationships for assimilation. For instance, Landrine and

Klonoff (2004), using such an approach, argue that assimilation indicates the extent to which immigrants retain their indigenous culture or adopt the host culture as a result of operant learning by social contingencies that include economic rewards for English speaking skills or learning by observing acculturated behaviors. Exposure to persons who speak English may promote English language acquisition, which is likely to result in increased English use in other settings. This may promote social situations in which immigrants are likely to expose friends and other native speakers to English. These interacting contingencies and social exposures to English likely compete with social reinforcers that hinder English language acquisition and use.²

Given this simple logic and prior studies, we hypothesize that immigrants who (H1) reside the longest in the host society, (H2) live outside enclaves, (H3) have greater contact with other ethnic groups and (H4) are members of later generations are expected to show greater similarities with the majority group than other immigrants. Stated formally,

H₁: Immigrants who reside the longest in the host society are expected to show greater similarities with the majority group than other immigrants.

H₂: Immigrants who reside outside immigrant enclaves are expected to show greater similarities with the majority group than other immigrants.

H₃: Immigrants who have greater contact with other ethnic groups are expected to show greater similarities with the majority group than other immigrants.

H₄: Immigrants who are members of later generations are expected to show greater similarities with the majority group than other immigrants.

In addition, some behaviors like (H₅) stronger ties to country of origin may be inversely related with assimilation, as these ties are generally carried out in the native language.

H₅: Immigrants with stronger ties to their country of origin are expected to show greater similarities with the majority group than other immigrants.

These are all examples of situational contingencies in which individuals' interactions provide opportunities for English development and use. Traditional factors like higher education, income, and younger age may be associated with greater assimilation; from a theoretical perspective this can be interpreted to mean these are markers for increased contingencies favoring assimilation that may not be accounted for by other observations of explicit rewards, punishment, and observational learning for linguistic assimilation. Consistent with the "two-cultures" debate (H₆) Mexicans may have less English acquisition and use than other Latinos, though it

is not well understood what this measure indicates after controlling for likely surrogate factors like ties with country of origin.

H₆: Immigrants from Mexico may have less English acquisition and use than other Latinos.

Data and Methods

Data were drawn from a larger study (Ayers et al., 2009) of San Diego County adults (18 years or older), conducted by the Social Science Research Laboratory at San Diego State University using computer-assisted telephone interviewing from July 7, 2005, to January 27, 2006 (N=1929). Interviews were conducted in respondent's preferred language by closely supervised multilingual professional interviewers, with interviewers keying on the language of the person answering. Sampling was stratified by race/ethnic self-identification and immigrant status using random digit dial procedures. This study included 523 Latinos and 500 Asians, with each group having at least 50% first generation immigrants. About 34% of interviews with Latinos were conducted in Spanish, the remainder in English. Among Asians, about 8% of interviews were conducted in Mandarin, 7% were conducted in Vietnamese, and the remainder in English. The AAPOR response rate was 21%, the cooperation rate was 58%, and the refusal rate was 17%. Data were weighted to represent San Diego County on age, sex, and country of origin within each ethnic/immigrant group. The Institutional Review Board at San Diego State University approved study procedures.

Measures

English fluency was measured by responses to "Do you speak English?" Persons who reported speaking English were coded 1, otherwise 0.³ *English use* represents language preference among respondents. English use was measured as a composite by summing responses to seven items: "Now, in terms of the language you use to read and speak, is that. . . . In terms of the language you usually speak at home, is that. . . . In which language do you usually think. . . . In terms of the language you usually speak with your friends, is that. . . . In which language are the TV programs you usually watch. . . . In which language are the radio programs you usually listen to. . . . In which language are the movies, TV and radio programs you prefer to watch and listen to. . . ? Responses were "other language only, other language more than English, both equally, English more than other language, or only English" A composite of these items (Cronbach's $\alpha=.91$) formed by summing these items with scores ranging from 0 (consistently not English) to 30 (consistently only English).

Length of residence in the U.S. was calculated by subtracting the age of immigration to the U.S. from their current age.

Context. Context was measured by the percent of Latino or Asian residents within each respondent's census tract at the time of the interview using current population estimates (Census, 2000).

Contact. Contact was measured by reports of contact with members outside respondent's ethnic group in several situations: "Are your close friends. . . . At the social gatherings you attend, are the people . . ." and "Are the people you visit and who visit you. . . . If you could choose your children's friends, would you want them to be . . . all from the same ethnic group as you [coded 1], more from the same ethnic group as you than from other ethnic groups [coded 2], both equally [coded 3], more from other ethnic groups than from your own ethnic group [coded 4], or all from other ethnic groups [coded 5]?" A composite index was computed by standardizing (mean=0, SD=1.0) items so each weighed the same and then summing the scores (Cronbach's $\alpha=0.88$).

Three indicators measured ties with their country of origin. Send money to home country was derived from "Do you ever send money to support family members who live outside of the United States? This includes extended family members. This does not include birthday gifts or Christmas gifts." Visit home country was derived from "On how many different occasions have you visited your country of origin, or if you were born in the U.S., your parents' country of origin?" This was adjusted by dividing the reported number of visits by years of residence in the U.S. Values greater than 5 were recoded to 5 to constrain right skewness and affected 12% of cases among Latinos and 0.1% among Asians. Noncontinuous stay in U.S. was derived from "Have you returned to your country of origin or lived in another country for six months or longer?" The latter was asked only of first-generation respondents.

Covariates. Covariates included generational status, country of origin, family income, age, education, and gender.

