The Racial Identification of Biracial Children with One Asian Parent: Evidence from the 1990 Census*

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Abstract

This article examines the socioeconomic and demographic correlates that are associated with whether biracial children with an Asian parent are racially identified with their Asian parent or with their non-Asian parent. With data extracted from the 5-percent Public Use Microdata Sample (PUMS) of the 1990 census, we take into account explanatory variables at three levels: the child's characteristics, the parents' characteristics, and the locale's racial composition. Our results indicate that the racial identification of biracial children with an Asian parent is to a large extent an arbitrary option within today's prevailing racial classification scheme. We find empirical evidence in support of the theoretical proposition that both assimilation and awareness of Asian heritage affect the racial identification of biracial children with an Asian parent.

Asian Americans are the fastest-growing minority in the United States, and most of their growth is attributed to immigrants and their children (Barringer, Gardner & Levin 1993; Kitano & Daniels 1988; Robey 1985). Further, Asian Americans experience the highest outmarriage rates among all racial and ethnic groups in the country (Kitano et al. 1984). According to our conservative estimation, about half a million children under age 17 had one Asian parent and another non-Asian parent in 1990.[1] This number is nearly one fourth of the official estimate of the Asian American population in this age range, defined by self-identification regardless of their parents' racial characteristics (U.S. Bureau of the Census 1993).

Accurate estimation and projection of the Asian American population, then, require information about the racial identification of children born by an Asian

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parent and a non-Asian parent. How Asian American parents in intermarriages racially identify their children can greatly impact the Asian American population size presently and in the future. Since parents play a crucial role in socializing children to be aware of racial and ethnic differences (Alba 1990; Mass 1992; Salgado de Snyder & Padilla 1982; Waters 1990), we argue that parents' current racial designations for biracial children will greatly influence, if not definitively constrain, these children's own racial identifications in adulthood.[2]

Knowledge about the racial identification of children in intermarriages involving an Asian American not only provides valuable demographic information but also facilitates better understanding of assimilation processes of Asian immigrants. For example, the identification of biracial children with an Asian parent as non-Asian may signal the Asian parent's more complete assimilation into the great American "melting pot." Accompanying this fuller assimilation, however, is the concern that the identification of biracial children as non-Asian will reduce the size of the Asian American population in the United States and threaten the maintenance of Asian American cultural identities (Judd 1990; Mass 1992; Saenz et al. 1995). In contrast, the identification of these children as Asian should lead to a greater awareness of their Asian heritage and a higher likelihood of carrying on Asian languages, cultural values, and traditions. In short, in the presence of high outmarriage rates among Asian Americans, the racial identification of biracial children with an Asian parent directly impacts the future Asian American population.

Referring to the ethnic identification of children from interethnic marriages among whites, Hout and Goldstein (1994) aptly put it:

> In the world of ethnic options, intermarriage provides an opportunity to exercise one's options. For some ethnic groups, intermarriage thins out the ethnic heritage because few offspring of mixed marriages remember ancestors from that group. For other groups, intermarriage is a recruitment opportunity because the offspring of mixed marriages often think of themselves as part of that group, simplifying their mixed heritage with a single mention or expressing the sense that they "feel closer" to one group than to the other. (71)

In this article, we argue that the racial identification of biracial children with an Asian American parent is, similar to the above statement about ethnic identification, a matter of option. This is so in large part because the growth of the Asian American population and, concurrently, intermarriages involving Asian Americans are recent phenomena, in a time when racial attitudes towards minorities have become more tolerant (Schuman, Steeh & Bobo 1985), and social mobility through educational achievement has been high for Asian Americans (Xie 1993). In contrast to the Asian American case, America has had a long history of using the "one drop" rule to identify the offspring of black-white intermarriages. Due to the recency of the phenomenon and the associated opportunity for more

choice, the racial identification of children from interracial marriages involving an Asian American merits close attention.

Our study also draws from and contributes to the literature that considers ethnic identification to be an option based on social factors (Gans 1979; Hout & Goldstein 1994; Lieberson 1985; Okamura 1981; Waters 1996). While the extant literature is mostly concerned with *ethnic* identification, we consider a unique case of *racial* identification. In the absence of an established social norm and a multiracial category, intermarried couples involving an Asian American are often forced to choose one of the available racial categories for their biracial children. Significant occasions where this option is exercised include recent U.S. decennial censuses, which asked individuals to identify themselves or other household members as belonging to one race only (Farley 1991).[3]

In this article, we use a special file extracted from the 5-percent Public Use Microdata Sample (PUMS) of the 1990 census to examine the socioeconomic and demographic correlates that are associated with whether children of interracial marriages involving one Asian parent are racially identified with their Asian parent or with their non-Asian parent.[4] With information about these children, their parents, and their residential community matched at the most detailed level available in PUMS, we take into account explanatory variables at three levels: the child's characteristics, the parents' characteristics, and the locale's racial composition.

Theoretical Issues

FROM OPTIONAL ETHNICITY TO OPTIONAL RACE

Ethnic and racial identities shift over time and across a variety of situations (Alba 1990; Hout & Goldstein 1994; Lieberson 1985; Saenz & Aguirre 1991; Spickard 1992; Waters 1990). Okamura (1981) asserts that ethnicity can be seen as "situational;" that is, the contexts in which an individual acts affect how the individual defines herself or himself and how the individual is defined by others. Further, Gans (1979) contends that as groups become more upwardly mobile in the United States, they choose to maintain ethnic identities without necessarily participating in ethnic and cultural organizations. According to Gans, individuals may pick their ethnic identification without participating in ethnic communities, giving rise to what he terms *symbolic ethnicity.*

Waters (1990, 1996) warns, however, that ethnic identity is much less of a choice for racial minorities in the United States. While whites have more freedom to pick and choose ethnicities with which they identify themselves, "Black Americans, Hispanic Americans, Asian Americans, and American Indians do not have the option of a symbolic ethnicity at present in the United States" (1996:449). For members of racial minorities, social categories of race or national origin override the importance of ethnicity. Their "choice" is limited because their identity is constrained by racial

labels imposed by other members of the society or by custom. For example, the "one drop rule," a vestige of the slave-owning plantation system, defines as black any person who has even "one drop" of black blood.

