Status Homogamy in the United States[1]

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According to classical works on social stratification, status homogamy can be regarded as an indicator of the "openness" of society. In contrast to previous approaches, this article treats marriage choice as a multidimensional phenomenon and makes a distinction between ascriptive- and achievement-oriented characteristics. Ascriptive status homogamy is measured by the similarity of spouses with respect to their fathers' occupational class, while the achieved dimension of status homogamy is measured by the similarity of spouses' educational attainment. Multivariate log-linear models are used to explore the relative importance of these factors for the choice of a spouse, and the article tests the hypothesis that there has been a transition from ascription to achievement in patterns of marriage selection. This study first demonstrates empirically that previously conducted synthetic cohort analyses of educational homogamy suffer from selection biases and then, using the Occupational Change in a Generation (OCG) surveys, analyzes two *real* marriage cohorts. The analyses show that education is a more important boundary in marriage selection than social-class origins and that educational homogamy has increased over time. At the same time, there is some indication that ascription has become a less important boundary in marriage selection.

INTRODUCTION

The study of social stratification has traditionally focused on three related questions: What are the main dimensions of inequality in society? What is the strength of this inequality? How much mobility do families and individuals have in the social hierarchy? The third question can be phrased as a question about the "openness" of status groups and has traditionally been measured by assessing the degree of inter- and intra-

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generational occupational mobility. An alternative way of measuring the openness of society is to focus on how much people from different status groups interact on a basis of equality. In this respect, the selection of marriage partners is particularly important. Marriage is a choice for a long-term relationship that is—at least under certain historical conditions—focused on procreation and characterized by intimacy and close personal ties. Marrying someone from a different status group is not only accepting that person as an equal lifetime partner, it is also choosing that the next generation will not continue the distinctions between status groups that currently prevail. Questions about the rigidity of the social structure can therefore be answered with empirical analyses of marriage patterns (Glass 1954; Lipset and Bendix 1959; Blau and Duncan 1967; Hout 1982; Sixma and Ultee 1984; Jones 1987).

A second way of applying the study of homogamy to questions about social stratification lies in its multidimensional character. Individuals belong to several status groups at the same time, and these social differences are not necessarily correlated. The existence of intersecting group memberships suggests that, for part of the population, making a match in one respect implies forgoing a match in another. In these cases, people choose which dimension of homogamy they consider most important. Hence, a study of multidimensional homogamy can shed light on the relative strengths of different dimensions of social stratification. In this respect, the traditional distinction between achieved and ascribed dimensions of inequality is important. Some theorists on stratification have argued that ascriptive criteria such as class background, race, and ethnicity have become less important in determining the socioeconomic positions that people achieve during the life course. They argue instead, that achieved qualities, particularly educational attainment, are now the dominant criterion for the distribution of life chances in society (Blau and Duncan 1967). The parallel with marriage patterns can easily be drawn: questions about how much someone can get ahead socially and economically in spite of a disadvantageous social background are similar to questions about whether two individuals who are attracted to each other will get married despite their coming from different social backgrounds. More specifically, if marriage partners have a high degree of similarity in their social backgrounds, that could be regarded as evidence for the prevalence of ascriptive mechanisms of stratification. If brides and grooms are similar in their own cultural values and preferences—as, for instance, is indicated by educational homogamy—that would indicate that society is more oriented to achievement than to ascription. In the former case, marriage binds families of origin together, whereas, in the latter case, marriage connects individuals independently of their families of origin.

The conceptual resemblance of interclass marriage and intergenera-

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tional mobility has often been emphasized in pioneering studies of social stratification (Sorokin [1927] 1959; Glass 1954; Lipset and Bendix 1959). Nonetheless, the importance of ascription versus achievement has not yet been explored in the context of intermarriage.[2] Both the empirical and theoretical literatures have interchangeably defined status homogamy as the similarity of spouses' ascribed status attributes, as indicated by their fathers' occupations (Burgess and Wallin 1943; Centers 1949; Berent 1954; Hope 1972), and the similarity of spouses' achieved status characteristics, as indicated by their own occupations (Marvin 1918; Hunt 1940; Hope 1972; Ramsøy 1966; Hout 1982) and educational attainment (Hollingshead 1950; Berent 1954; Garrison et al. 1968; Michielutte 1972; Rockwell 1976; Spanier and Glick 1980; Sixma and Ultee 1984; Jones 1987). Conceptual distinctions between these different kinds of homogamy seem to have been ignored.

In this article I present an analysis of the multivariate structure of status homogamy. My first aim is to assess the relative importance of boundaries of ascription and achievement for marriage choice. Ascriptive status homogamy is indicated by the similarity of social-class background; the achieved dimension of homogamy is indicated by the similarity of educational attainment. My second aim is to explore whether there has been a transition from ascription to achievement in patterns of marriage selection.

PREVIOUS STUDIES OF STATUS HOMOGAMY

Although research on status homogamy started early in this century (Marvin 1918), in comparison with developments in research on occupational mobility and status attainment, there has been no impressive progress. Most studies have simply described the similarity of spouses in terms of a single characteristic (parental status, occupation, or education) or in terms of several characteristics dealt with separately. Table 1 presents an overview of findings in 10 bivariate studies of homogamy in the United States conducted in the past five decades. Despite the variety of samples under consideration, the differences in the categorization of variables, and historical factors affecting the outcomes, researchers consistently found high degrees of status homogamy. For occupational status, the percentage who have similar attributes is about 35%, for education, the

[2] An exception can be found in research on other dimensions of ascription. Schoen and Wooldredge (1989), e.g., have analyzed the role of education vs. race in marriage selection. Another exception may be the literature on the marital mobility of women (Tyree and Treas 1974; Chase 1975). Since this research analyzes the association between the occupations of *husbands* and the occupations of *wives' fathers,* it does not deal with homogamy directly.

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TABLE 1

OVERVIEW OF FINDINGS IN TEN AMERICAN STUDIES OF HOMOGAMY

Study	Year	*N*	Description of Sample	Ncat	*D* (%)
			A. Husband's and Wife's Father's Occupation		
Burgess and Wallin	1943	986	Nonrandom sample of engaged couples in Chicago, 20–30 years	4	49
Centers	1949	449	Married couples from nonfarm background, 18–80 years	7	43
Rubin	1968	15,084	White married couples, 22–41 years (OCG-I)	5	36
		10,879	White married couples, 42–61 years (OCG-I)	5	40
			B. Husband's and Wife's Education		
Burgess and Wallin	1943	1,000	Nonrandom sample of engaged couples in Chicago, 20–30 years	3	54
Hollingshead	1950	431	Marriage licenses in New Haven	3	66
Garrison et al.	1968	123,488	Birth certificates in Minnesota	3	50
Michielutte	1972	40,445	White married couples (1960 census)	5	48
			Nonwhite married couples (1960 census)	5	59
Rockwell	1976	. . .	White married couples (1970 census)	6	45
			Nonwhite married couples (1970 census)	6	40
Spanier et al.	1980	24,152	White married couples, 35–64 years (1975 CPS)	6	45
		2,034	Black married couples, 35–64 years (1975 CPS)	6	46
			C. Husband's and Wife's Occupation		
Marvin	1918	49,207	Marriage licenses in Philadelphia (1913–16)	25	8
Hunt	1940	675	Marriage licenses in small town in Massachusetts (1923–37)	5	36
Hout	1982	12,437	Published table (1970 census)	5	34

NOTE.—Ncat is the number of categories; *D* is the percentage of cases on the diagonal. The percentage for Hollingshead's study is based on a combination of separate tables for Catholics, Jews, and Protestants. The percentage for Garrison's study is an average for the 1965 and 1966 table. The percentage for Marvin's study is unusually low because it is based on a 25 × 25 table. The percentage for Hunt's study is based on a combination of tables for three different time periods (1923–28, 1930–32, and 1933–37). In Marvin's study, nonworking wives are included in the table and considered to be married homogamously if they marry a man without an occupation. In Hunt's study, nonworking wives are also included in the table but assigned to the lowest occupational category.

