Gender and Ethnicity: Marriage Patterns in Historical Perspective.

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"Nice Greek girls do three things. Marry Greek boys.
Make Greek babies. Feed everybody until the day we die."
--Toula Portokalos (Nia Vardalos), *My Big Fat Greek Wedding* (IPC Films, 2002).

Gender is fundamental to understanding ethnic marriage patterns, particularly in the case of the United States of America, where immigrant streams have long been sex-selective. While for much of a century (1880-1970) male immigrants typically out-numbered females 110:100, for Greeks and Italians the adult sex ratio averaged 150, and Norwegians, Mexicans, Austrians, and others were not far behind at 125. In caste societies, polyandry, celibacy or same-sex unions might be the means for attaining equilibrium in socially-constructed marriage markets. In the United States, out-marriage is the escape valve, as far back in the past as census microdata permit us to peer. Nevertheless, breaking the gender squeeze is a two-step, or better two-generation, process with immigrants, favoring spouses of their own ethnicity even though born in the USA, shoving, as far as possible, the imbalance onto the second generation.

Toula was expected to marry a Greek to maintain her ethnic ties and traditions. She was constrained by a demographic imperative, the gender squeeze: a surplus of eligible Greek men. Her brothers were free to choose whomever they pleased. The second generation gender in over-supply, typically males except for the Irish and a few less-well known groups, are faced with three choices: marrying out, marrying late or not marrying at all. Not surprisingly, as our analysis will show, the favorite is to marry-out, even for Norwegian farmers in close proximity to Lake Wobegon (data not available for the village; unsubstantiated reports in the liberal media lament the large number of confirmed bachelors). This pattern, detailed by a study of century-long marriage patterns in New York City (McCaa 1993), clearly has national dimensions.

Will the gender squeeze, the demographic dynamo of the past, promote high rates of intermarriage for the newest immigrants from Latin America, Asia, and, most recently, Africa? Are the segmented assimilationists correct that the old rules governing the marriage market no longer apply because the latest streams of immigrants confront racial in addition to ethnic barriers? We conclude by analyzing census microdata of the

last three decades to try to peer into the future. Our analysis suggests that the trends are not entirely different from what in 1910 were called the "new" immigrants—Italians, Greeks and other Eastern Europeans—but today refer to ethnicities of Latin American and Asian origins.

Figure 1 near here

Figure 1 sums together the ethnic marriage patterns of 50 groups by gender and generation over the space of a century, 1880-1970. Does this figure bring to mind Lieberson's "bumpy line" theory of ethnic marriage assimilation in which the second generation leads the way? Four points stand out, when all groups are thrown into the same plot. First, immigrants always had the highest rates of in-marriage, in part because marriages consummated before immigration are counted here. In 1880, 80% of immigrants were in endogamous unions, down to 60% a century later. Second, children of immigrants, the "second generation", were always substantially less likely than their parents to take a spouse of their own ethnicity. In 1880, 40% were endogamously married versus fewer than 10% six decades later. Third, interruption of immigration streams had profound effects on ethnic in-marriage. By 1920, endogamy rates for children of immigrants had declined, but only fractionally. The disruption of immigration flows by the first World War caused only a slight drop. Until the 1930 microdata are made available, it is not possible to assay the effects of the restrictive immigration measures of the 1920s. We suspect that these were minor. In any case by 1940, the rate had plummeted to less than 10%, according to the census microdata. Finally, the Great Depression was a watershed. As early as 1950 endogamous unions rose slightly, but they barely attained 10% of the total for children of immigrants. At such low levels, strong groupings based on ethnicity are difficult to maintain.

While Figure 1 is useful to summarize broad trends, our goal is to illuminate the social geometry of marriage, particularly between the newest and older patterns of ethnic intermarriage. U.S. population censuses, specifically, integrated microdata samples disseminated by the IPUMS-USA project, are recognized for their comparability in space and time (Ruggles, Sobek 2004). The IPUMS contain responses of individual persons to the decennial census schedules. Spouses, often listed successively on the forms and in the datafiles, are identified by marital status and relationship to householder. Microdata supplied by IPUMS-USA identifies spouses ("SPLOC"), which means that researchers may analyze, as we have in figure 1,

husbands and wives according to their combined demographic and social characteristics, including national origins.