Analysis Strategy

Analyses were based on subsets of Asians and Latinos by generational status, first versus later generation. First, two sample t-tests with unpooled variances were used to estimate statistical differences among the subsamples. Second, reinforcements associated with English fluency were explored using logistic regression among first-generation Latinos. Alternative analysis was not feasible, since non-English fluency was rare among other subsets. Third predictors, by ethnicity and generational status, of English use were explored using least squares regression. Differences in the association of any predictor by generation and ethnicity were

evaluated using methods described by Brame and colleagues (1998). To prevent bias due to complete case analysis, Amelia II was used to impute missing values for all multivariable analysis. To ease interpretation, predicted probability of English fluency or expected value on the English use scale were calculated by simulation (King *et al.*, 2000). All tests were two-tailed $P < .05$.

Findings

A large portion of first generation Latinos were dominant in their native language, compared to very few first generation Asians. Disparities between Latinos and Asians persisted, though there was some attenuation, in later generations, as detailed in Figure 1.

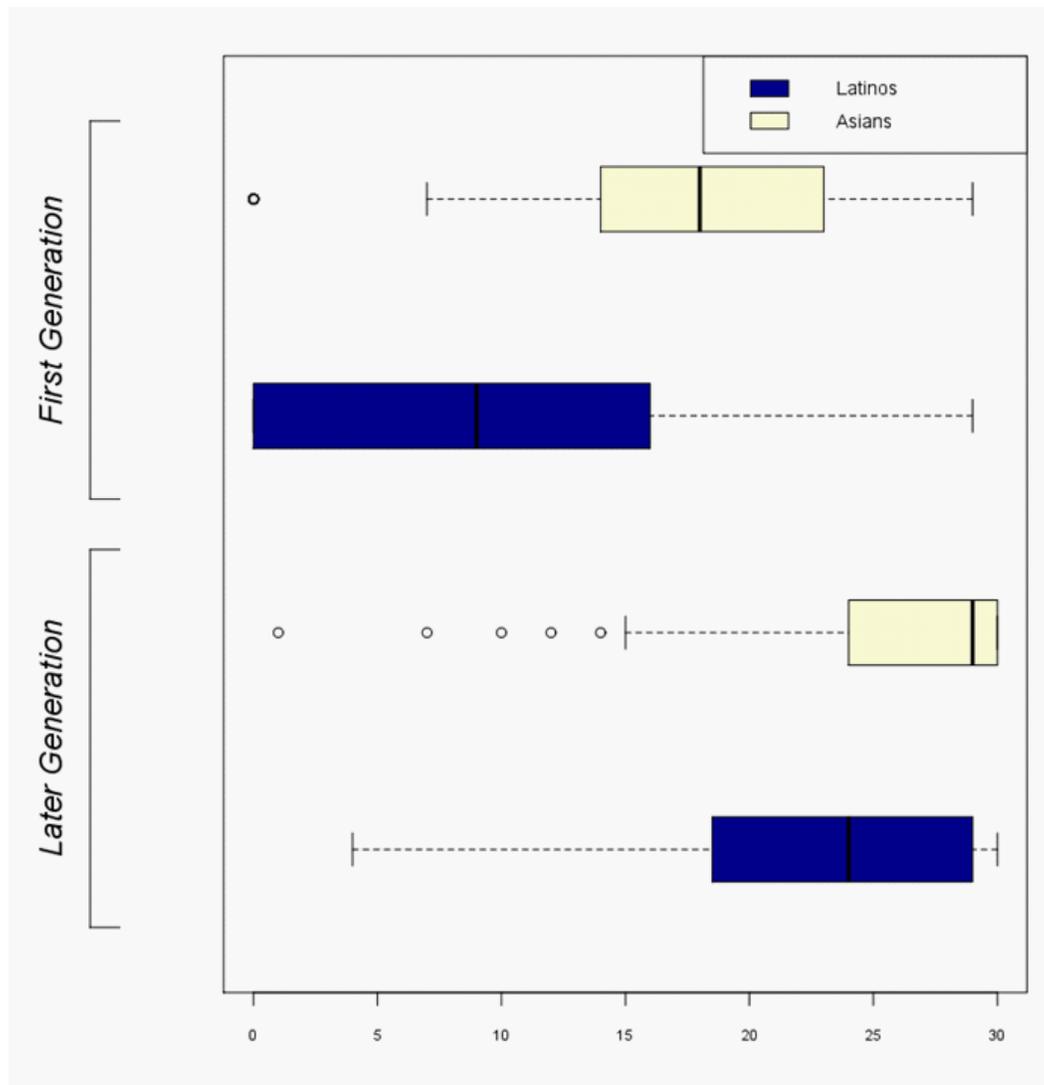
First-generation Latinos' median English use score was 9, half as much as their Asian counterparts, 18. About 5% of first-generation Asians spoke no English, compared to 33% of Latino respondents (0 on the English scale). English use increased across ethnicities in later generations; median English use was 24 among later-generation Latinos and 29 for Asians. Among later generations, 22% of Latinos and 43% of Asians were English monolingual. Latinos had tendencies toward Spanish use, regardless of how they compared with Asians. These differences may be explained by variation in factors that promote English use.

Not only do the data indicate that Asians displayed more language assimilation than Latinos in both early and later generations, contextual factors were also much different among Asians and Latinos in early and later generations. Table 1 shows that both Latino and Asian first generation respondents lived in more homogeneous neighborhoods, had less contact with other ethnic groups, less education, sent more money to their country of origin, were younger, and visited their country of origin more than second or later generation respondents (See Table 2 for results of logistic and linear regression).