It is generally understood that race refers to "distinctions drawn from physical appearance," whereas ethnicity refers to "distinctions based on national origin, language, religion, food — and other cultural markers" (Mittelberg & Waters 1992:425). By this definition, then, the "choice" of race is more limited than the "choice" of ethnicity, as "physical appearance" is more apparent and less malleable. However, as Waters (1990) points out, race, like ethnicity, is also socially structured and not biologically determined. Thus, it is possible that under special circumstances, racial identification, like ethnic identification, can also be optional. There are two major reasons why racial identification of children from intermarriages involving an Asian can be optional. First, physical appearance of these biracial children varies greatly. Second, given the variation in physical appearance, racial categorization of these children is largely a cognitive decision, a process subject to uncertainty and interpretation on the part of the children's families and the society at large.

The recent growth of the Asian American population and the high incidence of interracial marriages among Asian Americans raise the interesting question of whether children from such intermarriages have the option of being identified with either their Asian parent's race or with their non-Asian parent's race. In practice, the question often becomes one of how intermarried parents choose to racially identify their biracial children. Our thesis is that racial identity, like ethnic identity among whites, *is* optional for biracial children with an Asian American parent.

We hasten to emphasize that our extension of optional *ethnic* identity to optional *racial* identity pertains to a special case of biracial children with an Asian heritage. It is a special case for a number of reasons. First, the racial identification of biracial children with an Asian American parent did not become salient until recently due to the rapid growth of the Asian American population after the 1965 Immigration Act (Kitano & Daniels 1988); thus, there has not been a widely held view as to how to identify these children. The absence of traditional practice leaves room for exercising discretion. Second, racial attitudes toward minorities and particularly toward Asian Americans have become more tolerant (Davis & Smith 1994:349-69; Farley 1996; Schuman, Steeh & Bobo 1985). This trend of gradual racial tolerance may have weakened the traditional racial boundaries that have long separated whites from racial minorities in America. Third, Asian Americans occupy a unique dual position in American society: On the one hand they are a minority and subject to racial discrimination and prejudice; on the other hand, Asian Americans have achieved social status on par with the white majority (Barringer, Gardner & Levin 1993). This dual status of Asian Americans facilitates optional racial identity of the offspring of Asians and non-Asians because it serves to reduce the social distance of Asian Americans with whites as well as with other minorities. Finally, the case for Asian Americans is unique in that their racial identity is often

intrinsically linked with ethnic identity. For example, in the recent decennial censuses, from which data for our study and that of Saenz et al. (1995) were drawn, identification of Asian Americans was broken down into identification with specific Asian ethnicities (such as Japanese and Chinese). This close link between racial identification and ethnic identification among Asian Americans enables us to borrow the literature on ethnic options in the study of the racial identification of biracial children with an Asian parent.

EXISTING LITERATURE

Existing knowledge concerning the racial identification of biracial Asian Americans is rather limited. Some insightful studies are based on a particular group in a specific setting (i.e., Black-Japanese on army bases) and thus are not generalizable (Hall 1992; Root 1992; Stephan 1992; Williams 1992). The most ambitious effort so far is by Saenz et al. (1995), who conducted a study of the racial identification of children from Asian-white intermarriages using the 1980 PUMS data for the state of California. Our analysis follows the pioneering work of Saenz et al. (1995) and extends it in three important ways. First, we use the more recent PUMS data from the 1990 census. Second, our analysis is at the national level. Third, we include children not only from Asian-white intermarriages but also from all intermarriages with an Asian American spouse.

ASSIMILATION VS. ETHNIC COMPETITION

So far we have argued that biracial children with an Asian ancestry have the option to be identified as Asian or not. We have not, however, considered *how* children or their parents exercise this option. What factors influence the racial identification of biracial children with an Asian parent? To address the "how" question, we first turn to two dominant theoretical perspectives, assimilation and ethnic competition.

The assimilation perspective links the likelihood of identifying with the majority group to the degree of assimilation of the immigrant and minority groups. Here assimilation may be defined in terms of success of integration into mainstream American society. The assimilation perspective posits that as an individual becomes more successfully integrated into the mainstream, the individual will be less attached to his or her culture of origin and increasingly identified with more dominant groups, particularly whites. Two important dimensions of assimilation are (1) length since family's immigration to the U.S. and (2) socioeconomic status (SES). The first dimension, length, is commonly measured by immigration generation (Fitzpatrick & Hwang 1992; Hutnik 1986). According to this perspective, second-generation children, or children of immigrants, should be less likely to be identified as Asian by their parents than first-generation children, and, likewise, third-generation children less than second-generation children. The second dimension of family SES is well approximated by parental education. Thus, the "assimilation

hypothesis" consists of two components, a generation effect and an education effect. More specifically, the assimilation hypothesis predicts that the likelihood of Asian identification declines both with immigration generation and with educational attainment.

In contrast, the ethnic-competition perspective argues that minorities' ethnic awareness heightens as they enter into "mainstream" society (Hwang & Murdock 1991; Portes 1984). This leads to a prediction, opposite from that based on the assimilation perspective, that minorities face more conflict and competition the higher they move on the socioeconomic ladder. The heightened level of conflict and competition in turn enhances minorities' sense of ethnic identity. However, it is also possible that there are channels other than ethnic competition that could give rise to a positive association between education and Asian identity. For example, past research has shown that education is positively related to ethnic identity, although interpretations of this relationship are still unclear (Alba 1990; Lieberson 1985). Borrowing from the literature documenting a positive relationship between education and ethnic identity, we argue that education may serve to impart knowledge and awareness of racial and ethnic differences so that those who are more educated are more likely to identify their biracial children as Asian Americans.[5] We call this positive relationship between education and Asian identity the "awareness hypothesis."

