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# Interracial and Intraracial Patterns of Mate Selection Among America's Diverse Black Populations

Despite recent immigration from Africa and the Caribbean, Blacks in America are still viewed as a monolith in many previous studies. In this paper, we use newly released 2000 census data to estimate log-linear models that highlight patterns of interracial and intraracial marriage and cohabitation among African Americans, West Indians, Africans, and Puerto Rican non-Whites, and their interracial marriage and cohabitation with Whites. Based on data from several metropolitan areas, our results show that, despite lower socioeconomic status, native-born African Americans are more likely than other Blacks to marry Whites; they also are more likely to marry other Black ethnics. West Indians, Africans, and Puerto Rican non-Whites are more likely to marry Afri-Americans than to marry Whites. Interracial relationships represent a greater share of cohabiting unions than marital unions. The majority of interracial unions, including native and immigrant Blacks, consist of a Black man and White woman. The implications for marital assimilation are discussed.

Interracial marriages have increased dramatically in the United States after antimiscegenation laws were ruled unconstitutional by the U.S. Supreme Court in 1967. Indeed, interracial marriages accounted for less than 1% of all marriages in 1970 but grew to over 5% by 2000. Furthermore, interracial couples are disproportionately represented among cohabiting unions: Nearly 10% of all cohabiting unions are between partners of different races (Fields & Casper, 2001). Recent increases in interracial unions with Whites presumably reflect positive changes in American race relations as well as the blurring of racial boundaries and racial and ethnic identities (Waters, 1999). The color line in marriage nevertheless remains strong. Black-White romances and marriages were strongly sanctioned in the past and subject to legal penalties (Davis, 1991). Even today, African Americans remain much less likely than American Indians, Latinos, and Asian Americans to marry Whites (Kalmijn, 1993; Qian & Lichter, 2001; Rosenfeld, 2002, 2005). The continuing significance of skin color for Blacks—and social distance from Whites—is clearly evident in America's marriage patterns (Bonilla-Silva, 2002; Qian, 2002; Tucker & Mitchell-Kernan, 1990).

Unfortunately, most research has ignored the growing cultural and economic diversity of

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Blacks in America. Blacks are usually treated as a monolith, without regard to ancestry or ethnicity. Yet, between 1991 and 2000 alone, nearly 400,000 immigrants arrived in the United States from Africa, and another 1 million arrived from the Caribbean (U.S. Department of Homeland Security, 2003). From a cultural and economic standpoint, new Black immigrants often have little in common with their native-born counterparts. With few exceptions, however, previous studies have ignored differences in out-marriage among America's diverse Black populations.

In this study, we document differences in intermarriage among African Americans, West Indians, Africans, and Puerto Rican non-Whites in 2000. We also identify, for the first time, the extent of intraracial marriage and cohabitation patterns among these immigrant groups, that is, the extent to which Blacks with different ancestry backgrounds marry or cohabit. Such analyses are now possible with the recent release of the Public Use Microdata Sample (PUMS) from the 2000 census.

#### THEORY AND PREVIOUS RESEARCH

Intermarriage is often used as an indicator of intergroup relations and social distance between groups (Gordon, 1964). Its usefulness is easily demonstrated from historical patterns of marriage among White ethnics in the United States. At least initially, White ethnics remained separated by language, religion, residential patterns, and socioeconomic status. They became culturally assimilated by adjusting to the culture of the new society and/or became structurally assimilated by immersing themselves into America's educational systems and work settings (Gordon). With growing length of residence, intergroup exposure, and generational succession, ethnic identities have blurred as economic and cultural assimilation has continued apace and intermarriage among ethnic groups has accelerated (Pagnini & Morgan, 1990; Portes & Rumbalt, 1996; Sassler, 2005). Today, transcending ethnic barriers through marriage is of little social or economic consequence for most native-born White Americans.

African Americans have a longer history in the United States than many of the European immigrant groups (e.g., Italians or Poles). But, unlike newer immigrant groups, it is a history that began with slavery and continues to be marked by racial

prejudice and discrimination. The legal ban against interracial marriage was not lifted nation-wide until 1967. Since then, Black-White marriages have been on the rise, but the levels of interracial marriage with Whites remain much lower than intermarriage rates for other racial minorities. Yancey (2003) argues that social relations and attitudes in America strongly suggest a clear Black/non-Black racial divide. The implication for Blacks in America is that interracial marriages with Whites will continue to be less common than they are for other non-Black racial minorities.

The Black population, however, has become much more diversified as a result of the new immigration. West Indians and Africans have settled in large, racially diverse metropolitan areas in the United States. They have been joined by Island-born Puerto Ricans, who have migrated in large numbers to the mainland, while accelerating racial and ethnic diversity in America's urban marriage markets. How do intermarriage patterns among these newer Black populations compare with those of native-born African Americans? Do they resemble the patterns of other minority immigrants, who are more likely to marry their native-born minority counterparts than Whites (Qian & Lichter, 2001)? Although classical assimilation theory predicts that immigrants lag behind in marital assimilation compared to native-born persons, this may be less true among newly arrived Blacks. In fact, they may be more likely than African Americans to marry Whites. For native-born African Americans, their history of discrimination, lower socioeconomic status, and cultural patterns may create large social and economic barriers to forming unions with Whites and other Black populations.