Within generation and across ethnicity comparisons suggest that first-generation Latino respondents were characterized by more homogeneous neighborhoods than were Asians, 52% (95% confidence interval [95%CI], 49 to 54) and 21% (95%CI, 19 to 23), though Latinos and Asians were in the U.S. about the same number of years, 19.46 (95%CI, 17.90 to 21.02) and 18.76 (95%CI, 17.22 to 20.30). Latinos and Asians moved out of ethnic enclaves in later generations, Latinos 42% (95%CI, 39 to 45) and Asians 15% (95%CI, 13 to 16). Similarly, contact outside their ethnic groups was 150% ($t=7.45$, $p<.01$) and 300% ($t=8.77$, $p<.01$) higher in later generations among Latinos and Asians respectively.

Ties to their country of origin were typically stronger among Latinos but both Latinos and Asians trended toward weaker ties in later generations. About 37% (95%CI, 31 to 43) of first-generation Latinos sent money to their country of ori-

Figure 1. Latino and Asian San Diego County Residents' English Language Use



gin versus 12% (95%CI, 8 to 15) of later-generation Latinos, compared to 42% (95%CI, 35 to 48) and 16% (95%CI, 11 to 21) among Asians. First-generation Latinos typically made 1.07 (95%CI, .86 to 1.27) while later-generation Latinos made .67 (95%CI, .51 to .83) visits to their country of origin on average. On the other hand, first- and later-generation Asians made .34 (95%CI, .25 to .41) and .07 (95%CI, .05 to .08) visits to their country of origin respectively. About 20% (95%CI, 15 to 25) of first-generation Latinos reported moving back their country

Table 1. Descriptive Characteristics of the Sample

First Generation	Latinos		Asians	
	Statistic	95% CI	Statistic	95% CI
Length of Residence	19.46	(17.90, 21.02)	18.76	(17.22, 20.3)
Ethnic Context	0.52	(.49, .54)	0.21	(.19, .23)
Contact	-0.95	(-1.25, -.65)	-0.52	(-.81, -.23)
Visit	1.07	(.26, 1.27)	0.32	(.25, .41)
Education	HS or less		College Grad+	
Income	30K-50K		50K +	
Age	39.15	(37.50, 40.81)	44.98	(43.10, 46.86)
Non-Continuous Stay	0.2	(.15, .25)	0.12	(.07, .15)
Send Money	0.37	(.31, .43)	0.42	(.35, .48)
Mexican/Filipino	0.87	(.83, .91)	0.18	(.13, .23)
Male	0.47	(.41, .53)	0.5	(.43, .56)
Later Generation				
Ethnic Context	0.42	(.39, .45)	0.15	(.13, .16)
Contact	0.62	(.34, .91)	1.36	(1.05, 1.66)
Visit	0.67	(.51, .83)	0.07	(.05, .08)
Education	Some college		College Grad+	
Income	30K-50K		50K +	
Age	37.86	(36.11, 39.61)	39.56	(37.43, 41.70)
Second Generation	0.64	(.58, .69)	0.81	(.76, .86)
Send Money	0.12	(.08, .15)	0.16	(.11, .21)
Mexican/Filipino	0.75	(.70, .80)	0.24	(.18, .29)
Male	0.46	(.41, .52)	0.5	(.44, .56)

Numbers in cells are proportions or means (confidence intervals reported in parentheses), and N's. Analysis used listwise deletion of missing cases. Education and income are three-category ordinal variables, and the median category is reported.

of origin for longer than six months compared with 12% (95%CI, 7 to 15) among Asians. Structural factors were also differentially distributed across ethnicities, for example, Latino immigrants were less educated and wealthy than Asian immigrants within first and later generations.

First-Generation Latinos' English Fluency

Table 2 presents parameter estimates for all regression models.. As hypothesized, each additional 10 years in the US was associated with a 11% (95% CI, 7 to 15) higher probability of English fluency; as shown in Figure 2.⁴ Living in ethni-

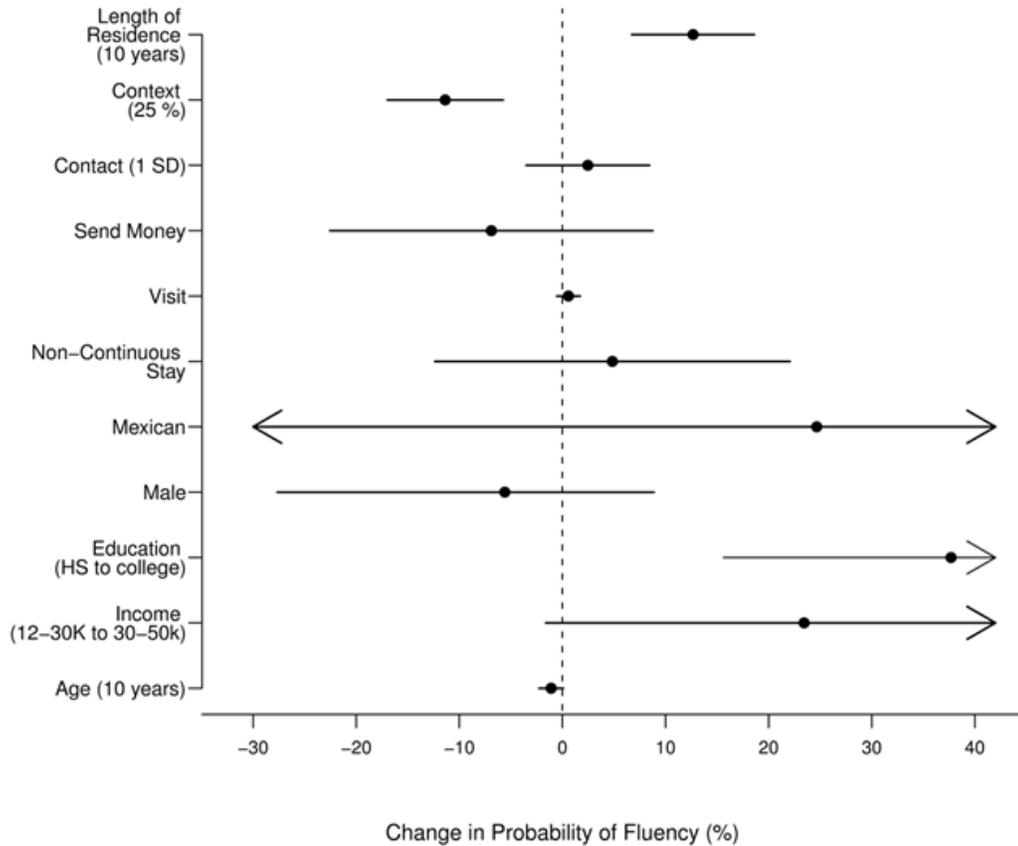
Table 2: Results for Logistic and OLS Regression Analyses

