

Measures of Assimilation in the Marriage Market: Mexican Americans 1970–1990

In 1965 the United States rewrote its immigration laws, and immigration increased sharply as a result. The immigrants and the children of immigrants from the post-1965 period are slowly becoming more influential in U.S. life; the largest of these groups are the Mexican immigrants and the Mexican Americans. The rapid growth of Hispanic and Asian populations in the United States has led to a renewed interest in the question of assimilation; that is, will the new groups assimilate, and if so how long will it take? Will they become part of White America? Will some groups assimilate into the Black-dominated urban underclass (a process Portes called segmented assimilation)? Will some groups remain permanently separate and socially isolated? In this article, I examine the behavior of Mexican Americans and Mexican immigrants in the U.S. marriage market, using census data from 1970, 1980, and 1990. The findings are that Mexican Americans are assimilating with non-Hispanic Whites over time, and the evidence tends to reject the segmented assimilation hypothesis. The interplay between intermarriage and endogamy is studied with log linear models; some variations by geography and U.S. nativity are noted.

Intermarriage is a fundamental part of the sociological understanding of assimilation. Theorists such as

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Davis (1941), Merton (1941), Kennedy (1944, 1952), Gordon (1964) and Lieberman and Waters (1988) have used measures of intermarriage as the most basic measuring stick for the social distance between groups, and with good reason. Not only does intermarriage represent the acceptance of an outsider into a group that is more intimate and sacred than the workplace or the neighborhood, but marriage itself is the unique institution socially and legally sanctioned for procreation and childrearing. Because racial and ethnic identities and distinctions are recreated and reproduced or reinvented in the childrearing process, the presence of intermarried couples can represent a unique challenge to the social boundaries between the parents' social groups, whereas the absence of intermarriage between two groups can represent and reproduce an insurmountable social barrier between the groups.

In Gordon's (1964) classic *Assimilation in American Life*, he argued that when a new group began to intermarry "fully and freely" with the dominant native social group, all other forms of social and cultural assimilation would necessarily follow. Eventually the old ethnic and social divisions between the groups would disappear. Gordon's view of assimilation is self-consciously ideal-typical. We know, for instance, that the oldest national origin groups in the United States (the English, Irish, and Germans) still show a tendency to marry endogamously. In the 1990 census the odds of marrying a German American man were still about 4 times higher for German American women than for other women. Even though Gordon (and Park and Burgess, 1921, before him) implied that assimilation

would erase the social boundaries of national origin, in practice few of these social boundaries ever disappear completely. The continued salience of endogamy among groups that are widely viewed as fully assimilated (such as German Americans) means that the study of assimilation needs new, more practical guidelines for what constitutes assimilation in the marriage market.

The immigration policy of the United States was fundamentally opened to Latin America and Asia in 1965; the U.S.-born children of those immigrants are now beginning to come of age and beginning to influence the political, economic, and social fabric of the United States. The largest among these second-generation groups are the Mexican Americans, and all demographic predictions point to a sharp increase in the U.S.-born Mexican American population over the next few decades (Smith & Edmonston, 1997). The increasing importance of Mexican Americans in U.S. society raises a number of classic sociological questions. Are Mexican Americans assimilating, and if so with whom? To what extent are Mexican Americans already assimilated? And what are the appropriate methods and benchmarks for evaluating assimilation using evidence from the marriage market? In this article, "Mexican American" will mean U.S.-born persons of Mexican descent. The marriage patterns of Mexican Americans will be distinguished from the marriage patterns of the Mexican immigrants, so that both assimilation over time and over generations can be examined.

The literature on assimilation generally assumes that assimilation means specifically assimilation with non-Hispanic Whites. Recent work by Portes and others on segmented assimilation (Portes & Rumbaut, 1996; Portes & Zhou, 1993; Waters, 1996) argues that assimilation with Whites is no longer the only, or even the modal type of assimilation that may occur. The literature on segmented assimilation notes that although integration into middle-class White America is still a viable option for some immigrant groups, for other groups (especially those perceived as ("non-White"), "Americanization" usually means joining the inner-city underclass. Portes and Rumbaut noted that Mexican Americans frequently work in the most menial jobs, live in the heart of central cities, and go to school and work with Black Americans who have learned to reject what they see as the values and ideals of middle-class White America. Poverty and blocked mobility can lead to an oppositional subculture, and Portes and Rumbaut argued that this is precisely what "Chicano" and "Cholo" identities have become. It is important, therefore, not to assume that assimila-

TABLE 1. MARTIAL CHOICES FOR U.S. MEXICAN AMERICAN WOMEN, AGED 20-29, 1970-1990 (%)

	1970	1980	1990
Husband's ethnicity			
Non-Hispanic Black	0.5	1.3	1.4
Mexican American	77.2	73.8	66.4
Other Hispanic	2.5	1.4	1.6
All others	0.7	1.0	1.4
Non-Hispanic White	19.2	22.5	29.2
Total	100.0	100.0	100.0

tion with Whites is the only kind of assimilation that can take place. Theory and ethnographic evidence have suggested that Mexican Americans may be assimilating into the underclass of the United States, and this alternate kind of assimilation can be tested by examining the pattern of Mexican American intermarriage with Blacks. Throughout this article, references to "Whites" will mean non-Hispanic Whites, and references to "Blacks" will mean non-Hispanic Blacks.