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percentages vary from 40% to 66%, and for similarities of the spouses' fathers' occupational status positions, the percentages vary from 36% to 49%. Analyses of homogamy as a continuous phenomenon show that the correlation between the spouses' educational levels is substantial, varying around .60, while the correlation between the spouses' occupational status positions is more modest, varying around .40 (Blau and Duncan 1967; DiMaggio and Mohr 1985; Jacobs and Furstenberg 1986).

Although there exists an early, but failed, attempt to study the strength of several socioeconomic dimensions of homogamy simultaneously (Popenoe 1937), the multivariate approach has had little follow-up. The primary exception is Blau and Duncan's (1967) analysis of a large national representative sample of U.S. males aged 20–64 in 1962 (see also Warren 1966). This study contains a brief multivariate analysis showing that the correlation between spouses' education is stronger than the correlation between spouses' class origins. They also found that the correlation between the spouses' fathers' occupations drops substantially when spouses' educational levels are controlled for.

Trends in status homogamy in the United States have typically been described with analyses of census data (Michielutte 1972; Nam 1965; Rockwell 1976). For instance, by comparing synthetic cohorts of first-married white couples in the 1970 census, Rockwell shows that, in the period before 1950, there has been a clear trend away from random mating. For the postwar period, he finds stability in the ratio of observed homogamy to the degree of homogamy expected under a model of chance mating (Rockwell 1976, p. 89). Trend studies such as Rockwell's are potentially biased because marriage cohorts are compared at one point in time. Since older cohorts have been married longer than younger cohorts, cohorts differ in their rates of attrition. Attrition from marriage cohorts may be selective because the likelihood of divorce and separation is generally inversely related to homogamy (Bumpass and Sweet 1972). The older cohorts may be more homogamous primarily because they have been exposed to the risks of marital dissolution for a longer period of time. If there has been selective attrition, the stable postwar pattern observed in previous studies may conceal true increases in educational homogamy in this period. Another drawback of these studies is that they rely heavily on the use of mobility ratios that are now known to be inappropriate for the study of historical change. Two sets of mobility ratios cannot be the same unless the marginal distributions of the two tables are the same (Featherman and Hauser 1978, p. 413). In the context of intermarriage, this implies that the ratio of observed to expected homogamy cannot remain constant if educational distributions change.

In sum, the empirical literature shows that for various indicators of social status—whether achieved or ascribed—there is a clear tendency

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for people to marry homogamously. Scarce findings on the relative and independent importance of social characteristics seem to indicate that education is more important than socioeconomic origins. Studies of trends have found that educational homogamy has remained stable in the United States in the second half of this century, once changes in the distribution of schooling in society have been taken into account. Nevertheless, these findings are not convincing because they are based on statistically inappropriate analyses of synthetic marriage cohorts. Finally, none of the studies examine changes in the relative importance of several dimensions of homogamy simultaneously. My multivariate analysis follows those of Blau and Duncan (1967) and Warren (1966) and extends them by making comparisons over time and by using multivariate log-linear models of variable social distance mobility (Haberman 1979) to ascertain the strength of ascription and achievement in marriage selection.

THEORETICAL ARGUMENTS ABOUT MARRIAGE SELECTION

Marriage selection is commonly believed to be determined by the preferences people have for similarity in social and cultural characteristics and by the constraints of the marriage market they face in realizing these preferences (for an overview of theories, see Eckland [1968] and Epstein and Guttman [1984]). A discussion of these mechanisms will further illuminate the conceptual distinction between achieved and ascribed dimensions of status homogamy and will enable me to formulate expectations regarding trends in marriage selection.

PREFERENCES OF POTENTIAL MARRIAGE PARTNERS

Evidence of homogamy exists for a wide range of characteristics, such as intelligence, values, attitudes, deafness, personality characteristics, social origins, religion, race, ethnicity, occupation, and education (Epstein and Guttman 1984). In part, these matching patterns can be explained by the preferences people have for similarity in cultural resources, on the one hand, and in socioeconomic resources, on the other. Cultural resources include values, norms, life-styles, leisure activities, taste, intellectual erudition, styles of speech, and life experiences. Similarity of cultural resources is believed to be mutually rewarding in relationships with friends and spouses. People with similar cultural backgrounds are more likely to confirm each other's behavior and worldviews (Lazarsfeld and Merton 1954), and they share a "common universe of discourse" that enhances mutual understanding (DiMaggio and Mohr 1985). Cultural resources are either acquired in the home environment or transmitted by educational institutions and peer groups outside the home. These two

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processes of socialization may be in conflict, and educational institutions have a tendency to counteract the influence of parental socialization. It has been demonstrated extensively that educational attainment has an effect on values, attitudes, knowledge, and life-styles that is independent of, and relatively stronger than, the effect of parental status (Hyman et al. 1975; Hyman and Wright 1979; Davis 1982). Therefore, when adolescents reach marriageable age, they should be more likely to realize their preferences for cultural similarity by making matches on the basis of education rather than on that of social origins (Blau and Duncan 1967, p. 357).

There are several arguments about the role of socioeconomic resources in the process of marriage selection. Probably the most cited theory was developed by Becker (1981), who argues that negative assortative mating on economic status prevails over positive. The central assumption in this theory is that the rewards of marriage stem from the division of paid and domestic labor within the household. According to Becker, marriage is most likely to occur between a person who has a comparative advantage in earning money (usually the male) and a person who has a comparative advantage in domestic labor (usually the female). The rapid growth in women's labor-force participation, however, suggests that Becker's assumption of a strong sexual division of labor within the family does not hold true. When changes in sex roles are considered, an alternative hypothesis about the role of socioeconomic resources in marriage choice may be more plausible. When both partners want to work, the family may experience problems of status incompatibility if the occupational statuses of the spouses are too far apart (Oppenheimer 1977). Under conditions of high female labor-force participation, people may prefer similarity rather than dissimilarity in socioeconomic status.

