

---

The Political Consequences of Social Mobility

Author(s): P. Clifford and A. F. Heath

Source: *Journal of the Royal Statistical Society. Series A (Statistics in Society)*, Vol. 156, No. 1 (1993), pp. 51-61

Published by: Wiley for the Royal Statistical Society

Stable URL: <https://www.jstor.org/stable/2982860>

Accessed: 18-12-2019 08:51 UTC

---

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <https://about.jstor.org/terms>



JSTOR

*Royal Statistical Society, Wiley* are collaborating with JSTOR to digitize, preserve and extend access to *Journal of the Royal Statistical Society. Series A (Statistics in Society)*

## The Political Consequences of Social Mobility

By P. CLIFFORD

and

A. F. HEATH†

*Jesus College, Oxford, UK*

*Nuffield College, Oxford, UK*

[Received July 1991. Revised March 1992]

### SUMMARY

This paper examines the effect of social mobility on voting behaviour by using diagonal reference models. The EM algorithm is used to fit the models. Asymmetrical mobility effects are found on voting for the Labour party, the downwardly mobile from the salariat being more likely to retain the voting patterns of their class of origin than are the upwardly mobile into the salariat. It is suggested that this asymmetry can be explained by countermobility.

*Keywords:* DIAGONAL REFERENCE MODEL; EM ALGORITHM; SOCIAL MOBILITY; VOTING

### 1. INTRODUCTION

The effect of social mobility on political behaviour has long puzzled sociologists and political scientists. That people's current social class affects (or at least is associated with) their voting behaviour is one of the best established propositions in political sociology. But researchers have often suspected that downwardly mobile individuals did not behave entirely in the same way as the intergenerationally stable members of their classes of destination. More specifically, data from five industrial nations suggested to Lipset and Bendix that, although the upwardly mobile tended to conform to the patterns of their class of destination, the downwardly mobile tended in contrast to retain the patterns of their class of origin:

'The majority of the men who rise to middle-class status become politically conservative (more in America than in Europe but still a majority on both continents), while a large minority of those who are reduced to working-class status in the United States, and a majority of men mobile downward in Europe, remain adherents of conservative movements'

(Lipset and Bendix (1959); compare Wilensky and Edwards (1959)). In short, there were believed to be asymmetrical mobility effects.

Various mechanisms can be postulated for this asymmetry, but the principal mechanism suggested by these early researchers was that the downwardly mobile desire to return to the higher class, and thus retain the values and behaviour patterns of their class of origin, whereas the upwardly mobile are assimilated (more readily in America than in Europe, but to some extent in both continents) into the social networks and culture of their class of destination. In essence then the theory is of an asymmetry in the normative reference groups of the upwardly and downwardly mobile. As Weakliem (1992) has pointed out, a theory of status underlies such accounts: it is the greater social prestige of the higher classes which leads both downwardly and upwardly mobile people to seek to emulate higher class behaviour.

†*Address for correspondence:* Nuffield College, Oxford, OX1 1NF, UK.

However, alternative mechanisms could be suggested, mechanisms which rely not on the concept of prestige but more on the nature of people's occupational careers. Thus there is substantial evidence that occupational careers are themselves asymmetrical: people who are upwardly mobile are rarely demoted thereafter, whereas people from high status backgrounds are often downwardly mobile in the early stages of their careers before returning to their father's level later. In other words, some downward mobility is merely temporary. The people involved may feel that their political interests are more those of the higher class to which they expect to be returning rather than those of the lower class in which they are temporarily located. This has been termed counter-mobility, and it appears to be a common pattern of career development (Goldthorpe (1987), chapter 5).

In addition to this hypothesis of asymmetrical mobility effects on the direction of people's votes, other researchers have suggested that there may be mobility effects on political participation. This second hypothesis contrasts the mobile, both upwardly and downwardly mobile alike, with the stable and holds that the mobile will exhibit lower levels of political interest and involvement or might be more prone to political extremism than the stable. The postulated mechanism here is rather different: it has been suggested that group attachments are disrupted by the process of mobility (Blau, 1956).

The first researchers relied largely on what might be called informal statistics. Lipset and Bendix for example simply inspected their cross-tabulations and calculated a few summary indices, but made no attempt to model the data formally or to test for the goodness of fit of alternative hypotheses. Many later researchers also used informal statistics and reached the same conclusion that there were asymmetrical mobility effects (e.g. Heath (1981)).