The frequency of intermarriage between Mexican Americans and non-Hispanic Whites has increased substantially from about 19% in 1970 to 29% in 1990 (see Table 1). At the same time, the percentage of Mexican Americans marrying other Mexican Americans has declined from 77% to 66%. These two trends are clearly related; the question is how. One possible interpretation of the trends is that Mexican American endogamy is decreasing, leading to increased intermarriage with all other groups including non-Hispanic Whites; I will refer to this as "generalized assimilation". A second possible interpretation is that there has been assimilation specifically between Mexican Americans and non-Hispanic Whites.

This paper will offer tests of the following kinds of assimilation:

1. Specific assimilation of Mexican Americans (and Mexican immigrants) with non-Hispanic Whites
2. Specific assimilation of Mexican Americans (and Mexican immigrants) with non-Hispanic Blacks
3. Generalized assimilation of Mexican Americans

Specific assimilation between Mexican Americans and non-Hispanic Whites corresponds most closely to what the literature in the past has usually meant by assimilation (Anderson & Saenz,

1994; Gurak & Fitzpatrick, 1982; Kalmijn, 1993; Qian, 1997). Specific assimilation with Blacks represents the alternate kind of assimilation that Portes and Rumbaut (1996) referred to as segmented assimilation. The third kind of assimilation, generalized assimilation, follows Lieberman and Waters (1988) and can be defined simply as the reduction in national origin endogamy over time. With the passage of time and generations there is a natural reduction in the identification with the ancestral culture and language, and a corresponding reduction in in-group solidarity that is reflected in the slow decline of the odds of endogamy for almost all national origin groups in the United States. An immigrant group may, for its own internal reasons, slowly deemphasize the customs associated with their ancestry, but this doesn't mean that established White or Black native groups will necessarily accept the new arrivals as equals. Alternatively, either one or both of the native groups could be willing to treat the immigrant group on an equal basis long before the immigrant group gives up its customs and culture and its tendency to endogamy.

As the data will show, non-Hispanic Whites seem to be quite willing to marry Mexican Americans (men and women), and given the context of the marriage market in which these unions take place, I will argue that the marriage market reveals no evidence of specific social distance between Mexican Americans and non-Hispanic Whites. Mexican Americans are, in other words, already specifically assimilated with non-Hispanic Whites. Mexican American endogamy is quite high, however, meaning that generalized assimilation is far from complete, and Mexican Americans are far from the kind of "optional" White ethnicity that Polish Americans or Irish Americans have (Waters, 1990). Mexican immigrants have extremely high levels of national origin endogamy (as do immigrants from most other parts of the world), but Mexican immigrants also face substantial social barriers in their interactions with native Whites. Mexican immigrants are far from generalized assimilation or specific assimilation with any native group.

The evidence for segmented assimilation (i.e. intermarriage specifically between Mexican Americans and Blacks) is quite negative. By most measures the Mexican American-Black schism in the marriage market is almost as strong as the historically rooted and powerful Black-White schism.

The distinction between specific and general

assimilation is an important distinction that Mittelbach and Moore (1968) emphasized, but most of the rest of the literature has examined either general or specific assimilation, but not both. In a multiethnic context, both general and specific assimilation (separately with Blacks and Whites) can be tested jointly, along with other forces in the marriage market (such as the endogamy of other groups and the social distance between Blacks and Whites) that account for the context of marital choices and options for all groups. The natural interrelationships between generalized and specific assimilation make it all the more important to distinguish between them theoretically and to test them jointly.

MEXICAN AMERICAN INTERMARRIAGE IN THE LITERATURE

The literature on Mexican American assimilation and intermarriage dates back to the broad research agenda of Grebler, Moore, and Guzman (1970). Mittelbach and Moore (1968) showed that as Mexican Americans advanced in the U.S. occupational hierarchy, they were less and less likely to marry other Mexican Americans, and they interpreted this decline as assimilation. Schoen and Cohen (1980) reanalyzed the Mittelbach and Moore data, using logistic regression (in an application very similar to log linear models), and found that although Mexican Americans did seem to be assimilating, it was the passage of generations and not occupational advancement that was the cause. Although Mittelbach and Moore's analysis had some technical limitations, their theoretical analysis was ahead of its time. They noted that intermarriage between two groups can be determined either by the attraction between the groups (i.e. specific assimilation) or by the endogamous tendencies of either group (i.e. general assimilation).

Other research on Mexican American intermarriage and assimilation has come to a variety of divergent conclusions. Schoen, Nelson, and Collins (1978) found that the percentage of Spanish-surnamed persons in California who outmarried declined from 1962 to 1974. This result would seem to run counter to the assimilation hypothesis, although the inability of the raw percentages to control for group size, educational distributions, or ethnic endogamy makes the results a bit difficult to interpret. Schoen (1986) revisited the question of exogamy among Spanish-surnamed persons, using an approach based on life

tables and attraction scores; he concluded that compositional changes could have been the reason for declining exogamy among Spanish-surnamed persons. Mittelbach and Moore (1968) found that the percentage of Mexican Americans who married exogamously (especially to non-Hispanic Whites) was increasing over time.

