# More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s[1]

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The association between men's and women's socioeconomic origins and destinations decreased by one-third between 1972 and 1985. This trend is related to the rising proportion of workers who have college degrees. Origin status affects destination status among workers who do not have bachelor's degrees, but college graduation cancels the effect of background status. Therefore, the more college graduates in the work force, the weaker the association between origin status and destination status for the population as a whole. Overall mobility remains unchanged because a decline in structural mobility offsets the increased openness of the class structure. Upward mobility still exceeds downward mobility in the 1980s but by a smaller margin than it did in the 1960s and 1970s.

We characterize a society as open or closed, fair or unfair, equitable or inequitable, depending on how advantages and disadvantages are passed from one generation to the next. In the open society, occupational success is independent of both the constraints that arise from a disadvantaged social class background and the privileges that accompany an advantaged origin. In closed societies, parents pass on their social positions, good or bad, to their offspring. The study of occupational mobility measures the degree of openness by quantifying the association between occupational origins and destinations. Societies may be placed on a continuum from open to closed according to the numerical value of that association.

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## CHANGES IN MOBILITY

Almost as important as the absolute degree of openness is the direction in which the society is heading: Is the distribution of opportunity becoming more or less equitable over time? The record for the United States indicates that absolute mobility rates increased, although there was little change in the effect of class or status origins on occupational destinations before 1962, at least among men. Absolute mobility increased during the first half of the 20th century because of a growing disparity between the distribution of workers by origin and the distribution of those same workers by destination. The disparity between origin and destination distributions grew out of the decline of farming and other forms of self-employment throughout U.S. history and the concomitant growth of white-collar occupations after World War I (Hauser et al. 1975*b*). The transition to postindustrial society redistributed occupational positions but did not alter the dependence of occupational destinations on origins (Hauser et al. 1975*a*). Studies made of individual cities, for example, of Indianapolis (Rogoff 1953*a*, 1953*b*; Duncan 1966*a*; Hauser et al. 1975*a*; Baron 1980) and Boston (Thernstrom 1973; Grusky 1986), replicate the national pattern in broad terms; most fluctuations in absolute mobility rates reflect changes in the dissimilarity between occupational origins and destinations within those cities. Careful analyses of 19th-century data reveal some changes in aspects of the association between origins and destinations between the 1880s and 1962 (Guest, Landale, and McCann 1986) or 1973 (Grusky 1986), but even the authors cited conclude that redistribution of the labor force was more of a factor in mobility than was changing association.

When Featherman, Jones, and Hauser (1975) found evidence of a common pattern of association between origins and destinations in three countries that complemented Hauser et al.'s (1975*a*, 1975*b*) evidence of temporal invariance of that association in the United States, they advanced the hypothesis that a fixed level of unequal opportunity is endemic to the structure of modern societies. Variation in absolute mobility rates over time and space was thought to come from variation in structural conditions, not from differences in the underlying dependence of destination on origins. When Featherman and Hauser gathered data to test their hypothesis in 1973, their "initial presumption" had to be "modified substantially" (Featherman and Hauser 1978, p. 137) in light of evidence that the opportunity structure of the United States, as it is reflected in mobility from origins to current destination, had become more open since 1962. Log-linear analyses of the mobility from father's occupation to current occupations among men revealed a number of small changes that, when interpreted in conjunction with declines in measures of the correlation

between origins and destinations between 1962 and 1973, pointed to the conclusion that "there apparently were real changes in the relative chances of mobility. . ." (Featherman and Hauser 1978, p. 137). Their regression analyses of the same data (Featherman and Hauser 1976; Featherman and Hauser 1978, pp. 260–62) showed that "the total effects of virtually all indicators of social background were reduced [between 1962 and 1973], and the total variation in occupational status that is responsive to these indicators declined" (Featherman and Hauser 1978, p. 260). Subsequently, I confirmed (1984*a*) that the pattern of association in the 1962 and 1973 mobility tables was consistent with the regression results. In particular, the effect of origin status on destination status among men decreased by 28% between 1962 and 1973 (Hout 1984*a*, table 2).

## GENDER AND MOBILITY

The preceding paragraphs review research on the mobility patterns of employed men. Much less is known about the trend in women's mobility. This lacuna in the research record calls into question some of the conclusions about lack of trend. If mobility patterns for working women differ from those of working men (and they do), then to conclude that the openness of American society has or has not changed simply because it has or has not changed for men would be inaccurate, to say the least.

Evidence of gender differences in mobility patterns is pretty clear. Early research on the occupational mobility of women found few differences between the sexes (e.g., DeJong, Brawer, and Robin 1971), but, as subsequent work showed, the methods used in these early studies led to an understatement of gender differences. In particular, the technique of comparing observed frequencies with those expected under independence confounds gender differences in the distribution of occupational destinations with gender differences in association. In many cases, this confounding misdirects researchers into inferring that there are differences in association where none exist. However, in this case, the combination of a high concentration of women in clerical and service occupations that employ few men and the pattern of association between origins and destinations among women (as revealed by unbiased methods) converged to produce mobility ratios for women that were indistinguishable from those for men (see Havens and Tully 1972; Ramsøy 1973; Tyree and Treas 1974). Unbiased methods show that men and women differ in the probability of occupational immobility (inheritance) and in circulation (*a*) among white-collar occupations and (*b*) between farm and nonfarm strata (Tyree and Treas 1974; Hauser, Featherman, and Hogan 1977; Roos 1985). Part of the sex difference in circulation mobility within the white-

collar stratum might be due to a pattern of selectivity of labor-force participation among women (Ramsøy 1973; Hauser et al. 1977), although research by Fligstein and Wolf (1978) casts doubt on that possibility.[2]

A good case could be made for reevaluating trends in mobility in the United States before 1973 in light of these gender differences in mobility. Such a reevaluation is beyond the scope of this paper. Sufficient data are probably lacking anyway. The issue of gender differences arises here because it is incorporated into the search for recent trends in American mobility. The research below describes changes in the mobility of men and women since 1972. As such, it may well be the first look at trends in the mobility of American women. In any event, it is the first look at recent trends for either men or women.

## POSSIBILITIES FOR CHANGE SINCE 1973

Since the early 1970s, the structural changes so important to absolute levels of mobility in the first half of this century have been abating. In particular, the flow of work power from the countryside to the city has probably spent itself. The discrepancy between the proportion of workers with farm origins and those with farm destinations can be expected to decline over the rest of this century, unless a very large share of the new

[2] If women withdraw from the labor force when they are faced with downward mobility, then an analysis of employed women may be misleading. Rational choice, as it is delineated by the human capital theorists (Mincer 1962; Heckman 1974), may lead some women to stay out of the labor force if they fail to achieve an occupational status commensurate with aspirations that, in turn, depend on their social origins and education. The large number of clerical occupations available to women makes it more likely that women from disadvantaged origins will accomplish that goal (or even "overachieve" in the sense of raising the odds, relative to those of their brothers, of attaining white-collar employment) than it is for women from upper-nonmanual backgrounds. Since class homogamy makes it likely that a large proportion of women facing underemployment relative to their origin-based expectations will have husbands with high incomes, some women from advantaged backgrounds may find a use for their time that is preferable to underemployment, i.e., they may choose not to work for pay rather than to work for too little pay (or status). Fligstein and Wolf (1978) adjust status-attainment models for women to eliminate this source of bias. It turns out that the adjustments make little substantive difference in estimates of the effects of origins and education on women's occupational status. One of three conclusions is warranted: (*a*) the rational calculus of selective participation works for all except the most disadvantaged origin groups, so women from a wide range of origins redistribute their time away from the labor force, which biases the intercept of the attainment equation for women but leaves the slopes unaffected; (*b*) the process of job placement is sufficiently chancy or sex-role socialization so complete that women do not recognize their own underemployment (Kanter 1977); or (*c*) enough other factors constrain the choices of women that they do not redistribute their time according to the expectations of human capital theory.

immigrants from Latin America and Southeast Asia come from farm backgrounds (which is a likely prospect).

Macroeconomic changes are unfavorable to greater equality of opportunity. There is concern that income inequality may have begun to increase (Thurow 1981). Economic growth has been uneven; deep recessions have been interspersed with periods of tentative growth. If origins affect the postunemployment status attainment of workers displaced by recessions, overall inequality of opportunity could show an increase. These trends may well affect absolute mobility directly or through an effect on the association between occupational origins and destinations. Bear in mind, however, that there is no evidence that mobility and income distribution are related.

On the other hand, the data presented below show that the proportion of the labor force with college degrees has increased by 30% since 1973. Changes of this type in the educational composition of the labor force can affect inequality. In particular, the effect of origin status on destination status depends on the level of education achieved (Hout 1984*a*). The occupational status of high school dropouts is very sensitive to their origin status; among college graduates, destination status is independent of origin status. At intermediate levels of education, the effect of origins on destinations is neither as strong as it is among high school dropouts nor as weak as it is among college graduates. If the same interaction affects the mobility of women, then the educational advancement of the labor force as a whole will reduce the association between origins and destinations.

These conjectures aside, perhaps the best justification for doing research on mobility trends is the passage of time itself. Over a decade has passed since the last estimates were taken on this important social indicator, so the time has come for new estimates.

## THE MODEL

The difference between the clear and simple indication of change in the regression results of Featherman and Hauser (1976; Featherman and Hauser 1978, pp. 219 ff.) and the murky image half hidden by their log-linear analysis (Featherman and Hauser 1978, pp. 62–138, and to a lesser extent pp. 139 ff.) may be a difference of method. In that case, a regression approach similar to theirs would be warranted here as well. On the other hand, the differing results may point to matters of substance that we should not ignore. The justification for doing detailed mobility-table analysis instead of the more elegant (single parameter, multivariate) regression analyses is the supposition that the flows between particular occupational categories reveal aspects of the process of stratification that are missed by the single parameter of the regression analysis (e.g., Hauser

1978, p. 921).[3] What is revealed by a mobility-table analysis that is hidden in a regression analysis? The answer depends on the occupational classification scheme used in the mobility-table analysis, of course, but one would hope that the information added might provide the evidence that dimensions of occupational placement other than socioeconomic status influence the stratification process (Hodge 1981). Aspects of authority, self-direction, and specialization on the job may be important for understanding social stratification in toto and for understanding intergenerational occupational mobility in particular (Hall 1968; Kluegel 1978; Spaeth 1979; Wolf and Fligstein 1979*a*, 1979*b*; Kerckhoff, Campbell, and Trott 1982; Wright 1985).[4]

On-the-job autonomy and specialized vocational training are two dimensions that influence intergenerational mobility to current occupations, independent of socioeconomic status (Hout 1984*a*). They also affect mobility to first jobs (Hout 1983, pp. 76–80). More important, the status dimension—but not autonomy or training—shows a substantial trend in the direction of greater openness.[5] I have concluded (1984*a*) that reduced association between origins and destinations in the mobility table, indicated in the regression results of Featherman and Hauser, was due to the weaker effect of background status on current occupational status, but that other dimensions of occupational mobility had effects that were persistent over the decade.

The model employed here is one I have proposed (1984*a*) extended to incorporate the parameterization of structural and exchange mobility in Sobel, Hout, and Duncan (1985). The unit of observation is the cell of a

[3] From Hauser (1978, p. 921): "In short, mobility tables are useful because they encourage a direct and detailed examination of movements in the stratification system. Within a given classification they tell us where in the social structure opportunities for movement or barriers to movement are greater or less, and in so doing provide clues about stratification processes which are no less important, if different in kind, from those uncovered by multivariate causal models."

[4] These variables may be correlated with status, and methods of analysis must attend to these correlations. Many of the methods commonly used for multidimensional analysis, e.g., canonical correlation or cluster analysis, assume no correlation among the variables that produce multidimensionality. These methods are ill-suited to the purpose for this reason.