Since people often marry at an age when they have just begun their socioeconomic careers, the process of spouse selection is complicated by uncertainty (Oppenheimer 1988). As a consequence, people who are searching for a spouse have to rely on proxies in order to assess the type of career marriage candidates will make in the future. Status-attainment research has demonstrated that educational attainment has a much larger direct effect on socioeconomic status than does father's occupational status (Blau and Duncan 1967; Duncan et al. 1972; Jencks 1972; Treiman and Terrell 1975). This makes education a better proxy and, therefore, a better criterion than social origins for selecting a spouse.

In sum, education is not only an important determinant of the spouses' cultural resources before marriage, but it may also function as the prime indicator of the spouses' cultural and socioeconomic characteristics after marriage. This double function of education may well make it the most important factor in marriage selection.

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CONSTRAINTS OF THE MARRIAGE MARKET

How much people are able to realize their preferences for cultural and socioeconomic similarity depends largely on the structure of the marriage market. Marriage markets can be defined either in terms of the demographic composition of the marriageable population as a whole (Goldman et al. 1984), or in terms of the composition of local areas, such as neighborhoods (Ramsøy 1966; Peach 1974; Morgan 1981) and educational institutions (Scott 1965; Reiss 1965; Bayer 1972). When young people live with their parents while searching for a marriage partner, the residential marriage markets they usually face are socially segregated. As a consequence, there is a high probability of their encountering people with similar social backgrounds (Eckland 1968). Living with one's parents can thus be expected to promote homogamy of ascribed characteristics.

Those whose educational careers extend beyond high school often move out of the parental home and experience a change in their matching opportunities. The extensive social life and the narrow age distribution of colleges make them efficient, or low-cost, marriage markets (Scott 1965). Although college populations are somewhat homogeneous in terms of students' social origins, they are, by definition, very homogeneous in terms of students' achieved characteristics. This suggests that young people who enroll in higher educational institutions are more likely to marry someone with a similar education than to find a spouse whose social origins resemble their own. Nonetheless, high educational attainment may also lead to postponement of marriage (Marini 1978), which implies that probably only a small proportion of college students marry while in college. Still, continued exposure to higher education may result in the formation of friendship circles that are homogeneous in terms of education. Becoming accustomed to these patterns of social interaction may increase their chances of marrying someone with a similar education after they leave school.

EXPECTED TRENDS IN STATUS HOMOGAMY

There are several reasons for expecting boundaries of ascription to become less important and boundaries of achievement more so in marriage selection. Probably the most important change is the rapid increase in educational attainment in the second half of this century. This expansion in the period of secondary socialization implies that the cultural outlook of people at a marriageable age has become more dependent on their own achievements and decreasingly dependent on their social origins. Insofar as homogamy is based on preferences for cultural similarity, we may expect education to gain importance as a factor in marriage choice.

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At the same time, the rise in educational attainment implies that increasing numbers of the marriageable population are encountering low-cost marriage markets that are homogeneous in education and heterogeneous in social origins.

Trends in homogamy may also be affected by changes in the process and determinants of socioeconomic achievement. There has been a decline in immobility between father's occupation and son's first occupation, a trend that is paralleled by a decreasing association between occupational origins and destinations (Hauser et al. 1975; Featherman and Hauser 1978). In addition, an individual's occupational attainment has become more strongly dependent on education and less strongly so on parental characteristics (Featherman and Hauser 1978, p. 259). These findings suggest that education has become a more important proxy than parental status in reducing the uncertainty in matching on socioeconomic status.

The changing role of women in society may also affect patterns of marriage selection. It is plausible that the rapid growth of female labor-force participation in the second half of this century has changed the meaning of education for women. Whereas, in times of low female labor-force participation, women's education may have served primarily as an indicator of their cultural resources, the increasing economic activity of women suggests that education has also become an important indicator of their economic resources. It is therefore to be expected that education has become a more valuable criterion in men's choice of a spouse (Schoen and Wooldredge 1989).

To conclude, education's growing importance to an increasing number of young Americans, the rise in the importance of education vis-à-vis parental status in determining future socioeconomic careers, and the changing meaning of education for women may all have reduced the strength of the ascriptive dimension of homogamy and increased the strength of the achievement dimension of homogamy. I turn now to an empirical exploration of the achieved and ascribed dimensions of homogamy in the United States between 1952 and 1973.

DATA AND MEASUREMENTS

National representative samples containing information on parents-in-law are scarce. Fortunately, the 1962 and 1973 Occupational Change in a Generation (OCG) surveys collected information on the socioeconomic status of both husband's and wife's parents (Blau and Duncan 1967; Featherman and Hauser 1978). Data on the father and father-in-law pertain to their occupations when the spouses I studied were 16 years old.

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Previous trend studies like Rockwell's (1976) and Michielutte's (1972) have compared marriage cohorts at one point in time. Since homogamy is believed to be inversely related to the risk of marital dissolution, and since the older cohorts in these studies have been exposed to that risk for a longer period of time, synthetic cohort analyses are potentially biased. My study differs from previous studies in that I analyze real marriage cohorts instead of synthetic ones. The importance of using a real cohort approach can best be illustrated by providing empirical evidence on the selection bias that a synthetic cohort analysis introduces. By comparing marriage cohorts in the first OCG with the same marriage cohorts 11 years later (in the second OCG), I can demonstrate how the homogamy of a marriage cohort changes over time. Comparing figures within each row of table 2 reveals these attrition effects. Note that the older cohorts are less useful as evidence since not only do marital dissolution and mortality cause attrition, but so, too, does being over 65 years old—the cut-off point of the OCG. Nevertheless, the correlations between the spouses' educational levels increase for all cohorts, and the percentages of those who married homogamously increase for all cohorts except one. Given the fact that synthetic cohort studies typically include cohorts of couples who have been married for several decades, the modest attrition effects in an 11-year period, illustrated in table 2, suggest that previous analyses of long-term trends probably suffered from substantial selection bias.

This study compares two marriage cohorts: men in 1962 who had then been married for 10 years or less and men in 1973 who had then been married for the same length of time. Since the two marriage cohorts have been married equally long, they will have approximately the same rate

TABLE 2

INTRACOHORT CHANGES IN EDUCATIONAL HOMOGAMY, 1962–1973

	Zero-Order Correlations		Percentage Homogamous	
Marriage Cohort*	1962	1973	1962	1973
1957–61	.614	.650	48.0	48.8
1952–56	.595	.601	46.8	46.7
1947–51	.563	.602	45.5	48.3
1942–46	.595	.604	45.0	47.6
1937–41	.530	.603	43.5	48.3
1932–36	.583	.609	46.4	52.0
1927–31	.613	.626	51.7	59.9

* Only white married couples of which the husband is in his first marriage were included. Based on five educational categories (as in table 3).