Although Mittelbach and Moore's methodology was unable to test the important theoretical distinction between specific and general assimilation, recent advances in the application of log linear models to multiethnic data sets (Qian, 1997; Sandefur & McKinnell, 1986) allow for tests of this important distinction.

THE DATA

The data for this article include all married coresident couples from the 1980 and 1990 Public Use Microdata Samples A files, and from the 1970 public use files of the 5% questionnaire, where both spouses are between ages 20 and 29 at the time of the census (following Qian, 1997). Couples consisting of two foreign-born spouses are excluded from the multivariate analysis (because of the difficulty especially in the 1990 census of determining whether the couple was married in the United States or abroad), but marriages between U.S.-born and foreign-born persons are included. The use of couples aged 20 to 29 is meant to restrict the sample to couples recently married at the time of each census and also to create synthetic, non-overlapping cohorts. The 1990 census did not contain a question about time at marriage, but analysis from the 1980 census (available from the author) shows that as far as ethnic intermarriage is concerned, the young married couples (aged 20 to 29) are fully representative of all recently married couples. Married couples who are separated or who live in different households are not included because the census only records information on spouses who live in the same household. Census data is prevalence data rather than incidence data. If intermarried couples were more likely to divorce, a prevalence sample would be a biased approximation of the real incidence of intermarriages. The inclusion of only young couples in the data set is intended to limit the potential bias caused by different divorce rates.

In the log linear analyses I introduce another covariate, residence in the Southwestern United States, which is meant to distinguish between the area of the country where Mexican Americans have historically been a sizeable part of the pop-

ulation from the rest of the country where (with few exceptions such as Illinois) Mexican Americans are a tiny minority. One might hypothesize that Mexican American assimilation should be less apparent in the Southwest because of the rich variety of historically rooted Mexican American communities and institutions there; in fact I will show that the process of Mexican American marital assimilation is similar inside and outside of the Southwestern United States, although intermarriage between all groups is more common in the Southwest. Another covariate, formal education, is much analyzed in the literature (Kalmijn, 1991, 1993; Qian, 1997) but had little effect on the results here, so in the interests of allowing other covariates into the model (geography and nativity) I have left out the analyses with education (these may be obtained from the author).

MEASURES OF GENERAL ASSIMILATION

The most basic measure of general assimilation is the percentage endogamy. The percentage of Mexican American wives in this data set who are married to Mexican American husbands declined from 77% in 1970 to 66% in 1990 (see Table 1). The declining percentage of Mexican Americans who marry other Mexican Americans is consistent with a pattern of general assimilation, because such a pattern implies an increase in the percentage of Mexican Americans married to all other groups (including non-Hispanic Whites and non-Hispanic Blacks).

Despite its popularity in the past (see Murguía, 1982), the simple "percent endogamy" statistic has many limitations. The chief limitation of the "percent endogamy" statistic is its inability to account for group size. It is well known that smaller groups tend to outmarry more, but this is merely a function of opportunity and exposure rather than a particularly assimilative trait of small groups (Blau, 1977). Kalmijn (1993) showed that in some states with very small Black populations, more than 50% of Blacks married non-Blacks, whereas in states with large Black populations the outmarriage rate for Blacks was closer to 1%. The discrepancy in Black outmarriage was simply due to the availability of Black spouses, rather than to any fundamental difference in Black-White relations across the states.

Table 2 shows that the Asian ancestry groups are somewhat more endogamous than the Mexican and Puerto Rican ancestry groups. This finding might seem to be in conflict with much-pub-

TABLE 2. ETHNIC ENDOGAMY FOR U.S.-BORN COUPLES, AGED 20–29, BY CENSUS YEAR

	1970		1980		1990		1970–1990 Change in Log Odds Ratio for Endogamy	1980–1990 Change in Log Odds Ratio for Endogamy
	Endog- amy Odds Ratio	Log (Odds Ratio)	Endog- amy Odds Ratio	Log (Odds Ratio)	Endog- amy Odds Ratio	Log (Odds Ratio)		
Black (Non-Hispanic)	51901.00	10.86****	15792.46	9.67****	5533.24	8.62****	–2.24****	–1.05****
Chinese Americans	12207.69	9.41****	1544.36	7.34****	923.00	6.83****	–2.58****	–0.51
Cuban Americans	^b		503.3	6.22****	571.61	6.35****		0.13
Japanese Americans	3829.60	8.25****	1004.11	6.91****	473.97	6.16****	–2.09****	–0.75****
Filipino Americans	3896.33	8.27****	460.75	6.13****	420.83	6.04****	–2.23****	–0.09
Puerto Ricans ^a	2032.40	7.62****	725.00	6.59****	387.08	5.96****	–1.66****	–0.63****
Mexican Americans	819.60	6.71****	307.86	5.73****	167.34	5.12****	–1.59****	–0.61****
Native Americans	^b		195.01	5.27****	116.94	4.76****		–0.51****
English Americans	^c		10.38	2.34****	12.52	2.53****		0.19****
Italian Americans	^c		8.85	2.18****	7.06	1.95****		–0.23****
Polish Americans	^c		8.69	2.16****	6.88	1.93****		–0.23****
German Americans	^c		4.34	1.47****	4.31	1.46****		–0.01
Irish Americans	^c		4.19	1.43****	4.03	1.39****		–0.04

Note: From the 1980 and 1990 Public Use Microdata Samples A file; 1970 Census 5% questionnaire microdata.