	Logit		OLS		
	First Generation Latinos	First Generation Latinos	First Generation Asians	Later Generation Latinos	Later Generation Asians
(Intercept)	3.015 (0.962)	15.296 (1.797)	19.811 (1.461)	28.735 (1.398)	27.876 (1.270)
Length of Residence	0.135 (0.028)	0.275 (0.041)	0.319 (0.034)	-- --	-- --
Second Generation	-- --	-- --	-- --	-3.194 (0.681)	-1.910 (0.777)
Context	-4.033 (1.072)	-6.728 (1.941)	2.238 (2.816)	-4.463 (1.296)	-2.082 (2.325)
Contact	0.059 (0.078)	0.747 (0.158)	0.872 (0.157)	0.582 (0.125)	0.239 (0.122)
Send Money	-0.434 (0.413)	-2.076 (0.846)	0.356 (0.759)	-5.734 (0.920)	-3.335 (0.766)
Visit	0.119 (0.125)	0.380 (0.229)	0.009 (0.473)	-0.379 (0.248)	-2.156 (2.294)
Non-continuous stay	0.219 (0.492)	-0.546 (0.970)	0.611 (0.875)	-- --	-- --
Mexican/Filipino	0.754 (0.693)	-1.071 (1.282)	3.162 (0.795)	-0.106 (0.632)	1.730 (0.628)
Male	-0.279 (0.414)	-0.189 (0.750)	-0.312 (0.673)	0.428 (0.587)	-0.229 (0.532)
Some college	2.301 (0.767)	5.021 (1.042)	0.950 (1.292)	-1.210 (0.723)	0.002 (0.809)
College or post grad	2.083 (0.866)	4.331 (1.258)	2.130 (1.006)	-1.299 (0.857)	-1.279 (0.757)
30-50K Income	1.130 (0.439)	2.429 (0.903)	1.642 (0.904)	-1.617 (0.782)	0.259 (0.797)
Income over 50K	1.535 (0.947)	3.327 (1.304)	3.862 (1.032)	1.094 (0.832)	1.950 (0.735)
Age -0.098	-0.215 (0.022)	-0.298 (0.034)	-0.008 (0.027)	0.005 (0.020)	(0.018)

Note: Cell entries are regression coefficients with standard errors in parentheses for logistic regression on English fluency (first column) or linear regression on the language assimilation scale (other columns).

cally homogeneous contexts was associated with a 10% (95% CI, 5 to 16) lower probability of English fluency. College relative to high school educated Latinos were 25% (95% CI, 15 to 35) and annual household incomes approximating 100 relative to 40 thousand were 15% (95% CI, 4 to 28) more probable to be English fluent. A 10-year increase in age was associated with a 1% (95% CI, ~1 to 3) lower

Figure 2. Predictors of English Fluency Among First Generation Latinos



probability of English fluency. Contrary to hypothesized expectations reported contact with other ethnic groups, visiting, sending money, and returning to their home country for longer than six months were not independently associated with English fluency. The percent correctly predicted (Herron 1999) was 76.4%, suggesting our behavioral model is useful prediction tool.

First-Generation Immigrants’ English Use

Conforming to hypothesized expectations, 10 additional years of residence was associated with a 2.75 (95% CI, 1.96 to 3.51) higher English language use on the 0 to 30 scale among Latinos and 3.18 (95% CI, 2.52 to 3.81) among Asians; as detailed in Figure 3. A 25% more homogeneous ethnic context was associated with a 1.69 (95% CI, .79 to 2.59) lower English use score among Latinos but English use was similar regardless of context among Asians. Moreover, this association differed

significantly between Latinos and Asians ($t=2.621$, $P<.05$) A one standard deviation increase in contact with other ethnic groups was associated with a 1.78 (95% CI, 1.03 to 2.47) increase in English use among Latinos and 2.06 (95% CI, 1.36 to 2.77) among Asians.

Sending money to their country of origin, outside of holidays or birthdays, was significantly associated with a 2.07 (95% CI, .42 to 3.79) lower English use score among Latinos but not among Asians, and these associations were significantly different from each other ($t=2.141$, $p<.05$). Visits to their country of origin, returning for periods longer than six months, among Latinos and Asians, and Mexican country of origin among Latinos, were not significantly associated with English use.