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of attrition. One could argue that an increase in the frequency of divorce and separation during this period could cause the attrition to be somewhat higher in the younger marriage cohort. However, there is little reason to believe that the increase in marital dissolution has been caused by changes in homogamy. Instead, researchers single out exogenous factors such as increasing female labor-force participation and shifting attitudes toward divorce as being responsible (see Cherlin [1981] for an overview). If this assumption is valid, the slightly higher attrition in the 1963–73 cohort will not automatically be accompanied by a higher degree of homogamy in that cohort. Only first marriages are considered because marriage selection tends to differ according to marriage order (Jacobs and Furstenberg 1986).[3] The analysis is further limited to white couples because there are substantial racial differences in marriage behavior, and because the small number of nonwhites in 10-year marriage cohorts does not permit a separate statistical analysis. The analysis is based on an occupational classification that is frequently used in social-stratification research. A distinction is made between farmers (including farm laborers) and manual and nonmanual workers, and the latter categories are further differentiated into lower and higher groups (this is roughly similar to Featherman and Hauser [1978] and Hout [1982]). The educational classification distinguishes elementary school, high school, and college educations. Within the latter two groups, further distinctions are made between those with and those without a degree (three vs. four years of high school or college). Percentage distributions of the variables for each cohort are presented in table 3.

ANALYSES

My analyses focus on three issues. The *first* objective is to compare the strength of achieved and ascribed dimensions of homogamy. The *second* objective is to describe the differences in the degree of homogamy between the two marriage cohorts. The *third* aim of the analysis is to explore the sources of change, in particular, the roles of structural factors (here measured by changes in the distribution of educational attainment and social origins of marriage cohorts), on the one hand, and changes in social mobility (here measured by changes in the association between father's occupation and spouse's education), on the other. Before these issues can be addressed, I need to develop a model of homogamy. In the following section, I explore alternative log-linear models and choose a common model for each type of homogamy. I then use these models to

[3] My information indicates only whether the husband is in his first marriage, not whether the wife is in her first.

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TABLE 3

PERCENTAGE DISTRIBUTIONS OF HUSBANDS' AND WIVES' EDUCATION AND HUSBANDS' AND WIVES' FATHERS' OCCUPATIONS

VARIABLE	MARRIAGE COHORT 1952–62	MARRIAGE COHORT 1963–73	CHANGE IN PERCENTAGE POINTS
Husband's father's occupation:*			
Farm	19.8	13.9	−5.9
Lower manual	30.4	28.6	−1.8
Higher manual	21.5	24.5	+3.0
Lower nonmanual	9.1	10.2	+1.1
Higher nonmanual	19.2	22.8	+3.6
Total	100.0	100.0	
N	2,254	4,733	
Wife's father's occupation:			
Farm	18.0	11.3	−6.7
Lower manual	31.3	28.1	−3.2
Higher manual	22.6	24.1	+1.5
Lower nonmanual	9.2	11.8	+2.6
Higher nonmanual	19.5	24.7	+5.2
Total	100.0	100.0	
N	2,231	4,631	
Husband's education:			
Elementary	14.4	6.5	−7.9
High school 1–3	17.5	11.1	−6.4
High school 4	36.4	40.2	+3.8
College 1–3	13.0	19.2	+6.2
College 4+	18.7	23.1	+4.4
Total	100.0	100.0	
N	2,406	5,026	
Wife's education:			
Elementary	9.7	5.1	−4.6
High school 1–3	19.1	12.2	−6.9
High school 4	50.5	50.2	−.3
College 1–3	11.6	16.7	+5.1
College 4+	9.3	15.9	+6.6
Total	100.0	100.0	
N	2,403	5,024	

* Upper nonmanual = professional and technical workers, managers, officials, and proprietors (except farm); lower nonmanual = clerical workers and sales workers; upper manual = craftsmen and foremen; lower manual = operatives, private household workers, other service workers, and laborers (except farm and mine); farm = farmers, farm laborers, and foremen.

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develop a multivariate log-linear framework in which achieved and ascribed dimensions of homogamy are analyzed simultaneously. Finally, I estimate a series of nested multivariate log-linear models that allows me to answer the three central questions of the analysis.

MODELING HOMOGAMY

Log-linear models have the advantage over correlational methods in that they are able to single out that part of the association between spouses' attributes that is independent of the effect of marginal distributions. Following Johnson (1980) on religious assortative mating, I make a distinction between a tendency to marry within the group, or what Johnson calls "intrinsic homogamy," and a tendency to marry spouses near in status rather than those distant in status. Intrinsic homogamy can be modeled with a diagonal parameter that describes the degree of in-marriage over and above that expected on the basis of the marginal distributions (Johnson 1980). The tendency to avoid marriages with people distant in status can be assessed with models of social-distance mobility (Haberman 1979). Distance models structure the off-diagonal cells of a marriage table so that the cell densities decrease in magnitude by a fixed amount as the number of categories in which the spouses are apart increases. The advantage of distance models is that they assume symmetry and summarize the association in the off-diagonal cells with a single parameter.

These models can be refined in two ways. First, the degree of in-marriage may be higher in certain groups than in others; this can be modeled by estimating a separate diagonal parameter for each group. Second, in the fixed-distance model, the intervals between ordered categories are assumed to be equal. This assumption can be tested by estimating variable instead of fixed-distance models (Haberman 1979). In the fixed-distance model, the distances between categories are a function of the number of boundaries crossed, while in the variable-distance model, the distance between each pair of adjacent categories has to be estimated. Log-linear models of variable-distance mobility have previously been applied to the study of religious homogamy (Johnson 1980).

The strategy I followed in this exploration is gradually to relax assumptions about the nature of homogamy. Table 4 presents the goodness-of-fit statistics and the formal description of the models. When I focus first on homogamy with respect to social origins, it appears that adding a single diagonal parameter (model 2) to a model of independence (model 1) greatly improves the fit. Adding a fixed-distance parameter to model 2 also leads to a significant reduction in L^2. The hypothesis that each group has a different degree of in-marriage is confirmed by the data. However,

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TABLE 4

LOG-LINEAR MODELS OF EDUCATIONAL HOMOGAMY AND HOMOGAMY OF SOCIAL ORIGINS*

Description of Models†	L^2‡	df	L^2/df
A. Models of social origin homogamy:			
1. Marginals	598.30	16	37.39
2. Model 1 + diagonal parameter	254.83	15	16.99
3. Model 2 + fixed-distance parameter	134.39	14	9.60
4*a*. Model 3 + farm in-marriage	31.55	13	2.43
4*b*. Model 3 + variable diagonal parameters	28.77	10	2.88
5. Model 4*a* + variable distance parameters	23.18	11	2.11
B. Comparing models of social origin homogamy:			
1. Diagonal parameter (1 vs. 2)	343.47	1	343.47
2. Fixed-distance parameter (2 vs. 3)	120.44	1	120.44
3*a*. Farm in-marriage (3 vs. 4*a*)	102.84	4	25.71
3*b*. Other diagonal parameters (4*a* vs. 4*b*)	2.78	3	.93
4. Variable distances (4*a* vs. 5)	5.59	2	2.80
C. Models of educational homogamy:			
1. Marginals	2,597.85	16	162.37
2. Model 1 + diagonal parameter	1,189.23	15	79.28
3. Model 2 + fixed-distance parameter	39.24	14	2.80
4. Model 3 + variable diagonal parameters	33.15	10	3.32
5. Model 2 + variable distance parameters	27.14	11	2.47
D. Comparing models of educational homogamy:			
1. Diagonal parameter (1 vs. 2)	1,408.62	1	1,408.62
2. Fixed-distance parameter (2 vs. 3)	1,149.99	1	1,149.99
3. Variable diagonal parameters (3 vs. 4)	6.09	4	1.53
4. Variable distances (3 vs. 5)	12.10	3	4.03

* Models are estimated for the pooled cohorts. The second cohort is weighted down to the size of the first cohort. Total weighted sample size for models of educational homogamy is 4,806; for models of social origin homogamy it is 4,214.