## Black Intermarriage With Whites

Educational attainment plays an important role in interracial marriage. Immigrants from the West Indies and Africa are highly selected on education. Indeed, they are among the most educated American immigrants (Butcher, 1994; Dodoo, 1997). Based on 1990 census data, for example, Qian and Lichter (2001) found that 26% of Black immigrants (aged 20 – 34) had a college education or higher. This percentage was similar to that of native-born Whites. Compared to African Americans, West Indians and African Blacks are more likely to have attended college and have

higher earnings than native-born Blacks despite their recent arrival in the United States (Dodoo & Takyi, 2002; Kalmijn, 1996; Waters, 1999). The legacy of slavery and discrimination in the United States continues to cast a dark shadow over African Americans.

Highly educated individuals are much more likely than their less educated counterparts to intermarry (Kalmijn, 1991; Mare, 1991; Qian, 1997). The same is true for African Americans. Highly educated Blacks are more likely to be married to Whites than are their less educated counterparts (Qian, 1997). Although Blacks today from Africa, the West Indies, Puerto Rico, and other areas face cultural barriers (e.g., language, religion, kinship), their educational advantage as a result of selective migration is likely to promote their interracial marriage with Whites. Yet, they are far less likely to out-marry than other highly educated racial minorities (Qian & Lichter, 2001). Race is clearly part of the explanation. In fact, the intermarriage patterns of racial minority immigrants are more similar to their native-born counterparts than to other minority immigrants.

Few studies have considered the diversity of intermarriage among America's Black populations. Model and Fisher's (2001) study is an exception. They find that unions between West Indians and Whites occurred more frequently than unions between African Americans and Whites. In fact, race relations appeared to be "warmer" between West Indians and Whites than between African Americans and Whites. West Indians often kept their accent and emphasized other cultural cues that distinguished them from African Americans (Model & Fisher, 2002). The ethnographic study of West Indians by Waters (1999) draws much the same conclusion: West Indians typically were more comfortable with Whites and less affected by racial stigma. Like West Indians, African Blacks emphasized their foreign origins in their daily interactions with other minorities and Whites; they sought to separate themselves culturally from their native-born counterparts (Waters, 1994). West Indians and Africans may also be more receptive than native-born Blacks to interracial marriage with Whites. Whether any warm feelings between Black immigrants and Whites have translated into more interracial marriage is unclear. Indeed, as a barrier to marriage with Whites, skin color may trump most other cultural or social factors.

Puerto Ricans are least likely among Latinos to marry Whites and most likely to marry African Americans (Qian & Cobas, 2004). Their marriage patterns and family structure more closely resemble those of African Americans than those of other Latinos (Lichter & Qian, 2004). Puerto Ricans, as U.S. citizens, are racially diverse. Puerto Rican non-Whites have experienced clear socioeconomic disadvantages and residential segregation, patterns that are similar to those experienced by African Americans (Bean & Tienda, 1987; Chiswick & Sullivan, 1995; Landale & Tolnay, 1991). Whereas most Latino groups experience greater social distance from Blacks than from non-Hispanic Whites (Rosenfeld, 2002), the reverse is true among Puerto Rican non-Whites. Puerto Rican non-Whites have marriage patterns with Whites that are most similar to those of African Americans.

# Intraracial Marriages Among Blacks

Most studies of intermarriage have focused on marriages between Blacks and Whites. But social, cultural, and economic barriers to marriage may also exist between native-born African Americans and other Black populations. Many Black immigrants, for example, have come to America seeking educational and occupational opportunities and freedoms denied to them back home. West Indian, Jamaican, or other immigrant Blacks in New York do not identify strongly with the history of racial oppression and discrimination experienced by native-born African Americans. Indeed, Waters (1999) claims that Black immigrants often see themselves as "superior" to native Blacks and are sometimes critical of values and behaviors that seem outside the cultural mainstream (e.g., sexual permissiveness, out-ofwedlock childbearing, and oppositional behavior). For example, West Indians often believe that interpersonal interaction, intermarriage, and assimilation with their Black American counterparts are routes to downward mobility (Waters, 1999). The implication is clear: Cultural differences between newer Black groups and African Americans are significant and represent potential barriers to intraracial marriage.

One expectation is that intermarriage between native and immigrant Blacks may be less common than intermarriages involving the various immigrant Black populations. Alternatively, shared skin color can lead to shared experiences with native-born African Americans, such as living in the same neighborhoods, working the same jobs, or attending the same public schools. Because propinquity and shared experiences often promote intermarriage, intraracial marriage among Blacks may be more common than interracial marriage with Whites. Indeed, second-generation children of newer Black groups may have common early childhood experiences with African American children and, as a result, have difficulty separating themselves culturally from African Americans (Waters, 1999).

Immigrants overall are more likely to marry immigrants of the same national origin than natives or other immigrants of the same race. Studies on Asian American marriage patterns have found that immigrants are unlikely to cross national origin boundaries to marry other Asian immigrants (Qian, Blair, & Ruf, 2001). Latinos exhibit similar patterns, although racial barriers remain strong (Qian & Cobas, 2004). Similarly, Kulczycki and Lobo (2002) showed that nativity plays an important role in Arab American intermarriage patterns. The substantive implication from observed marriage patterns of Asians, Latinos, and Arabs is that Black immigrants also may be unwilling to cross national origin boundaries. The acculturation process may start with marriages between fellow immigrants of the same national origin and the same race, followed by marriages with their native-born counterparts, and eventually with Whites.