Both the assimilation hypothesis and the awareness hypothesis contain a common variable, i.e., education, although the two hypotheses predict its effect in opposite directions. Mathematically, there is no easy way to uniquely identify the two effects in a linear equation. However, a closer examination of the two hypotheses reveals that they are not always contradictory. In this study, we devise a new way to test the relative validity of the two hypotheses using *interactions* between education and immigration generation.[6] We reason that, if the assimilation effect is significant, parental education should play a stronger role, i.e., have a more negative effect on Asian identity, for first- and second-generation children than for third- and higher-generation children. This is so because we presume the parents of third- and higher-generation children to already be assimilated and do not require education to facilitate assimilation. In contrast, if awareness is at work, we expect a stronger *positive* education effect for third- and higher-generation children than for first- and second-generation children. Recent immigrant families hardly need formal education to become aware of their own cultural roots.

CULTURAL AND STRUCTURAL FACTORS

Besides immigration generation and education, language use can also play a role in the racial identification of biracial children with an Asian parent. Saenz et al. (1995) find a positive effect of Asian-white children's use of a non-English language on the likelihood of Asian identification and interpret it as representing the influence of exposure to Asian culture. Language use by biracial children, however,

may not necessarily be a cause of racial identification, but more of a consequence. It is possible that parents who identify their children as Asian would make a conscious effort to teach them their native language. In this study, we tackle the problem differently by using the Asian *parent's* language use to represent children's exposure to native Asian culture.

Saenz et al.'s study also clearly documents substantial differences across diverse Asian ethnicities. For example, they report that children whose Asian parent is Chinese are far more likely to be identified as Asian than children whose Asian parent is of other ethnicities. However, interpretations of such ethnic differences are not straightforward. They are likely to be related to many factors in complicated ways, including the group's immigration history and the desirability of the ethnicity in question.[7] Lacking a solid understanding of ethnic differences, we take a conservative approach by acknowledging their existence and tentatively attributing their effects to a combination of the social, historical, and cultural factors that are specific to each ethnicity.

Saenz et al.'s study also highlights the importance of structural factors at the macrolevel. One such significant factor is the local concentration of Asian Americans within a geographic boundary. In areas where there are relatively more fellow Asians, Asian Americans appear more conspicuous as a distinct race, and this may lead to a higher likelihood of Asian identification. Similar to the awareness effect of education, the effect of the local concentration of Asian Americans may also interact with generation: close contact with other Asian Americans should matter more for third- and higher-generation children than for first- and second-generation children, because new immigrant families more readily recognize their distinctive Asian identity without exposure to many other Asian Americans.

THE FAMILY DYNAMICS PERSPECTIVE

As Alba (1990) points out, the family is an important site of ethnic and racial identification because cultural values and traditions are first learned and carried out in the home. Because of its central role, past research has examined the influence of the family on racial and ethnic identities (Alba 1990; Mass 1992; Salgado de Snyder & Padilla 1982; Waters 1990). However, most of the past efforts have treated the family as a harmonious place where values and traditions are transmitted, overlooking the fact that heterogamous married couples experience more marital conflict than more homogamous marriages (Jorgensen & Klein 1979; Rogler & Procidano 1989; Tzeng 1992). Although intermarried couples tend to be homogamous in other ways (e.g., educationally and socioeconomically), racial differences may introduce additional conflict into marriages (Blau, Blum & Schwartz 1982; Blau & Schwartz 1984). One such struggle may be over how a child

produced by an interracial union should be racially identified. Conflict could arise over the question of whether the child should take the mother's or the father's race.

We argue that the family should be viewed as a site of struggle and compromise, where a child's racial and/or ethnic identification must be negotiated between both parents (when the child is young) and children and parents (when the child becomes older). For families with an Asian parent and a non-Asian parent, the potential for conflict and the need for negotiation are particularly acute because, as we contend, such families have the option to identify their children either with the Asian parent or with the non-Asian parent. We call this perspective that allows for differences within the family the "family dynamics" perspective.

The significance of family dynamics can manifest itself in many ways. For example, whether the Asian parent is the mother or the father could be relevant. Some scholars (e.g., Wilson 1981) suggest that mothers maintain the primary responsibility for transmitting ethnic culture to their children and speculate that biracial or biethnic children will be more likely to identify with their mother's race or ethnicity. In contrast, Waters (1989) argues that father's ethnicity is more important in determining the ethnic identification of a child, because the child typically carries the father's surname, one of the principal cues for ethnicity.

Conflict between spouses over a child's racial identification is alleviated if the non-Asian parent has an Asian ancestry. Parents who do not identify themselves racially as Asian but have some Asian ancestry (perhaps the offspring of intermarriages themselves) may be more likely than other non-Asian spouses to agree to an Asian racial identity for their children. In this study, we account for the potential influence of Asian ancestry of the non-Asian parent.

The family dynamics perspective also suggests that conflict could exist between parents and children. As children age, they develop racial identities that may differ from their parents' designations for them, and children's racial self-identification could in turn influence parents' designations. Age of the child, then, is a good proxy for children's influence on parents' racial identification of them, although whether it is positively or negatively associated with the child's identification as Asian is unclear.

The family dynamics can also be complicated by the racial status of the non-Asian parent. When the non-Asian parent is black or Hispanic, the assimilation and awareness perspectives are inapplicable, and other influences must be considered. For example, two contradictory forces appear to be at work. On the one hand, we know from the literature on racial attitudes (Davis & Smith 1994:349-69; Farley 1996) that whites' racial prejudice against Asian Americans is lower than their prejudice against blacks and Hispanics. It thus seems "rational" that parents may wish to identify their Asian-black and Asian-Hispanic biracial children as Asian Americans in order to minimize their exposure to discrimination. On the other hand, Waters (1990, 1996) has convincingly argued that ethnic identity is less an option for racial minorities than for the white majority, as minority status strongly determines social status regardless of one's self-identification. Relative to

Asian-white children, the racial identity of Asian-black and Asian-Hispanic children may be more constrained because of the overriding emphasis that the society places on their being half-black or Hispanic. This leads to a "constraining" effect of other minority status on the likelihood of Asian identification, for there may be social pressure to label Asian-black and Asian-Hispanic children as black or Hispanic. Note that the two hypotheses lead to two vastly different predictions concerning the relationship between the non-Asian parent's race and identification: while the "rational" hypothesis predicts that Asian-black and Asian-Hispanic children are *more* likely to be identified as Asian, the "constraining" hypothesis predicts that they are *less* likely to be identified as Asian. In this study, we will provide a tentative exploration of the two hypotheses.