^aU.S.-born Puerto Ricans refers here to Puerto Ricans born on the U.S. mainland. ^bInsufficient data. ^cThe 1970 Census did not include a question on “ancestry,” so White ethnics cannot be disaggregated.

** $p < .05$. **** $p < .001$.

licized rates of exogamy among the Asian groups that exceed 50%. In fact the two findings are consistent. Asian groups do have a higher percentage of outmarriage: 47% of Japanese women in my 1980 census sample married endogamously, compared with 73.8% of Mexican American women (see Table 1). The reason Japanese Americans have a higher odds ratio of endogamy is that their group is so small (less than 0.1% of the marriage market) and the odds ratio takes into account not only the odds of marrying within the group, but also the odds of marrying a Japanese spouse for non-Japanese persons. By controlling for group size, the odds ratio shows that the Asian groups are remarkably endogamous.

The odds ratio for endogamy (popularized by Lieberman & Waters, 1988) is a better measure of general assimilation than the percent exogamy: The odds ratio controls for relative group sizes, its distribution is known, and the odds ratio is the basic unit of log linear analysis. Table 2 lists the basic odds ratios for endogamy for selected racial and ethnic groups, for 1970, 1980, and 1990 in order from the most endogamous (non-Hispanic Blacks) to the least (non-Hispanic Whites of Irish ancestry). The odds ratio for endogamy is calculated as follows: $(N1/N2) / (N3/N4)$, where (using the example of Black endogamy) N1 is the number of Black men married to Black women, N2 is the number of Black men married to non-Black women, N3 is the number of non-Black men mar-

ried to Black women, and N4 is the number of non-Black men married to non-Black women. So N1/N2 is the odds of being married to a Black woman for married Black men, and N3/N4 is the odds of being married to a Black woman for married men who are not Black. The natural logarithm of the odds ratio is asymptotically normal (Agresti, 1990), with a variance of $(1/N1) + (1/N2) + (1/N3) + (1/N4)$.

Table 2 reveals a hierarchy of generalized assimilation: The White ethnics are the most assimilated, the Blacks are the least assimilated, and the Hispanic and Asian groups all reside on the endogamy scale somewhere between the assimilated ethnic Whites and the isolated non-Hispanic Blacks. The odds of marrying a Mexican American man are 170 times higher for Mexican American women than for other women in 1990; this compares with an odds ratio for endogamy of more than 5,000 for Blacks, and an odds ratio of 4.3 for German Americans in 1990. Simply having a level of endogamy that is intermediate (between the endogamy of Whites and the endogamy of Blacks) does not by itself mean that the Hispanics, Asians, and Native Americans are assimilating. Assimilation implies a lowering of social barriers over time, so if the Hispanics, Asians, and Native Americans are assimilating, we would expect to see their levels of ethnic endogamy decline significantly from 1970 to 1990.

Mexican American endogamy does decline

significantly from 1970 to 1980, from a log odds ratio of 6.71 to 5.73, further decreasing to 5.12 in 1990. Along with the decline in Mexican American endogamy, the rate of endogamy of almost every other ethnic and racial and national origin group also declines. The data reveal a sharp decline in endogamy for Blacks from 1970 (log odds ratio of 10.86) to 1990 (log odds ratio of 8.62), and a decline over time in the rate of ethnic endogamy for all the White ethnic groups except for English Americans (for German Americans and Irish Americans, the declines are not significant). There is, in other words, a powerful trend of decreasing endogamy in the United States over a wide range of ethnic, racial, and national origin groups. The question is whether the widespread trend of declining endogamy across many groups (including Mexican Americans and non-Hispanic Whites) is enough, by itself, to explain the increasing intermarriage between Mexican Americans and non-Hispanic Whites or whether some other, more specific process is required to explain trends in Mexican American–White intermarriage.

LOG LINEAR MODELS

The log linear models use the same data as Table 2, with a more limited set of five ethnic groups: non-Hispanic Blacks, non-Hispanic Whites, Mexican Americans, other Hispanics, and All Others (a residual category that includes Asians and Native Americans). Some of the ethnic categories in Table 2 must be aggregated together to make a log linear analysis possible; the reduced set of five categories in use here allow for an examination of the interactions between Mexican Americans and the other groups. The log linear models have a nativity dimension with three values: both spouses U.S. born, U.S.-born wife married to foreign-born husband, and U.S.-born husband married to foreign born wife. The data includes a time dimension (census year 1970, 1980, or 1990), and a dimension for residence in the Southwestern United States; the full data set has $5 \times 5 \times 3 \times 3 \times 2 = 450$ cells.