# Gender Differences in Black Intermarriage With Whites

Black-White interracial marriages typically involve Black men and White women (Kalmijn, 1993; Monahan, 1976; Qian, 1997). Indeed, the 2000 census indicated that 26% of Black-White couples included Black women (Lichter & Qian, 2004). To explain this large gender difference, Merton (1941) applied status-caste exchange theory, arguing that African American men of higher socioeconomic but "lower" racial status can exact an exchange from White women of lower socioeconomic but "higher" racial status. Rosenfeld (2005, p. 1318) casts doubt on status-caste exchange theory and argues that any educational advantage of intermarried Blacks over their White spouses is "weak but distinct." Most interracially married couples in fact have the same levels of educational attainment (Qian, 1997; Rosenfeld, 2005).

Do the gender differences similarly exist among other culturally distinct Black populations? Data from the General Social Survey show that Whites' anti-Black feelings and attitudes toward immigrant Blacks are similar, if not worse, than those held toward native-born African Americans (Model & Fisher, 2001). Furthermore, throughout Europe and the West, fair skin tone has long been perceived as a desirable feminine characteristic. Black Americans evidently share these perceptions. Hill (2002) found that Black interviewers participating in a national survey of African Americans rated Black women interviewees with lighter skin as more attractive than those with darker skin. Skin tone is less often used to evaluate attractiveness of Black men. As a result, our analyses are likely to reveal similar patterns of gender differences in interracial marriage among America's new Black groups as in the Black population generally.

#### THE CURRENT STUDY AND HYPOTHESES

Most previous research has ignored the growing cultural and economic diversity of Blacks in America. Our primary goal is to document recent patterns of intermarriage among Whites and America's diverse Black populations. Although we seek to uncover whether Black immigrant assimilation is proceeding in the form of intermarriage with Whites, we also highlight patterns of intraracial marriage among different groups of Blacks. In addition, we examine, for the first time, patterns of cohabitation among these diverse groups. Cohabitation is less formal than marriage, often short-lived, and typically involves fewer close ties between families and friends and no childbearing plans (Bumpass, Sweet, & Cherlin, 1991). Interracial and intraracial couples may therefore be more likely to opt for cohabitation than for marriage compared to other couples.

Based on the preceding discussion, our analyses are guided by the following hypotheses:

- West Indians and Africans will be more likely than African Americans and Puerto Rican non-Whites to form interracial unions with Whites.
- 2. Intraracial unions among different Black populations will be uncommon but more likely than unions between any of these groups and Whites.

 Most interracial unions will involve White women and Black men, regardless of national origin.

### METHOD

#### Data

This paper uses combined data from the 5% and 1% PUMS of the 2000 U.S. Census. Given spatial differences in marriage market conditions (Harris & Ono, 2005), we limit our analyses to distinct geographical areas with large and diverse Black populations, that is, places where opportunities for interracial and intraracial contact are comparatively abundant. Specifically, we identify six metropolitan areas with high concentrations of African Americans, West Indians, Africans, and Puerto Ricans. They are Atlanta, Boston, Chicago, Los Angeles, New York City, and Washington, DC.

Our sample includes all married and cohabiting individuals aged 20-35. The census does not provide information on date of marriage. By restricting our sample to young adults, however, our sample includes mostly first marriages and marriages of short duration (Qian & Lichter, 2001). This reduces potential selection biases associated with divorce and remarriage. Our sample is restricted to all currently married or cohabiting couples in which one of the spouses/partners is a householder. We exclude immigrants who came after age 20 to minimize marriages con-

tracted overseas (Qian & Lichter). The resulting sample includes 62,040 married or cohabiting couples.

For our purposes, we consider African Americans, West Indians, African Blacks, and Puerto Rican non-Whites. African Americans are defined as non-Hispanic native-born Blacks. Although it is ideal to introduce nativity status to examine newer Black groups, small sample sizes do not allow us to further classify these groups by nativity. Table 1 presents educational attainment, union type, and nativity status for the four groups in our study.

Persons are considered West Indian if they are non-Hispanic Black and reported a birthplace in one of the West Indian census classifications or are native born but reported at least one West Indian ancestor. We also include people with Guyanese ancestry (or birthplace) in our West Indian sample. Over three fourths of West Indians (83.3% for men and 80.8% for women) are foreign born, with nearly half reporting Jamaica, Haiti, or Trinidad as their birthplace. Nearly one quarter of West Indian men (23.0%) and slightly more West Indian women (26.9%) have at least a college degree. Roughly three quarters of West Indians are in marital unions, whereas the other quarter are in cohabiting relationships.