[5] The trend toward greater openness on the status dimension is true for the male labor force as a whole. Closer inspection reveals that among black men the trend toward greater equality of opportunity relative to white men translated into an actual increase in the association between origin status and destination status (Hout 1984*a*, 1984*b*). This trend appears to be because of (*a*) a selection for upward mobility during the 1960s of those black men whose origins most resembled the origins of white men normally recruited for the positions in question and (*b*) the disappearance of racial differences in intergenerational mobility to first jobs among the cohort leaving school between 1962 and 1973 (Featherman and Hauser 1976).

cross-classification of occupational origins ($i$), by occupational destinations ($j$), by gender ($k$), and by time period ($t$). Expected frequencies for each cell $\{i, j, k, t\}$ of the $R \times R \times 2 \times T$ cross-classification are given by the log-linear equation:

$$\log(F_{ijkt}) = a_{1ikt} + a_{1jkt} + a_{2jkt} + b_{1kt}S_iS_j + b_{2kt}A_iA_j + b_{3kt}T_iT_j + d_{1kt}D_{ij}S_i^2 + d_{2kt}D_{ij}A_i^2 + d_{3kt}D_{ij}T_i^2, \quad (1)$$

where $\Sigma_j a_{2jkt} = 0$ ($j = 1, \ldots, R$; $k = 1, 2$; $t = 1, \ldots, T$), $a_{1jkt} = a_{1ikt}$ for $i = j$ ($i = 1, \ldots, R$), the $a_{1ikt}$ and $a_{1jkt}$ parameters are "size effects" (Sobel et al. 1985) in log form, the $a_{2jkt}$ parameters are "structural mobility effects" (Sobel et al. 1985) in log form, the $b_{pkt}$ parameters ($p = 1, 2, 3$) are "scaled association effects" (Hout 1984*a*), the $d_{pkt}$ parameters ($p = 1, 2, 3$) are "scaled diagonal effects" (Hout 1984*a*), $S_i$ is the Duncan SEI (Duncan 1961) score for category $i$, $A_i$ is the autonomy score (see table 1 below) for category $i$, $T_i$ is the training score (see table 1 below) for category $i$, and $D_{ij} = 1$ if $i = j$ and 0 otherwise. The combination of $a_{1ikt}$, $a_{1jkt}$ and $a_{2jkt}$ parameters serves to fit the three-way marginals that might be expressed as [STO] [STD] using the Goodman (1970, 1972) notation,[6] while the $b_{pkt}$ and $d_{pkt}$ parameters put constraints on the fit of the four-way marginal [STOD]. Therefore, in the form of equation (1), the model is a nonhierarchical log-linear model. Constraints on the $b_{pkt}$ and $d_{pkt}$ parameters can make the model hierarchical.[7] The association parameters ($b_{pkt}$ and $d_{pkt}$) are symmetric, so the structural mobility interpretation for the $a_{2jkt}$ parameters is appropriate (Sobel et al. 1985). Equation (1) is a special case of the conditional quasi-symmetry (CQS) model of Sobel (1988).

Because origins are fathers' occupations for most subjects in this study, the structural mobility parameters have different interpretations for men and women. For women, the origin/destination comparison involves not only a change of generation, as it does for men, but also a change of gender.[8] Therefore, any particular estimate of $a_{2j2t}$ combines structural

[6] Let O designate origin occupation (father's or other head's occupation when the respondent was 16 years old), D designate destination occupation (respondent's current or [if unemployed] last occupation), S designate gender, and T designate time period.

[7] For example, $b_{1kt}$ can be decomposed into the linear combination of
- $b_{1o}$ the status component of the [OD] two-way marginal term,
- $b_{1k}$ the status component of the [SOD] three-way marginal term,
- $b_{1t}$ the status component of the [TOD] three-way marginal term, and
- $b_{1kt}$ the status component of the [STOD] four-way marginal term.

Each of these separate components can then be tested by taking the ratio of the estimated coefficient to its approximate asymptotic standard error in the usual way. Such a test requires that the entire $R \times R \times 2 \times T$ cross-classification be analyzed at once. In practice, I analyzed $2 \times T$ separate $R \times R$ tables, so I was unable to utilize this decomposition.

[8] The addition of mother's occupation might enrich this study in several ways. First, mother's occupation affects daughter's destination, net of the effect of father's occupa-

mobility in the sense it is understood for men with gender differences in the distribution of occupational destinations. One could take the difference between structural mobility parameters for women and men ($a_{2j2t} - a_{2j1t}$) as estimates of the gender effect if structural mobility were defined as those differences between origins and destinations that pertain in a same-sex comparison. Even if one objects to the assumption that structural mobility is the same for men and women, the structural mobility effects can be interpreted as the combination of those factors that, although independent of origins, nonetheless affect mobility, as in Sobel et al. (1985), recognizing that gender is one such factor.

To interpret the scaled association and scaled diagonal effects in the model, transform equation (1) into a multinomial logistic regression model:

$$\begin{aligned}\Phi_{(jj')ikt} &= \log(F_{ijkt}/F_{ij'kt}) \\ &= \alpha_{(jj')kt} + \Sigma_p \beta_{p(jj')kt} X_{pi} + \Sigma_p \delta_{p(jj')kt} X_{pi},\end{aligned} \tag{2}$$

Where $\alpha_{(jj')kt} = (a_{1jkt} - a_{1j'kt}) + (a_{2jkt} - a_{2j'kt})$, $\beta_{pkt} = b_{pkt}(X_{pj} - X_{pj'})$, and $\delta_{pkt} = d_{pkt}(D_{ij}X_{pj} - D_{ij}X_{pj'})$. This shows that the effect of origins on destinations is proportional to the difference between the destinations being compared in each dimension $p$, and whether a diagonal cell is involved in the numerator or denominator of the odds for each comparison (see Hout [1984*a*] for details).

Estimates of the parameters for the nonhierarchical model expressed in equation (1) can be obtained using programs that take scaled input, for example, GLIM (Baker and Nelder 1973), FREQ (Haberman 1979), or SPSS$^X$ (SPSS 1985). In the present application, parameter estimates were obtained using GAUSS (Edlefsen and Jones 1985).

## THE DATA

*Sample.*—The data for this analysis come from the General Social Survey (GenSoc) from NORC (Davis and Smith 1985).[9] Records for all

tion (Rosenfeld 1978). Second, mother's occupation may also have a net effect on son's destination (no research on this topic is known to the author). Third, ignoring mother's occupation understates immobility because it fails to count as immobile those subjects who pursue an occupation in the same category as their mother's occupation. This source of bias is probably greater for women because (*a*) women are more likely to pursue their mother's than their father's occupation (Rosenfeld 1978) and (*b*) men are probably more likely to pursue their father's than their mother's occupation (no research on this topic is known to the author). On this basis, we might reasonably expect that daughters are more likely than sons to appear mobile with respect to father's occupation but immobile once mother's occupation is observed. On the other hand, unpublished results from the research for Sewell et al. (1980) suggest that mother's occupational status does not affect daughter's status (net of father's status).

[9] Blau and Duncan (1967, pp. 101–2) raise serious questions about the applicability of 1947 data from NORC for trend studies. In particular, the 1947 NORC survey seri-

persons 25–64 years old who were in the civilian labor force were drawn from the cumulative data file for 1972–85 ($N$ = 9,227).[10] Following Featherman and Hauser (1978), the sample is restricted to those in the experienced civilian labor force who are less than 65 years old. Furthermore, because the youngest men in the labor force are from cohorts that may still have large numbers of college students who are outside the experienced civilian labor force, including the people who are most likely to be successful, the sample is further restricted to persons who have passed their twenty-fifth birthdays. Occupation is undefined for persons in the labor force who have never worked, so they are excluded. Blacks counted in the 1982 supplement who are experienced workers 25–64 years old are included in the analysis. These cases are weighted according to NORC procedures (Davis and Smith 1985).

*Origins and destinations.*—Occupational origin is the respondent's report of the occupation, industry, and employment status of her or his father (or other family head) transformed to the 17 occupational categories used by Blau and Duncan (1967) and Featherman and Hauser (1978). Occupational destination is the respondent's own current (or, if unemployed, last) occupation, industry, and employment status transformed in the same way. When the two were cross-classified by sex and period (1972–75, 1976–80, and 1982–85), the resultant tables were very sparse. Three pairs of occupational categories differ little in status, autonomy, or training (see Hout 1984*a*, table A2), so managers were combined with sales workers (nonretail), service workers with operatives (other), and laborers (manufacturing) with laborers (other).[11] Other combinations of occupations might be acceptably combined according to the goodness-of-fit criteria in Goodman (1981), but combining them would reduce variance in the status, autonomy, or training scores, so they are left alone.

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ously underrepresented blue-collar men. To investigate the coverage of the recent NORC data relative to the OCG data, the distribution of current occupations among men aged 21–64 years in the 1972–75 GenSoc surveys (pooled) are compared with the distribution of current occupations among men aged 21–64 years in OCG-II (Featherman and Hauser 1978, p. 533). The similarity of the two distributions is reassuring. The breakdowns into broad nonmanual/manual/farm categories are 45%/51%/4% in GenSoc and 43%/53%/4% in OCG-II. Details of this comparison are available from the author on request.

[10] There are 1,275 cases with missing occupations, most because they are looking for their first occupation. That leaves 7,952 unweighted cases for analysis. The oversample of blacks in 1982 necessitates the use of weights for the data in that year, so the $N$s in the tables sum to a number that is smaller than 7,952.

[11] The procedures in Goodman (1981) show that combining these categories does not obscure any significant association between origins and destinations. The likelihood ratio $\chi^2$s ($L^2$) for each combination of occupational categories (by period and gender) are available from the author.

The resultant 14-category classification scheme is spelled out in table 1. Also shown are the status, autonomy, and training scores for each occupation. The status scores are the mean Duncan (1961) SEI score for men in each occupational group in the 1973 OCG survey (Featherman and Hauser 1978). Status scores of women and men differ little within categories such as these (e.g., Fligstein and Wolf 1978; Sewell et al. 1980; Stevens and Featherman 1982; Roos 1985, chap. 5), so using men's scores on this dimension is not problematic. The SAT model does not assume that men and women work side by side just because they have similar status means. Bielby and Baron (1986) make it clear that workplaces are highly segregated. The autonomy scores are the odds on having a supervisor (multiplied by $-1$, so that the highest score is the highest autonomy) calculated from a tabulation of current occupation by GenSoc question 190 (Davis and Smith 1985, p. 209) by gender for currently employed persons in the 1972–85 cumulative GenSoc file. The training scores are the means of specific vocational preparation scores (Davis and Smith 1985, p. 74) by current occupation by gender for the same sample. Some of the differences in autonomy between men and women are substantial (particularly among salaried professionals, managers, and clerks). Nonetheless, for this analysis, total sample scores are used for both men and women so as not to confound gender differences in the scoring of occupational dimensions with gender differences in the mobility process.[12]

*Time periods.*—The GenSoc annual samples are too small to allow single years to be the time units. Years are grouped with breaks at 1975 and 1980 for this analysis, that is, as 1972–75, 1976–80, and 1982–85. Each period pools together four surveys (no surveys were conducted in 1979 and 1981). Unemployment was high during some of the years of all three periods. Other macroeconomic indicators show wide ranges of fluctuation between and within periods. Treating the periods as internally homogeneous could distort the results if mobility parameters were closely related to macroeconomic fluctuations. There is no evidence about whether mobility parameters are susceptible to short-term fluctuations. It is reassuring to note that roughly four-fifths of the GenSoc respondents from a given year's survey would report the same occupation even if they happened to be interviewed in one of the other years of that period. That is because, even though the rate of job shift in the United States may be

[12] In fact, I redid the analysis using gender-specific scores for autonomy and training. The results did not differ from those reported in this paper. The gender differences in the mobility process so far outweigh the small differences introduced by gender-blind rather than gender-specific scores that the interpretation of the findings is the same whichever way one decides the scoring issue. The results of the gender-specific scoring analysis are available on request.