About 30-50 relative to 12-30 thousand annual income, 2.43 (95% CI, .75 to 4.28), and 10 years younger age, 2.15 (95% CI, 1.53 to 2.84) were statistically significantly associated with greater English use among Latinos. Among Asians, Filipino country of origin, 3.15 (95% CI, 1.76 to 4.49), and 10 years younger age, 2.92 (95% CI, 2.46 to 3.49), were statistically significantly associated with greater English use.

After adjusting for covariates, Latinos remained less assimilated than Asians, but this was reduced to a 2.84 (95% CI, 1.64 to 4.04) difference on the English use scale, compared to a raw difference of 8.18, suggesting about 65% of the gap between Latinos and Asians was explained by the model. The analysis also captured a large proportion of the variation in English use (Latino Adjusted $R^2=.68$; Asian Adjusted $R^2=.57$).

Later-Generation Immigrants' English Use

Conforming to hypothesized expectations, second-generation Latino respondents had 3.19 (95% CI, 1.90 to 4.58) and Asians 1.91 (95% CI, .33 to 3.48) less English use than their later-generation counterparts; as shown in Figure 3. More homogeneous ethnic contexts by 25% was associated with a 1.24 (95% CI, .50 to 1.77) lower English use score but was independent of English use among Asians, though these associations did not significantly differ from each other ($t=.894$, $p>.10$). A one standard deviation increase in contact with other ethnic groups was associated with a 1.37 (95%CI, .83 to 1.96) and .57 (95% CI, 0 to 1.16) high English use score among Latinos and Asians respectively, though the later was statistically less certain.

Sending money to their country of origin was associated with a 5.70 (95% CI, 3.87 to 7.49) and 3.36 (95% CI, 1.91 to 4.83) lower English use score among Latinos and Asians respectively. This association was significantly larger among Latinos ($t= -2.064$, $P<.05$). These patterns were stronger for both Latinos and Asians in later generations than first generations. Visiting their country of origin, on the

other hand, was not significantly associated with English use among either group. Mexican heritage was statically unassociated with English use.

Among later generation Latinos 30-50 relative to 12-30 thousand annual income was associated with 1.62 (95%CI, .11 to 3.21) lower English use score, though borderline significant ($p < .10$). Among later generation Asians, Filipino country of origin (1.67; 95%CI: .41, 2.76), lower education (1.74; 95%CI: .61, 3.06) were significantly associated with increased English use.

When controlling for measured predictors, the difference in English use between Latinos and Asians was reduced to 2.84 (95% CI: 1.64, 4.04), compared to a raw difference of 3.44, suggesting that behavioral variables account for about 17% of the gap between Latinos and Asians. The model captured less variation in English use than the first-generation models (Latino Adjusted $R^2 = .40$; Asian Adjusted $R^2 = .15$) suggesting factors beyond those proposed here may be necessary to better estimate English use among later generations.⁵

Discussion

Three themes emerged supporting Huntington's (2004) his contention. First, Latinos were much less linguistically assimilated than Asians. Second, characteristics, *a priori*, assumed to be negatively associated with assimilation were consistently more prevalent among Latinos than Asians. Third, social-environmental predictors were differentially associated with English use among Latinos and Asians, suggesting Latinos with similar characteristics are assimilating at slower rates than Asians. However, Latinos appear to be making steady ground in their assimilation patterns. In fact, English use increased 95% and shifts in their socio-environment became more favorable for assimilation from first to later generations.

Moreover, several of the predictors Huntington and others have emphasized in their accounts, like Mexican ancestry, were not important predictors in this study. Indeed, large differences between later-generation Latinos and Asians did not persist in the population when controlling for behavioral mechanisms in their environment, suggesting, also unlike Huntington's accounts, less assimilation is not so much a result of endemic cultural factors that Latinos bring across the border with them. Instead, these findings suggest that the determinants of language assimilation are socio-environmental. This does not necessarily mean the implications of Huntington's claims of a wholly monolingual Spanish speaking society on the border are incorrect. It does, however, call for a balanced perspective somewhere between the disparate accounts of the "two cultures" debate.

It may be argued that these findings are not new, but present an agreed upon general understanding of complexity and differential assimilation patterns among Latino and Asian immigrants. We, however, point to the dominance of polarized

scholarly articles within the “two-cultures” debate (Alba et al., 2002; Alba and Nee, 2003; Bean and Stevens, 2003; Brimelow, 1995; Citrin et al., 2007, Huntington, 2004). Moreover, as detailed in the review, we find these previous studies limited in many ways, particularly in their research designs. For example, studies have often included limited measures of linguistic traits that focus on fluency instead of English preference, poor measures of enclaves or ethnic contact, omission of concepts central to the debate like immigrants’ ties with their country of origin, or application of national data not designed for their purposes.

The primary strengths of the design employed in this study include (1) the use of more complete measures of language assimilation, (2) adequately considering the social influences of assimilation, (3) incorporating ties to country of origin as a mechanism for assimilation, (4) accurately specifying enclave effects in the units they likely occur in by examining the context of language assimilation at the sub-county level, which helps reduce errors of inference (Baybeck, 2006), and (5) utilizing data that is on the point of interest (the U.S.-Mexico border).

It is critical, then, to consider the importance of English use as a measure, since assimilation, by definition, implies preferences for the host culture and our measure of English use may capture a part of this preference whereas a focus on English fluency ignores the variability within subjects between their abilities and preferences. It is impossible to completely isolate language preference from ability, however. In fact, there was a large amount of variability in English use among fluent subjects (Mean=24.57; standard deviation [SD]=6.57) and prior studies have described the advances for applying similar dual measures of fluency and use (Ayers Under Review; Gee et al. in press).