Formal statistical models, however, have failed to reject the null hypothesis. The first formal model for the investigation of mobility effects was proposed by Duncan. He formulated the problem in terms of an origin effect, a destination effect and an interaction effect. Duncan's general model is

$$m_{ij} = m + a_i + b_j + c_{ij}. \quad (1)$$

Here  $m_{ij}$  is the mean behaviour (in Duncan's case fertility rather than voting behaviour) in the combination of origin class  $i$  and destination class  $j$ ;  $m$  is the grand mean for the whole sample;  $a_i$  is the 'effect', expressed as a deviation from the grand mean, of belonging to the  $i$ th origin class;  $b_j$  is the effect for the  $j$ th destination class;  $c_{ij}$  is the interaction, expressed as a deviation of the observed mean from the mean expected on the basis of the sum of the three previous terms (Duncan (1966), p. 94). For voting behaviour we would nowadays reformulate Duncan's model as a log-linear or logistic model, and model (1) would become the straightforward saturated model for the transformed mean.

The crucial question for Duncan was whether the effects of the grand mean, origin and destination on their own were an adequate fit to the data. He found that, for the fertility data he had to hand, they were. He concluded that '*interaction of origin with destination is not significant (whence the willingness to discount completely any specific "mobility effect")*' (Duncan (1966), p. 95).

Substantively, then, the conclusion to be drawn was that the mobile combined the patterns of their classes of origin and destination: 'The couples in the study behaved *as if* they determined their fertility by combining the fertility pattern of their class of

origin with the fertility pattern of their class of destination in a simple additive or averaging process' (Duncan (1966), p. 93). Most importantly, the downwardly mobile seemed to combine the fertility patterns of their classes of origin and destination in just the same way as the upwardly mobile did. There was no statistically significant asymmetry in the combination process.

Application of Duncan's model to political behaviour reached similarly negative conclusions about the existence of mobility effects (Jackman, 1972; Knoke, 1973). However, Sobel (building on ideas introduced by Hope (1971)) suggested that a diagonal reference model might be more appropriate than Duncan's model (Sobel, 1981, 1985). He pointed out that Duncan's formulation did not adequately distinguish origin, destination and mobility effects. For example, respondents in a given destination will include both mobile and stable individuals, and the simple additive model will thus confuse the effects of destination with those of mobility. Put somewhat differently, our sociological hypotheses compare the behaviour of mobile with stable respondents, but this is not the comparison that Duncan's model carries out. The models proposed by Sobel, however, do try to represent the sociological hypotheses more faithfully. Thus he proposes the following model:

$$m_{ij} = p_1 m_{ii} + (1 - p_1) m_{jj}. \quad (2)$$

Here  $m_{ij}$  represents the mean behaviour of respondents in the  $ij$ th cell of the mobility table; there is one parameter  $m_{ii}$  for each diagonal cell, representing the expected mean behaviour of the stable members of each class;  $p_1$  represents the origin weight (and  $1 - p_1$  the destination weight). This model is more parsimonious than the conventional main effects model: in an  $r \times r$  table, the main effects model for the transformed mean

$$m_{ij} = m + a_i + b_j \quad (3)$$

has  $2r - 1$  parameters whereas the diagonal reference model given in equation (2) has  $r + 1$  parameters.

In the diagonal reference formulation, therefore, the behaviour of respondents in the  $ij$  cell is modelled as a function of the behaviour of those in the  $ii$  cell (the diagonal cell containing the stable members of their origin class) and of those in the  $jj$  cell (the diagonal cell containing the stable members of their destination class).

The null hypothesis of symmetrical mobility effects on partisanship can be tested by comparing the fit of model (2) with that of model (4):

$$\begin{aligned} m_{ij} &= p_1 m_{ii} + (1 - p_1) m_{jj} & \text{if } i < j; \\ m_{ij} &= p_2 m_{ii} + (1 - p_2) m_{jj} & \text{if } i > j. \end{aligned} \quad (4)$$

Model (4) thus allows the effect of origin to differ among the upwardly and downwardly mobile respectively. We shall use this model to investigate the effects of mobility on support for the Labour party.

The central sociological idea behind these diagonal reference models is that it is the stable members of each class (the diagonal cell) who constitute the core of the class and define the norms, values and behaviour patterns. And we may note that the informal statistics of researchers such as Lipset and Bendix were indeed based on a comparison of diagonal with off-diagonal cells.

Sobel, like Duncan, applied his models to the analysis of fertility, but they have now been applied to voting behaviour by de Graaf and Ultee (1990) (Dutch data) and

by Weakliem (1992) (data from seven industrial countries). Both de Graaf and Ultee and Weakliem employ models similar to our model (4), but they obtain the same negative results that were obtained with Duncan's model: they found that the simple diagonal reference model (model (2)) gave an adequate representation of the data without the need to introduce asymmetrical mobility effects.