† Models of homogamy of social origins are given by:

A1: $\log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf}$;

A2: $\log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta$;

A3: $\log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta + \nu_{|i-j|}$;

A4*a*: $\log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta + q\delta^f + \nu_{|i-j|}$;

A4*b*: $\log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta_i + \nu_{|i-j|}$;

A5: $\log F_{ij} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + p\delta + q\delta^f + \nu_i^D$,

where Hf_i is occupation of husband's father, Wf_j is occupation of wife's father, $p = 1$ if $i = j$ ($p = 0$ otherwise), $q = 1$ if $i = j = 1$ ($q = 0$ otherwise), and for i and $j > 1$, $\nu_i^D = \Sigma_{s=j}^{i-1} \nu_s$ when $i > j$, and $\nu_i^D = \Sigma_{s=i}^{j-1} \nu_s$ when $j > i$, with $\nu_i^D < 0$. Models of educational homogamy are given by:

C1: $\log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We}$;

C2: $\log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta$;

C3: $\log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta + \nu_{|k-l|}$;

C4: $\log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta_k + \nu_{|k-l|}$;

C5: $\log F_{kl} = \lambda + \lambda_k^{He} + \lambda_l^{We} + r\delta + \nu_k^D$,

where He_k is education of husband, We_l is education of wife, $r = 1$ if $k = l$ ($r = 0$ otherwise), and $\nu_k^D = \Sigma_{t=l}^{k-1} \nu_t$ when $k > l$, and $\nu_k^D = \Sigma_{t=k}^{l-1} \nu_t$ when $l > k$, with $\nu_k^D < 0$.

‡ L^2 is likelihood ratio χ^2.

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explorations show that the exceptional marriage pattern of people with farm origins accounts for most of the variation in intrinsic homogamy. A model with specific in-marriage parameters for each group (model 4*b*) does not have a significantly better fit than the more parsimonious model in which only the farm category is allowed to have a different degree of in-marriage compared with the other groups (model 4*a*). Model 4*a* is therefore preferred to model 4*b*. Finally, model 4*a* is significantly improved by relaxing the assumption that distances between groups are equal (model 5). Note that model 5 includes only a general in-marriage parameter, a farm in-marriage parameter, and variable marriage boundaries between the four nonfarm categories. Findings with regard to educational homogamy show more or less the same pattern. Adding a general in-marriage parameter (model 2) and a fixed-distance parameter (model 3) significantly improves the fit of a model of independence (model 1). The assumption of equal in-marriage tendencies seems to hold true for educational homogamy, given the nonsignificant improvement in the fit of model 3 by model 4. The hypothesis that boundaries between groups vary in strength is again confirmed by the data (model 5).

To conclude, model 5 is the preferred model for both dimensions of homogamy. Marriage selection can thus be regarded as a combination of two processes: a general tendency to marry people equal in status (intrinsic homogamy) and a tendency for marriage to become less likely as the status distance between individuals increases (avoidance of distance) in which the strength of the status boundaries depends on which pair of categories we look at.

MULTIVARIATE LOG-LINEAR MODELS OF HOMOGAMY

Since the research questions focus on two dimensions of homogamy, the education of the spouses and the occupations of their fathers, we need a multivariate model that takes intergenerational mobility, that is, the association between fathers' occupations and spouses' educations into account. For conceptual reasons, and in contrast to the status-attainment approach, I impose no causal order on the data. In the process of marriage selection, individuals demonstrate a set of attributes to others and evaluate a similar set of attributes in their potential spouses. While social origins and education are causally related, it is doubtful whether the mechanisms of demonstration and evaluation have an underlying causal order. People look at each other's origins, given their current destinations, and they look at their destinations, given their origins. Therefore, both dimensions of homogamy are modeled while the association between social origins and education is controlled for.

In order to answer the three central questions of the analysis, I estimate

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a series of nested multivariate log-linear models for the pooled sample of the 1952–62 and the 1963–73 marriage cohorts. The models, goodness-of-fit statistics, and formal descriptions are presented in table 5. In log-linear form, the *baseline model* is given by:

$$\log F_{ijklm} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^{C} + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe},$$

where Hf_i is occupation of husband's father, Wf_j is occupation of wife's father, He_k is education of husband, We_l is education of wife, and C_m is marriage cohort. Social mobility is taken as given, meaning that a saturated model is used for the association between fathers' occupation and educational attainment for both husbands and wives (λ_{ik}^{HfHe} and λ_{jl}^{WfWe}). An advantage of this approach is that it prevents the estimates of homogamy in subsequent models from being affected by incorrect models of the relationship between social origins and education.

To assess the degree of homogamy of education and social origins, in-marriage and distance parameters are added to model 1. Model *2a* adds parameters of homogamy of social origins, model *2b* adds parameters of educational homogamy (equations for models *2a* and *2b* are available upon request from the author), and model *3a* adds both sets of parameters. Model *3a* is defined as follows:

$$\log F_{ijklm} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^{C} + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe} + p\delta + q\delta^f + \nu_i^D + r\delta + \nu_k^D,$$

where $p = 1$ if $i = j$ (0 otherwise), $q = 1$ if $i = j = 1$ (0 otherwise), $r = 1$ if $k = l$ (0 otherwise), and ν_i^D and ν_k^D are the distance parameters for social origins and education, respectively. In this model, the degree of homogamy is an average for the two cohorts, and it is independent of the relationship between social origins and education for both husbands and wives, as well as independent of the influence of the marginal distributions. The latter effects are again averaged for the two cohorts.

The second set of models in the series focuses on change. In order to simplify matters, changes in the degree to which people avoid marrying a person distant in status are summarized with a single parameter that takes into account the fact that categories are unevenly dispersed over the social-distance scale. For this purpose, I construct a scaled distance parameter that uses the estimated variable-distance parameters ν_i^D and ν_k^D in model *3a* to scale the categories. Although model *3b* (equation not shown, but also available on request) does not provide new information—it has the same fit with five degrees of freedom less—interacting the scaled-distance parameter with cohort reveals the general change in marriage selection, while taking into account that intervals between categories vary in magnitude. Note that this approach disre-