Data and Methods

Our study uses data drawn from the 5-percent 1990 U.S. Census PUMS. Our use of the 1990 data is an important update of Saenz et al.'s study because the Asian American population grew rapidly, in fact doubled, between 1980 and 1990 (Barringer, Gardner & Levin 1993). For this study, we first selected families with children under age 15 living with both biological parents one of whom is Asian and the other is non-Asian.[8] We then randomly chose one child per family regardless of birth order. We purposely restricted the age range to 0-14 because we believe that the racial identification of biracial children available in PUMS reflects choices exercised by *parents*, not by children themselves.

Given the constraint of using the PUMS data, how to best operationalize intermarriages involving an Asian American is not obvious. A person can be defined as Asian either by the race question or by the two ancestry questions on the census form (Farley 1991).[9] One way to resolve this problem is to examine the implications of alternative operationalizations for the dependent variable. In Table 1, we present the proportion of children identified as Asian cross-classified by mother's identification and father's identification. The entries in Table 1 strongly suggest that a parent with Asian ancestry who is not identified as Asian by race is much more similar to a non-Asian parent (by either race or ancestry) than to an Asian parent (by race). That is, the first two rows and the first two columns are almost collapsible. Thus, for the remainder of the article, we define intermarriages involving an Asian American as those in which one marriage partner is Asian by race and the other partner is non-Asian by race. This definition allows the non-Asian partner to have an Asian ancestry, and this additional information is incorporated in statistical analyses. In Table 1, our definition corresponds to the four cells in bold face. The sample consists of 7,808 children.

Our analytical strategy consists of three steps. First, we present descriptive statistics for the variables used in our analysis. Second, we estimate a multivariate baseline logit model to ascertain the net overall effects of the explanatory variables

TABLE 1: Proportion of Children Racially Identified as Asian by Parents' Racial and Ancestral Identification

Mother's Identification	Father's Identification: Not Asian	Father's Identification: Asian by Ancestry Only	Father's Identification: Asian by Race
Not Asian	N/A	.057 (1,987)	**.418 (4,133)**
Asian by Ancestry Only	.080 (2,598)	.082 (784)	**.474 (287)**
Asian by Race	.404 (9,676)	.514 (317)	.980 (38,155)

Note: Data are based on the 5-percent PUMS from the 1990 Census. Bold figures represent the cells that define for this study biracial children with an Asian parent. The cases in these cells are included in the statistical analysis.

on racial identification. Finally, we test interactive effects as suggested by our theoretical discussion and interpret the results.

Variables used in our analysis are listed and labeled in Table 2. More detailed explanations of the variables are given as follows.

Child Level: First, we include the child's sex and age as basic demographic controls. We then consider the generation of the child. Consistent with standard usage, first-generation means that the child is foreign-born; second-generation means that at least one of the child's parents is foreign-born; third- and higher-generation children are grouped together and defined as those whose parents are native-born.

Family Level: To contrast the difference between children having an Asian mother versus those having an Asian father, we create a dummy variable Asian parent (mother = 0, and father = 1). The classification scheme for the Asian parent's ethnicity is based on the major (recoded) categories of Japanese, Chinese, Korean, Filipino, Asian Indian, Southeast Asian, Pacific Islander, and other Asian. The Asian parent's language use is measured by a dummy variable (non-English = 0, and English only = 1). Two measures of the Asian parent's education are used in the analyses, the categorical form and the continuous form in years of schooling.[10] The categorical form is intended to illustrate descriptive statistics only, while the continuous form is used in statistical models. We also include two characteristics of the non-Asian parent. First, whether the non-Asian parent reports an Asian ancestry as his or her first or second ancestry is recoded into a dummy variable (no Asian ancestry = 0, and Asian ancestry = 1). Second, the non-Asian parent's race was recoded from the original questions on the census form about race and Hispanic origin into four major categories: non-Hispanic white, Hispanic, African American, and other.

Macro Level: We use a simple variable to measure the local concentration of Asian population: percent Asian in relation to the total population within each public use micro area (PUMA). PUMA is the smallest geographic unit available on the original PUMS file. In rural areas, a PUMA might be as large as a county.

TABLE 2: Descriptive Statistics and Percentages Identified as Asian

	Percent/Mean	Std. Dev.	Percent as Asian
Sex of Child			
Male	51.0		38.3
Female	49.0		39.3
Age of Child			
0 thru 4	48.0		39.1
5 thru 9	31.0		39.5
10 thru 14	21.0		37.1
Immigration Generation of Child			
Third-generation	29.6		43.5
Second-generation	59.2		35.3
First-generation	11.1		44.8
Asian Parent			
Mother	67.8		36.6
Father	32.2		43.4
Asian Parent's Ethnicity			
Japanese	18.6		42.7
Chinese	15.7		50.5
Korean	14.0		34.6
Filipino	27.1		36.4
Asian Indian	5.5		27.4
Southeast Asian	7.2		33.1
Pacific Islander	8.7		39.5
Other Asian	3.1		26.5
Asian Parent's Language			
Non-English	50.9		38.8
English only	49.1		38.8
Asian Parent's Education			
Less than high school	13.3		35.3
High school graduate	20.7		36.5
Some college	30.7		37.4
College graduate	22.0		41.2
Advanced degree	13.3		45.1
Asian Parent's Education (continuous)	13.72		3.03
Non-Asian Parent's Ancestry			
No Asian ancestry	96.1		38.4
Asian ancestry	3.9		49.5
Non-Asian Parent's Race			
Non-Hispanic white	83.2		40.6
Hispanic	9.4		22.7
African American	5.0		32.8
Other	2.4		49.7
Local Concentration of Asian Population			
0 thru 5%	60.2		34.9
5.1 thru 10%	16.2		42.1
10.1 thru 20%	11.6		43.8
Above 20%	12.0		48.7
Log (Percent Asian)	1.66		1.04

Note. The number of observations is 7,808. Data were based on the 5-percent 1990 PUMS.

In urban areas, a PUMA can be much smaller. For descriptive statistics, we first grouped children into four levels of Asian concentration: less than 5%, 5.1 to 10%, 10.1 to 20%, and above 20%. For multivariate analysis, we use the logarithmic transformation of the percentage Asian population in PUMA as a continuous measure.