The procedures used by Sobel and by de Graaf and Ultee assume a normally distributed dependent variable of constant variance. For voting behaviour this assumption cannot generally be made. In this paper we propose a method which assumes binomial distributions and which is thus more appropriate for a dichotomous dependent variable. We apply the model to recent British data, and unlike the previous attempts we do find asymmetrical mobility effects.

## 2. METHODS

To fit the diagonal models with a categorical dependent variable we use the estimation-maximization (EM) algorithm (Dempster *et al.* (1977); for a more introductory account see Little and Rubin (1987)). This uses an iterative two-stage procedure with synthetic data.

Diagonal models can be thought of as mixture models in which the voting behaviour of one subset (let us call them the sheep) is assumed to be influenced by their origins, that of the other subset (the goats) by their destinations. Define the proportion of sheep who vote, say, Labour as  $p_i^S$  and the proportion of goats who vote Labour as  $p_i^G$ . If the overall proportion of sheep is  $r$  then the proportion of respondents who vote Labour in the  $ij$ th cell is

$$p_{ij} = rp_i^S + (1-r)p_j^G \quad (5)$$

and in particular in the diagonal cells

$$p_{ii} = rp_i^S + (1-r)p_i^G. \quad (6)$$

If we assume that  $p_i^G = p_i^S$  then it follows from equation (6) that

$$p_i^G = p_i^S = p_{ii}. \quad (7)$$

Substituting in equation (5), we reach Sobel's basic diagonal model as described earlier, and the proportions of sheep and goats become Sobel's origin and destination parameters.

The EM procedure starts by specifying initial values for the unknown parameters. For example these may all be taken to be equal to  $\frac{1}{2}$ . These values are then used to split the observed votes into sheep votes and goat votes in the specified proportions. Note that these synthetic values are not necessarily whole numbers. The  $ij$ th cell of the original three-way table has now become a  $2 \times 2$  subtable giving the votes of the sheep and the goats.

Repeating this procedure for the other cells, we obtain our synthetic data in a four-way table. In the second stage of the EM algorithm we treat these data as if they were real, and we calculate maximum likelihood estimates of the parameters by using the synthetic four-way table. These estimates can be calculated directly from the margins of the table. The number of Labour sheep in row  $i$  plus Labour goats in column  $i$  gives us a new estimate for  $p_{ii}$ . Using these new estimates we can now resynthesize the data and repeat the process. For the models described here the estimates converge steadily

to the maximum likelihood values. Accuracy to three decimal places is obtained after about 1000 iterations, which corresponds to approximately 2 s computer time on a mainframe computer or 1 min on a personal computer.

### 3. DATA

Our data come from the 1987 British election study. This is a random sample of 3826 respondents from the electorate of Great Britain, conducted in the weeks following the 1987 general election. A three-stage selection procedure was used. First, a sample of 250 constituencies was selected, with probability proportional to the size of the electorate. A polling district was then selected within each constituency, and a systematic random sample of 24 electors on the current electoral register was selected with equal probability within each of the 250 polling districts. 6000 names and addresses were thus issued to the interviewers. Of these 537 were 'out of scope' (the named person having died, emigrated or moved to an unknown address). Out of the remaining 5463 named electors, interviews were achieved with 3826, giving a response rate of 70.0%. (For full details see Heath *et al.* (1991).)

The study contains information on the respondents' and their spouses' current (or last main) occupation and employment status and on the occupation and employment status of their fathers when the respondent was 14 years of age.

On the basis of these data on occupation and employment status, respondents have been allocated to one of five classes. This five-class schema was developed by Goldthorpe (1987) and has been widely used in research on voting behaviour. The five classes are as follows:

- (a) class 1, salariat—professional, managerial and administrative posts;
- (b) class 2, routine non-manual—largely clerical and secretarial work;
- (c) class 3, petty bourgeoisie—small employers and own-account workers together with farmers;
- (d) class 4, foremen and technicians;
- (e) class 5, working-class—rank and file manual jobs in industry, personal service and agriculture.

Goldthorpe's class schema is based on the concept of economic interests and has been shown to be particularly appropriate for the analysis of political behaviour (Heath *et al.*, 1985; Marshall *et al.*, 1988). It is not strictly hierarchical and does not attempt to capture notions of status and prestige.