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TABLE 5

MULTIVARIATE LOG-LINEAR MODELS OF EDUCATIONAL HOMOGAMY AND HOMOGAMY OF SOCIAL ORIGINS IN TWO MARRIAGE COHORTS

Description of Models*	L^2	df	L^2/df
A. Multivariate models of homogamy:			
1. Marginals and intergenerational mobility	5,515.77	1,200	4.60
2*a*. Model 1 + homogamy of social origins	4,681.39	1,195	3.92
2*b*. Model 1 + educational homogamy	1,986.40	1,195	1.66
3*a*. Model 1 + both dimensions of homogamy	1,396.67	1,190	1.17
3*b*. Model 1 + both dimensions of homogamy with scaled single distance parameters	1,396.67	1,195	1.17
4. Model 3*b* + modeling changes in homogamy	1,315.32	1,190	1.11
5. Model 4 + modeling marginal changes for husbands and wives equally	1,119.23	1,182	.95
6. Model 5 + modeling marginal changes for husbands and wives separately	1,098.65	1,174	.94
7. Model 6 + modeling changes in mobility	1,049.54	1,142	.92
B. Comparison of multivariate models of homogamy:			
1. Educational homogamy (2*a* vs. 3*a*)	3,284.72	5	656.94
2. Homogamy of social origins (2*b* vs. 3*b*)	589.73	5	117.95
3. Changes in homogamy (3*b* vs. 4)	81.35	5	16.27
4*a*. Changes in marginals equally for husbands and wives (4 vs. 5)	196.09	8	24.51
4*b*. Convergence of distributions of husbands and wives (5 vs. 6)	20.85	8	2.61
5. Changes in mobility (6 vs. 7)	49.11	32	1.54

* Models are defined as follows:

$$1: \log F_{ijklm} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^{C} + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe};$$

$$3a \text{ adds to } 1: p\delta + q\delta^f + \nu_i^D + r\delta + \nu_k^D;$$

$$3b \text{ adds to } 1: p\delta + q\delta^f + \nu^*_{|i-j|} + r\delta + \nu^*_{|k-l|};$$

$$4 \text{ adds to } 3b: p\delta_m + q\delta_m^f + \nu^*_{|i-j|m} + r\delta_m + \nu^*_{|k-l|m};$$

$$5 \text{ adds to } 4: \eta_{im} + \eta_{km},$$

$$6 \text{ adds to } 4: \lambda_{im}^{HfC} + \lambda_{jm}^{WfC} + \lambda_{km}^{HeC} + \lambda_{lm}^{WeC}$$

$$7 \text{ adds to } 6: \lambda_{ikm}^{HfHeC} + \lambda_{jlm}^{WfWeC},$$

where C_m is cohort, Hf_i, Wf_j, He_k, We_l, and homogamy parameters are defined in table 4, $\nu^*_{|i-j|}$ and $\nu^*_{|k-l|}$ are scaled distance parameters where the scaling of the category values is based on variable distance estimates ν_i^D and ν_k^D in model 3*a*. Interaction terms in model 5 are defined as follows:

$$\eta_{im} = \frac{\lambda_{im}^{Hf} + \lambda_{jm}^{Wf}}{2}, \text{ and } \eta_{km} = \frac{\lambda_{km}^{He} + \lambda_{lm}^{We}}{2}.$$

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gards the more complex equation about whether boundaries have changed in an uneven fashion. Model 4 is defined as follows:

$$\log F_{ijklm} = \lambda + \lambda_i^{Hf} + \lambda_j^{Wf} + \lambda_k^{He} + \lambda_l^{We} + \lambda_m^{C} + \lambda_{ik}^{HfHe} + \lambda_{jl}^{WfWe}$$
$$+ p\delta + q\delta^f + \nu^*_{|i-j|} + r\delta + \nu^*_{|k-l|}$$
$$+ p\delta_m + q\delta_m^f + \nu^*_{|i-j|m} + r\delta_m + \nu^*_{|k-l|m},$$

where $\nu^*_{|i-j|}$ and $\nu^*_{|k-l|}$ are the scaled-distance parameters. In this model the degree of homogamy is estimated for each cohort separately. The marginal distributions and intergenerational mobility are taken into account, but these effects are assumed to be equal in the two cohorts. These equality constraints are relaxed when I address the question about sources of change. I estimate three additional models that add parameters for cohort differences in marginal distributions and intergenerational mobility (models 5, 6, and 7). These models reveal the trend in homogamy, net of changes in marginal distributions and mobility. In addition, comparing the changes in homogamy in these models with changes in homogamy in model 4 will shed light on the sources of change. Models 5, 6, and 7 will be discussed in more detail in a subsequent section.

Since the tables are relatively sparse, the interpretation of goodness-of-fit statistics should not be given too much weight. Under these conditions, it is nevertheless still meaningful to compare the fit of nested models as long as the difference in degrees of freedom between models is small, which is the case here (Fienberg 1980).

THE STRENGTH OF ASCRIPTION AND ACHIEVEMENT

We see in table 5 that adding homogamy parameters to a model that includes parameters for the marginals and the association between social origins and education, significantly improves the fit. More important, we see that the patterns of marriage choice on the basis of education depart more strongly from random selection than do patterns of marriage choice based on social origins. Adding parameters for educational homogamy to a model of marginals, mobility, and homogamy of social origins decreases L^2 by 3,285, whereas adding parameters of ascriptive homogamy to a model of marginals, mobility, and educational homogamy decreases L^2 by 590 with the same loss of degrees of freedom. This suggests that marriage selection in the United States is more strongly oriented toward education than toward social origins. A more detailed assessment of the relative importance of achieved and ascribed dimensions of homogamy can be made by focusing on the parameter estimates of model 3*a* (table 6).

The positive in-marriage parameters for ascriptive marriage choice

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TABLE 6

PARAMETER ESTIMATES OF HOMOGAMY IN MULTIVARIATE LOG-LINEAR MODEL 3*a**

Parameter Description	Value	(*Z*-value)
A. Husbands' and wives' social origins:		
General in-marriage parameter	.127	(2.69)
Farm in-marriage parameter	1.469	(15.36)
Variable distance parameters:†		
Lower–higher manual	.064	(1.83)
Higher manual–lower nonmanual	.210	(5.66)
Lower–higher nonmanual	.054	(1.16)
B. Husbands' and wives' education:		
In-marriage parameter	−.527	(9.45)
Variable distance parameters:		
Elementary to high school 1–3	1.138	(16.83)
High school 1–3 to high school 4	1.118	(22.12)
High school 4 to college 1–3	1.230	(25.85)
College 1–3 to college 4+	1.264	(22.70)

* Model is defined in table 5.

† Variable distance parameters are multiplied by −1. Subtracting the antilog of the parameter value from 1 yields the relative decrease of cell frequencies when crossing a specific boundary.

indicate that people have a tendency to marry someone from their own class background. This tendency is, however, much stronger for people from farm backgrounds than for others, a finding that can probably be explained in terms of the social and geographic isolation of the rural population. Similar results have been found in an earlier analysis of occupations of fathers and fathers-in-law in the United States in 1962 (Hope 1972, p. 119).[4] In addition, when the tendency to marry within the group is controlled for, we observe a tendency to avoid marrying people distant in status. However, the manual-nonmanual boundary appears to be a much more salient impediment to intermarriage than the boundaries within the manual and nonmanual groups. Crossing the manual-nonmanual line (from upper manual to lower nonmanual) decreases marriage frequencies by 19%, while crossing the lower-higher boundaries within the manual and nonmanual groups decreases marriage frequencies by only 6% and 5%, respectively.[5] This result is in line with Hout's (1982) findings for data on husbands' and wives' occupations in the United States in the late 1970s.