TABLE 1

STATUS, AUTONOMY, AND TRAINING (SAT) SCORES BY GENDER

| Occupation/Gender | Status (S) | Autonomy (A) | Training (T) | Cases (*N*) |
|---|---|---|---|---|
| Professionals, self-employed | 80.5 | −.185 | 7.467 | 177 |
| Men | ... | −.189 | 7.559 | 123 |
| Women | ... | −.176 | 7.259 | 54 |
| Professionals, salaried | 73.8 | −10.059 | 6.892 | 1,565 |
| Men | ... | −8.565 | 7.086 | 824 |
| Women | ... | −12.375 | 6.677 | 741 |
| Managers/sales, nonretail | 67.2 | −3.375 | 7.255 | 1,134 |
| Men | ... | −2.888 | 7.244 | 779 |
| Women | ... | −5.073 | 7.277 | 355 |
| Proprietors | 49.6 | −.153 | 6.725 | 345 |
| Men | ... | −.123 | 6.716 | 249 |
| Women | ... | −.237 | 6.750 | 96 |
| Clerks | 44.2 | −8.581 | 4.637 | 1,568 |
| Men | ... | −18.000 | 4.319 | 319 |
| Women | ... | −7.505 | 4.718 | 1,249 |
| Sales workers, retail | 38.1 | −3.258 | 3.976 | 190 |
| Men | ... | −2.545 | 4.047 | 58 |
| Women | ... | −3.650 | 3.944 | 132 |
| Crafts, manufacturing | 38.0 | −24.250 | 6.682 | 431 |
| Men | ... | −22.167 | 6.717 | 396 |
| Women | ... | −∞ | 6.282 | 35 |
| Crafts, construction | 26.2 | −2.171 | 6.848 | 351 |
| Men | ... | −2.235 | 6.857 | 345 |
| Women | ... | .000 | 6.358 | 6 |
| Crafts, other | 32.0 | −4.567 | 6.605 | 456 |
| Men | ... | −4.780 | 6.627 | 418 |
| Women | ... | −3.000 | 6.366 | 38 |
| Service/operatives, other | 19.5 | −4.216 | 3.868 | 1,903 |
| Men | ... | −6.797 | 3.939 | 836 |
| Women | ... | −3.036 | 3.804 | 1,067 |
| Operatives, manufacturing | 18.5 | −18.161 | 3.797 | 857 |
| Men | ... | −15.476 | 3.915 | 499 |
| Women | ... | −23.800 | 3.633 | 358 |
| Laborers, nonfarm | 8.0 | −5.970 | 2.918 | 325 |
| Men | ... | −6.185 | 2.917 | 282 |
| Women | ... | −5.000 | 2.925 | 43 |
| Farmers | 14.4 | −.070 | 6.631 | 158 |
| Men | ... | −.073 | 6.631 | 153 |
| Women | ... | −.000 | 6.620 | 5 |
| Farm laborers | 7.9 | −5.600 | 3.958 | 45 |
| Men | ... | −4.600 | 3.997 | 38 |
| Women | ... | −∞ | 3.750 | 7 |

SOURCE.—NORC General Social Survey (MRDF).

high, the annual rate of change from one occupational group to another is only a fraction of that rate (Fernandez 1984).

Therefore, if no change in mobility is observed, it is unlikely that the pooling of surveys from different years is masking significant change. If, however, a monotonic pattern of change is observed, it is probably a distortion to view the periods as internally homogeneous. For example, if the monotonic change is toward more openness, that is, if $b_{1kt}$ from equation (1) declines monotonically over time, then the effect of origin status on destination status is probably greater than $b_{1kt}$ in the years before the midpoint of period $t$ and less than $b_{1kt}$ in years after the midpoint of period $t$.

*Mobility tables.*—The cross-classification of 25–64-year-old members of the experienced civilian labor force, according to their occupational origins, destinations, genders, and time periods is shown in table A1. The large number of zero cells in table A1 causes statistical problems (Clogg and Eliason 1987), so 1/14 was added to each cell count ($f_{ij}$). That addition increases each row and column total by one, so counts were reduced to the original row and column totals by iterative proportional fitting (Haberman 1979, pp. 527–28).

## OCCUPATIONAL COMPOSITION: CHANGES AND GENDER DIFFERENCES

The distribution of occupational opportunities changed little during the 1972–85 period (see table 2). Despite the myriad macroeconomic changes, the destination distributions for each year are very similar. This contrasts with the rapid growth of upper-middle-class employment at the expense of lower-middle-class and farm employment among men in the 1962–73 period (Featherman and Hauser 1978, table 3.14). The most noteworthy recent trend is the growing similarity of origins and destinations. Among men, dissimilarity fell by 29% (an absolute decline of seven percentage points), while, among women, dissimilarity fell by 9% (an absolute decline of five percentage points from a much higher base). On the whole, origin categories that were smaller than the corresponding destination category grew, while origin categories that were larger than the corresponding destination category declined. In particular, a growing share of the labor force comes from upper-middle-class backgrounds; that is, more contemporary workers grew up with fathers (or other heads of household) who worked as professionals, managers, or nonretail salesmen. The counterpoint to this growth is the declining share of the labor force that comes from farm backgrounds (down from 20% to 13% of men and from 19% to 12% of women).

TABLE 2

DISTRIBUTION OF ORIGINS AND DESTINATIONS BY SEX AND YEAR: PERSONS IN THE LABOR FORCE, UNITED STATES, 1972–85

| | MALE | | | FEMALE | | | |
|---|---|---|---|---|---|---|---|
| | 1972–75 | 1976–80 | 1982–85 | 1972–75 | 1976–80 | 1982–85 | TOTAL |
| Origin: | | | | | | | |
| Professionals, self-employed | 1.7 | 2.2 | 2.7 | 1.8 | 2.7 | 1.8 | 2.2 |
| Professionals, salaried | 5.2 | 5.8 | 6.9 | 5.2 | 5.1 | 7.6 | 6.1 |
| Managers/sales, nonretail | 6.9 | 8.0 | 10.7 | 8.2 | 10.4 | 13.0 | 9.5 |
| Proprietors | 8.0 | 8.3 | 7.2 | 9.1 | 7.9 | 7.2 | 7.9 |
| Clerical workers | 3.3 | 3.3 | 4.2 | 3.6 | 3.0 | 3.7 | 3.6 |
| Sales, retail | .7 | .9 | 1.1 | 1.3 | 1.3 | 1.0 | 1.0 |
| Crafts, manufacturing | 7.1 | 9.2 | 8.3 | 8.1 | 7.5 | 8.1 | 8.1 |
| Crafts, construction | 6.7 | 4.9 | 7.1 | 5.3 | 5.3 | 7.2 | 6.2 |
| Crafts, other | 9.9 | 10.8 | 9.7 | 7.3 | 10.5 | 9.1 | 9.7 |
| Service/operatives, other | 13.3 | 11.8 | 12.2 | 13.9 | 13.3 | 13.1 | 12.8 |
| Operatives, manufacturing | 7.6 | 9.9 | 8.7 | 8.9 | 8.6 | 8.0 | 8.6 |
| Laborers | 6.3 | 5.7 | 6.0 | 5.7 | 5.6 | 6.5 | 6.0 |
| Farmers | 20.4 | 17.4 | 13.4 | 18.9 | 16.2 | 11.7 | 16.2 |
| Laborers, farm | 2.6 | 1.8 | 1.8 | 2.8 | 2.6 | 2.0 | 2.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Destination: | | | | | | | |
| Professionals, self-employed | 1.9 | 2.1 | 3.3 | 1.0 | 1.1 | 1.8 | 2.0 |
| Professionals, salaried | 15.6 | 17.3 | 15.6 | 18.0 | 19.3 | 20.7 | 17.6 |
| Managers/sales, nonretail | 15.5 | 15.1 | 14.3 | 6.9 | 9.2 | 10.7 | 12.5 |
| Proprietors | 4.5 | 4.4 | 5.6 | 2.3 | 2.3 | 2.8 | 3.9 |
| Clerical workers | 6.8 | 4.5 | 6.7 | 32.5 | 31.1 | 34.1 | 17.3 |
| Sales, retail | .8 | 1.5 | .8 | 2.4 | 4.2 | 2.9 | 1.9 |
| Crafts, manufacturing | 7.5 | 7.6 | 6.9 | 1.0 | .6 | .9 | 4.6 |
| Crafts, construction | 6.4 | 5.4 | 7.5 | .1 | .1 | .3 | 3.8 |
| Crafts, other | 9.6 | 10.7 | 8.4 | .4 | 1.4 | 1.6 | 6.0 |
| Service/operatives, other | 13.7 | 12.6 | 12.5 | 23.6 | 19.2 | 17.1 | 15.7 |
| Operatives, manufacturing | 8.6 | 9.8 | 10.1 | 10.5 | 10.6 | 5.4 | 9.1 |
| Laborers | 4.9 | 5.0 | 4.9 | .8 | .5 | 1.4 | 3.2 |
| Farmers | 3.5 | 3.2 | 2.8 | .0 | .2 | .2 | 1.9 |
| Laborers, farm | .6 | .9 | .6 | .3 | .2 | .1 | .5 |
| Total *N* of cases | 1,553 | 1,494 | 1,542 | 901 | 1,062 | 1,400 | 7,952 |
| Dissimilarity between origins and destinations | 24.5 | 21.6 | 17.4 | 54.2 | 53.2 | 49.4 | |

SOURCE.—Appendix table A1.

This decrease in the dissimilarity of origins and destinations accelerates a trend evident in the comparison between 1962 and 1973 (Featherman and Hauser 1978, table 3.16) when dissimilarity decreased by 1.1 percentage points. Because the dissimilarity between origins and destinations forces a certain amount of mobility, less dissimilarity between origins and destinations will mean less mobility unless the association between origins and destinations falls enough to compensate. Between 1962 and 1973, the gross mobility of men went up from 84% to 86% (in the 17 × 17 table) because the decreasing association between origins and destinations more than offset declining structural mobility. As shown below, the association between origins and destinations decreased again between 1972–75 and 1982–85. The increased exchange mobility that resulted from the declining association between origins and destinations was just enough to offset the fall in dissimilarity, so that, overall, the rates of mobility for both men and women remained unchanged during the 1970s and the first half of the 1980s.

Gender differences in occupational origins are negligible. There is some hint of differential labor-force participation by origin among women, but it is clearly a weak effect. The differences between the destination distributions of men and women are familiar (Oppenheimer 1970) but nonetheless striking. The vast majority of female workers are white-collar workers, although by some definitions they are "working class" (e.g., Wright 1985). Women are less likely than men to be self-employed or to be blue-collar workers. Service work by women shows a decline over the span of years covered here.

The patterns of occupational supply and recruitment differ greatly by gender. Indexes of dissimilarity for mobility into and out of each occupational category quantify the gender gap in supply and recruitment; they are calculated from the frequencies in table A1. The results are shown in table 3. The outflow dissimilarities are large for all origin categories. The outflow of men and women differs most for workers whose origin category contains occupations that offer few opportunities to women. The men whose fathers were proprietors, craftsmen, semiskilled manual workers, and farmers have current occupations that differ a great deal from the current occupations of women whose fathers were engaged in those occupations.