Compared with other quantitative sources in the social sciences, census microdata offer unrivaled temporal and sample density. Nevertheless, as for any source with long-term coverage, new variables appear and the meaning, significance and comparability of old ones change. Country of birth, used here to identify immigrants, is common to all US censuses from 1850 through 2000. To distinguish individuals whose parents immigrated, we rely on country of birth of mother and father, first recorded in 1880 and maintained through the census of 1970. Beginning in 1980, instead of parent's country of birth, the Census Bureau introduced an open-ended ancestry question, which permitted individuals to indicate ethnic identities irrespective of generational depth. Then too, beginning in 1980, the opening up of the "race" question elicited a wide range of responses, including "Japanese", "Philippine", "Korean", etc. Parent's country of birth and ancestry (which we supplement with "race" and "Hispanic origin") are not comparable, so we split our analysis at 1980.

For the period 1880-1970, first and second generation immigrants are distinguished by means of country of birth for the individual and his or her parent's country of birth (as in figure 1). "Natives" are classified as those born in the USA whose parents were also born in the USA. For individuals with only one parent born abroad, this is assigned as the parents'country of origin. Where both parents were born abroad, the mother's country of birth is favored, even where the country of birth of the father is the same as that of the spouse or the spouse's parents.

For the second period, 1980-2000 , country of birth is used to determine first generation immigrants. Since no question was asked regarding parents'country of birth, we rely on "ancestry", "race" and "Hispanic origin" to classify individual's ethnic origin for second and older generations, including native non-hispanic whites as well as other non-natives.

Census microdata indicate prevalence, not incidence. They offer no information on the celebration of marriages at specific moments in time, but rather indicate the marital status of individuals at census date. Unions broken by separation, divorce or widowhood go un-noted. Thus, if ethnically endogamous marriages are less likely to dissolve at younger ages, then any source based on prevalence will overestimate the incidence of such unions (Jacobs and Labov 2002).

In the following analysis, to limit bias we adopt a practice common to research on this topic to focus only on young couples by selecting, in our case, couples formed by young men aged 25-34 years (Qian 1997, 2001). For historical research involving decennial censuses, restricting attention to a ten year age group has the added advantage of avoiding over-lapping cohorts in successive censuses. The disadvantage is that we may underestimate ethnically mixed marriages because, as Toula's prolonged courtship shows us, exogamous marriages tend to occur at somewhat older ages (Porterfield 1982). The fact that marital status at the moment of immigration is unknown may also be seen as a limitation of our sources. Unions occurring before immigration are indistinguishable from those formed afterwards because only two censuses (1900 and 1910) inquire about age at marriage. To minimize this effect, we have excluded immigrants whose declared year of immigration (available in all censuses from 1900 to the present) points to an age at immigration of 20 years or more.[1] Throughout we use 1% samples of the harmonized census microdata.

Small groups tend to marry-out more, simply because they are small—not because of the intrinsic preferences for or against any specific ethnicity (Blau 1977). Log-linear models readily account for group size to reveal broad patterns of in-marriage and inter-marriage. Our periodization for the log-linear analysis (1880-1920; 1980-2000) responds both to historical develoments, as we have seen above, as well as the availability of information. Since country of emigration for the first period differs greatly from the second, we have selected different groups for each. For the first period, we focus on immigrants from England, France, Germany, Ireland, Italy, and Sweden, while for the second, we have selected China, Cuba, Japan, Korea, Mexico, and the Philippines. For each period these are the most commonly cited in the literature on ethnic intermarriage (Pagnini and Morgan 1990; Rosenfeld 2002; Wildsmith, Guttman et al. 2004; Alba and Golden 1986). Note that if all groups had exactly the same number of spouses, there would be no need for log-linear analysis. Since all groups are different, log-linear models are used to remove the effects of unequal group sizes.

In contrast to Figure 1 with its sums for 50 ethnicities, in the following analysis each ethnic group is analyzed individually. Table 1 lays out the topology of our analysis. For each ethnic group, marital unions are distributed according to the ethnic origins of the husband and wife divided into four categories: For the first period, 1880-

[1] The 1980 and 1990 censuses report year of immigration in groups rather than single years. We have taken the last year of the group as the year of immigration.