Results

DESCRIPTIVE RESULTS

For our sample as a whole, we found that 38.8% (3,028 out of 7,808) of the biracial children with an Asian parent were identified as Asian. This number is quite high and close to parity (i.e., 50%), and we interpret this result as confirming our hypothesis that the racial identification of biracial children with an Asian parent is highly optional in contemporary America. To further understand the correlates of the racial identification for these children, we turn to more detailed descriptive results in Table 2. The first two columns of Table 2 list frequency distributions for categorical variables and means and standard deviations for continuous variables. The last column gives the conditional percentage of children identified as Asian for each category of the explanatory variables.

We note that the sample is fairly evenly distributed across child's sex and age. At 59.2%, most children are second-generation, and there are more third-generation children (29.6%) than first-generation children (11.1%). About two thirds of the children in our sample had an Asian mother and a non-Asian father, and the remaining third had an Asian father and a non-Asian mother. This difference is due to higher outmarriage rates for female Asian Americans than for male Asian Americans (Kitano 1984).

More children in our sample have Filipino Asian parents than Asian parents of other ethnicities. The percentages with Japanese, Chinese, or Korean parents are also high relative to those with parents of other Asian ethnicities. About half of the Asian parents in our sample speak a language other than English at home. This is not surprising, given that more than two-thirds of the children are first- and second-generation. Further, Asian parents have an average of 13.72 years of school, with the majority graduating from high school and a significant minority obtaining advanced degrees. Most non-Asian parents have no Asian ancestry at all, and the overwhelming majority of non-Asian parents are white (at 83.2%). Most of these biracial children live in areas where the presence of Asian population is less than 5% (at 60.2%).

The last column of Table 2 presents the bivariate results showing the relationship between racial identification and each of the explanatory variables. Many interesting results emerge, although we postpone discussing them until we present the results from a logit analysis. This is necessary because bivariate results may be misleading

due to factors that are relevant but correlated to each other. In order to disentangle the independent effects of all relevant factors, we conduct a multivariate analysis. When multivariate results are consistent with bivariate results, however, bivariate results are reported due to their simplicity and ease of interpretation.

BIVARIATE AND MULTIVARIATE RESULTS

In Table 3, we present estimated coefficients for two logit models, in which the dependent variable is whether a biracial child is identified as Asian (yes = 1). Let us first focus on the baseline model (model 1). The negative constant term means that the probability of Asian identification is less than 50% for, hypothetically, a male child, aged 0-4 years, of the third-generation, with a white father with no Asian ancestry and a Japanese-American mother who speaks a language other than English and has 0 years of schooling living in an area with 1 percent Asian population. In fact, the estimated logit coefficients can be easily converted to the predicted probability through:

$$\Pr(y=1)=\frac{\exp(\underline{x}'\underline{b})}{[1+\exp(\underline{x}'\underline{b})]}$$

Here Pr(y = 1) is the probability that a child is identified as Asian, $\underline{x}$ stands for a vector of the explanatory variables, and $\underline{b}$ for the estimated logit coefficients of the explanatory variables. From the constant term, for example, we can easily calculate the predicted probability with which the above fictitious person is identified as Asian:

$$\frac{\exp(-0.755)}{[1+\exp(-0.755)]}=.0320$$

For other combinations of the explanatory variables, similar calculations can be conducted after appropriate terms are added to the $\underline{x}'\underline{b}$ part of the above equation.

In general, the bivariate and multivariate results from the baseline model are consistent. According to both sets of results, for example, there do not appear to be significant differences in Asian identification by sex or age of child. However, bivariate and multivariate results concerning immigration generation differ slightly. Bivariate results from Table 2 show that almost the same percentages of first-generation and third-generation children are identified as Asian.[11] However, in the multivariate model shown in Table 3, first-generation children are *significantly* more likely to be identified as Asian than third-generation children, everything else being equal. It appears that once other factors are accounted for (like language use and education of the Asian parent) third-generation children are less likely to be identified as Asian. What is notable is that, according to both bivariate and multivariate analyses, first- and third-generation children are more likely to be identified as Asian than second-generation children. A higher likelihood of Asian identification for first-generation children than for second- and third-generation children is consistent with the assimilation hypothesis. However, the assimilation

TABLE 3: Estimated Coefficients of Selected Logit Models

	Model 1		Model 2	
	Coeff.	Std. Error	Coeff.	Std. Error
Constant	-.755	.160	-1.786	.306
Sex of Child (male = excluded)				
Female	.059	.048	.061	.048
Age of Child (0-4 = excluded)				
5 thru 9	.024	.055	.021	.055
10 thru 14	-.088	.064	-.091	.064
Generation of Child (third-generation = excluded)				
Second-generation	-.161	.068	1.126	.331
First-generation	.327	.098	1.617	.409
Asian Parent (mother = excluded)				
Father	.404	.056	.418	.056
Asian Parent's Ethnicity (Japanese = excluded)				
Chinese	.333	.081	.333	.081
Korean	-.179	.093	-.211	.094
Filipino	-.181	.075	-.165	.075
Asian Indian	-.720	.130	-.689	.130
Southeast Asian	-.309	.113	-.331	.114
Pacific Islander	-.193	.099	-.158	.100
Other Asian	-.637	.158	-.621	.159
Asian Parent's Language (non-English = excluded)				
English only	-.211	.059	-.206	.059
Asian Parent's Education (continuous)	.010	.009	.069	.019
Non-Asian Parent's Ancestry (no Asian ancestry = excluded)				
Asian ancestry	.532	.130	.523	.130
Non-Asian Parent's Race (white = excluded)				
Hispanic	-1.126	.099	-1.113	.099
African American	-.259	.115	-.265	.115
Other	.285	.153	.308	.153
Log (Percent Asian)	.216	.024	.296	.039
Interaction: Generation and Asian Parent's Education				
(Second-generation) x edu.			-.076	.021
(First-generation) x edu.			-.057	.028
Interaction: Generation and Log (Percent Asian)				
(Second-generation) x log (percent Asian)			-.096	.051
(First-generation) x log (percent Asian)			-.281	.088
Model χ^2	467.75		490.90	
df	20		24	

perspective fails to explain why third-generation children are more likely than second-generation children to be identified as Asian. Instead, this latter comparison suggests that the awareness hypothesis is at work: third-generation children, although more assimilated than second-generation children, are more closely identified with their Asian heritage by their parents.