A striking feature of table 3 is the much greater margin of dissimilar inflow for specific occupational categories than for the population as a whole. While the origin distributions of men and women are very similar overall, many occupational groups apparently recruit men and women from different origin groups. As shown below (and in previous studies—Tyree and Treas 1974; Hauser et al. 1977; Roos 1985), most of the dissimilarity is due to a lower rate of occupational self-recruitment (immobil-

TABLE 3

DISSIMILARITY OF OUTFLOW AND INFLOW OF MEN AND WOMEN BY YEAR: PERSONS IN THE LABOR FORCE, UNITED STATES, 1972–85

| | OUTFLOW | | | INFLOW | | |
|---|---|---|---|---|---|---|
| | 1972–75 | 1976–80 | 1982–85 | 1972–75 | 1976–80 | 1982–85 |
| Professionals, self-employed | 43 | 33 | 22 | 56 | 24 | 29 |
| Professionals, salaried | 41 | 37 | 29 | 20 | 17 | 12 |
| Managers/sales, nonretail | 54 | 36 | 37 | 22 | 8 | 10 |
| Proprietors | 44 | 40 | 45 | 34 | 38 | 27 |
| Clerks | 53 | 57 | 42 | 14 | 20 | 20 |
| Sales, retail | 48 | 64 | 44 | 36 | 30 | 47 |
| Crafts, manufacturing | 44 | 44 | 36 | 39 | 55 | 45 |
| Crafts, construction | 52 | 55 | 59 | ... | ... | ... |
| Crafts, other | 49 | 44 | 42 | ... | 29 | 14 |
| Service/operatives, other | 41 | 36 | 42 | 14 | 14 | 14 |
| Operatives, manufacturing | 46 | 39 | 46 | 15 | 23 | 11 |
| Laborers, nonfarm | 40 | 48 | 37 | 49 | ... | 38 |
| Farmers | 48 | 48 | 47 | ... | ... | ... |
| Laborers, farm | 35 | 56 | 49 | ... | ... | ... |
| Total | 42 | 39 | 39 | 6 | 6 | 5 |

SOURCE.—Appendix table A1.

ity) and a correspondingly higher rate of circulation within the white-collar and blue-collar strata for women.[13]

## HOW DESTINATION DEPENDS ON ORIGIN: CHANGES AND GENDER DIFFERENCES

A baseline for assessing recent changes in the effects of origins on destinations is a standard log-linear analysis of the cross-classification of origin by destination by gender by period drawn from the GenSoc data. This analysis is somewhat more complicated than that of Featherman and Hauser because the present analysis includes gender as a variable. It shows even less evidence of change than Featherman and Hauser (1978, pp. 88–114) found in their 1962–73 comparison. The preferred model (no. 10 in the first col. of table 4) for the complete data set (all cells included) includes terms for gender-specific changes in origins [SPO] and destinations [SPD] and a term for the association between origins and destinations that does not vary across periods or by gender [OD]. Without additional information, we cannot reject the null hypothesis that the effect of origins on destinations is the same for men and women and that there was no change in the strength of the effect between 1972–75 and 1982–85.

Deleting the diagonal cells to allow for differential immobility by sex and period does not alter that conclusion: Number 10 is the preferred model in the second column of table 4, as well. The decrease of 75.99 in $L^2$ occasioned by the deletion of the diagonal is well within what might be expected given the expenditure of 76 *df*.[14] Fitting only the cells that contain interstratum mobility again leads to a preference for model 10 (see col. 3, table 4). The reduction in $L^2$ of 118.57 is small relative to degrees of freedom ($df = 134$). So even the quasi-independence method fails to detect any significant change in relative mobility chances.

The standard tests in table 4 have very little statistical power. They expend over 100 *df* in pursuit of changes over two time intervals. A more

[13] This finding confounds facile attempts to equate the exclusion of women from some occupations with racial discrimination. My previous work (1984*b*) shows that, despite the vast differences between the origins of black men and white men, employers who hired black men for white-collar occupations between 1962 and 1973 selected those black men whose origins most closely resembled the origins of white men in those positions.

[14] For some of the models in table 10, the *df* I report are smaller than would be expected for a $14 \times 14 \times 2 \times 3$ table. That is because some combinations of sex-period-origin and sex-period-destination do not occur in the GenSoc data.

TABLE 4

GOODNESS OF FIT STATISTICS FOR HIERARCHICAL LOG-LINEAR MODELS FOR CROSS-CLASSIFICATION OF DESTINATIONS (D) BY ORIGINS (O), SEX (S), AND PERIOD (P): PERSONS IN THE LABOR FORCE, UNITED STATES, 1972–85

| MARGINALS FITTED | ALL CELLS INCLUDED | | DIAGONAL CELLS BLOCKED | | 5 × 5 CELLS BLOCKED | |
|---|---|---|---|---|---|---|
| | $L^2$ | *df* | $L^2$ | *df* | $L^2$ | *df* |
| 1. [SPO][D] | 4,698.72 | 1,079 | 3,378.75 | 995 | 2,578.35 | 839 |
| 2. [SPO][PD] | 4,625.82 | 1,053 | 3,318.40 | 969 | 2,521.23 | 813 |
| 3. [SPO][SD] | 2,653.49 | 1,066 | 1,706.87 | 982 | 1,246.53 | 826 |
| 4. [SPO][OD] | 2,922.68 | 855 | 2,462.21 | 785 | 1,990.21 | 655 |
| 5. [SPO][PD][SD] | 2,591.55 | 1,040 | 1,653.15 | 956 | 1,195.36 | 800 |
| 6. [SPO][PD][OD] | 2,869.16 | 829 | 2,413.44 | 759 | 1,946.08 | 629 |
| 7. [SPO][SD][OD] | 882.85* | 842 | 797.63* | 772 | 665.73* | 642 |
| 8. [SPO][PD][SD][OD] | 834.14* | 816 | 751.94* | 746 | 621.50* | 616 |
| 9. [SPO][SPD] | 2,529.44 | 1,001 | 1,597.70 | 906 | 1,149.17 | 741 |
| 10. [SPO][SPD][OD] | 769.96* | 781 | 693.97* | 705 | 575.40* | 571 |
| 11. [SPO][SPD][SOD] | 598.31* | 568 | 549.23* | 513 | 457.05* | 413 |
| 12. [SPO][SPD][POD] | 441.93* | 422 | 378.44* | 377 | 308.09* | 302 |
| 13. [SPO][SPD][SOD][POD] | 267.19* | 237 | 232.31* | 212 | 191.25* | 167 |
| [8] − [10] | 64.18 | 35 | 57.97 | 41 | 46.10* | 45 |
| [9] − [10] | 1,759.48 | 220 | 903.73 | 201 | 573.77 | 170 |
| [10] − [11] | 171.65* | 213 | 144.74* | 192 | 118.35* | 158 |
| [10] − [12] | 328.03* | 359 | 315.53* | 328 | 267.31* | 269 |

*$P > .05$.

powerful test would use fewer *df*. Note, for example, that the decrease of 328.03 in $L^2$ would be highly significant if fewer *df* were involved. Therefore, if a large portion of that change in $L^2$ can be expressed in terms of fewer than 359 *df*, evidence that appears to sustain the null hypothesis might be marshaled against it.

The SAT model in equation (1) uses 12 *df* to model association in any period (compared with 338 *df* for model 10 in table 4). Parameter estimates (table 5) for a modified version of this SAT model[15] (that uses only 8 *df* per period) show very clearly how the association between origins and destinations changed between 1972–75 and 1982–85.[16] For both women and men, the scaled association between origin status and destination status declined. For women the decrease was 33%; for men it was 28%.[17] Within each period, the status coefficient for women is not significantly different from the same coefficient for men, so an overall estimate placing the decrease in the effect of origin status on destination at roughly 30% is appropriate.[18]

To illustrate the magnitude of the change in the scaled association between origin and destination status, figure 1 plots the odds on a salaried professional destination relative to a destination as an operative (nonmanufacturing) or service worker by origin status, gender, and period. The two destinations being compared differ by 54 points on the Duncan SEI scale, so the line has a sharp upward slope.[19] If the scaled association between origin and destination status were the only component of association, then the plots would be simple straight lines. The departures from simple linearity reflect the scaled diagonal effects of status, autonomy,

[15] The model as presented in table 5 is somewhat different from the version in equation (1). Preliminary analysis indicated only a slight difference between the scaled association effect of autonomy and its scaled diagonal effect, so the model was refit with the constraint that $b_{2kt} = d_{2kt}$. Also, it was found that $b_{3kt}$ never differed significantly from zero (regardless of the value of $k$ or $t$), so the scaled association effect of training was dropped from the final model (see also Hout 1984*a*).

[16] Note that while the model for men does not fit the data at conventional levels of statistical significance, the *bic* coefficient of Raftery (1986*a*, 1986*b*) supports the decision to prefer it over models with more parameters. A similar remark applies to the versions of the SAT model in Hout (1983, pp. 76–80; Hout 1984*a*).

[17] The *t*-tests for the differences between the status effects in 1972–75 and 1981–85 are 2.42 ($P < .05$) for men and 2.32 ($P < .05$) for women.

[18] The power of the SAT model for detecting the change in the effect of origin status on destination status comes from the expression of the status effect in a single coefficient, not from the controls for autonomy and training. A unidimensional, linear-by-linear interaction model (Haberman 1979, chap. 6) with status as the only dimension would also reveal significant change across periods.

[19] Note from equation (2) that the slope of such a line (net of autonomy and the scaled diagonal effects of status and training) is $b_1 (X_{1,2} - X_{1,10}) = 54b_1$.

and training and the scaled association effect of autonomy.[20] Glossing over the departures from linearity and calling the plots "lines," one should note how the dashed lines for both men and women (representing 1972–75) tilt upward more sharply than do the solid lines (representing 1982–85). These plots suggest that the particulars of change differ for men and women. For men, the effect of origin status on destination status declined between 1972–75 and 1982–85 because the odds on higher-status employment for the sons of high-status fathers declined. Among women, on the other hand, the effect of origin status on destination status declined because of an increase in the odds on higher- versus lower-status employment among women with lower-status origins. Not evident from the plots as they are displayed is the extent to which the 1982–85 plot for women overlaps the 1982–85 plot for men. With the exception of workers from operative or service origins, the lines are so close that the separate lines cannot be seen if they are plotted on the same chart. Plots involving sex-typical occupational categories, for example, self-employed professionals, proprietors, clerks, or craftsmen, do not show the same degree of gender equality as is seen here.

In all other respects, mobility differs for women and men. For men, the scaled association effect of autonomy is significant, as are the scaled diagonal effects of status, autonomy, and training. For women, status is the only significant dimension, and only the general effect of origin status on destination status ($b_1$), not the scaled diagonal effect ($d_1$), is significant. Thus, part of the lower immobility among women noted in other studies (Hauser et al. 1977; Roos 1985) is caused by the absence of diagonal effects that are important for the immobility of men. I have speculated (1984*a*) that, outside of occupations with important property ties, such as farming, role modeling and socialization influence immobility at least as much as property does. To the extent that mothers, not fathers, are the role models for daughters, equation (1) incorrectly specifies the effects of autonomy and training on the immobility of women by excluding mothers (see Rosenfeld 1978). Future research may rectify the situation by uncovering the effects of mother's autonomy and training on the occupational destinations of sons and daughters.

Note that the results for men replicate the application of this model to the OCG-I and OCG-II data (Hout 1984*a*). Autonomy has significant positive scaled association and scaled diagonal effects. The sons of shop-

[20] The two destinations differ by $-5.84$ points on the autonomy scale, so the only appreciable autonomy effect visible in the figure is the positive departure from the line for craftsmen in manufacturing (at around SES = 40). The other departure from the line of large magnitude (at around SES = 20) reflects the scaled diagonal effect of status for men from origins in the operative(nonmanufacturing)/service-worker category.