Africans are defined here as non-Hispanic Blacks who were either born in one of 70 African countries or native born but reported at least one African ancestor. Over half of Africans are

Table 1. Descriptive Statistics for African American, West Indian, African, and Puerto Rican Men and Women	ı,
$Aged\ 20 - 35,2000$	

			Men			W	omen	
	African American	West Indian	African	Puerto Rican Non-White	African American	West Indian	African	Puerto Rican Non-White
Education (%)								
Less than high school	12.9	12.7	9.6	29.1	10.0	11.4	13.3	22.9
High school	31.8	29.7	24.0	38.1	24.1	22.8	28.5	29.4
Some college	36.3	34.6	33.7	25.0	41.6	38.9	32.9	36.7
College and above	19.0	23.0	32.6	7.7	24.3	26.9	25.4	11.0
Union type (%)								
Married	70.6	77.2	78.3	67.1	71.3	77.0	77.9	66.8
Cohabiting	29.4	22.8	21.8	32.9	28.7	23.0	22.1	33.3
Nativity status (%)								
Native born	100.0	16.8	38.4	69.2	100.0	19.2	43.4	74.0
Foreign born	0.0	83.3	61.6	30.8	0.0	80.8	56.6	26.0
n	9687	1095	802	1164	9406	1052	702	1217

foreign born (61.6% for men and 56.6% for women), with more than one quarter reporting Nigeria, Ghana, or Ethiopia as their birthplace. Although African refugees seem more visible in the United States than other Africans, the share of all refugees and asylees granted lawful permanent residence between 1991 and 2000 was only 5.1% (Arthur, 2000; U.S. Department of Homeland Security, 2005). The refugee population is likely to be underrepresented in our sample because we only select several metropolitan areas. Africans in these areas exhibit the highest levels of educational attainment among the Black populations considered in our study. Compared with other Black populations, Africans tend to be married rather than cohabiting.

Finally, Puerto Rican non-Whites are defined as having a Puerto Rican origin and identified as either Black or *other race*. The majority of Puerto Rican non-Whites reported their race as other. They are mostly mulatto but do not self-identify as Black (Rodriguez, 2000). Puerto Rican non-Whites in our sample are mostly mainland born but have the lowest levels of education. Only about one tenth of them have a college degree or more, compared to 20% – 30% among other Black populations. Of the populations considered here, Puerto Rican non-Whites are most likely to be in a cohabiting union (32.9% for men and 33.3% for women).

Log-linear analyses are the statistical method of choice in most studies of intermarriage across religious, racial and ethnic, and educational boundaries (Blackwell & Lichter, 2000; Kalmijn, 1991; Pagnini & Morgan, 1990; Qian, 1997). These models describe patterns of association in cross-classified data of characteristics of partners (e.g., husband's race by wife's race). The chief advantage of log-linear models is that differences across groups in the marginal distributions of spouses' characteristics (e.g., education) can be controlled. Along with race, origin group, and gender, we include education (high school or less and at least some college), union type (marriage or cohabitation), and metropolitan area (six areas mentioned above) in our models. Our cross-tabulation of husbands and wives has a total of 1,200 cells (5 race/origin-group categories for men  $\times$  2 education categories for men × 5 race/origingroup categories for women  $\times$  2 education categories for women  $\times$  2 union types  $\times$  6 metropolitan areas). We fit several models in an effort to find the ones that generated cell counts that best fit the observed data and that concisely summarized comparative patterns of interracial and intraracial marriage and cohabitation among Blacks.

#### **RESULTS**

Table 2 presents the percentage of interracial and intraracial marriages and cohabitations by educational attainment in 2000. Overall, the percentages of interracial marriage with Whites differ by population subgroup, gender, and educational attainment. Puerto Rican men and women have the highest percentages of intermarriage with Whites, followed by African Americans. Although West Indians have the lowest percentages of intermarriage with Whites, they have the highest percentages of intermarriage with African Americans. Africans also have comparatively high levels of marriage with African Americans (compared with percentages with Whites). Thus, West Indians and Africans marry African Americans much more frequently than they marry Whites. Similar patterns across groups are observed for cohabiting couples. In addition, the share of interracial and intraracial cohabitation is disproportionately large in comparison to interracial and intraracial marriage.

Percentages of racial intermarriage are higher for men than for women. As in previous research, interracial unions between Black men and White women are more likely than unions between Black women and White men. Significantly, gender differences in interracial marriage for other Black groups follow the same patterns as those for African Americans. The prevalence of interracial marriage with Whites increases with educational attainment for all groups. For example, 7.6% of West Indian men with some college or more are married to a White woman, whereas fewer than 3% of less educated West Indian men have a White spouse.

The results in Table 2, however, are potentially confounded by group differences in population size, education levels, and gender ratio imbalances (Qian, 1997). We therefore estimate loglinear models to describe the extent of interracial and intraracial union formation (marriage and cohabitation) when the marginal distributions by group and educational attainment are controlled. Our goals are to examine associations between men and women by group, educational attainment, and union type for each metropolitan area, controlling for differences in population

Table 2. Percentage of Interracial and Intraracial Married and Cohabiting Individuals by Education, Aged 20 - 35, 2000