1920, these are: (A) native, (B) other non-native, (C) first generation immigrant, and (D) second generation immigrant, that is native born of one or more parents born abroad. For the second period, 1980-2000, to take into account the ancestry information collected by the census, the categories become (A) native non-Hispanic white, (B) other non-native, (C) first generation immigrant, and (D) second or more generations. For both periods, the "other non-native" category is relative to the ethnicity of the reference person. Finally to take into account census year, we use a series of tables that consist of 4 rows (husband's ethnicity) by 4 columns (wife's ethnicity) by 4 censuses (3 for the second period) by 6 ethnicities (a different set for each period).

Table 1 near here

A series of six models are tested for each ethnicity and period. The simplest model is M_0, complete independence. It tests the false proposition that there is no relation between the ethnicity of the husband and that of the wife, that ethnicity is not a relevant consideration for nuptial pairings. Its frequencies may be derived as follows.

$$\log f_{ijc} = \mu_0 + \mu_i + \mu_j + \mu_c + \mu_{ic} + \mu_{jc} \qquad [1]$$

Where $\log f_{ijc}$ is the natural logarithm of the expected from from row *i*, column *j*, and the covariable *c* (census); μ_0 is a constant; μ_i the parameter of row *i;* μ_j the parameter of column *j*; and μ_c the parameter of the covariable *c*.

At the other extreme, is the saturated model (not depicted), which assumes a unique interaction for each of the possible combinations of pairings, and therefore we must estimate a parameter for each one. The mathematical expression of this model is:

$$\log f_{ijc} = \mu_0 + \mu_i + \mu_j + \mu_c + \mu_{ic} + \mu_{jc} + \mu_{ij} + \mu_{ijc} \qquad [2]$$

Where μ_{ijc} is the parameter representing the interaction between row *i*, column *j*, and the covariable *c*. The saturated model has the unique property of reproducing the data exactly, but it is of no analytical interest because it requires as many parameters as there are interactions to explain. The saturated model offers no parsimony whatsoever. Between the saturated and independence models, numerous combinations exist. Because each yields some degree of parsimony they are of substantive interest. They allow us to test the validity of specific hypotheses with regard to the patterns of ethnic interaction in the formation of marital unions. Throughout, we test the importance of time, in 3 ways: none, uniform, and significant variation found in each census.

Table 1 illustrates the topological structure of the basic parameters of each of the principal hypotheses which we propose to test. All substantive models include homogamy parameters. This is depicted along the diagonal where like ethnics are shown as married to like ethnics. These are the endogamous unions and they can be interpreted in terms of marital assimilation or the lack thereof. Model M_1 tests a second false proposition, that homogamy is the same for all combinations, parameter 1: [A,A] = [B,B] = [C,C] = [D,D]. The uniform homogamy model assumes quasi-independence in the off-diagonal cells. Although false, this model provides a better benchmark than M_0 for selecting more parsimonious models. It relaxes the condition of independence by assuming that the cells on the diagonal contain the majority of cases, but restricts this association to be equal for each endogamic combination. This model is a first test of the conventional assimilationist theory of ethnic marriage. Where it fits the data for any ethnic group, neither generation nor gender are important mechanisms for assimilation. Where it does not, our attention must focus on in-marriage parameters and the differences between first and second generation pairings and their variations in time.

Model M_2 relaxes even further the condition of homogamy by allowing each cell on the diagonal to take on a unique value, indicating a unique degree of endogamy for each combination. This formulation yields 4 parameters: $[A,A] \neq [B,B] \neq [C,C] \neq [D,D]$. M_3 expands on the previous model considering parameter 4, cells [D, C] and [C, D], as also surpassing the condition of independence. Between the first and second generation of a common ethnicity or ancestry, our model 3 proposes a special attraction, indeed a uniform attraction identical to endogamy between second generation unions of the same ethnicity:

Model M_4 bestows a single, unique parameter on generational exogamy, distinct from ethnic endogamy, that is $[D, C] = [C, D] \neq [D, D]$. Finally, M_5 tests the hypothesis of gender asymmetry in generationally exogamous unions, $[D, C] \neq [D, C]$. If gender squeeze plays a role in promoting exogamy, Model 5 should fit the data better than Model 4. A more complete testing of this hypothesis might include the parameter $[D, A] \neq [A,D]$ to measure the interaction between the native born and second generation ethnicities. We did not perform this test.