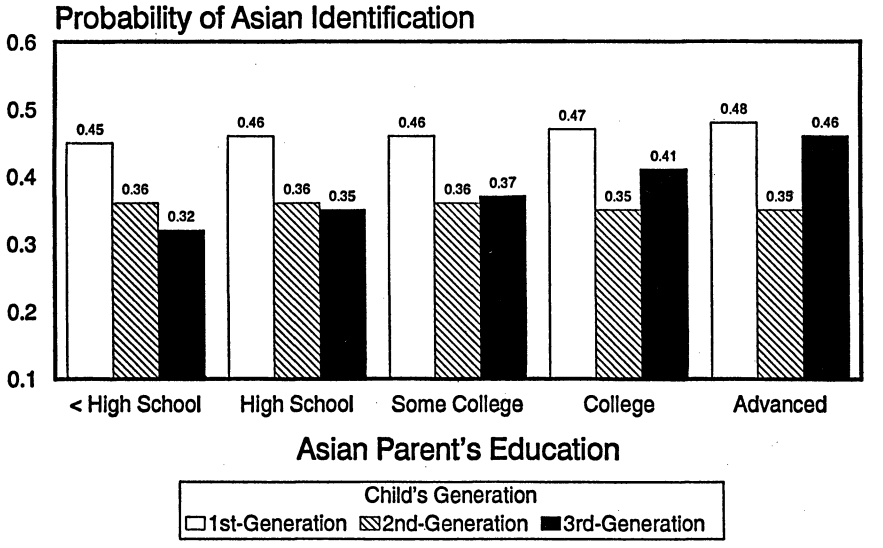
Bivariate and multivariate results are consistent in showing that children with Asian fathers are much more likely to be identified as Asian than children with Asian mothers. Returning to Table 2, for example, 43.4% of biracial children with Asian fathers are identified as Asian, compared to 36.6% among biracial children with Asian mothers. This finding confirms an earlier result found by Saenz et al. (1995), supporting the notion that ethnic and racial identification is likely to be influenced by surname, a powerful cue about one's ancestry (Waters 1989).

Both bivariate and multivariate results also show that children with a Chinese or Japanese parent have a relatively higher likelihood of being identified as Asian. In contrast, children with an Asian parent of Indian, Korean, or Filipino ethnicity have relatively low percentages of being identified as Asian. Looking only at the bivariate results, we observe that the language use of the Asian parent does not appear to affect children's racial identification (38.8% for non-English and 38.8% for English only). However, in the multivariate logit model, the Asian parent's language use is significantly negative (-.211 with a standard error of .059), indicating that the bivariate relationship is spurious due to the confounding effects of other factors, such as generation. This is consistent with the assimilation perspective, which predicts less affinity with an Asian identity following full linguistic assimilation.

Asian parent's education has a monotonically positive relationship with Asian identity. As shown in Table 2, for parents with less than a high school education, only 35.3% of their children are identified as Asian. For those with advanced degrees (master's and above), 45.1% of their children are identified as Asian. This pattern of racial identification by parental education seems to contradict the assimilation hypothesis but support the awareness hypothesis. Since parental education has a clearly monotonic relationship with the outcome variable, we use the continuous form in multivariate analysis, making tests for interaction effects more parsimonious and powerful. Surprisingly, multivariate results for the baseline model in Table 3 show that the Asian parent's education has little effect on the racial identification of the child once other factors are controlled. We will further explore the meaning of this result with an interactive model.

Asian ancestry of the non-Asian spouse clearly increases the likelihood that a child is identified as Asian according to both bivariate and multivariate results, suggesting that Asian ancestry of the non-Asian spouse reduces potential conflict between spouses over the child's racial identity. Also note substantial differences in racial identification by the race of the non-Asian parent: Hispanics and African Americans are less likely to identify their children as Asian than whites. In these instances, it is likely that children are "constrained" by social norms concerning the designation of other

FIGURE 1: Predicted Probability of Asian Identification by Asian Parent's Education and Child's Generation



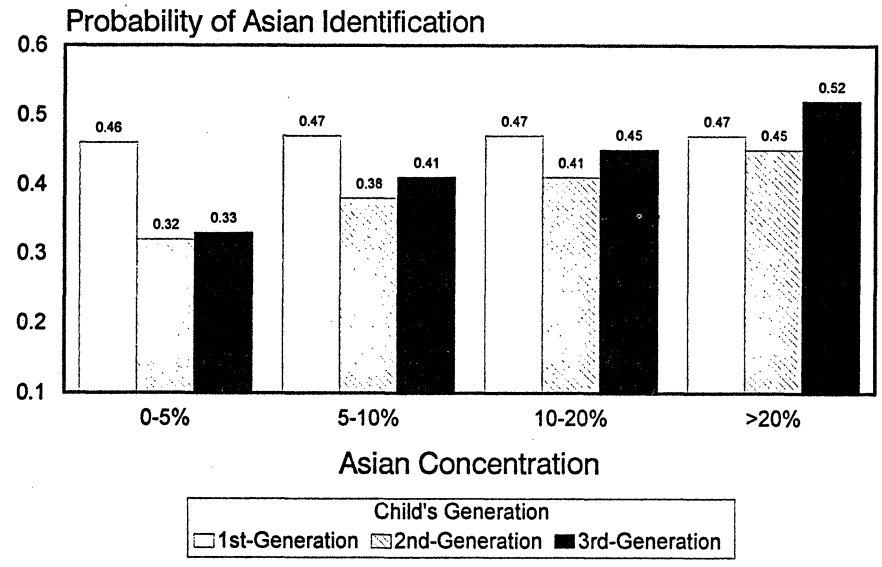
Predicted probabilities control for sex of child, age of child, sex of Asian parent, Asian parent's ethnicity, Asian parent's language use, ancestry of non-Asian parent, non-Asian parent's race, and local concentration of the Asian population.

minorities. Clearly, these children do not have the same opportunities to assimilate as those who are from Asian-white intermarriages and may be simultaneously aware of two (or more) racial and ethnic heritages. Rather than following assimilation or awareness processes, these children are more likely to be defined by social rules regarding minorities' intermarriages.[12]

Finally, we examine the role of the local concentration of the Asian population within the PUMA boundaries. It is evident that Asian identification increases as the percentage of the Asian population increases. According to Table 2, 34.9% of children who live in PUMAs where Asians make up less than 5% of the total population are identified as Asian. This number contrasts to 48.7% for children who live in PUMAs where Asians constitute more than 20% of the total population. The coefficient of the continuous measure for the local concentration of the Asian population is estimated to be highly and significantly different from zero (.216 with a standard error of .024).