Partner's Race

			Married						Cohabiting			
	White	African American	West Indian	African	Puerto Rican Non-White	N	White	African American	West Indian	African	Puerto Rican Non-White	×
Men												
Willie High school or less	98 58	960	80 0	900	0.32	11090	06.87	23	0.05	0.18	0.64	2172
More than high school	98.71	1.0	0.1	90:0	0.15	32297	97.02	2.28	0.2	0.13	0.38	5564
African American												
High school or less	8.13	8.98	2.58	1.37	1.13	2484	7.9	85.7	2.7	1.3	2.4	1488
More than high school	11.1	83.3	3.1	1.1	1.3	3761	14.6	76.8	4.4	1.8	2.4	1115
West Indian												
High school or less	2.28	21.7	73.5	1.14	1.42	351	5.2	29.1	60.5	1.5	3.7	134
More than high school	7.6	24.0	65.4	2.1	1.0	529	16.5	27.6	49.6	1.6	4.7	127
African												
High school or less	5.0	15.0	3.3	76.1	9.0	180	9.2	22.4	4.0	63.2	1.3	92
More than high school	5.8	23.3	4.8	65.4	0.7	416	20.2	22.5	4.5	51.7	1.1	68
Puerto Rican non-White												
High school or less	10.0	4.0	0.0	0.4	85.6	499	11.8	7.3	0.4	0.0	9.08	289
More than high school	14.5	9.9	3.1	0.4	75.4	289	20.8	10.4	4.2	2.1	62.5	96
Women												
White												
High school or less	97.45	2.0	0.06	0.09	0.35	9694	92.7	5.2	0.5	0.3	1.3	1879
More than high school	98.39	1.2	0.12	0.07	0.17	33913	6.56	3.0	0.3	0.3	0.5	6010
African American												
High school or less	4.8	90.2	2.7	1.6	8.0	1827	4.5	90.1	2.9	1.0	2	1105
More than high school	7.9	85.7	3.6	2.2	9.0	4249	9.4	84.5	3.1	1.9	1.0	1344
West Indian												
High school or less	2.4	16.9	77.6	2.1	1.0	290	2.2	21.5	73.1	2.2	1.1	93
More than high school	6.1	23.1	66.3	3.5	1.1	572	6.1	42.1	46.3	3.1	2.4	164
African												
High school or less	2.4	11.3	6.0	84.0	1.4	212	2.7	24.7	1.4	71.2	0.0	73
More than high school	6.9	16.6	4.1	72.4	0.0	319	11.5	28.2	3.9	53.9	2.6	78
Puerto Rican non-White												
High school or less	8.9	8.5	1.3	0.3	83.2	399	6.7	12.5	2.1	9.4	78.3	240
More than high school	13.3	10.5	1.2	0.7	74.4	421	11.6	20.1	3.7	9.0	64.0	164

size for each group and category. That is, we take into account marginal distributions of origin group, educational attainment, union type, metropolitan area, and their two- to four-way interactions for husbands and wives.

Table 3 presents the likelihood ratios and Bayesian information criterion (BIC) statistics for the selected models. We start with the baseline model. Model 1 is the baseline model:

$$\begin{split} \log F_{\mathit{ijmnuc}} &= \beta_0 + \beta_i^{\mathrm{HR}} + \beta_j^{\mathrm{WR}} + \beta_m^{\mathrm{HE}} + \beta_n^{\mathrm{WE}} \\ &+ \beta_u^{\mathrm{U}} + \beta_c^{\mathrm{C}} + \beta_{\mathit{imuc}}^{\mathrm{HREUC}} + \beta_{\mathit{jnuc}}^{\mathrm{WREUC}} \end{split}$$

where  $F_{ijmnuc}$  is the expected number of marriages (or cohabiting relationships) between men in race and ethnicity i, and education m, and women in race and ethnicity j, education n, in union type u and in metropolitan area c;  $\beta_0$  is the constant;  $\beta_i^{HR}(\beta_j^{WR})$  denotes husbands' (wives') race and ethnicity (i or j = non-LatinoWhite, African American, West Indian, African, and Puerto Rican non-White);  $\beta_m^{\text{HE}}$  ( $\beta_n^{\text{WE}}$ ) denotes husbands' (wives') education (m = high school or less and n = at least some)college). In addition to controlling for marginal distributions of these characteristics, we account for the interactions between race and ethnicity, education, union type, and metropolitan area for men and women, respectively  $\beta_{jnuc}^{WREUC}$ ), and their lower order interactions. As shown in Model 1, both the log-likelihood ratio and BIC statistic are large, indicating that associations in the table are not captured.

Model 2 adds in the model interracial and intraracial parameters (quasi symmetry parameters with the assumption of no gender differences). The decline in the ratio and BIC statistic suggests improvement in model fit compared to Model 1. We further examine two-way interactions between interunion (interracial and intraracial) and educational homogamy (Model 3), between interunion and union type (Model 4), and between interunion and metropolitan area (Model 5). The model fit for each of the three models has improved dramatically. The BIC statistic, which adjusts the log-likelihood ratio for sample size, is negative for all these models, indicating these models to be preferred compared to the saturated model (Raftery, 1986). Finally, Model 6 examines a four-way interaction between interunion, educational homogamy, union type, and metropolitan area as well as their lower order interactions. The BIC statistic for Model 6 is greater than those for Models 3, 4, and 5. This result indicates that the model fit for two-way interaction models (Models 3, 4, and 5) is better and more parsimonious than the model fit for Model 6. As a result, we present the findings from the preferred models (Models 3, 4, and 5), which uncover differences in interunion by educational combination, union type, and metropolitan area separately.