TABLE 5

PARAMETER ESTIMATES AND GOODNESS OF FIT STATISTICS FOR SAT MODEL BY GENDER AND PERIOD: PERSONS IN THE LABOR FORCE, UNITED STATES, 1972–85

| | 1972–75 | | 1976–80 | | 1982–85 | |
|---|---|---|---|---|---|---|
| | Men | Women | Men | Women | Men | Women |
| Parameter: | | | | | | |
| Scaled association: | | | | | | |
| Status[b] | .789* (.068) | .838* (.094) | .767* (.067) | .785* (.083) | .569* (.060) | .562*,[a] (.071) |
| Autonomy | .200* (.051) | −.088 (.099) | .275* (.045) | .048 (.091) | .220* (.048) | .106 (.084) |
| Scaled diagonal: | | | | | | |
| Status[b] | −.291* (.046) | −.035 (.086) | −.217* (.046) | −.047 (.080) | −.205* (.043) | .026 (.066) |
| Autonomy | .200* (.051) | −.088 (.099) | .275* (.045) | −.048 (.091) | .220* (.048) | .106 (.084) |
| Training | .244* (.020) | .027 (.049) | .216* (.020) | .034 (.046) | .209* (.020) | .046 (.040) |
| Structural mobility: | | | | | | |
| Professionals, self-employed | 2.841 | 1.110 | 1.892 | .706 | 1.710 | 1.584 |
| Professionals, salaried | 6.872 | 6.096 | 5.762 | 6.146 | 3.143 | 4.069 |
| Managers/sales, nonretail | 5.150 | 1.340 | 3.533 | 1.368 | 1.815 | 1.062 |
| Proprietors | .841 | .330 | .680 | .357 | .881 | .433 |
| Clerks | 3.137 | 11.402 | 1.777 | 12.462 | 1.825 | 10.659 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Sales, retail | 1.624 | 2.050 | 2.047 | 3.451 | .821 | 2.949 |
| Crafts, manufacturing | 1.560 | .126 | 1.069 | .084 | .938 | .125 |
| Crafts, construction | 1.096 | .020 | 1.189 | .017 | 1.060 | .036 |
| Crafts, other | 1.217 | .062 | 1.123 | .136 | .875 | .174 |
| Service/operatives, other | 1.116 | 1.548 | 1.068 | 1.291 | .998 | 1.178 |
| Operatives, manufacturing | 1.309 | 1.034 | 1.034 | 1.098 | 1.175 | .617 |
| Laborers, nonfarm | .737 | .107 | .787 | .065 | .775 | .169 |
| Farmers | .090 | .005 | .103 | .009 | .135 | .015 |
| Laborers, farm | .224 | .094 | .463 | .056 | .301 | .029 |
| $\sigma$ (log $\alpha$) | 1.139 | 2.213 | .949 | 2.205 | .779 | 1.975 |
| Goodness of fit: | | | | | | |
| $L^2$: | | | | | | |
| Independence ($df$ = 169) | 606.64 | 269.76 | 573.55 | 260.04 | 511.59 | 311.19 |
| Quasi symmetry ($df$ = 78) | 70.26 | 37.15 | 68.31 | 34.64 | 101.38 | 55.58 |
| SAT ($df$ = 165) | 224.21 | 159.59 | 216.66 | 145.79 | 222.28 | 198.29 |
| $P$, SAT | <.01 | >.50 | .02 | >.50 | .01 | .05 |
| *bic*, SAT | −988 | −963 | −989 | −1,004 | −989 | −997 |
| $N$ | 1,553 | 902 | 1,494 | 1,062 | 1,542 | 1,400 |
| Percentage immobile | 18.8 | 10.6 | 18.5 | 9.6 | 18.4 | 11.8 |

[a] The $t$-test for the difference between the status effect in 1972–75 and 1982–85 is 2.42 ($P < .05$).
[b] Metric coefficient and SE multiplied by 1,000.
* $P < .05$.

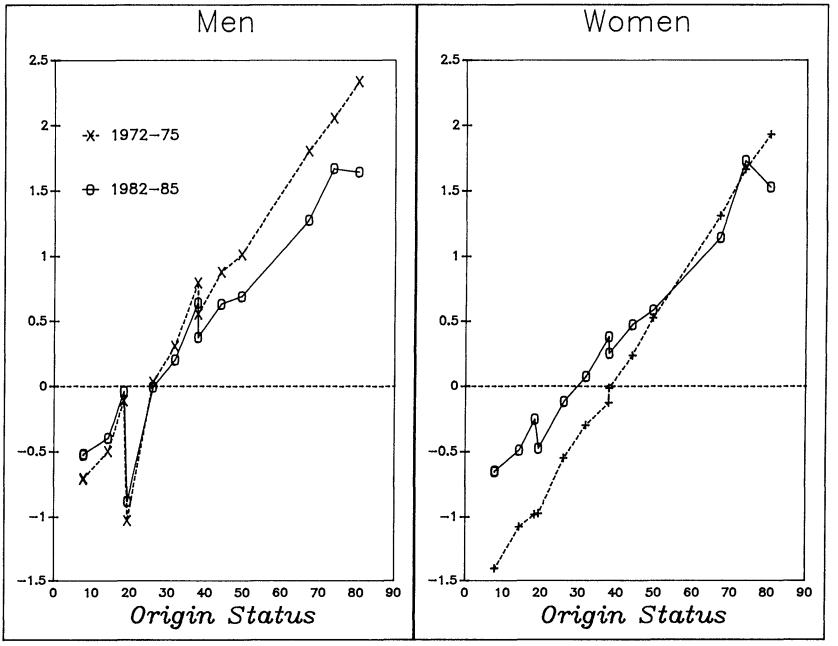


FIG. 1.—Log-odds on salaried professional destination relative to operative (nonmanufacturing) or service work expected under the SAT model by gender and period for persons in the labor force, United States.

keepers, entrepreneurs, independent professionals, and farmers are more likely than other men to enter occupations that promise them a degree of autonomy. The sons of autonomous workers are especially likely to enter their fathers' occupational categories, whether through inheritance, partnership, or other means. Specificity of training also positively affects immobility. The sons (but not the daughters) of specialists are more likely than sons of generalists to enter occupations that fall in the same categories as their fathers' occupations.

The probability of being immobile decreases as origin status increases, ceteris paribus. This is a very strong effect that I gave scant attention to in my previous applications of this model (1983, 1984*a*). The very high net immobility of farmers' sons (when structural mobility out of farming is controlled) accounts for some—but not all—of this effect. I offered no interpretation in the earlier work for the remaining effect of status on immobility, even though it is a strong effect that is replicated in many of the subpopulations defined by race, age, and education (Hout 1984*a*) and for immobility between origins and first jobs (Hout 1983, table 25). On reflection, it appears that the negative effect of status on immobility

pertains to the "expanding universalism" argument advanced by Blau and Duncan (1967, pp. 429–31). Their key hypothesis is that "superior status cannot any more be directly inherited but must be legitimated by actual achievements that are socially acknowledged." Their unit of analysis is the occupational structure as a whole, and their view is that technological change has redefined the conditions of occupational recruitment throughout the American economy. Although the macro view has its place in the study of social change, in this case, the changes under study are redefinitions of recruitment criteria at the level of the individual occupational group, so theory must address this unit of analysis. Considering the high correlation between the status of occupations in a given category and the education of incumbents of those occupations, it may be useful to examine the link between educational credentials and universalism. From this perspective, some occupations are almost certainly more universalistic in their recruitment criteria than are others. In particular, the very same high-technology occupations that received the attention of Blau and Duncan are more likely to use universalistic recruitment than the "obsolete lower occupational positions" (Blau and Duncan 1967, p. 430), notably farming and manual labor, that select men from the same origins.

To the extent to which universalism and selection on the basis of higher educational attainment go together, one can view the negative effect of status on immobility as evidence of expanding universalism within high-status occupations. If credentials are required for entry into an occupation, sons cannot move into that position without competing with workers from other origins. Of course, the sizable general effect of origin status on destination (even in 1982–85) means that a high-status background is nonetheless an advantage. It is just that the advantages of high-status origins are incremental rather than particular to the category of origins (Yamaguchi 1983).

One can accept the notion of expanding universalism without accepting Blau and Duncan's functionalist argument about its source. Indeed, it is unlikely that universalistic occupational recruitment comes from functional prerequisites at all. If the functional argument about universalistic principles' pervading society were true, then immobility net of the scaled association effects of status and autonomy would be nil; all occupations would recruit universally. The results here support a different view, one that sees universalism within those positions that have been most selective in drawing human resources from colleges and universities but particularism within those positions that have traditionally selected from among those workers who lack advanced credentials. Of course, this tendency is net of the considerable force of autonomy and training—both of which foster immobility in the professions, crafts, and farming.

## GROSS MOBILITY: CHANGES AND GENDER DIFFERENCES

Gross mobility, the absolute percentage of persons whose current occupation is in a category other than their fathers', did not change significantly for women or men in the U.S. labor force between 1972–75 and 1982–85 (as seen in the last row of table 5). All else being equal, an increase in openness (decrease in the association between origins and destinations) like the one described in the preceding section will increase gross mobility. Such an increase failed to materialize in the United States because the force of structural mobility diminished over the decade. As mentioned in connection with table 2 above, origins and destinations of workers in the early 1980s are more similar than were origins and destinations of workers in the early 1970s. The structural mobility parameter estimates (after Sobel et al. 1985) in table 5 specify the occupations that are most affected. First, note that the overall reduction in the force of structural mobility is reflected in the range and standard deviation [labeled $\sigma(\log \alpha)$] of the coefficients. This overall change is probably the most important aspect of reduced structural mobility, as the correlations of structural mobility in 1972–75 with structural mobility in the other two periods are all in excess of .90,[21] and, among both men and women, 11 of the 14 structural mobility coefficients moved closer to 1.0 between 1972–75 and 1982–85.

The biggest specific changes refer to structural mobility into the salaried professions and management. Among both men and women, the coefficients for these occupational groups fell particularly far—mostly between 1976–80 and 1982–85. The share of the labor force working in the salaried professions and management has not declined. The force of structural mobility into these categories has decreased because their rate of growth has abated, while growth from past decades is beginning to appear in the origin distribution as well as in the destination distribution. Stated another way, origins and destinations are becoming less dissimilar in part because, in the 1980s, more workers come from backgrounds in the salaried professions and management than in the 1970s. This trend is complemented by a decline in the structural pressure that results from the dissimilarity between origins and destinations in self-employment and manual labor (and, to a lesser extent, farming). In a manner of speaking, the force of structural mobility has declined because a growing proportion of the labor force is second-generation postindustrial; that is, more and more workers are the offspring of the first postindustrial generation.

Featherman and Hauser (1978, table 3.16) report an increase in downward mobility (direction defined in terms of socioeconomic status) and no

[21] For men, the correlations between the structural mobility coefficients in 1972–75 and those for 1976–80 and 1981–85 are .97 and .92, respectively. For women, the correlations are .99 and .98, respectively.

change in upward mobility between 1962 and 1973. In the GenSoc data, the upward mobility of men decreased between 1972–75 and 1982–85, while their downward mobility increased. Men's upward mobility is still 78% higher than downward mobility in 1982–85, but the margin is shrinking. In 1962, it was 237% higher (Featherman and Hauser 1978, table 3.16). The association between origins and destinations is symmetrical, so changes in the relative prevalance of upward and downward mobility reflect the decreased force of structural mobility. In the absence of structural mobility, upward and downward mobility are equal (Sobel et al. 1985).

Both the upward and the downward mobility of women remained unchanged in the 1970s and early 1980s. For women, upward mobility exceeds downward mobility by about 160%.