In model 2 of Table 3, we add two sets of interaction effects that are designed to test theoretically interesting hypotheses. A chi-squared test (i.e., difference in model χ^2 statistic) shows that the interactive model clearly improves over the baseline model (χ^2 is 23.15 for 4 degrees of freedom). We discuss these interactive effects in turn.

FIGURE 2: Predicted Probability of Asian Identification by Local Asian Concentration and Child's Generation



Predicted probabilities control for sex of child, age of child, sex of Asian parent, Asian parent's ethnicity, Asian parent's language use, ancestry of non-Asian parent, non-Asian parent's race, and Asian parent's education.

The interaction effects between the Asian parent's education and the child's generation reveal that the Asian parent's education increases the likelihood of Asian identification *only* for third-generation children. For first- and second- generation children, the Asian parent's education has no noticeable effects at all.[13] This pattern is best represented visually in Figure 1, which depicts the predicted probability of Asian identification by the Asian parent's education and generation while holding other variables at their sample means. The predicted probability was first calculated for each child and then averaged by the level of the Asian parent's education, thus comparable to the descriptive statistics reported earlier in Table 1. It can be easily seen from Figure 1 that the Asian parent's education significantly increases the likelihood of being identified as Asian for third-generation children, from .32 for less than high school to .46 for advanced degrees. For second-generation children, the likelihood stays low at .35 throughout. For first-generation children, the likelihood is already high (between .45 and .48) regardless of the Asian parent's education.

Similarly, we find the effect of local Asian concentration to depend on generation in such a way that Asian concentration has the strongest effect for third-generation children and the weakest effect for first-generation children, with

second-generation children somewhere in between. Figure 2 displays the interactive pattern in predicted probabilities. We observe that the propensity for Asian identification is rather high (between .46 and .47) for first-generation children regardless of the local concentration of Asians. For third-generation children, local Asian concentration enhances the likelihood sharply, from .33 in areas with light Asian presence (0-5% Asian) to .52 in areas of heavy Asian presence (above 20% Asian).

Discussion and Conclusion

Given the above results, what can we say about the racial identification of biracial children with one Asian parent and one non-Asian parent? The first answer to this question is that we can draw a great deal from the extensive literature on ethnic identification. Our central argument is that the racial identification of children from Asian intermarriages is similar to ethnic identification among whites. That is, the racial identification of biracial children with an Asian parent is, to a large extent, optional. This thesis is well supported by the marginal distributions of the racial identification of these children from the 1990 PUMS: We found that the percentage of Asian identification varies mostly from 30% to 50% across different demographic characteristics. In no demographic group is an overwhelming majority identified either as Asian or non-Asian.

Further support for the argument that race is an option for biracial children with one Asian parent is based on the similarities between the extant literature on ethnic options and our findings concerning the patterns of racial identification for biracial children with one Asian American parent. Most notably, the literature on ethnic options has looked at two competing channels through which ethnic identification takes place: assimilation and what we term *awareness*. Assimilation is hypothesized to reduce the likelihood of Asian identification, whereas awareness of Asian heritage is hypothesized to increase the likelihood of Asian identification. Our empirical results are consistent with both hypotheses. We uncovered an assimilation effect, showing that first-generation children are more likely to be identified as Asian than are second-generation children. We also found support for the awareness hypothesis in two correlates: (1) third-generation children are found more likely to be identified as Asian than are second-generation children; and (2) third-generation children with more educated parents are more likely to be identified as Asian than are those with less educated parents.

Differing from the traditional approaches in the ethnicity literature, however, we further demonstrate the compatibility of the assimilation and awareness hypotheses by exploring the interaction effects between parental education and generation. Multivariate models with these interaction effects reveal that parental education only affects the racial identification of third-generation children. First-generation children are more likely to be identified as Asian across all levels of

parental education; second-generation children are least likely to be identified as Asian across all levels of parental education; for third-generation children, however, the Asian parent's education sharply increases their likelihood of being identified as Asian. Reminiscent of Lieberson's (1985) finding that higher educated whites are more likely to identify themselves ethnically, our result of an educational effect for third-generation children lends support to the awareness hypothesis.

Concentration of the Asian population plays a role similar to that of the Asian parent's education. Having just recently immigrated, the Asian parents of first-generation children are more aware of their Asian heritage. For third-generation children, however, their family's awareness of Asian identity could be low unless they reside in an area with a high concentration of Asians. Thus, the awareness hypothesis predicts that the importance of the locale's Asian concentration is high for third-generation children and low for first-generation children. This prediction holds true in our data: While the local concentration of Asians is shown to be positively related to Asian identification in multivariate analysis, we found the effect of Asian concentration to be most pronounced for third-generation children and relatively weak for first-generation children. This interactive pattern also provides evidence that racial identification is optional for biracial children with an Asian parent; parents who are more aware of their Asian heritage are more likely to exercise their option to identify their biracial children as Asian.

Apart from the theoretical mechanisms of assimilation and awareness, we also recognize family dynamics and entertain possible conflicts and compromises between two intermarried parents. Because there are few norms or social rules guiding the racial identification of children from Asian intermarriages, we contend that there is much room both for choice and for arbitrariness in racially identifying children from such marriages for official purposes such as the census. Due to this uncertainty, dynamics within families, both between parents and between parents and children, may affect how their biracial children become identified. We find, for example, that children are more likely to be identified as Asian when the father is Asian. This is likely due to the practice of identifying children's ethnicity by their surname (Waters 1989). Also, we note that Asian ancestry of the non-Asian parent increases the likelihood of an Asian identity.