To ease interpretation, we transform the estimates of interracial and intraracial parameters into endogamy odds ratios (Fu, 2001; Lieberson & Waters, 1988; Rosenfeld, 2002). Endogamy odds ratios measure the likelihood of marriage

Table 3. Log-Linear Models	of Racial and Ethnic Assortative M	Mating for Couples Age	d 20 - 35.2000 (N = 62.040)

Models	df	Log-Likelihood Ratio	BIC
Model 1: Metropolitan Area × Union Type × Husband's	972	61,564	50,838
Race × Husbands' Education + Metropolitan Area ×			
Union Type × Wife's Race × Wife's Education			
Model 2: Model 1 + Interracial and Intraracial Parameters	962	12,800	2,183
Model 3: Model 1 + Interracial and Intraracial Parameters ×	951	1,499	-9,046
Education Homogamy			
Model 4: Model 1 + Interracial and Intraracial Parameters $\times$	951	1,266	-9,229
Union Type			
Model 5: Model 1 + Interracial and Intraracial Parameters $\times$	911	1,022	-9,031
Metropolitan Area			
Model 6: Model 1 + Interracial and Intraracial Parameters $\times$	720	634	-7,312
Education Homogamy $\times$ Union Type $\times$ Metropolitan Area			

*Note:* Each four-way interaction term includes main effects and two- and three-way interactions. The two-way interaction term includes the main effects.

or cohabitation between each pair of the groups. For example, the odds ratio of marriage between West Indians (I) and Whites (W) can be expressed as follows:

$$\theta = \frac{II \times WW}{IW \times WI} = \frac{\frac{II}{IW}}{\frac{WI}{WW}}$$

where  $\theta$  is the odds ratio, II is the expected marriage count between West Indians, WW is the expected marriage count between Whites, IW is the expected marriage count between West Indian men and White women, and WI is the expected marriage count between White men and West Indian women. The last part of the equation provides substantive meaning to the odds ratio. The odds ratio is simply defined as the ratio of the odds of West Indians marrying West Indians rather than Whites over the odds of Whites marrying West Indians rather than Whites. Often called endogamy ratios (Blackwell & Lichter, 2000; Fu, 2001), an odds ratio of 1 means that there is no group boundary between West Indians and Whites; each group is equally likely to marry outside the group as inside the group. Obviously, a larger odds ratio indicates more rigid barriers or greater social distance between the two groups.

Table 4 presents the odds ratios of interracial and intraracial unions by educational combination (from Model 3) and union type (from Model 4). Although African Americans are much less likely to marry Whites than Hispanics and Asian Americans (Qian & Lichter, 2001), they nevertheless are more likely to marry Whites than are West Indians, Africans, and Puerto Rican non-Whites. As shown in Column 3, the odds ratio of endogamy versus a union with Whites is lowest for African Americans (618.93), followed by for Puerto Ricans (1553.09), West Indians (4582.50), and Africans (7361.36). Clearly, group boundaries between the two newer groups (West Indians and Africans) and Whites are defined in terms of marriage and cohabitation.

Among West Indians, Africans, and Puerto Rican non-Whites, intraracial unions with African Americans are much more common than interracial unions with Whites. The odds ratio of endogamy versus a union with African Americans for West Indians, Africans, and Puerto Rican non-Whites is 42.44, 180.19, and 292.95, respectively. These ratios are much smaller compared to the odds ratio of endogamy versus unions with Whites. Clearly, social distance of

newer Black groups from African Americans is narrower than that from Whites. Perhaps surprisingly, Puerto Rican non-Whites are much less likely than West Indians and Africans to form unions with African Americans. Availability of eligible Puerto Rican partners for marriage and cohabitation may be more abundant for Puerto Ricans because of their citizen status and easy travel between the mainland and Puerto Rico (Landale, 1994).

In Table 4, Columns 4 and 5 present odds ratios by educational combinations of married and cohabiting partners. The results in Column 4—the endogamy odds ratio for couples in which both have no college education or one spouse has at least some college and the other spouse does not-represent the main effects in the model. They are all statistically significant at conventional levels. Significance test results shown in Column 5 are relative to the results shown in Column 4. Most of the odds ratios for couples in which both have at least some college shown in Column 5 are not significantly different from those in Column 4. Origin group evidently trumps educational attainment in intermarriage patterns. Only highly educated African Americans have significantly lower endogamy odds ratio (545.66) than their less educated counterparts (699.24).

We turn next to differences in interracial and intraracial unions by union type: married or cohabiting couples. For each Black population, the marital endogamy ratios shown in Column 7 are significantly larger than those for cohabitation in Column 6 of Table 4. In a word, marital unions are more likely than cohabiting unions to involve same-race partners. Marriage-cohabitation differences in these endogamy odds ratios are especially large for interracial relationships with Whites. For example, the endogamy ratio among West Indians who are cohabiting with other West Indians versus Whites was 1,128, a large figure but relatively small when compared with the corresponding endogamy ratio of 7,435 for marriage. Clearly, out-marriage—even from one Black population to another—occurs far less frequently than interracial cohabitation.