Of course, this study is not without limitations. Our sample was drawn from single a context—San Diego County, California. San Diego County is home for over three million persons (about 1.3 million in the city) and the two San Diego-Tijuana border-crossing points are the busiest in the world (Kiy and Kada, 2004). Notwithstanding this narrow perspective, San Diego County is a suitable context to test the respective hypotheses of the “two-cultures” debate since it allows rigorous testing of theoretically meaningful relationships by including concepts closely linked to this debate with a border focus. Moreover, the cross-sectional nature of these data and the measure of English fluency—as a binary concept—are additional limitations of this study. Greater variability in measuring English ability would be preferred, but such a measure was not included in the original survey instrument and there were no surrogate outcomes that could be substituted. It should be noted, however, that unlike previous studies this research relied on a seven-item, highly reliable English use scale.

One possible unexplored factor that might explain less assimilation among Latinos is illegal immigration, primarily from Mexico. Illegal immigrants live in con-

stant fear of being deported therefore they are more likely to reside in communities that will understand their plight. More importantly, they may want to be understood, culturally and linguistically, so they seek neighborhoods in which Spanish is the dominant language while in a foreign country. However, if this were one reason Latino immigrants were less assimilated in this study, it would be consistent with Huntington's (2004) and others' expectations. Another potential explanation of stronger assimilation among Asians rather than Latinos is actual distance from country of origin. This study employed indicators of ties with country of origin that have greater face validity than absolute measure of distance. Nonetheless, if distance was an important measure, we would expect there to be a stronger relationship between Mexican origin and assimilation than the null association observed.

The implications of this study are both theoretical and practical. On the theory front, this study moves beyond previous explanations of language assimilation, such as rational perspectives for English language fluency (Espenshade and Fu, 1997: 290). This framework is inconsistent with many behavioral predictors consistently associated with English fluency and use in this study. Second, learning English may represent an automatic process, but choices for English vs. Spanish require a different understanding. The behavioral theory and analysis strategy used in this study to identify reinforcement mechanisms captures this process.

This study focused on reported behaviors associated with the first steps of assimilation, English language fluency and use. Some researchers have addressed assimilation hypotheses by focusing on immigrant groups' attitudes (Schildkraut, 2007; de la Garza et al., 1996; Alba, 2006), but considerable measurement error is associated with attitudinal measures (Zaller, 1992). As a result, the present analysis, based on the reported behavior of the subjects, may have stronger implications given the stronger face validity of our approach.

By no means do the findings in this study suggest that immigrant groups on the border cannot comprehend English as a result of ties to country of origin, restricted contact with members outside their ethnic group, or enclave patterns. Rather, the findings suggest that these variables influence preferences for communicating in languages other than English. It may be best to think of language assimilation then, as a latent contagion. As such, understanding what the reinforcers are and the conditions under which reinforcement occurs near the U.S.-Mexico border may lead to effective policies that promote linguistic assimilation.

On the practical front, these results suggest government policies that promote integration of schools and interethnic contact among later generation youth may increase Latino language assimilation. This study suggests that such policies would be highly effective among Latinos near the border, even more so than among their later-generation Asian counterparts. Policies promoting community activities that bring members of neighboring non-Latino communities together with Latinos may

facilitate English acquisition and use. Policies explicitly targeted at first-generation Latinos might profitably focus on moderating the impact of enclave effects to promote English acquisition and use given the difficulty of manipulating this factor directly. For instance, policies offering free English classes within ethnic enclaves should be effective.

Conclusion and Prospects for Future Research

This paper has examined the debate regarding language assimilation among immigrants in the United States. In particular, this study has evaluated the claims of the “two-cultures” debate using public opinion data from residents in San Diego County, California. Based on the analyses herein we find that Latinos were much less linguistically assimilated than Asians and that characteristics, *a priori*, assumed to be negatively associated with assimilation were consistently more prevalent among Latinos than Asians. In addition, while social-environmental predictors suggest that Latinos are assimilating at slower rates than similar Asians, these data also suggest that Latinos appear to be making steady ground in their assimilation patterns. As such, these findings provide a more nuanced perspective falling between disparate accounts of language assimilation.

At the time of the writing of this study immigration had received less popular attention in the face of a declining economy and terrorist threats. However, it is likely that immigration could emerge as a highly salient political issue since prior studies have noted that economic decline may promote immigrant phobia (Citrin et al., 1997). As immigration and immigrants’ assimilation emerge in the debate, new scientific data that inform policymakers, like the study here, of the nuance in the “two-cultures” debate may prove helpful. The lack of hard evidence has allowed advocates to make strong claims that can either contribute to ethnocentric policies when Huntington’s (2004) perspective is considered wholly valid or no policies to increase assimilation among Latinos when Citrin’s (2007) claims are treated similarly. Ultimately, the findings of this study should enhance our understanding of immigrant incorporation since it serves to unpack the processes that speed or retard linguistic assimilation among immigrants and can thus directly inform the policy-making debate in the country.

While this study makes a positive contribution to the debate on immigrant incorporation, the results reported here are tentative and replication is critical to elucidating assimilation patterns. Future studies should expand the generalizability of our findings to other border regions and inland parts of the U.S. where the debate about language use and fluency is intensifying.⁶ But, regardless of the design, it may no longer be enough to present evidence of assimilation that draws solely from disparate accounts with limited measures and, in the case of Huntington, lack

of systematic analysis. Future studies should carefully consider the accounts in the “two-cultures” debate developing a testing scheme to evaluate their claims. Moreover, since much the debate rests on claims for which there are no archival or survey data to test, application of qualitative designs may prove very fruitful to fill this data void, fill gaps in this study, and outline future explorations.