Table 3 presents summary statistics and log linear coefficients for five models. Model 5 starts with the same full set of controls as Model 4 and eliminates intergroup associations that become insignificant as other more statistically significant terms are added (full model available from the author).

In simplified hierarchical terms, Model 1 can be written

$$\begin{aligned} \text{Log}(U) = & \text{Const} + \text{Heth} * \text{Nat} * \text{SW} * \text{Yr} \\ & + \text{Weth} * \text{Nat} * \text{SW} * \text{Yr} + \text{BW} \\ & + \text{MW} + \text{BM}, \end{aligned}$$

and Model 4 can be written

$$\begin{aligned} \text{Log}(U) = & \text{Const} + \text{Heth} * \text{Nat} * \text{SW} * \text{Yr} \\ & + \text{Weth} * \text{Nat} * \text{SW} * \text{Yr} \\ & + \text{Eendog} * \text{Yr} + \text{Eendog} * \text{SW} \\ & + \text{Eendog} * \text{Nat} + \text{BW} * \text{Yr} \\ & + \text{MW} * \text{Yr} * \text{Nat} + \text{BM} * \text{Yr} \\ & + \text{BW} * \text{SW} + \text{MW} * \text{SW} \\ & + \text{BM} * \text{SW}, \end{aligned}$$

where the only the highest order terms are listed, and the lower order terms are assumed. Here U are the predicted values of the model, $Heth$ is husband's ethnic group, $Weth$ is wife's ethnic group, Nat is U.S. nativity of the spouses, SW is residence in the Southwestern United States (California, Texas, Arizona, Colorado, and New Mexico), Yr is census year, $Eendog$ is ethnic endogamy, BW is the (gender symmetric) Black–White association, MW is the (gender symmetric) Mexican American–White association, and BM is the (gender symmetric) Black–Mexican American association.

The first 4 models from Table 3 all include the Black–White, Mexican–White, and Mexican–Black associations. The Mexican American–non-Hispanic White association tests for the classic kind of what I refer to as specific assimilation. The Black–White association is provided as a benchmark, because the literature has shown that the Black–White division is one of the fundamental features of the U.S. marriage market. The Black–White benchmark is important because the social significance of the Black–White divide is well known (Lieberson & Waters 1988; Massey & Denton 1993), and thus the measure of Black–White distance in the marriage provides a useful guide as to the potential social significance of other associations. In all five models, the Mexican American–White distance is far less than the Black–White distance in the marriage market, and Mexican American–Black distance is comparable to the distance between Blacks and Whites. The Black–Mexican association is included because it represents a test of segmented assimilation, that is, the assimilation of Mexicans into a broader “people of color” coalition with Blacks.

TABLE 3. THE EFFECT OF DIFFERENT CONTROLS ON MEXICAN-WHITE AND OTHER ASSOCIATIONS; LOGLINEAR_MODEL SUMMARY STATISTICS AND COEFFICIENTS

	Model				
	1	2	3	4	5
Goodness of fit <i>df</i>	285	279	273	247	179
Goodness of fit chi-square (L^2)	68,293	67,407	3,062	913.7	219
Goodness of fit <i>p</i>	0	0	0	0	0.022
Simplified Model Hierarchical Description	heth × sw × nat × yr weth × sw × nat × yr	heth × sw × nat × yr weth × sw × nat × yr	heth × sw × nat × yr weth × sw × nat × yr Eendog	heth × sw × nat × yr weth × sw × nat × yr Eendog × yr Eendog × sw Eendog × nat	heth × sw × nat × yr weth × sw × nat × yr Eendog × yr × sw × nat
General assimilation					
Black endogamy			5.37***	5.44***	5.80***
Mexican American Endogamy			2.64***	2.92***	2.33***
White endogamy			2.01***	2.55***	3.94***
Black endogamy × year				-0.37	-0.85**
Mexican American endogamy × year				0.09	-0.04
White endogamy × year				-0.60***	-0.71***
Black endogamy × SW				0.53***	-0.67 ^a
Mexican American endogamy × SW				-0.53***	-0.25
White endogamy × SW				-0.43***	-0.93***
Specific assimilation					
Black-White	-4.72***	-5.57***	-2.01***	-1.84***	-1.35***
Mexican-White	-2.30***	-2.89***	-0.72***	-0.42**	-
Mexican-Black	-4.37***	-5.52***	-1.80***	-1.51***	-1.81***
Black-White × year		0.55***	0.55***	0.33**	0.24*
Mexican-White × year		0.35***	0.36***	0.27**	0.23***
Mexican-Black × year		0.67***	0.61***	0.40**	0.28*
Mex Immigrant-White native			0.04	-0.31*	-0.51***
Mex Immigrant-White native × year			-0.30***	-0.18*	-
Black-White × SW		0.62***	0.56***	0.55***	-0.35***
Mexican-White × SW		0.14***	0.26***	-0.20 ^a	-
Mexican-Black × SW		0.31**	0.37***	-0.37*	-

Note: Loglinear model controls are as follows: heth = husband's ethnic group; weth = wife's ethnic group; SW = residency in the Southwestern United States; year = census year; nat = husband's and wife's U.S. nativity; Eendog = ethnic endogamy. See text for further details. From the 1980 and 1990 Public Use Microdata Samples A file for 50 states plus the District of Columbia, and the 1970 Public Use Microdata Samples files from the 5% questionnaire.