## EDUCATION AND MOBILITY

Education is the key factor in occupational placement, especially in placement on the status dimension of occupational mobility. The importance of education makes it highly unlikely that a change as significant as the 30% reduction in inequality of opportunity reported here could come about without a contribution from changes in the system of educational stratification.

The relationships among origin status, education, and destination status are complicated. As a simple starting place, consider a three-variable causal system composed of occupational origin status ($x$), education ($u$), and occupational destination status ($y$), ignoring, for rhetorical purposes, the many other important background and intervening variables (see, e.g., Duncan, Featherman, and Duncan 1972; Hauser, Tsai, and Sewell 1982). The total or reduced-form effect (Alwin and Hauser 1975) of origin status on destination status in such a system is the sum of a direct effect ($b_{yx.u}$) and an indirect effect that is itself the product of the path from origins to education ($b_{ux}$) and the subsequent path from education to destinations ($b_{yu.x}$):

$$b_{yx} = b_{yx.u} + b_{yu.x}b_{ux},$$

where $b$ is a regression coefficient (or its analogue from eq. [1]), the first subscript designates the dependent variable, the second subscript designates the independent variable, and the subscript after the dot designates the control variable. If such a system described the relationships among origins, destinations, and education, we could look to one of the three component parameters—$b_{yx.u}$, $b_{yu.x}$, or $b_{ux}$—for the source of change in $b_{yx}$. But, as noted above, the direct effect $b_{yx.u}$ varies according to the

TABLE 6

PERCENTAGE OF THE LABOR FORCE WITH COLLEGE DEGREES BY GENDER AND PERIOD: UNITED STATES, 1972–85

| Gender | 1972–75 | 1976–80 | 1982–85 |
|---|---|---|---|
| Men | 20.5 | 24.6 | 25.8 |
| Women | 16.2 | 19.2 | 22.5 |

SOURCE.—NORC General Social Survey (MRDF).

level of education.[22] Therefore, a simple shift in the distribution of education, decreasing the portion of the work force at levels where $b_{yx.u}$ is large while increasing the portion of the work force at levels of education where $b_{yx.u}$ is near zero, might reduce $b_{yx}$ even when $b_{yx.u}$, $b_{yu.x}$, and $b_{ux}$ remain constant. In particular, because the effect of origin status on destination status is zero for college graduates (at least among male college graduates over 35 years old), an increase in the proportion of the labor force holding college degrees might, in and of itself, produce a decline in inequality of opportunity.

College graduates are a growing portion of the labor force. Table 6 shows that the proportion of the labor force with college degrees increased between 1972–75 and 1982–85. The increase was 26% for men in the labor force and 39% for women in the labor force. Since, for this growing segment of all workers, destination status is independent of origin status, surely some of the decline in inequality of occupational opportunity is caused by this compositional shift.

Noting that the percentage increase in college degrees is commensurate with the percentage decrease in the effect of origin status on destination status, I am tempted to ascribe all the change in inequality of occupational opportunity to the increase in college graduates in the labor force. But changes in any of the fundamental parameters linking origins, education, and destination—$b_{yx.u}$, $b_{yu.x}$, or $b_{ux}$—could also contribute to a decrease in the total effect of origins on destinations. A definitive decomposition of the observed change in the association between origin status and destination status into changes in each of the four components (composition and three parameters) requires a replication of the analyses in Mare (1981) and Hout (1984*a*, tables 9, 10). The GenSoc data provide too few cases for such a replication, but, with a few simplifications, some inferences about the contribution of changes in $b_{yx.u}$ can be made.

[22] More precisely, the effects of status as measured by the $b_1$ and $d_1$ parameters in equation (1) vary according to the level of education, as shown in table A2.

The OCG surveys used for analyses of changes between 1962 and 1973 contained enough cases for detailed analysis. What can we infer from the changes between 1962 and 1973? During that interval, the proportion of white men 31–64 years old who had college degrees rose 36%, while the total effect of origin status on destination status fell by 31% (Hout 1984*a*, tables 9, 10). Yet it is clear that more than just the growing proportion of college graduates in the labor force contributed to the growing equality of opportunity. Evidence indicates that two of the other components—the direct effect of origin status on destination status (app. table A2) and the component of its indirect effect that operates through socioeconomic differentials in educational attainment (Hauser and Featherman 1976; Mare 1981)—also contributed to the decline in inequality of opportunity. For high school dropouts in particular, there is a sharp drop in the effect of origin status on destination status (see table A2). Mare (1980, 1981) describes how decreasing high school dropout rates for all students result in less educational disadvantage for students from lower-status origins; specifically, they result in a lower value for $b_{ux}$. Origin status affects the educational transitions that lead up to college more than it affects college enrollment or graduation. For the cohorts that left school during the 1950s and 1960s, factors independent of origins increased the odds on graduating from high school. This trend made it possible for more students from working-class origins to get into college and subsequently graduate, even though there was no decrease in the parameter relating origin status to the transition from high school graduation to college enrollment or the transition from college enrollment to the completion of four years.

Similar changes in the interval between 1972–75 and 1982–85 cannot be counted on, of course. Nor can they be ruled out. If the 1962–73 pattern was repeated during the 1973–85 interval, then some of the 30% decline in the total effect of origins on destinations must be attributed to further declines in the component of the indirect effect of origins on destinations that depends on the effect of origins on educational attainment.

A complete replication of the analysis in Hout (1984*a*) is out of the question. Selected comparisons from the GenSoc data are possible if workers 25–35 years old are included in the analysis, if gender differences in the effects of autonomy and training are ignored (allowing the men and women to be combined in a single mobility table), and if cohort is accepted as a substitute for period in some of the comparisons. Three propositions are important for the thesis that the total effect of origin status on destination decreased because of increases in the share of the labor force with college degrees:

H1. Destination status is independent of origin status among college graduates who entered the labor force since 1973.
H2. The effect of origin status on destination status among workers without college degrees who were in the 25–64 age range throughout the 1973–86 period is constant during the entire period.
H3. The effect of origin status on destination status is the same among workers without college degrees who have turned 25 since 1973 as it is among similar workers who were in the 25–64 age range throughout the 1973–86 period.

The model in equation (1) is fitted to five subgroups in the GenSoc data in order to test these three propositions. The subgroups are (1) college graduates who turned 25 between 1973 and 1986 (those born 1948–61) provided that they were 25 or older and in the labor force at the time of the interview, (2) labor-force participants without college degrees who turned 25 between 1973 and 1986 provided that they were 25 or older at the time of the interview, (3) labor-force participants without college degrees who were between the ages of 25 and 64 throughout the 1973–86 period (those born 1921–47), (4) members of group 3 who were interviewed in the 1970s, and (5) members of group 3 who were interviewed in the 1980s. Workers who turned 65 between 1973 and 1986 are excluded even if they were less than 65 when they were interviewed. Data from the 1986 GenSoc are added to the 1972–85 data used in the foregoing analyses to increase further the case base. Men and women are combined because there are not enough cases for separate analyses. The tables for some of the subgroups are very sparse. The technique of adding $\frac{1}{14}$, then adjusting the resultant counts to the original marginals (as described earlier) is used for all subgroups. Results for a sixth group, college graduates who were between the ages of 25 and 64 throughout the 1973–86 period, are reported in the interest of closure. The results are in table 7.

The coefficient to test H1 is in the first column of the table. The estimate of .018, with a standard error of .106, is less than one-fifth of a standard deviation away from zero. Therefore, even though the burden of proof for sustaining a null hypothesis is a heavy one, this result is strong evidence in favor of H1.

The coefficient in the second column does not test any particular hypothesis, but it reiterates the absence of an effect of origin status on destination status among college graduates.

The remaining hypotheses cannot be sustained. The coefficients in the third and fourth columns refer to H2. The null hypothesis of no difference between them cannot be rejected ($t = 1.41$), but a $t$-ratio that large is weak support for sustaining the null. Since we are interested only in

TABLE 7

ESTIMATES OF ASSOCIATION PARAMETERS AND GOODNESS OF FIT STATISTICS FOR SAT MODEL BY SELECTED COMBINATIONS OF EDUCATION, COHORT, AND PERIOD: PERSONS IN THE LABOR FORCE, UNITED STATES, 1972–85

| | COLLEGE DEGREE | | NO DEGREE | | | |
|---|---|---|---|---|---|---|
| | All Years | | All Years | | 1972–78 | 1982–85 |
| | 1948–61 | 1921–47 | 1948–61 | 1921–47 | 1921–47 | 1921–47 |
| Parameter: | | | | | | |
| Scaled association: | | | | | | |
| Status[b] | .018 (.106) | .077 (.096) | .414* (.067) | .668* (.047) | .749* (.062) | .560*,[a] (.072) |
| Autonomy | .387* (.147) | .228* (.101) | .039 (.057) | .080* (.036) | .093* (.046) | .061 (.060) |
| Scaled diagonal: | | | | | | |
| Status[b] | −.339* (.090) | −.318 (.074) | −.222* (.052) | −.186* (.036) | −.223* (.048) | .142* (.054) |
| Autonomy | .387* (.147) | .228* (.101) | .039 (.057) | .080* (.036) | .093* (.046) | .061 (.060) |
| Training | .310* (.058) | .261* (.047) | .185* (.022) | .166* (.014) | .175* (.018) | .155* (.021) |
| Goodness of Fit: | | | | | | |
| $L^2$ | 144.99 | 171.30 | 240.56* | 365.95* | 281.53* | 258.52* |
| $X^2$ | 205.64* | 241.16* | 231.14* | 358.82* | 265.56* | 266.49* |
| *df* | 166 | 166 | 165 | 165 | 165 | 165 |
| *bic* | −923 | −1,003 | −986 | −1,012 | −1,006 | −976 |
| *N* | 621 | 1,184 | 1,679 | 4,223 | 2,445 | 1,778 |
| Percentage immobile | 20.3 | 15.0 | 15.7 | 14.8 | 15.0 | 14.6 |

[a] The *t*-test for the difference between the status effect in 1972–75 and 1982–85 is 1.99 ($P < .05$).
[b] Metric coefficient and SE multiplied by 1,000.
* $P < .05$.

declines, a one-tailed test is appropriate. The probability of observing a difference as large as .188 when sampling from a population in which there is no difference is less than .10. Furthermore, the 25% decline between the 1970s and the 1980s is too provocative to ignore. The coefficients in the fifth and sixth columns of the table refer to H3. The effect of origin status on destination status is significantly weaker in the younger cohort than in the older one ($t = 3.11$).[23]

These results show that the decline in the total effect of origin status on destination status between 1972–75 and 1980–85 grew out of a complex set of changes in the way that education intervenes in the process of occupational achievement. First, the rise in the proportion of workers with college degrees shifted more people into the educational category for which origins do not affect destinations. Second, additional downward pressure on the association between origin status and destination status came from an exogenous drop in the effect of origin status on destination status among workers without college degrees. Whether viewed as an intercohort shift or an intracohort one, the effect of origin status on destination status declined in the past 15 years. Origins did less to help or hinder the attainments of workers without college degrees who had turned 25 since 1973 than it did among older workers without college degrees. In the intracohort comparison for the 1921–47 cohort, origin status affected current occupation in the 1980s less than it did in the 1970s.

Figure 2 illustrates these results. It plots the log-odds on a salaried, professional destination relative to a destination as an operative (non-manufacturing) or service worker by origin status, education, and cohort. The left-hand side of the figure shows what we would see if H1 and H3 were both true. The right-hand side shows the results I actually obtained. The most striking piece of evidence in the figure is the interaction among origin status, education, and destination status expected under H1. The log-odds on a higher-status destination versus a lower-status one rise sharply with origin status among workers who lack a college degree (points marked by * and +). The log-odds on high status are uniformly high for college graduates of all origin statuses (points marked by O and X). The difference between the slopes of the lines for older and younger cohorts of workers without college degrees is the crucial evidence against H3.