Our log-linear results reveal large geographic differences in the likelihood of interracial unions (Model 5). Table 5 displays the odds ratios for Atlanta, Boston, Chicago, Los Angeles, and Washington, DC. The odds ratios for Atlanta are the main effects, all of which are significant. The significance test results for other metropolitan areas

Table 4. Odds Ratios of Interunion by Education and Union Type for Couples Aged  $20 - 35,2000 \, (N = 62,040)$ 

	Odds Ratios		All Couples	Education	и	Union Type	Type
Odds 1		Odds 2	ю	Low Eduation (One or Both) 4	Both High Education 5	Cohabiting 6	Married 7
West Indians in union with West Indians rather than Whites	Versus	Whites in union with West Indians rather than Whites	4582.50***	5044.23***	4264.16	1127.77**	7435.34^^^^
West Indians in union with West Indians rather than African Americans	Versus	African Americans in union with West Indians rather than African Americans	42.44	47.66***	37.56	30.20**	47.75^
West Indians in union with West Indians rather than Africans	Versus	Africans in union with West Indians rather than Africans	148.71***	115.82***	199.54	45.24**	229.98^^^^
West Indians in union with West Indians rather than Puerto Ricans	Versus	Puerto Ricans in union with West Indians rather than Puerto Ricans	459.44***	467.78***	459.44	121.51**	972.63^^^
Africans in union with Africans rather than Whites	Versus	Whites in union with Africans rather than Whites	7361.36***	5177.10***	9916.94	1187.97**	15063.05^^^^
Africans in union with Africans rather than African Americans	Versus	African Americans in union with Africans rather than African Americans	180.19***	190.19***	171.74	112.84**	211.03^
Africans in union with Africans rather than Puerto Ricans	Versus	Puerto Ricans in union with Africans rather than Puerto Ricans	430.95***	302.48***	864.37	98.30**	968.74^^^^
Puerto Ricans in union with Puerto Ricans rather than Whites	Versus	Whites in union with Puerto Ricans rather than Whites	1553.09***	1116.55***	2565.73^^^	518.01**	2455.29^^^^
Puerto Ricans in union with Puerto Ricans rather than African Americans	Versus	African Americans in union with Puerto Ricans rather than African Americans	292.95***	270.97***	352.83	128.25**	484.93^^^^
African Americans in union with African Americans rather than Whites	Versus	Whites in union with African Americans rather than Whites	618.93***	699.24***	545.66^	277.00**	783.68^^^

\*p<.05. \*\*p<.01. \*\*\*p<.01. (main effect). ^\triangleroonup <.05. \(^\triangleroonup <.01. \(^\triangleroonup <.01 \) (statistically different from main effect).

Table 5. Odds Ratios of Interunion by Metropolitan Area for Couples Aged  $20-35,2000 \, (N=62,040)$ 

	Odds Ratios				Metrol	Metropolitan Area		
Odds 1		Odds 2	Atlanta 3	Boston 4	Chicago 5	Washington DC 6	Los Angeles 7	New York 8
West Indians in union with West Indians rather than Whites	Versus	Whites in union with West Indians rather than Whites	12506.45***	5955.08	5825.50	2079.74^	525.32^^^	5779.08
West Indians in union with West Indians rather than African Americans	Versus	African Americans in union with West Indians rather than African Americans	59.98***	26.21	54.82	40.04	43.38	36.97
West Indians in union with West Indians rather than Africans	Versus	Africans in union with West Indians rather than Africans	160.45***	64.97	34.19	130.06	23.86^	312.31
West Indians in union with West Indians rather than Puerto Ricans	Versus	Puerto Ricans in union with West Indians rather than Puerto Ricans	36.02***	113.75	60.46	38.02	6.28	1600.39^^^^
Africans in union with Africans rather than Whites	Versus	Whites in union with Africans rather than Whites	9063.4**	2489.91	12406.80	6075.38	2067.3^	19850.81
Africans in union with Africans rather than African Americans	Versus	African Americans in union with Africans rather than African Americans	217.02***	39.65^^	213.58	217.46	73.7^	255.19
Africans in union with Africans rather than Puerto Ricans	Versus	Puerto Ricans in union with Africans rather than Puerto Ricans	67.36***	54.93	266.67	147.53	31.12	3146.36^^^
Puerto Ricans in union with Puerto Ricans rather than Whites	Versus	Whites in union with Puerto Ricans rather than Whites	1276.66***	1543.80	3435.78	531.66	377.66	1692.56
Puerto Ricans in union with Puerto Ricans rather than African Americans	Versus	African Americans in union with Puerto Ricans rather than African Americans	335.63***	106.70	1516.26^	350.05	170.37	212.72
African Americans in union with African Americans rather than Whites	Versus	Whites in union with African Americans rather than Whites	1848.26***	224.98^^^	1028.65^^^	373.9^^^	157.28^^^	1121.03^

\*p < .05. \*\*p < .01. \*\*\*p < .001 (main effect).  $p < .05. ^{\wedge \wedge} p < .01. ^{\wedge \wedge \wedge} p < .001$  (statistically different from main effect).

show whether the odds ratio for a given metropolitan area is significantly different from that for Atlanta. Endogamy ratios are relatively high for each group in Atlanta. Los Angeles represents the other end of the spectrum. For West Indians, for example, the endogamy ratio (relative to out-marriage to Whites) was 12,506 in Atlanta but only 525 in Los Angeles. Similarly, for African Americans, the odds ratios of an intraracial union rather than an interracial union with Whites also differ significantly across metropolitan areas. Such results beg for possible interpretations (e.g., differences in racial acceptance or exposure across cities). At a minimum, they reinforce the conclusion of Harris and Ono (2005) that national research studies on racial intermarriage must acknowledge that marriage market opportunities are often locally constrained rather than national in scope.