^aModel 5 eliminates insignificant off-diagonal terms and adds other associations to achieve a good fit to the data (full model available from author).

* $p < .1$. ** $p < .05$. *** $p < .01$. **** $p < .001$.

Model 1 shows that the each of the three kinds of couples are substantially underrepresented in the data, given the sizes of the groups and a null hypothesis of mate selection that random with respect to the ethnicity of the spouse. In the context of log linear models, a negative log odds ratio coefficient (such as the -4.72 coefficient for Black–White marriages in Model 1) means that there are fewer such couples than the model would otherwise predict. More specifically, the Black–White coefficient from Model One (-4.72) means that the odds of Black–White intermarriage are about 0.0089 or 1/112 times as large as the size of the groups alone would lead one to expect ($e^{-4.72} = 0.0089 \approx 1/112$). A negative coefficient for the marital association between two groups indicates a smaller than expected number of couples, and the size of the negative coefficient is a measure of the social distance between the two groups. A zero log odds ratio coefficient indicates no social distance between the two groups, given the controls of the model. In model 1 the Mexican association with non-Hispanic Whites is -2.30 , which means that in the pooled sample of data from three censuses, the odds of Mexican–White intermarriage are about one tenth of what they should be ($e^{-2.30} \approx 1/10$) given the sizes of the groups alone. The Mexican–White association in Models 1 and 2 includes both Mexican immigrants and Mexican Americans. In Models 3, 4, and 5, an additional term is added to treat the Mexican immigrants separately.

Model 2 shows that the social distance, or underrepresentation of marriages between each pair of ethnic groups is declining over time. In Model 2 the association between Mexicans and non-Hispanic Whites is a log odds ratio of -2.89 in 1970, -2.54 in 1980 ($-2.89 + .35$), and a more modest -2.19 ($-2.89 + [.35 * 2]$) in 1990. The Black–White and the Mexican–Black associations show similar reduction in social distance over time, although these social cleavages are much stronger to begin with. There clearly is more intermarriage between the groups over time, and this is not surprising considering that Table 2 showed a reduction in the ethnic endogamy of many groups over time, and Table 1 showed increasing outmarriage of Mexican Americans over time; Model 2 simply reiterates those findings. Increasing intermarriage between groups over time could be a result of declining ethnic endogamy across groups, it could be the result of increasing social alliances between particular groups, or it could be some complex combination of these factors. Starting with Model

3 of Table 3, I test these different explanations against each other in a multivariate context to try to determine which set of underlying explanations are the most likely cause for the observed changes over time.

Model 3 includes not only the associations between groups (such as between Mexican Americans and non-Hispanic Whites), but also a term for the endogamy of each group. Once the endogamy of Whites, Blacks, Mexican Americans, and others is taken into account, the social distance between Mexican Americans and non-Hispanic Whites nearly disappears. In Model 3 the association between Mexican Americans and non-Hispanic Whites is a log odds ratio of -0.72 , whereas in Model 2 the distance between Mexican Americans and Whites was a much more severe -2.89 ; this change indicates that most (though not all) of the social distance in the marriage market between Mexican Americans and non-Hispanic Whites is actually due to the endogamy of each group rather than to any specific social distance between the groups. In Model 3 the Mexican American–White social distance declines to zero ($-.72 + [2 * .36] = 0$) by 1990, which means that by 1990 there is no longer any social distance between Mexican Americans and non-Hispanic Whites. Model 3 appears to show, in other words, a process of specific assimilation between Mexican Americans and non-Hispanic Whites from 1970 to 1990. Mexican immigrants do not appear to participate in the same kind of assimilation process. The association between Mexican immigrants and Non-Hispanic White natives is negative in 1970 ($-0.72 + 0.04 = -0.68$) and hardly different in 1990 ($-0.72 + 0.04 + [0.36 * 2] - [0.30 * 2] = -0.56$).

Although Model 3 controls for the endogamy of each group, it does not control for the changes in endogamy over time, and the prior results should lead us to expect that the change in endogamy over time could be influential. Model 4 includes each group's change in tendency to endogamy from 1970 to 1980 and from 1970 to 1990 (the latter values are included in the table). Model 4 appears to show that the change in Mexican American endogamy over time is not a fundamental force in the marriage market (it is a non-significant 0.09), so Model 4 seems to favor specific assimilation between Mexican Americans and non-Hispanic Whites over generalized assimilation because the specific Mexican–White interaction is changing significantly over time (a significant change in the log odds ratio of 0.27 per

decade). The fact that Mexican American endogamy decline over time is not significant in Models 4 (0.09) or Model 5 (−0.04) of Table 3 does not mean that Mexican American endogamy is not declining—it is declining (see Table 2). What Table 3 shows is that this decline is simply the result of other changes in the marriage market (declining White endogamy, increasing Mexican American–White intermarriage).