[23] The difference between the effect of origin status on destination status for the entering cohort (1948–61) and the persisting cohort (1941–47) in the 1980s is nearly significant in a one-tailed test ($t = 1.49$; $P = .07$).

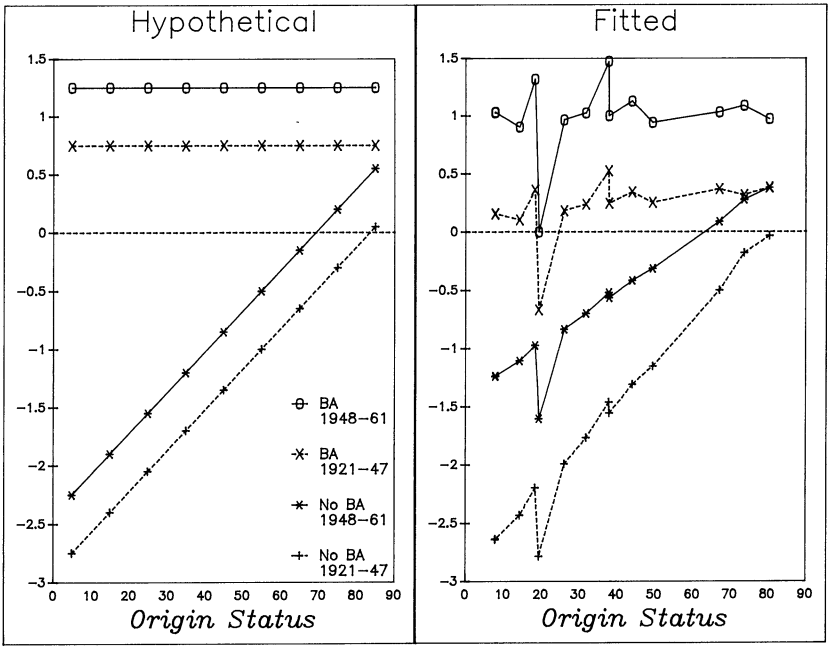


FIG. 2.—Log-odds on salaried professional destination relative to operative (nonmanufacturing) or service work expected under the SAT model by college degree and cohort for persons in the labor force, United States.

## CONCLUSION

Socioeconomic status has become less important for men's and women's occupational mobility since 1972. The association between men's and women's socioeconomic origins and destinations decreased by one-third between 1972–75 and 1982–85. This trend is related to the rising proportion of workers who have college degrees—the more college graduates in the work force, the weaker the association between origin status and destination status. The relationship between origin status and destination status is nil among college graduates but strong among workers without degrees, so the increasing prevalence of college graduates in the work force contributed to the decline in the overall level of inequality of opportunity. Other components of the relationships among origin status, education, and destination status contributed to the recent decline in inequality as well. Both intercohort and intracohort differences point in the direction of greater equality of occupational opportunity among workers who lack college degrees.

Despite this crucial change in equality of opportunity, overall mobility

did not change between 1972–75 and 1982–85. This is because the rate of change in occupational composition decreased enough to narrow the gap between origins and destinations. The existence of fewer workers with farm origins and more with fathers who were managers and professionals adds up to less structural mobility. Structural mobility did not disappear, but it declined enough to offset the increased openness of the class structure. Upward mobility still exceeds downward mobility, especially among women, but by a smaller margin.

Autonomy and specialization affect the mobility chances of men as much in the 1980s as they did in the 1960s and 1970s. These variables do not affect women's mobility in any year.

Recent conclusions about the openness of American society relative to that of Great Britain by Erikson and Goldthorpe (1985) and Kerckhoff, Campbell, and Winfield-Laird (1985) deserve a reexamination in light of the results reported here. Their comparisons were based on the 1973 OCG-II data and the 1972 Oxford Mobility Study (Goldthorpe 1980). As shown here, 1973 was the midpoint of a 25-year trend toward a weaker association between origins and destinations (a trend that may or may not continue). Authors of both studies treat their data as being indicative of generic tendencies in American and British stratification, ignoring the prospect that the association may change substantially over relatively short periods of time. The authors of both articles express the opinion that mobility rates change because occupational distributions change; they view the association between origins and destinations as a less variable social indicator. Unless Britain has been changing along with the United States, these conclusions of fundamental similarity between the stratification systems of the two societies may be premature.

More generally, the trends in status effects in the United States pose a challenge for theories of inequality. Most attention in this area goes to macro variables that supposedly influence the level of mobility and the association between origins and destinations within a fixed or changing mobility regime. Among the macro variables thought to be of theoretical importance are industrialization, growth of the service economy, and political democracy (Lipset and Bendix 1959; Lenski 1966; Grusky and Hauser 1984). Although theory attends to the clear and important relationship between education and inequality, that relationship is generally seen as an additive one. I know of few attempts to estimate the extent to which education alters the effect of origin status on destination status and of none that theorize about the implications of such a nonadditive relationship for trends and levels of inequality. As shown here, a nonadditive relationship opens the prospect for change in important social indicators that stem not only from changes in fundamental parameters that give rise to those indicators, but from compositional changes that shift the distri-

bution of the population across categories of the interacting variable. In a way that is not anticipated by theory, the recent past (and possibly the future) of mobility in America depends on the educational composition of the work force at least as much as it does on other, more macro, influences.

This research also affects our understanding of the role of education in the stratification process. Before path analysis, the question asked about the role of education in occupational success was something like, "How much schooling does it take to overcome the disadvantages of low social origins?" The answer implicit in the linear, additive models developed over the past 25 years (Duncan and Hodge 1963; Duncan 1966*a*, 1966*b*; Blau and Duncan 1967; Duncan et al. 1972; Featherman and Hauser 1978; Hauser et al. 1982) is that no amount of education can overcome origins. According to these models, the gap between the status of current occupations for individuals with identical educations but different social origins will be, on average, about 12% as large as the difference between their origins. This conclusion is based on the specification, implicit in the linear and additive model, that the effect of origins on destinations does not vary by education.

Now we see how that specification was wrong. The effect of origins on destinations differs by level of education. The extreme case is college graduates. For them, current occupational status is independent of origin status. This finding provides a new answer to the old question about education's overcoming disadvantaged origins. A college degree can do it. Of course, a higher probability of attaining a college degree is part of the advantage in high-status origins, but labor-market inequities do not compound those advantages for college graduates in the way that they do for workers with less education.

Most of what we know about stratification and mobility is predicated on additive relationships among origins, education, and destination status. Finding that a college degree cancels the effect of origins on destinations can clear away some anomalies that have cropped up in research based on additive models. I do not have any answers, but I would like to raise some interesting questions. Can it be that Americans of Russian and Irish descent achieve a higher occupational status than is predicted for them by a model of background, education, and career beginnings (Duncan and Duncan 1968) because a larger than average proportion of workers from those groups finish college? Could a shortfall of college degrees account for the below-expectations achievements of Hispanics? Any group with more college graduates than could be expected, given the distribution of origin status in that group and the relationship between origins and college graduation, will achieve more than a group with fewer college graduates, even after the usual adjustments for education, be-

cause the usual adjustments do not take account of the independence of origins and destinations among college graduates. Adjudicating the ethnic differences reported by Duncan and Duncan (1968) and others (notably Greeley 1977; Featherman and Hauser 1978) is beyond my scope in this discussion, but raising the issue draws attention to the implications for mobility research of the interaction effect uncovered here.

The implications of this research go beyond the subfield of mobility research as well. The success of human capital theory as an account of why people go to college has, on occasion, been used to prescribe who should pay for college. For example, the Reagan administration's budget proposal for 1988 said, "Students are the principal beneficiaries of their investment in higher education. It is therefore reasonable to expect them—not the taxpayers—to shoulder most of the costs of that investment." From this perspective, college education is an investment decision made by individuals for the benefit of individuals. But as long as "equality of opportunity" is a value in American society, increasing the proportion of workers with college degrees benefits society by making occupational opportunity independent of social origins for a large percentage of the work force.

## APPENDIX

### TABLE A1

CROSS-CLASSIFICATION OF WORKERS ACCORDING TO OCCUPATIONAL ORIGINS AND DESTINATIONS BY GENDER AND PERIOD: PERSONS IN THE LABOR FORCE, UNITED STATES, 1972–85

| ORIGIN | DESTINATION | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1972–75, Women: | | | | | | | | | | | | | | |
| 1. Professionals, self-employed | 1 | 7 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 |
| 2. Professionals, salaried | 1 | 21 | 5 | 0 | 13 | 2 | 0 | 0 | 0 | 3 | 1 | 1 | 0 | 0 |
| 3. Managers/sales, nonretail | 2 | 29 | 5 | 1 | 26 | 3 | 0 | 0 | 0 | 6 | 2 | 0 | 0 | 0 |
| 4. Proprietors | 0 | 18 | 10 | 3 | 31 | 2 | 0 | 0 | 0 | 11 | 6 | 1 | 0 | 0 |
| 5. Clerks | 2 | 5 | 2 | 1 | 15 | 2 | 0 | 0 | 0 | 3 | 2 | 0 | 0 | 0 |
| 6. Sales, retail | 0 | 2 | 3 | 0 | 2 | 0 | 1 | 0 | 0 | 2 | 2 | 0 | 0 | 0 |
| 7. Crafts, manufacturing | 1 | 13 | 4 | 0 | 26 | 5 | 1 | 0 | 0 | 15 | 7 | 1 | 0 | 0 |
| 8. Crafts, construction | 0 | 6 | 4 | 1 | 21 | 2 | 0 | 0 | 0 | 11 | 3 | 0 | 0 | 0 |
| 9. Crafts, other | 0 | 9 | 5 | 3 | 25 | 0 | 2 | 0 | 1 | 20 | 1 | 0 | 0 | 0 |
| 10. Service/operatives, other | 0 | 13 | 8 | 1 | 44 | 4 | 1 | 0 | 0 | 33 | 20 | 1 | 0 | 0 |
| 11. Operatives, manufacturing | 2 | 10 | 2 | 2 | 25 | 1 | 0 | 1 | 1 | 24 | 12 | 0 | 0 | 0 |
| 12. Laborers, nonfarm | 0 | 1 | 4 | 2 | 18 | 0 | 1 | 0 | 0 | 17 | 6 | 2 | 0 | 0 |
| 13. Farmers | 0 | 26 | 8 | 6 | 41 | 0 | 3 | 0 | 2 | 54 | 28 | 1 | 1 | 1 |
| 14. Laborers, farm | 0 | 2 | 1 | 1 | 3 | 0 | 0 | 0 | 0 | 11 | 5 | 0 | 0 | 2 |
| 1976–80, Women: | | | | | | | | | | | | | | |
| 1. Professionals, self-employed | 3 | 12 | 3 | 1 | 7 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 2. Professionals, salaried | 3 | 14 | 10 | 2 | 16 | 0 | 1 | 0 | 0 | 7 | 1 | 0 | 0 | 0 |
| 3. Managers/sales, nonretail | 1 | 37 | 20 | 3 | 32 | 3 | 0 | 0 | 1 | 7 | 6 | 0 | 0 | 0 |
| 4. Proprietors | 2 | 23 | 11 | 1 | 26 | 4 | 0 | 0 | 0 | 8 | 7 | 1 | 1 | 0 |