To this typology we add the layers of time, one for each census (C), specific for both husbands (CH) and wives (CW). Tables 2 and 3 show the results for six ethnicities for the periods 1880-1920 and 1980-2000.

Tables 2 and 3 near here

Endogamous marriage patterns in both time periods are remarkably uniform. A small class of models fit the data adequately, even though the degree of endogamy varies considerably as we shall show below. The endogamy rule is the single most important constraint on nuptial pairings, accounting for 90% of the fit, as we see by comparing models 1 and 2 (Tables 2 and 3, BIC or G^2). In both periods history matters. None of the time-constant models fit adequately (models 2-6). On the other hand while history matters, our models suggest that it does so in a generally uniform way, rather than as a discrete process oscillating from decade to decade. In both periods, the unrestricted time variation model fits best for only one of six ethnicities—Germans in the first and Mexicans in the second (model 10, Tables 2-3). An ad hoc explanation in the first instance is that what constituted Germans in the census changed markedly from 1900 to 1920 because of first the incorporation, then devolution, of Poland. In the case of Mexicans born in Mexico and resident in the USA, their numbers approached one million in 1980. Then the Mexican-born population doubled from 1980 to 1990, and doubled again from 1990 to 2000. This explosive growth meant that the Mexican born population was rejuvenated each decade as were the odd of intermarriage. To successfully model Mexican marriage patterns, additional parameters are required.

Table 4 near here

Table 4 reports the degree of endogamy by generation for all twelve ethnicities. To control for the disturbing effects of model type, we use model 10 in computing log odds of nuptial pairings, even though this model is not the most parsimonious fit. Surprisingly endogamy of the foreign born is typically higher in first period than in the second. This suggests that while marriage markets are now transnational, they function to a measurable degree to promote intermarriage rather than in-marriage as was the almost unbroken rule at the beginning of the twentieth century. For example, consider the Japanese born. Their exceedingly low endogamy ratio is no longer due to the "war-bride" phenomenon, but rather to a relatively higher proportion of transnational courtships leading to marriage with individuals who do not claim Japanese race on the census form. In the first period, for foreign born ethnics three degrees of endogamy are discernible: high (log odds below 5, characteristic of the English and "German" from 1910), higher (~5 for the French and Irish), and highest (greater than 6 for the Swedish

and Italian). In the second period, aside from the Japanese, most log odds are in the range of 5-6, that is substantially less than peaks typical of period one.

Second generation endogamy in period one displays the pattern associated with the assimilationist model. Log odds are typically half those of the first generation of the same ethnic background. Clearly lagging behind in the generational two-step were the Italians (and to a certain extent Germans), but we know from census microdata for 1940 and beyond, that Italian (and German) endogamy quickly approached the American assimilationist norm depicted in Figure 1. In period two, the ancestry question on the census form means that ethnic endogamy can now be measured regardless of generation. Moreover for individuals of multi-ethnic backgrounds, similar identities may be elected, heightening endogamy. It is unfortunate that we did not model this for the same groups as in period one in order to calibrate this effect. Not surprisingly ancestral endogamy is much higher than for ethnic endogamy limited to the second generation as in period one. Under the circumstances the odds of endogamy for those of Mexican origin is surprisingly low given the flood of Mexican immigrants in recent decades.

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By 2002, when *My Big Fat Greek Wedding* opened in theaters, the struggle to marry outside one's ethnic group had become a quaint stereotype. As one reviewer noted Tula's family could have been Italian, Hungarian, Polish or even Jewish. No reviewer referred to English, French or Scot, among the old immigrants, nor any of the newest immigrants—Mexican, Filipino or Somali. The difference between the patterns of traditional ethnic assimilation and segmented assimilation experienced by the newest immigrants should be reflected in distinct ethnic marriage patterns. As we have seen in the first case we found classic assimilation for all the groups, a more or less continuous, progressive increase in marriages with the native born of native parents. In contrast, in the second case, we found somewhat greater variety of patterns and stronger endogamy, particularly in the second generation. What we were unable to determine was whether this increase was due to the fact that the census now addresses issues of ancestry rather than parental country of birth. Then too, what might have happened to the classic pattern of assimilation through marriage if in the 1920s and 30s European immigrants had continued to stream into the United States as at the beginning of the twentieth century? For the newest groups the process of assimilation is still unfolding. If the patterns of the past are a guide, political or economic disruptions of immigration flows

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will substantially impact patterns of marital assimilation. Where no disruptions occur, marital endogamy is likely to persist for decades, if not generations.