Model 4 fits the data poorly by the conservative likelihood ratio test. The goodness of fit chi-square for Model 4 is 913.7 on 247 degrees of freedom. Although this is substantially better than Models 1, 2, and 3, there is still too much variance left unexplained, and this residual variance ought to be accounted for before any final conclusions can be reached about Mexican American assimilation in the marriage market. Model 5 is a good-fitting model, and this goodness of fit is achieved by dropping insignificant terms and adding other terms that were found to be significant in exploratory stepwise modeling.

Model 5 is the best fitting of the models and as such deserves special attention. Model 5 shows a null association between Mexican Americans and Whites in 1970, with increasing specific assimilation over time. By 1990, the association between U.S.-born Mexican Americans and non-Hispanic Whites is positive and significant ($0.23 * 2 = 0.46$), which indicates preferential mating between the groups, which is strong evidence for assimilation of Mexican Americans with non-Hispanic Whites, perhaps even strong enough to consider whether Mexican Americans are “becoming White” (Ignatiev, 1995). Of course Mexican Americans still have much higher levels of endogamy than the already-assimilated White ethnics (see Table 2), and at the current rate of decline it might be 5 or 6 decades before Mexican American endogamy is as low as White ethnic endogamy is in 1990.

The southwestern United States is more permissive of intermarriage than the rest of the U.S. Models 2 and 3 show that intermarriage of all types (including Mexican American intermarriage with non-Hispanic Whites) is more prevalent in the Southwest than in other parts of the country, and Model 5 suggests that the reason for the regional increase in intermarriage is that both Whites and Blacks have lower levels of endogamy in the Southwest. Eighty-three percent of Mexican Americans in the sample live in the Southwest, and this percentage has changed little between 1970 and 1990. Mexican American intermarriage

with both Whites and Blacks is increased, in part, by living in an area of the country where both Whites and Blacks are more apt to intermarry.

CONCLUSION

The enormous growth of the Mexican American population (and the growth that is predicted for the future, e.g. Smith & Edmonston 1997) means that the nature and timing of Mexican American assimilation will have important consequences for U.S. society. Gordon’s (1964) classic work viewed Hispanics, Blacks, and Native Americans as essentially inassimilable sectors of U.S. society. More recent work on intermarriage has tended to show that Black isolation is unique, but the question of whether and how the other groups (including Mexican Americans) have assimilated has been insufficiently studied.

The different measures of assimilation presented in this article contribute to a complex picture of Mexican American assimilation. Every indicator shows that the Mexican American experience in the U.S. marriage market is different from the Black experience. Unlike non-Hispanic Blacks, Mexican Americans do intermarry with non-Hispanic Whites in substantial numbers. Whereas the log linear models show that Black–White distance is a fundamental feature of the marriage market, Mexican American–White distance can be explained away if endogamy of each group is taken into account. Because Mexican American–non-Hispanic White social distance in the marriage market can be reduced to zero (and replaced by a small though significant attraction) if enough controls are added, the implication is that the kind of social barriers that exist between Whites and Blacks in the United States do not exist between Whites and Mexican Americans.

The apparent lack of cultural or discriminatory barriers between Mexican Americans and Whites in the United States (inasmuch as these barriers can be studied through marital data) has important implications. Gordon’s (1964) classic account of intermarriage and assimilation hypothesized that the decline of discriminatory and prejudicial barriers would be one of the last steps of an assimilation process. Yet by 1990 Mexican Americans seem to have reached a level of specific assimilation with the dominant White society that constitutes something like full acceptance. The history of discrimination that Mexicans have experienced in the United States cannot be discounted, of course. The group of Mexican Amer-

icans that is most assimilated with Whites consists of young U.S. natives who married in the 1980s; this population of Mexican Americans seems to intermarry with Whites in a way that reveals little evidence of the influence of social isolation or segregation from Whites. Earlier generations of Mexican Americans clearly faced, and Mexican immigrants continue to face a certain degree of social isolation from non-Hispanic Whites.

Assimilation in the marriage market is not necessarily a goal for minority groups, and the leadership of some minority groups (Jews, for example) actively opposes intermarriage. Assimilation at the social level is neither inherently good nor inherently bad. On the other hand, the kind of social division that exists between Blacks and Whites in the United States is clearly detrimental to Blacks. Black isolation in the marriage market is a central feature of a wider system of social isolation and segregation and disadvantage. If Blacks form a disadvantaged caste in U.S. society, this castelike status is only possible because of the social gulf that makes Blacks so clearly "the other" in White American society. All traditional caste systems have intermarriage prohibitions at their core. So the question is whether the social distance between Mexican Americans and Whites is great enough to create or reinforce a climate of segregation or disadvantage for Mexican Americans; the answer to this question appears to be no. That doesn't mean that Mexican Americans aren't a disadvantaged group in U.S. society; by some socioeconomic status measures Mexican Americans are among the most disadvantaged groups. The marriage market analysis simply suggests that the marital and social ties between Mexican Americans and Whites will erode, rather than reinforce, the socioeconomic disadvantage of Mexican Americans over time.