TABLE A1 (*Continued*)

| Origin | Destination | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1976–80, Women (cont.): | | | | | | | | | | | | | | |
| 5. Clerks | 0 | 8 | 3 | 1 | 13 | 5 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 |
| 6. Sales, retail | 0 | 1 | 2 | 0 | 7 | 1 | 0 | 0 | 2 | 0 | 1 | 0 | 0 | 0 |
| 7. Crafts, manufacturing | 0 | 16 | 8 | 1 | 26 | 2 | 1 | 0 | 1 | 19 | 6 | 0 | 0 | 0 |
| 8. Crafts, construction | 0 | 5 | 3 | 1 | 20 | 4 | 0 | 0 | 2 | 8 | 12 | 1 | 0 | 0 |
| 9. Crafts, other | 2 | 20 | 7 | 2 | 39 | 4 | 0 | 0 | 2 | 25 | 10 | 0 | 0 | 0 |
| 10. Service/operatives, other | 1 | 20 | 8 | 5 | 45 | 3 | 1 | 1 | 3 | 35 | 16 | 2 | 0 | 1 |
| 11. Operatives, manufacturing | 0 | 11 | 9 | 1 | 30 | 4 | 2 | 0 | 1 | 20 | 11 | 1 | 0 | 1 |
| 12. Laborers, nonfarm | 0 | 6 | 3 | 0 | 21 | 2 | 0 | 0 | 0 | 20 | 8 | 0 | 0 | 0 |
| 13. Farmers | 0 | 31 | 11 | 5 | 43 | 11 | 0 | 0 | 2 | 43 | 25 | 0 | 1 | 0 |
| 14. Laborers, farm | 0 | 1 | 0 | 1 | 5 | 1 | 1 | 0 | 1 | 10 | 8 | 0 | 0 | 0 |
| 1982–85, Women: | | | | | | | | | | | | | | |
| 1. Professionals, self-employed | 5 | 7 | 4 | 2 | 4 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 |
| 2. Professionals, salaried | 4 | 43 | 14 | 3 | 29 | 2 | 1 | 1 | 2 | 6 | 2 | 0 | 0 | 0 |
| 3. Managers/sales, nonretail | 3 | 45 | 33 | 8 | 58 | 11 | 0 | 0 | 2 | 17 | 4 | 1 | 0 | 0 |
| 4. Proprietors | 2 | 23 | 14 | 5 | 37 | 1 | 0 | 0 | 2 | 14 | 2 | 1 | 0 | 0 |
| 5. Clerks | 1 | 16 | 3 | 0 | 18 | 2 | 2 | 1 | 1 | 2 | 5 | 1 | 0 | 0 |
| 6. Sales, retail | 0 | 6 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| 7. Crafts, manufacturing | 1 | 22 | 13 | 1 | 37 | 5 | 1 | 2 | 2 | 18 | 9 | 2 | 0 | 0 |
| 8. Crafts, construction | 1 | 17 | 9 | 2 | 54 | 1 | 2 | 0 | 1 | 10 | 1 | 2 | 1 | 0 |
| 9. Crafts, other | 3 | 20 | 11 | 7 | 52 | 4 | 0 | 0 | 4 | 19 | 2 | 5 | 0 | 0 |
| 10. Service/operatives, other | 0 | 31 | 14 | 3 | 68 | 5 | 1 | 0 | 2 | 41 | 16 | 2 | 0 | 0 |
| 11. Operatives, manufacturing | 4 | 12 | 14 | 1 | 41 | 2 | 1 | 0 | 3 | 24 | 9 | 1 | 0 | 0 |
| 12. Laborers, nonfarm | 0 | 23 | 7 | 1 | 26 | 3 | 2 | 0 | 1 | 20 | 6 | 2 | 0 | 0 |
| 13. Farmers | 1 | 23 | 12 | 5 | 43 | 3 | 3 | 0 | 2 | 54 | 15 | 1 | 2 | 0 |
| 14. Laborers, farm | 0 | 2 | 1 | 0 | 7 | 0 | 0 | 0 | 1 | 11 | 4 | 1 | 0 | 1 |

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1972–75, Men: | | | | | | | | | | | | | | |
| 1. Professionals, self-employed | 2 | 8 | 9 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 1 | 1 | 0 |
| 2. Professionals, salaried | 5 | 21 | 27 | 2 | 8 | 2 | 1 | 4 | 4 | 5 | 2 | 0 | 0 | 0 |
| 3. Managers/sales, nonretail | 5 | 23 | 45 | 5 | 3 | 0 | 3 | 2 | 6 | 10 | 3 | 2 | 0 | 0 |
| 4. Proprietors | 4 | 22 | 25 | 22 | 9 | 2 | 5 | 4 | 11 | 8 | 8 | 5 | 0 | 0 |
| 5. Clerks | 1 | 20 | 6 | 1 | 4 | 1 | 3 | 1 | 8 | 5 | 1 | 1 | 0 | 0 |
| 6. Sales, retail | 1 | 5 | 1 | 0 | 2 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 |
| 7. Crafts, manufacturing | 1 | 20 | 19 | 4 | 5 | 1 | 20 | 4 | 8 | 16 | 11 | 2 | 0 | 0 |
| 8. Crafts, construction | 1 | 12 | 15 | 4 | 10 | 1 | 9 | 20 | 12 | 10 | 6 | 3 | 1 | 0 |
| 9. Crafts, other | 3 | 24 | 20 | 7 | 9 | 0 | 18 | 12 | 28 | 21 | 8 | 3 | 0 | 1 |
| 10. Service/operatives, other | 4 | 29 | 23 | 7 | 18 | 4 | 15 | 15 | 18 | 47 | 14 | 12 | 1 | 0 |
| 11. Operatives, manufacturing | 1 | 18 | 18 | 3 | 9 | 1 | 15 | 4 | 11 | 12 | 20 | 6 | 0 | 0 |
| 12. Laborers, nonfarm | 0 | 6 | 9 | 1 | 10 | 0 | 9 | 8 | 8 | 21 | 15 | 10 | 1 | 0 |
| 13. Farmers | 2 | 29 | 24 | 14 | 15 | 1 | 18 | 23 | 31 | 42 | 39 | 25 | 49 | 5 |
| 14. Laborers, farm | 0 | 5 | 0 | 0 | 2 | 0 | 1 | 2 | 1 | 11 | 7 | 6 | 2 | 4 |
| 1976–80, Men: | | | | | | | | | | | | | | |
| 1. Professionals, self-employed | 5 | 12 | 5 | 2 | 1 | 0 | 0 | 2 | 3 | 2 | 0 | 0 | 1 | 0 |
| 2. Professionals, salaried | 5 | 33 | 24 | 3 | 4 | 1 | 2 | 3 | 6 | 1 | 2 | 2 | 0 | 0 |
| 3. Managers/sales, nonretail | 4 | 30 | 40 | 6 | 5 | 3 | 2 | 5 | 11 | 7 | 5 | 2 | 0 | 0 |
| 4. Proprietors | 5 | 25 | 20 | 23 | 8 | 3 | 5 | 7 | 8 | 9 | 6 | 4 | 1 | 0 |
| 5. Clerks | 1 | 10 | 15 | 3 | 1 | 1 | 5 | 0 | 3 | 7 | 3 | 1 | 0 | 0 |
| 6. Sales, retail | 1 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 |
| 7. Crafts, manufacturing | 3 | 26 | 19 | 3 | 10 | 2 | 16 | 7 | 17 | 10 | 21 | 3 | 0 | 0 |
| 8. Crafts, construction | 0 | 11 | 9 | 3 | 2 | 3 | 6 | 11 | 8 | 6 | 6 | 6 | 1 | 1 |
| 9. Crafts, other | 5 | 24 | 19 | 3 | 5 | 1 | 14 | 8 | 31 | 27 | 16 | 8 | 0 | 0 |
| 10. Service/operatives, other | 1 | 27 | 22 | 5 | 8 | 0 | 11 | 9 | 24 | 42 | 12 | 14 | 1 | 1 |
| 11. Operatives, manufacturing | 0 | 21 | 21 | 4 | 8 | 2 | 21 | 4 | 12 | 21 | 22 | 11 | 0 | 1 |
| 12. Laborers, nonfarm | 0 | 13 | 5 | 2 | 2 | 2 | 8 | 3 | 9 | 16 | 15 | 8 | 0 | 2 |
| 13. Farmers | 1 | 21 | 21 | 8 | 12 | 4 | 23 | 21 | 20 | 35 | 35 | 11 | 42 | 6 |
| 14. Laborers, farm | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 1 | 6 | 5 | 3 | 4 | 1 | 3 |

TABLE A1 (*Continued*)

| Origin | Destination | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 1982–85, Men: | | | | | | | | | | | | | | |
| 1. Professionals, self-employed | 7 | 10 | 5 | 2 | 6 | 0 | 3 | 2 | 4 | 1 | 2 | 0 | 0 | 0 |
| 2. Professionals, salaried | 7 | 35 | 20 | 7 | 8 | 0 | 7 | 5 | 4 | 7 | 4 | 3 | 0 | 0 |
| 3. Managers/sales, nonretail | 10 | 36 | 46 | 16 | 11 | 1 | 4 | 4 | 10 | 10 | 8 | 9 | 0 | 0 |
| 4. Proprietors | 6 | 13 | 22 | 19 | 5 | 3 | 3 | 4 | 12 | 13 | 7 | 2 | 0 | 2 |
| 5. Clerks | 1 | 11 | 14 | 6 | 9 | 0 | 2 | 1 | 7 | 7 | 5 | 1 | 0 | 1 |
| 6. Sales, retail | 0 | 3 | 3 | 1 | 2 | 1 | 0 | 0 | 1 | 2 | 2 | 1 | 1 | 0 |
| 7. Crafts, manufacturing | 2 | 24 | 17 | 7 | 7 | 1 | 16 | 10 | 10 | 15 | 15 | 4 | 0 | 0 |
| 8. Crafts, construction | 0 | 7 | 15 | 4 | 7 | 1 | 11 | 27 | 7 | 17 | 6 | 5 | 2 | 1 |
| 9. Crafts, other | 4 | 26 | 19 | 3 | 6 | 3 | 16 | 10 | 23 | 23 | 10 | 5 | 1 | 1 |
| 10. Service/operatives, other | 7 | 19 | 25 | 4 | 15 | 2 | 11 | 19 | 15 | 33 | 26 | 12 | 0 | 0 |
| 11. Operatives, manufacturing | 3 | 18 | 9 | 5 | 13 | 0 | 17 | 11 | 12 | 15 | 20 | 9 | 1 | 1 |
| 12. Laborers, nonfarm | 2 | 17 | 6 | 3 | 9 | 0 | 6 | 6 | 4 | 14 | 12 | 11 | 2 | 0 |
| 13. Farmers | 2 | 22 | 19 | 9 | 4 | 1 | 8 | 14 | 17 | 30 | 31 | 12 | 35 | 2 |
| 14. Laborers, farm | 0 | 0 | 1 | 1 | 1 | 0 | 2 | 2 | 3 | 5 | 8 | 2 | 1 | 1 |

SOURCE.—NORC General Social Survey (MRDF).

TABLE A2

SCALED ASSOCIATION AND SCALED DIAGONAL EFFECTS FOR SOCIOECONOMIC STATUS BY EDUCATION AND YEAR: WHITE MEN, 31–64 YEARS OLD

| EDUCATION (in years) | ASSOCIATION ($b_1$) | | DIAGONAL ($d_1$) | |
|---|---|---|---|---|
| | 1962 | 1973 | 1962 | 1973 |
| 0–8 | .504 (.132) | .301 (.131) | −.120 (.111) | −.285 (.142) |
| 9–11 | .550 (.118) | .194 (.099) | −.192 (.105) | −.000 (.086) |
| 12 | .286 (.076) | .301 (.050) | −.111 (.061) | −.137 (.042) |
| 13–15 | .247 (.114) | .204 (.070) | −.194 (.095) | −.274 (.061) |
| 16 or more | .029 (.039) | .096 (.081) | −.090 (.106) | .046 (.072) |

NOTE.—Coefficients multiplied by 100. SEs in parentheses.

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