The parameter estimates of educational homogamy show a somewhat different pattern. There is a strong tendency for marriages to become less

[4] Hope's brief analysis is based on a published table in Blau and Duncan's monograph of the first OCG (1967).

[5] These figures are based on the formula $P^* = 100^*(1 - e^{-P})$.

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likely as the educational difference between spouses increases. When in-marriage is controlled for, educational boundaries are more salient impediments to intermarriage than are boundaries of social origins. Net of these tendencies, however, there is no preference for marrying within the group, given the small and negative general in-marriage parameter.[6] This indicates that achieved and ascribed patterns of marriage selection are based on different underlying processes. Educational marriage patterns result from a tendency to prefer spouses who are near in status to those who are distant, whereas ascriptive marriage patterns result more from a tendency to marry within, rather than outside, one's group.

Focusing on the distances between adjacent categories of education, we notice that there is a relatively large distance between high school graduates and people with some college. When in-marriage is controlled for, crossing the college/high school boundary decreases marriage frequencies by 71%. That this distinction appears to be so important for marriage selection is in line with the traditional characterization of colleges as marriage markets. Perhaps more surprising is the equally important marriage barrier between college graduates and people with some college (a decrease in frequency of 72%). This finding suggests that educational homogamy is not based solely on the dating and mating opportunities provided by institutions of higher education but is also the result of a shared cultural outlook on which years of schooling has an impact (Hyman et al. 1975).

In sum, the findings show that, when marriage selection is used as an indicator of the social distance between status groups in society, the boundaries between educational groups are much stronger than the boundaries between social-origin groups. Children from farm backgrounds are an exception, however. They appear to have an exceptionally low tendency to marry outside their group.

CHANGES IN ASCRIPTION AND ACHIEVEMENT

Here, the focus is on changes in the relative importance of ascription and achievement for marriage selection, net of the structural factors that may underlie these changes. In order to assess these changes, model 4 adds interactions of cohort and homogamy to model 3*b*. Although model 4 includes parameters for marginal distributions and social mobility, it does not take into account how the cohorts may differ in these respects. The

[6] A negative in-marriage parameter does not imply that matching on education is lower than expected on the basis of the marginal distributions. The expected proportion on the diagonal is a combination of the in-marriage parameter and the distance parameters (see Johnson 1980).

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change parameters should thus be interpreted in terms of "total change" rather than in terms of "net change"—that is, changes in homogamy, net of cohort differences in marginal distributions and mobility.

Table 5 indicates that allowing homogamy to vary across cohorts significantly improves the fit of the model. The difference in L^2 between model 4 and model 3*b* is 81.35 with five degrees of freedom. This demonstrates that, on the whole, homogamy has changed significantly between 1952–62 and 1963–73. In order to assess the magnitude and direction of these changes, I present the parameter estimates of model 4 in the top panels of table 7 (for educational homogamy) and table 8 (for homogamy of social origins).

For education, the change parameter in table 7 shows that there has been a statistically significant increase in educational homogamy in the 1952–73 period. In the early cohort, the scaled-distance parameter is 0.873; in the later cohort, the parameter is about 25% higher. In other words, in the later cohort, educational boundaries form a more salient impediment to intermarriage than in the first cohort. The general inmarriage parameter does not reveal any significant change. Changes in the importance of ascriptive characteristics show a contrasting finding (top of table 8). First, there has been a statistically significant decrease in the boundaries that separate the four social-origins groups. In the early cohort, the distance parameter is 1.540, in the latter cohort, it has decreased to 0.745. Hence, the tendency for marriage between people distant in social-class origins has increased in the 1952–62 and 1963–73 periods. The in-marriage parameters show a less clear pattern. First, net of the

TABLE 7

CHANGES IN HOMOGAMY OF EDUCATION IN MULTIVARIATE LOG-LINEAR MODELS 4, 5, AND 6*

MODELS AND PARAMETERS	PARAMETER VALUES 1952–62	1963–73	CHANGE	(Z-VALUE)†
A. Model 4				
In-marriage parameter	−.477	−.572	−.096	(.92)
Scaled distance parameter	.873	1.077	+.203	(3.53)
B. Model 5				
In-marriage parameter	−.412	−.609	−.197	(1.73)
Scaled distance parameter	.848	1.083	+.235	(3.88)
C. Model 6				
In-marriage parameter	−.416	−.604	−.188	(1.63)
Scaled distance parameter	.883	1.067	+.184	(2.87)

* Models are defined in table 5.

† Indicates statistical significance of cohort interaction with homogamy parameter.

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TABLE 8

CHANGES IN HOMOGAMY OF SOCIAL ORIGINS IN MULTIVARIATE LOG-LINEAR MODELS 4, 5, AND 6*

MODELS AND PARAMETERS	PARAMETER VALUES 1952–62	1963–73	CHANGE	(Z-VALUE)†
A. Model 4:				
In-marriage parameter	.009	.183	+.174	(2.32)
Farm in-marriage	1.917	1.181	−.736	(6.47)
Scaled distance parameter	1.540	.745	−.796	(2.95)
B. Model 5:				
In-marriage parameter	.119	.131	+.012	(.14)
Farm in-marriage	1.531	1.399	−.132	(.68)
Scaled distance parameter	1.071	.965	−.106	(.35)
C. Model 6:				
In-marriage parameter	.119	.130	+.010	(.12)
Farm in-marriage	1.521	1.406	−.115	(.60)
Scaled distance parameter	1.063	.973	−.089	(.30)

* Models are defined in table 5.
† Indicates statistical significance of cohort interaction with homogamy parameter.

decrease in the overall distance between groups, there has been an increase in the tendency for marriage to occur between people with similar social origins. Note that the increase in the general in-marriage parameter does not necessarily imply that the expected proportion on the diagonal has increased since the latter is a combination of changes in distance parameters and changes in in-marriage parameters. More interesting, perhaps, is that, in the later cohort, people from farm backgrounds more frequently marry outside their group than do those in the early cohort. Since the decrease in the farm in-marriage parameter is much greater than the increase in the general in-marriage parameter and since no distance parameters are estimated for the farm rows and columns, this change points to a real increase in the expected proportion of people from farm backgrounds who marry outside their origin group.

To conclude, when cohort differences in marginals and social mobility are disregarded, educational homogamy increases over time, while the degree of homogamy with respect to father's occupation decreases. This decrease, however, does not apply to the general in-marriage tendency, net of the changing boundaries between groups.