Finally, we conclude with analyses of gender differences in interracial marriage for each of the Black populations considered in this paper. Table 6 presents the ratio of the predicted number of Black men/White women couples to the predicted number of White men/Black women couples based on the asymmetry models. The figures shown in Table 6 are derived from the exponents of the difference between the parameter estimates for White men/Black women unions and for Black men/White women unions. A ratio of 1 indicates no gender difference in interracial marriage. A ratio above 1 indicates that interracial unions are more likely to involve Black men and White women rather than White men and Black women.

Table 6 shows that unions with Whites are more likely to involve Black men and White women than White men and Black women. With

few exceptions, this is true for each Black population and for different levels of education and union type. For example, among highly educated couples, gender differences in interracial union with Whites are the strongest among West Indians (1.42). In other words, West Indian men are about 42% more likely to form unions with White women than are West Indian women with White men. Clearly, our results reinforce the fact that even among interracial unions involving Black immigrants, Black man/White woman couples outnumber White man/Black woman couples.

#### **CONCLUSION**

Although the Black share of the U.S. population has remained steady over the past several decades at about 12%, it has become more ethnically diverse. New immigration from the West Indies, Africa, and Puerto Rico are largely responsible. Both culturally and economically, America's newer Black immigrants are considerably different from the native-born African American population. Yet, this basic demographic fact is too often overlooked; indeed, most previous studies of Black-White patterns of intermarriage treat the U.S. Black population as a monolith. The primary goal of our study, using data from the 2000 census, has been to acknowledge the diversity in America's Black populations, while highlighting emerging patterns of marriage and cohabitation with Whites as well as with other Black subpopulations. Because residential patterns of various Black populations are different, our analysis of six major metropolitan areas with high concentrations of Black populations may have limited generality. Nevertheless, our results highlight the

Table 6. Ratio of the Predicted Number of Black Men/White Women Couples to the Predicted Number of White Men/Black Women Couples by Educational Combination and Union Type, 2000 (N = 62,040)

	Ratio of Black Men/Wh	nite Women Couples to	o White Men/Blac	ck Women Couples
•	African American	West Indian	African	Puerto Rican
Total	1.51	1.22	1.33	1.27
Education				
Both or one less than some college	2.12	0.99	1.30	1.43
Both at least some college	1.20	1.42	1.36	0.99
Union type				
Cohabiting	1.57	1.56	1.58	1.48
Married	1.48	1.07	1.19	1.14

importance of understanding the diversity among America's Black populations.

Contrary to our first hypothesis, our analysis showed that members of new Black immigrant groups, despite higher levels of education (especially among Africans and West Indians), are much less likely than native African Americans to form marital and cohabiting unions with Whites. A disproportionate share of Blacks, regardless of national origin, are likely to cohabit with other groups than to out-marry. Clearly, if intermarriage is our measure, social distance between Whites and all groups of Blacks is wide in the United States. At the same time, education opens the door of opportunity for greater interracial contact, friendship, romance, and marriage. But any effect of more education is largely restricted to U.S.-born Blacks. Clearly, in the case of immigrant Blacks, culture may trump education in the marriage market with Whites.

Our results reinforce results from previous studies showing that African Americans have low rates of interracial marriage in comparison with other racial minorities (Fu, 2001; Qian & Lichter, 2001). Consistent with our second hypothesis, however, we also found that the prevalence of intermarriage between African Americans and Whites is far exceeded (on a percentage basis) by intraracial union formation between African Americans and each immigrant Black group considered here. In a word, African Americans are more likely to marry or cohabit with other nonnative Blacks than Whites. We should not, however, exaggerate current rates of intraracial marriage among Blacks. Intraracial unions between African Americans and Black immigrants remain surprisingly low.

Our results also demonstrate a distinct relationship between gender and race among interracial couples. Indeed, consistent with our third hypothesis, Black men are more likely to be involved in interracial unions than Black women. This is true for African Americans, West Indians, and Puerto Ricans. We showed that newer Black populations are similar to African Americans in observed gender differences in interracial marriage: Interracial couples are likely to consist of a Black man and White woman. This pattern exists in marital and cohabiting unions and regardless of level of education.

Finally, our results overall provide preliminary support for a model of marital assimilation along the color line, although long-term patterns may ultimately depend on evolving patterns of

economic and cultural incorporation. Marital patterns are sure to change as first-generation Black immigrants are succeeded by their second-generation offspring, many of whom have adopted American cultural values and lifestyles. As the immigrant Black population takes root in America, it will be more important than ever to acknowledge their ethnic diversity and their potentially divergent trajectories toward full incorporation into American society.

#### NOTE

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