An important assumption underlying the current study is that the racial identification of biracial children is a conscious choice made by parents, although the two parents may not reach an agreement on a particular choice. When forced to choose among exclusive single-race categories on the census form, they may seek arbitrary resolutions, such as (1) flip of coin or any other random method, (2) rotation over time (i.e., identified with one parent for one census and with the other parent for the next one), (3) rotation across siblings (in which one child's race matches the Asian parent's race and another child's matches the other parent's race), (4) choice of a neutral "other" category,[14] (5) choosing the child's racial identification based on whether the child "looks Asian," and (6) a decision by whichever parent happened to be completing the census form for the household

that the child's race should match his or hers. Although such arbitrary resolutions are difficult to uncover from PUMS, we can surmise their overall effects: they introduce a great deal of random noise to the data so that observed relationships are not as clear-cut and as sharp as our theories would suggest.

One way to explore the extent of this noise is to assess the reliability of the dependent variable. In Table 4, we present statistics measuring sibling resemblance in racial identification of biracial children with an Asian parent. The sibling method is useful in assessing random errors induced by the aforementioned factors (1), (3), and possibly (5) but not errors attributable to other sources. The focal child refers to the child chosen for the preceding analyses. To check for sibling resemblance, we randomly select a sibling of the focal child.[15] The entries in Table 4 are proportions of the siblings identified as Asian, broken down by the focal child's racial identification and age. The results unambiguously support a high degree of concordance in racial identification between two siblings in the same family. When the focal child is identified as Asian, his/her sibling is overwhelmingly likely to be identified as Asian (between 90% to 93%). When the focal child is not identified as Asian, his/her sibling is unlikely to be identified as Asian (between 4 to 5%). Furthermore, Table 4 also shows that the extent of sibling resemblance in racial identification does not deteriorate with age, indicating that children's own influence on their racial identification on the census form is minimal at least up to age 14.

The sibling analysis shows that most of the variation in the racial identification of biracial children with an Asian parent lies between rather than within families. Among all the variables that are used to explain between-family differences in our study, we observe that the impact of socioeconomic factors pales as compared to that of purely demographic factors. For example, we show that the Asian parent's ethnicity explains a good deal of variation in how biracial children with an Asian parent are racially identified, and this is true even after other relevant factors are controlled. Similarly, differences in racial identification by the race of the non-Asian spouse are also substantial. Although it is tempting to try to explain these patterns using highly speculative and convoluted reasoning, we tentatively attribute them to the confluence of historical, social, and cultural factors that are unique to each ethnic and racial group. Thus, we advance the following thesis: Racial identification is an option for biracial children with an Asian parent, but the exercise of this option is constrained not only by assimilation and awareness processes but also by historical, social, and cultural factors unique to the varied racial and ethnic groups living in the United States.

Notes

1. As we will show later in this paper, only about 40 percent of such children were actually identified as Asian on the 1990 Census returns. Our estimation is based on the 5-percent PUMS from the 1990 U.S. Census. We state that our crude estimation is "conservative" in the sense that we restricted our calculation to children who lived with both parents. This underestimation is slightly offset by an upward bias of including children adopted

TABLE 4: Proportion of Siblings Racially Identified as Asian by Focal Child's Racial Identification and Age

	Age	Proportion of Siblings Identified as Asian	n
Panel A: Focal Child is Identified as Asian			
	0-4	.905	676
	5-9	.934	680
	10-14	.927	396
Panel B: Focal Child is Identified as Non-Asian			
	0-4	.054	1,110
	5-9	.038	1,086
	10-14	.049	716

Note: Data were based on the 5-percent PUMS from the 1990 Census. Only families with two or more children are included.

by parents in interracial marriages involving an Asian American. A comparably high number is reported for the 1980 Census (Chew et al. 1989).

2. As shown later in Table 4, the resemblance in racial identification between two randomly selected siblings in an intermarriage involving an Asian parent is consistently high across all age groups. This result shows that parental influence does not diminish with children's age, an indicator of independence.

3. Although this statement is close to Portes' ethnic-competition perspective, there is a subtle difference. Here our emphasis is on knowledge and awareness of racial and ethnic differences rather than on the direct experience of discrimination.

4. Although the application of this test to the racial identification of biracial children with an Asian parent is new, the idea is not. In a footnote, Alba (344) also hypothesized the possible interaction effects between education and generation to test the ethnic-competition perspective, with Alba attributed to Paul DiMaggio. Alba did not find such interactions among whites.

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7. For example, as Lieberson (1985:166) notes, it was unpopular to be German during World War II in the United States.

8. This simple definition was not easy to implement with the PUMS data. The difficulty lies in the lack of information pertaining to whether parenthood for each child was biological. Following Saenz et al. (1994), we took many steps to exclude children who are potentially non-biological children. Such steps include the restriction to currently married parents and parents with own children present, and the exclusion of step-children of the household head, children who are likely to be adopted given parents' biological ages, and children whose ethnic ancestries do not match either of their parents' ethnic ancestries. It is still possible that some adopted children and some step-children (step-children of the spouse of the head of household, for instance) are present in the final file. The data file and computer code for creating it are available upon request.

9. We thank an anonymous reviewer for pushing us to look at this problem.

10. We initially experimented with both parents' education. Due to the high correlation between parents' education, however, the non-Asian parent's education is no longer significant once the Asian parent's education is included in the model. We thus use only the Asian parent's education to approximate for family SES.

11. This nonmonotonic pattern was also observed by Saenz et al. (1995:187).

12. The "other" category is too heterogeneous to warrant an unambiguous interpretation.

13. Ignoring sampling error, the education effect is .069 - .076 = -.007 for second-generation children, and .069 - .057 = .012 for first-generation children.

14. Empirically this is an uncommon resolution. In our dataset, only 2% of the children did not match either parents' race. For this reason, we treat the dependent variable in our study as dichotomous: Asian versus non-Asian.

15. We restrict our sibling analysis to families with at least two children. In families with two children, both children are included.

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