STRUCTURAL SOURCES OF CHANGE

This section focuses on two questions. First, to what extent can structural factors, that is, trends in the educational and social-origin composition

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of marriage cohorts, explain the change in homogamy? Second, to what extent can the trends in the association between social origins and education explain this change? Two aspects of structural change should be distinguished. The data in table 3 indicate that, parallel to an increase in educational attainment, there has been a convergence of the male and female distributions. The index of dissimilarity of the two distributions has decreased from 16% to 11%. In other words, in the later cohort, fewer women than in the earlier cohort would need to change years of education to make maximum homogamy possible. Since a convergence of these distributions may, in itself, lead to increasing homogamy, irrespective of the rise in education, these two effects need to be separated.[7]

In order to address these issues, I compare changes in homogamy parameters in model 4 with those of models 5, 6, and 7. In model 4 the effect of the marginal distributions is already taken into account, but the effect is averaged for the two cohorts. Model 5 adds cohort interactions that assume equal marginal changes for husbands and wives, that is, η_{im} and η_{km}, where

$$\eta_{im} = \frac{\lambda_{im}^{Hf} + \lambda_{jm}^{Wf}}{2},$$

and

$$\eta_{km} = \frac{\lambda_{km}^{He} + \lambda_{lm}^{We}}{2}.$$

In the next model, the marginal distributions are allowed to change differently for husbands and wives. Model 6 simply replaces the η_{im} and η_{km} parameters by cohort interactions with each marginal effect (i.e., λ_{im}^{HfC}, λ_{jm}^{WfC}, λ_{km}^{HeC}, and λ_{lm}^{WeC}). A comparison of changes in homogamy in model 4 and model 5 enables me to assess the effect of the change in educational distributions per se, while a comparison of models 5 and 6 yields estimates of the influence of the convergence of the male and female distributions, given the overall change in education. Model 5 has a significantly better fit than model 4, indicating that the increase in educational attainment observed in table 3 is statistically significant. Model 6 has a better fit than model 5, indicating that the relatively stronger in-

[7] The distribution of characteristics of the marriage cohorts analyzed here probably differs from the distribution of these characteristics in the population at risk of marrying in the relevant period. To some extent, this may bias my estimates of the structural effects (McFarland 1975). Unfortunately, it is not possible to correct this problem since the OCG surveys do not enable me to measure the relevant distributions of the unmarried female population (only males were sampled).

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crease in educational attainment for wives than for husbands observed in table 3 is statistically significant.[8]

Model 7 allows the association between social origins and education to change across cohorts. This model adds interactions between cohort and the association parameters to model 6 (λ_{ikm}^{HfHeC} and λ_{jlm}^{WfWeC}). However, table 5 shows that model 7 is not a significant improvement over model 6, which suggests that, net of changes in the marginal distributions, intergenerational mobility of husbands and wives is not significantly different in the two cohorts, at least when mobility is measured in the present way. This section thus limits the comparisons to models 4, 5, and 6. Homogamy parameters for the two cohorts in models 5 and 6 are presented in the bottom part of table 7 (for educational homogamy) and table 8 (for homogamy of social origins).

For educational homogamy, I find that, after changes in the marginal distributions of the variables are taken into account, the increase in the distance between educational groups drops from 0.203 (model 4) to a still-significant increase of 0.184 (model 6). Hence, part of the overall increase in educational homogamy can be attributed to changes in the marginal distributions of characteristics of marriage cohorts. More interesting, perhaps, is that it is only the convergence of husbands' and wives' distributions that explains part of the overall change in homogamy. Modeling changes in the marginals, while ignoring this convergence (model 5), reveals a somewhat greater increase in educational homogamy, but this increase is strongly reduced in model 6. In other words, part of the reason why educational homogamy has increased is that women have become more nearly equal to men in their schooling.

For homogamy with respect to social origins, I find that, once structural changes are taken into account, all the changes in homogamy disappear. In model 4, the distance parameter decreases by a significant amount of 0.796, in models 5 and 6 it decreases by the nonsignificant amounts of 0.132 and 0.115, respectively (table 8). In addition, the strong decrease in intrinsic homogamy among people from farm origins disappears once we take into account changes in the marginal distributions. This finding can be interpreted in terms of the relative decrease in the number of spouses from farm backgrounds. A decline in relative group size leads to a decline in opportunities to marry homogamously and may therefore result in an increase in intermarriage. The fact that the in-

[8] Sex-specific marginal changes are observed for education only. A model that allows the marginal distributions of husbands' and wives' social origins to change without modeling educational change does not have a significantly better fit than a model in which husbands' and wives' social origins are constrained to change equally.

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marriage tendency of the farm category remains constant when we model structural change, while in-marriage decreases when we do not model this change, is consistent with this argument.

CONCLUSION

In this article, I have argued that two dimensions of status homogamy should be distinguished. There is a tendency to match on social origins, a tendency that is explained by the cultural values and preferences as they are transmitted in the parental home. In line with classical notions in stratification research on the openness of societies (Glass 1954, Lipset and Bendix 1959), I have called this the ascriptive dimension of status homogamy. At the same time, people have a tendency to match on their own cultural resources and socioeconomic expectations, which can be referred to as the achievement dimension of status homogamy. An empirical comparison of the importance of these two dimensions of homogamy can tell us something about the relative strength of ascriptive versus achieved foundations of social stratification. The central hypothesis is that the transition from ascription to achievement, as documented in research on intergenerational occupational mobility and status attainment, can also be observed in changing patterns of marriage selection. The article provides an empirical test of this basic idea.

Two marriage cohorts, both taken from the OCG data, were analyzed with multivariate log-linear models of variable distance and diagonal mobility. Ascriptive status homogamy is measured by the similarity of spouses with respect to their fathers' occupational class, while the achieved dimension of homogamy is measured by similarity of educational attainment. The results of the analyses can be summarized as follows. First, although both dimensions of status homogamy are statistically significant, husbands and wives resemble each other more in their educational achievement than in their social origins. Second, if we compare people married 10 years or less in 1973 with people married 10 years or less in 1962, it appears that educational homogamy has increased over time. In contrast, the ascriptive dimension of status homogamy has lost some of its already-modest importance. Although these trends take into account the influence of marginal distributions and the association between social origins and education, they do not take into account how cohorts may differ in these respects. If we allow these effects to vary across cohorts, it appears that part of the trend in educational homogamy can be attributed to declining gender inequality in schooling. Furthermore, changes in the marginal distributions are completely responsible for the decrease in homogamy with respect to fathers' occupations.

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In general, the findings provide some alternative support for a transition from ascription to achievement as the foundation of social stratification. The degree of educational homogamy is not only strong in itself, it is also stronger than the degree of social-origin homogamy. The major importance of education for marriage selection can be interpreted as evidence that educational groups function as internally homogeneous and hierarchically ordered status groups. The significant increase in educational homogamy between the 1950s and 1960s suggests that education has become an even more substantial foundation of social distinctions in American society. New research is needed to determine whether the trend toward greater educational homogamy has continued in the late 1970s and 1980s. Further research could also be undertaken in order to determine if the same transition has taken place in relation to such other dimensions of ascription as race, national origins, and religious socialization.

One of the methodological conclusions of this article is that analyses of synthetic cohorts, as presented by Michielutte (1972) and Rockwell (1976), suffer from selection bias. I have shown that marriage cohorts grow more homogamous over time because of divorce, separation, and mortality. This result suggested that the previously observed stability in educational homogamy after 1950 may conceal true increases in educational homogamy. In addition, earlier analyses were based on inappropriate methods for canceling out the influence of the marginal distributions. The log-linear analysis of real marriage cohorts presented here comes to different conclusions concerning trends in educational homogamy.

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