References

- Alba, Richard. 2006. "Mexican Americans and the American Dream." *Perspectives on Politics* 4 (June): 289-96.
- Alba, Richard, John Logan, Amy Lutz, and Brian Stults. 2002. "Only English by the Third Generation? Loss and Preservation of the Mother Tongue among the Grandchildren of Contemporary Immigrants." *Demography* 39 (August): 467-84.
- Alba, Richard, and Victor Nee. 2003. *Remaking the American Mainstream: Assimilation and Contemporary Immigration*. Cambridge: Harvard University Press.
- Arriagada, Paula A. 2005. "Family Context and Spanish-Language Use: A Study of Latino Children in the United States." *Social Science Quarterly* 86 (September): 599-619.
- Ayers, John W. 2010. "Measuring English Proficiency and Language Preference: A Public Health Science Problem." *American Journal of Public Health* 100(8): 1364-1366.
- Ayers, John W., C. Richard Hofstetter, Keith Schnakenberg, and Bohdan Kolody. 2009. "Is Immigration a Racial Issue? Anglos' Attitudes on Immigration Policies in a Border County." *Social Science Quarterly* 90 (September): 593-610.
- Baybeck, Brady. 2006. "Sorting Out the Competing Effects of Racial Context." *Journal of Politics* 68 (May): 386-96.
- Bean, F. D., Stevens G. 2003. *America's Newcomers and the Dynamics of Diversity*. New York: Russell Sage Foundation.
- Brame, Robert, Raymond Paternoster, Paul Maxerolle, and Alex Piquero. 1998. "Testing for the Equality of Maximum-Likelihood Regression Coefficients between Two Independent Equations." *Journal of Quantitative Criminology* 14(3): 245-61.
- Brimelow, Peter. 1995. *Alien Nation: Common Sense about America's Immigration Disaster*. New York: Random House.
- Brown, Susan K. 2006. "Structural Assimilation Revisited: Mexican-Origin Nativity and Cross-Ethnic Primary Ties." *Social Forces* 85(1): 75-92.
- Citrin, Jack, Amy Lerman, Michael Murakami, and Kathryn Pearson. 2007. "Testing Huntington: Is Hispanic Immigration a Threat to American Identity?" *Perspectives on Politics* 5 (March): 31-48.
- Citrin, Jack, Donald P. Green, Christopher Muste, and Cara Wong. 1997. "Public Opinion toward Immigration Reform: The Role of Economic Motivations." *Journal of Politics* 59(3): 858-81.
- Crawford, James. 1992. *Hold Your Tongue: Bilingualism and the Politics of "English Only"*. Reading, Mass.: Addison-Wesley.

- Davila, Alberto, and Marie T. Mora. 2000. "English Skills, Earnings, and the Occupational Sorting of Mexican Americans along the U.S.-Mexico Border." *International Migration Review* 34 (Spring): 0133-0157.
- De la Garza, Rodolfo O., Angelo Falcon, and F. Chris Garcia. 1996. "Will The Real American Please Stand Up: Anglo and Mexican-American Support of Core American Political Values." *American Journal of Political Science* 40 (April): 335-51.
- DeGrandpre, R. J. 2000. "A Science of Meaning: Can Behaviorism Bring Meaning to Psychological Science?" *American Psychologist* 55(7): 721-39.
- Espenshade, Thomas J., and Haishan Fu. 1997. "An Analysis of English-Language Proficiency among U.S. Immigrants." *American Sociological Review* 62 (April): 288-305.
- Fishman, J. A. 1972. *Readings in the Sociology of Language*. New York: Mouton Publishers, The Hague.
- Fraga, Luis R., John A. Garcia, Rodney E. Hero, Michael Jones-Correa, Valerie Martinez-Ebers, and Gary M. Segura. 2006. "Su Casa Es Nuestra Casa: Latino Politics Research and the Development of American Political Science." *American Political Science Review* 100 (November): 1-7.
- Fuchs, Lawrence H. 1990. *The American Kaleidoscope: Race, Ethnicity, and the Civic Culture*. New York: Wesleyan.
- Gee Gilbert C., K. M. Walsemann, and D. T. Takeuchi. 2010. "English Proficiency and Language Preference: Testing the Equivalence of Two Measures." *American Journal of Public Health* 100(3): 563-69.
- Glenn, S. S., J. Ellis, and J. Greenspoon. 1992. "On the Revolutionary Nature of the Operant as a Unit of Behavioral Selection." *Am. Psychol.* 47(11): 1329-36.
- Gordon, Milton M. 1964. *Assimilation in American Life: The Role of Race, Religion, and National Origin*. New York: Oxford University Press.
- Guarnizo, Luis Eduardo, Alejandro Portes, and William Haller. 2003. "Assimilation and Transnationalism: Determinants of Transnational Political Action among Contemporary Migrants." *American Journal of Sociology* 108(6)(May 2003): 1211-48.
- Herron, Michael. 1999. "Postestimation Uncertainty in Limited Dependent Variable Models." *Political Analysis* 8(1): 83-98.
- Hughey, A. M. 1990. "The Income of Recent Female Immigrants to the United States." *Social Science Quarterly* 71 (June): 383-90.
- Huntington, Samuel. 2004. *Who Are We? The Challenges to America's National Identity*. New York: Simon and Schuster.
- Johnson, Martin; Robert M. Stein, and Robert Wrinkle. 2003. "Language Choice, Residential Stability, and Voting among Latino Americans." *Social Science Quarterly* 84 (June): 412-24.