In every one of the log linear models, regardless of the nature of the controls, the social distance between Mexican Americans and non-Hispanic Blacks is greater than the social distance between Mexican Americans and non-Hispanic Whites. To the extent that a social distance between Mexican Americans and Blacks exists in the marriage market, there are some interesting implications. One implication is that solidarity between groups based on "persons of color" ethnic identity seems not to be born out by the data, at least as far as Mexican Americans and non-Hispanic Blacks are concerned.

Segmented assimilation is an important theoretical idea that has emerged in the past few years

in the work of Portes, Rumbaut, Zhou, and Waters. According to segmented assimilation theory, Mexican Americans may face pressure to assimilate into the Black-dominated social underclass. The results of this study show more evidence for Mexican American assimilation with Whites (the classic type of assimilation), and less evidence for Mexican American assimilation with Blacks (the alternative, or segmented type of assimilation). Segmented assimilation theory has broadened the perspective on what assimilation means in the United States, and more empirical tests are needed, for other immigrant groups and in other dimensions besides intermarriage, to put segmented assimilation theory more fully to the test.

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REFERENCES

- Agresti, A. (1990). *Categorical data analysis*. New York: Wiley.
- Anderson, R. N., & Saenz, R. (1994). Structural determinants of Mexican American intermarriage, 1975–80. *Social Science Quarterly*, 75, 414–430.
- Blau, P. M. (1977). *Inequality and heterogeneity: A primitive theory of social structure*. New York: Free Press.
- Davis, K. (1941). Intermarriage in caste societies. *American Anthropologist*, 43, 376–395.
- Gordon, M. M. (1964). *Assimilation in American life: The role of race, religion and national origins*. New York: Oxford University Press.
- Grebler, L., Moore, J. W., & Guzman, R. (1970). *The Mexican American people: The nation's second largest minority*. New York: Free Press.
- Gurak, D., & Fitzpatrick, J. P. (1982). Intermarriage among Hispanic ethnic groups in New York City. *American Journal of Sociology*, 87, 921–934.
- Ignatiev, N. (1995). *How the Irish became White*. New York: Routledge Press.
- Kalmijn, M. (1991). Shifting boundaries: Trends in religious and educational homogamy. *American Sociological Review*, 56, 786–800.
- Kalmijn, M. (1993). Trends in Black/White intermarriage. *Social Forces*, 72, 119–146.
- Kennedy, R. J. R. (1944). Single or triple melting pot? Intermarriage trends in New Haven, 1870–1940. *American Journal of Sociology*, 49, 331–339.
- Kennedy, R. J. R. (1952). Single or triple melting pot? Intermarriage in New Haven, 1870–1950. *American Journal of Sociology*, 58, 56–59.
- Lieberson, S., & Waters, M. C. (1988). *From many strands: Ethnic and racial groups in contemporary America*. New York: Russell Sage Foundation.

- Massey, D. S., & Denton N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, MA: Harvard University Press.
- Merton, R. K. (1941). Inter-marriage and the social structure: Fact and theory. *Psychiatry*, 4, 361–374.
- Mittelbach, F. G., & Moore J. W. (1968). Ethnic endogamy—The case of Mexican Americans. *American Journal of Sociology*, 74, 50–62.
- Murguía, E. (1982). *Chicano intermarriage: A theoretical and empirical study*. San Antonio, TX: Trinity University Press.
- Park, R. E., & Burgess E. W. (1921). *Introduction to the Science of Sociology*. Chicago: University of Chicago Press.
- Portes, A., & Rumbaut, R. (1996). *Immigrant America: A portrait*. Berkeley: University of California Press.
- Portes, A., & Zhou M. (1993). The new second generation: Segmented assimilation and its variants. *Annals of the American Academy of Political and Social Sciences*, 530, 74–96.
- Qian, Z. (1997). Breaking racial barriers: Variations in interracial marriage between 1980 and 1990. *Demography*, 34, 263–276.
- Sandefur, G. D., & McKinnell, T. (1986). American Indian intermarriage. *Social Science Research*, 15, 347–371.
- Schoen, R. (1986). A methodological analysis of intergroup marriage. *Sociological Methodology*, 16, 49–78.
- Schoen, R., & Cohen, L. (1980). Ethnic endogamy among Mexican American grooms: A reanalysis of generational and occupational effects. *American Journal of Sociology*, 86, 359–366.
- Schoen, R., Nelson, V. E., & Collins, M. (1978). Inter-marriage among Spanish surnamed Californians, 1962–74. *International Migration Review*, 12, 359–369.
- Smith, J. P., & Edmonston, B. (Eds.). (1997). *The New Americans: Economic, demographic, and fiscal effects of immigration*. Washington, DC: National Academy Press.
- Waters, M. (1990). *Ethnic options: choosing identities in America*. Berkeley: University of California Press.
- Waters, M. (1996). Ethnic and racial identities of second-generation Black immigrants in New York City. In A. Portes (Ed.), *The New Second Generation* (pp. 119–170). New York: Russell Sage Foundation.