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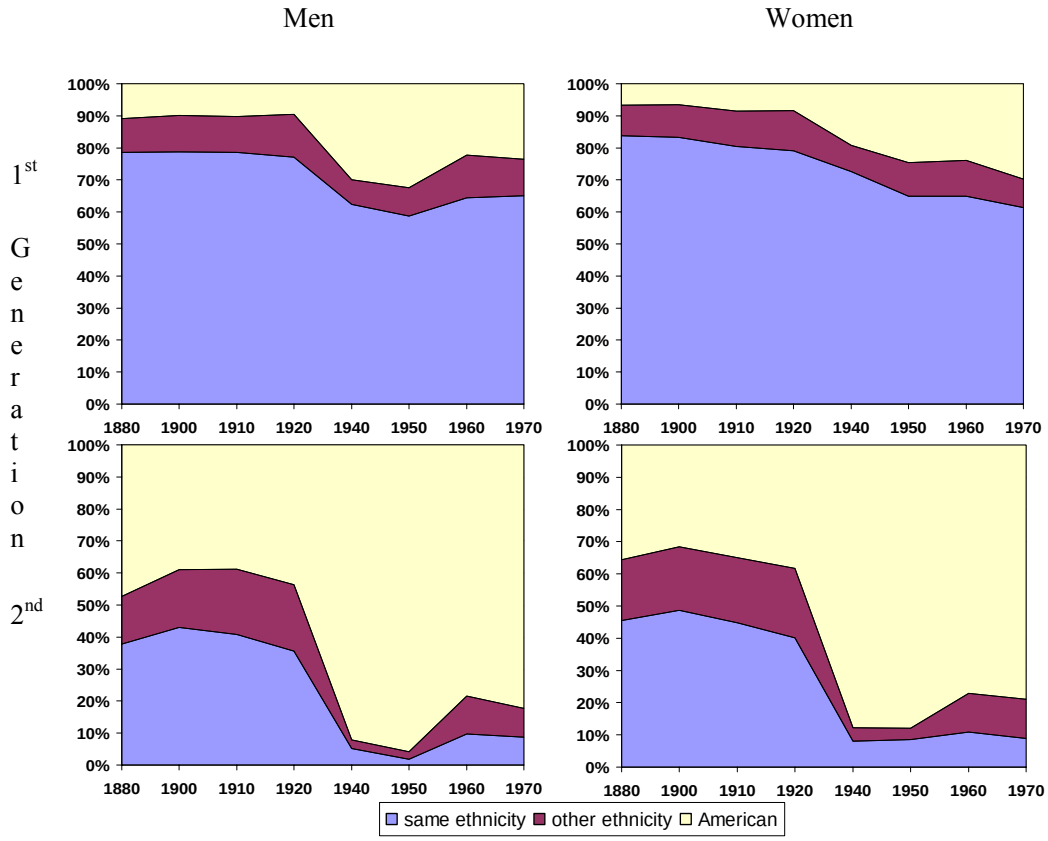

Figure 1. Ethnic marriage patterns by gender and generation: Restrictive legislation of the 1920s followed by the Great Depression sharply curtailed immigration and promoted out-marriage

Source: IPUMS-USA (Ruggles and Sobek, 1998), 1% sample extract
Note: Sums for 50 countries of origin, Albania to Yugoslavia, excluding native-born of native-stock married to native-born of native-stock.