- King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. "Analyzing Incomplete Political Science Data: An Alternative Algorithm for Multiple Imputation." *American Political Science Review* 95 (February): 49-69.
- King, Gary, Michael Tomz, and Jason Wittenberg. 2000. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 44 (April): 341-55.
- Kiy, Richard, and Naoko Kada. 2004. *Blurred Borders: Transboundary Issues and Solutions in the San Diego/Tijuana Border Region*. San Diego, Calif.: International Community Foundation.
- Leighley, Jan E. 2001. *Strength in Numbers? The Political Mobilization of Racial and Ethnic Minorities*. Princeton: Princeton University Press.
- Ling Lin, Yeh. 2004. "Mexican Immigration and Its Potential Impact on the Political Future of the United States." *The Journal of Social, Political, and Economic Studies* 29 (Winter): 409-31.
- MacManus, Susan A., and Carol A. Cassell. 1982. "Mexican-Americans in City Politics: Participation, Representation, and Policy Preferences." *Urban Interest* 4 (Spring): 57-69.
- Mora, Marie T., and Alberto Davila. 2006. "Hispanic Ethnicity, Gender, and the Change in the LEP-Earnings Penalty in the United States during the 1990s." *Social Science Quarterly* 87 (December): 1295-1318.
- Pachon, Harry, and Louis DeSipio. 1994. *New Citizens by Choice: Political Perspectives of Latino Immigrants*. Boulder, Colo.: Westview Press.
- Portes, Alejandro, and Robert L. Bach. 1985. *Latin Journey: Cuban and Mexican Immigrants in the United States*. Berkeley: University of California Press.
- Portes, Alejandro, and Ruben G. Rumbaut. 1990. *Immigrant America: A Portrait*. Berkeley: University of California Press.
- . 2001. *Legacies: The Story of the Immigrant Second Generation*. Berkeley, Calif. and New York: University of California Press and Russell Sage Foundation.
- Portes, Alejandro, and Richard Schauffler. 1994. "Language and the Second Generation: Bilingualism Yesterday and Today." *International Migration Review* 28 (December): 640-61.
- Schildkraut, Deborah J. 2007. "Defining American Identity in the Twenty-First Century: How Much 'There' is There?" *The Journal of Politics* 69 (August): 597-615.
- Stein, Robert, Stephanie Post, and Allison Rinden. 2000. "Reconciling Context and Contact Effects on Racial Attitudes." *Political Research Quarterly* 53 (June): 285-303.
- Stevens, Gillian, and Gray Swicegood. 1987. "The Linguistic Context of Ethnic Endogamy." *American Sociological Review* 52 (February): 73-82.

- Stolzenberg, Ross M. 1990. "Ethnicity, Geography, and Occupations of U.S. Hispanic Men." *American Sociological Review* 55 (February): 143–54.
- U.S. Census Bureau. 2000. "Language Use." Washington, D.C.: U.S. Department of Commerce, <http://www.census.gov/population/www/socdemo/lang_use.html> (February 1, 2008).
- Vigdor, Jacob. 2008. "Slow Assimilation of Mexican Immigrants Poses Questions for Policy Debate." Terry Sanford Institute for Public Policy, <http://www.pub-pol.duke.edu/news/features/vigdor_com052208.php (October 11, 2008)>.
- Waggoner D. 1988. "Language Minorities in the United States in the 1980s: The Evidence from the 1980 Census." In *Language Diversity: Problems or Resource? A Social and Educational Perspective on Language Minorities in the United States*, ed. S. McKay and S. Wong. New York: Newbury House Publishers, 69-108.
- Waters, Mary C., and Tomás R. Jiménez. 2005. "Assessing Immigrant Assimilation: New Empirical and Theoretical Challenges." *Annual Review of Sociology* 31: 105-25.
- Watson, J. B. 1994 (1913). "Psychology as the Behaviorist Views It." *Psychological Review* 101(2): 248-53.
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. London: Cambridge University Press.
- Zhou, M., and C. L. Bankston. 1998. *Growing up American: How Vietnamese Children Adapt to Life in the United States*. New York: Russell Sage Foundation.

Notes

¹Accommodation, acculturation, Americanization, ethnic incorporation, pluralism, and multiculturalism are among the other labels used to mark this concept. While others may use these terms to speak to specific aspects of post-immigration experiences we consistently use the label “assimilation” in reference to our earlier described working definition.

²While our argument is that interethnic contact promotes linguistic assimilation, this does not preclude the possibility that linguistic assimilation can also facilitate interethnic contact.

³Using language of interview resulted in nearly identical conclusions.

⁴Tolerances ranged from .46 to .98 with the lowest values observed for length of residence among first-generation Latinos (.46), length of residence among first-generation Asians (.49), and income among first-generation Asians (.60). The associated standard errors for predictor variables were not excessively high suggesting that multicollinearity was not a major problem.

⁵The analyses may mask moderated associations. For instance, Mexican respondents may respond to behavioral factors differently than other Latino respondents if Huntington’s (2004) theory is interpreted loosely. Analyses were replicated for Mexican respondents but results demonstrated that Mexican origin did not moderate the associations among our predictors and language fluency or use. Analyses were also replicated for respondents living in ethnic enclaves (>50%), again the conclusions did not change. Future research should investigate more conditional effects, but it appears that plausible moderated effects did not confound our earlier conclusions.

⁶For instance, there is a very real possibility that the Asian population in San Diego may differ substantially from that in other cities like San Francisco or San Jose, which probably act as more of destination cities with community life facilitating the maintenance of original languages. We thank an anonymous reviewer for pointing this out.