Table 1. Model topologies for Husband and Wife's ethnicity marriage patterns. 1880-1920 and 1980-2000								
Row, Column	**1880-1920**				**1980-2000**			
A	Native				Native non-Hispanic white			
B	Other non-native				Other non-native			
C	First generation same ethnicity				First generation same ethnicity			
D	Second Generation same ethnicity				Second+ generation same ancestry			
	Wife							
Husband	**A**	**B**	**C**	**D**	**A**	**B**	**C**	**D**
	M_0 Independence				**M_1 Uniform Homogamy**			
A	0	0	0	0	***1***	0	0	0
B	0	0	0	0	0	***1***	0	0
C	0	0	0	0	0	0	***1***	0
D	0	0	0	0	0	0	0	***1***
	M_2 Discrete Homogamy				**M_3 Discrete Homogamy +2nd generation & 1st**			
A	***1***	0	0	0	***1***	0	0	0
B	0	***2***	0	0	0	***2***	0	0
C	0	0	***3***	0	0	0	***3***	***4***
D	0	0	0	***4***	0	0	***4***	***4***
	M_4 Discrete Homogamy +symmetry 2nd & 1st				**M_5 Discrete Homogamy + gender asymmetry 2nd & 1st**			
A	***1***	0	0	0	***1***	0	0	0
B	0	***2***	0	0	0	***2***	0	0
C	0	0	***3***	***5***	0	0	***3***	***6***
D	0	0	***5***	***4***	0	0	***5***	***4***

Table 2. Modelling fittings for 6 Ethnicities over four censuses: 1880, 1900, 1910, 1920
Best models: M_3 (discrete homogamy with 2nd & 1st generation crossings) for English, Swedish and French--uniform for all censuses and M_5 (M_3 with the addition gender assymetry) uniform for Irish and Italians, discrete for each census for Germans

		Ireland		England		Sweden		Germany		Italy		France	
	df	G^2	BIC	G^2	BIC	G^2	BIC	G^2	BIC	G^2	BIC	G^2	BIC
Independence/Marginals													
1. CH, CW	36	89314.6	54162.1	56794.5	48812.6	97210.4	48388.2	82106.3	57938.1	134223.0	55716.8	57319.8	44675.1
Time Constant Association													
2. CH, CW, M_1	35	3345.9	2699.1	1079.2	672.9	4568.3	2358.3	4018.1	3519.2	29849.7	7162.4	1291.7	320.6
3. CH, CW, M_2	32	2828.0	1388.3	695.3	308.6	3435.5	669.3	3404.5	2390.3	15082.9	2407.6	647.7	102.8
4. CH, CW, M_3	32	532.8	163.8	543.7	194.1	412.2	53.1	785.7	462.06	444.9	97.0	386.6	32.3
5. CH, CW, M_4	31	501.2	142.5	542.4	204.0	399.3	45.2	692.8	338.9	428.5	87.8	382.4	40.2
6. CH, CW, M_5	30	458.6	117.4	541.5	214.8	387.3	47.0	672.7	329.7	409.6	87.0	377.3	45.7
Time Variant Association													
Uniform variation over C													
7. CH, CW, M_{3b}	29	294.4	-61.3	150.2	**-191.7**	111.2	**-224.7**	571.5	252.6	103.8	-259.2	103.7	**-236.7**
8. CH, CW, M_{4b}	28	272.3	-78.2	150.1	-180.4	104.1	-222.8	507.1	174.0	107.7	-265.1	99.8	-227.7
9. CH, CW, M_{5b}	27	228.0	**-99.8**	149.4	-169.2	92.2	-221.9	489.9	168.7	60.9	**-270.4**	95.7	-219.6
Unrestricted variation													
10. CH, CW, M_{5c}	12	64.2	-76.9	113.4	-27.9	31.19	-107.1	164.1	**19.1**	16.4	-119.6	23.0	-115.9

C Census year; H Husband's ethnicity; W Wife´s ethinicity; M1...M5 model specifications for Husband and Wife's ethnicity association;
b uniform variation over C; *c* unrestricted variation over C.
df degrees of freedom.
G^2 measure of goodness of fit
BIC Bayesian Inference Coefficient takes into account the trade-off between degrees of freedom, goodness of fit, and sample size; lowest values signals best fit (in **bold**)

Table 3. "Newest" Ethnicities' marriage patterns 1980, 1990, 2000 require 3 models
M_3 (discrete homogamy with 2nd & 1st generation crossings) uniform for all censuses for Koreans and Cubans
M_4 (M_3 plus gender symmetry) uniform for all censuses for Chinese, Japanese and Filipinos
and M_5 (M_3 with the addition of gender assymetry), discrete for each census for Mexicans (poor fit in any case)

			China		Japan		Korea		Philippines		Mexico		Cuba	
		df	G^2	BIC	G^2	BIC	G^2	BIC	G^2	BIC	G^2	BIC	G^2	BIC
Independence/Marginals														
1	**CH, CW**	27	310904.1	153308.8	224864.4	151632.3	236213.4	151490.0	237561.7	15357.2	400987.0	202024.4	269700.5	152541.1
Time Constant Association														
2	**CH, CW, M_1**	26	5336.1	2202.2	1692.2	683.7	2178.8	967.7	3072.3	1364.3	13964.5	12751.3	4534.3	1804.6
3	**CH, CW, M_2**	23	5339.4	602.2	782.0	198.7	843.8	132.6	3432.1	645.2	15655.1	9506.2	4413.3	647.1
4	**CH, CW, M_3**	23	353.6	67.3	716.3	412.5	369.4	75.7	345.6	58.5	1498.9	1138.8	313.9	29.6
5	**CH, CW, M_4**	22	339.3	64.0	403.6	127.0	361.5	84.7	325.7	50.8	1365.6	1060.2	313.8	42.1
6	**CH, CW, M_5**	21	335.8	75.2	402.4	139.5	361.3	97.4	313.2	51.0	1363.1	1071.9	311.8	52.8
Time Variant Association														
Uniform variation over C														
7	**CH, CW, M_{3b}**	21	79.1	**-189.5**	413.3	129.8	123.6	**-171.9**	92.2	-172.9	848.1	544.0	66.4	**-198.4**
8	**CH, CW, M_{4b}**	20	66.8	**-189.6**	111.1	**-143.4**	114.2	-163.0	74.4	**-180.3**	770.1	509.1	65.8	-186.6
9	**CH, CW, M_{5b}**	19	62.7	-178.8	109.8	-131.0	114.2	-150.4	60.8	**-181.4**	767.4	520.9	63.4	-176.0
Unrestricted variation														
10	**CH, CW, M_{5C}**	9	36.6	-77.2	69.3	-45.2	19.5	-96.8	42.3	-73.2	564.7	**437.4**	33.3	-80.4

C Census year; H Husband's ethnicity; W Wife´s ethinicity; M1...M5 model specifications for Husband and Wife's ethnicity association;
b uniform variation over C; *c* unrestricted variation over C.
df degrees of freedom.
G^2 measure of goodness of fit
BIC Bayesian Inference Coefficient takes into account the trade-off between degrees of freedom, goodness of fit, and sample size; lowest value signals best fit (in **bold**).

Table 4. Endogamy estimates for old and newest ethnic groups by generation
Log odds for inmarriage from model M_{5c}: discrete homogamy
plus gender assymetry with unrestricted variation from census to census

	First Generation (parameter 3)				Second Generation (parameter 4)			
	1880	**1900**	**1910**	**1920**	**1880**	**1900**	**1910**	**1920**
Ireland	**5.0**	**5.3**	**5.6**	**5.3**	**2.2**	**2.2**	**1.8**	**1.7**
England	**3.1**	**2.3**	**2.5**	**3.0**	**0.6**	**0.8**	**0.7**	**0.9**
Sweden	**7.3**	**6.3**	**6.0**	**5.8**	**6.4**	**5.0**	**3.1**	**2.8**
Germany	**4.9**	**4.7**	**3.6**	**3.9**	**2.2**	**1.9**	**1.5**	**1.2**
Italy	**8.8**	**10.4**	**10.1**	**8.6**	-	-	-	5.7
France	4.8	5.6	6.4	4.6	2.3	1.8	-	1.5
	First Generation				**Second Generation or more**			
	-	**1980**	**1990**	**2000**	**-**	**1980**	**1990**	**2000**
China	-	**6.4**	**6.5**	**6.4**	-	**5.7**	**4.6**	**5.0**
Japan	-	1.2	1.8	3.0	-	5.8	4.5	5.4
Korea	-	4.0	6.0	6.2	-	-	-	5.9
Philippines	-	**5.1**	**4.5**	**4.8**	-	**4.5**	**4.2**	**4.4**
Mexico	-	**5.7**	**5.6**	**5.2**	-	**3.9**	**3.3**	**2.9**
Cuba	-	**5.5**	**5.5**	**5.8**	-	**3.9**	**4.1**	**4.3**

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