We also compare our results with those obtained from the Registrar-General's class schema. This schema is explicitly hierarchical and has been claimed to measure social standing, although the official claims for the schema have varied over the years (Brewer, 1986). Because of the very small number involved in the bottom category of the Registrar-General's schema, we have combined it with the next category to yield the following five classes:

- (a) class I, professional etc. occupations;
- (b) class II, intermediate occupations;
- (c) class III(N), skilled occupations—non-manual;
- (d) class III(M), skilled occupations—manual;
- (e) classes IV and V, partly skilled and unskilled occupations.

As has been conventional in mobility research, the family has been treated as the unit of analysis and respondents have been classified according to the occupation of the head of household. Thus, single respondents (including the widowed, divorced and separated) are classified according to their own occupation and employment status. Married women, however, are classified according to the occupation and employment status of their husband. Where the person in question is retired, unemployed or economically inactive, the classification is carried out according to their last occupation and employment status. (The strict application of the head of household procedure requires that people living in their parents' home be classified according to the parents' class, but we do not have available the data to do this.)

The study obtained the respondents' reports on whether they voted, which were validated against the official records of turn-out (see Swaddle and Heath (1989)), and on the party for which they voted. The British political system contains three main options—Conservative, Labour and, in 1987, the alliance between the Liberals and the Social Democrats. There are also several minor parties which do not contest all seats, most notably the Scottish National Party and Plaid Cymru. In the analysis that follows we shall dichotomize our dependent variable. As the social bases of Conservative and centre party voting are rather similar (see Heath *et al.* (1991)), we employ a Labour–non-Labour dichotomy.

#### 4. RESULTS

We begin by considering the hypothesis that social mobility affects turn-out. Table 1 shows the proportion turning out to vote in each cell of the mobility table, using the validated turn-out data and classifying the social classes according to Goldthorpe's schema. Inspection of Table 1 suggests that turn-out is weakly related to current social class and that it is largely unrelated to social origin. Other recent research has suggested that failure to vote is largely due to circumstantial factors such as ill health or travel away from home and is weakly related to social characteristics such as social class (Swaddle and Heath, 1989).

This impression is confirmed by more formal modelling. We fit the basic diagonal model represented by equation (2). The best fit in this class is obtained when  $p_1 = 0$ , i.e. when turn-out is determined purely by destination class. The  $\chi^2$ -value for this model is 33.1 with 20 degrees of freedom ( $P = 0.033$ ).

Intergenerational social mobility does not therefore seem to have an important

TABLE 1  
*Voting by father's class and head of household's class †*

<i>Father's class</i>	<i>% voting in the following head of household's classes:</i>				
	<i>Salariat</i>	<i>Routine non-manual</i>	<i>Petty bourgeoisie</i>	<i>Foremen</i>	<i>Working-class</i>
Salariat	86 (335)	86 (85)	85 (53)	82 (17)	78 (102)
Routine non-manual	90 (86)	83 (35)	39 (17)	85 (13)	87 (30)
Petty bourgeoisie	90 (134)	84 (56)	91 (85)	97 (32)	81 (135)
Foremen	87 (104)	76 (41)	76 (41)	89 (36)	90 (115)
Working-class	88 (332)	84 (183)	73 (138)	80 (142)	82 (822)

†Figures in parentheses give the cell frequencies.

influence on turn-out, and we have little hesitation in rejecting this line of enquiry.

Much more promising is the study of mobility effects on the direction of vote. Table 2 shows the proportion voting Labour in each cell of the mobility table, using Goldthorpe's class schema. The diagonal cells show the expected pattern, with the intergenerationally stable members of the petty bourgeoisie having the lowest propensity to vote Labour followed by the salariat, routine non-manual, foremen and technicians, and working-classes in that order. This accords closely with previous research, although the differences between the core classes represented by these diagonal cells are substantially larger than the differences reported in the conventional class-by-vote table.

Again, in accordance with our theoretical expectations, we find that the levels of Labour voting in the off-diagonal cells (i.e. among the intergenerationally mobile) tend to lie somewhere in between the levels of the core classes corresponding to the classes of origin and destination. (The exceptions are mainly cells with low frequencies.)

We can also see signs of the asymmetrical mobility effect noted by the early researchers. For example, in the top row of the table we see that Labour voting was 21% among people who were downwardly mobile from the salariat to the working-class compared with a figure of 11% for the intergenerationally stable members of the salariat. But in the bottom row the corresponding difference is rather larger: the percentage voting Labour was 51% among the intergenerationally stable members of the working-class but only 24% among people upwardly mobile to the salariat. Casual inspection therefore suggests that the effects of upward mobility on Labour voting are much greater than those of downward mobility.

Our next step is to model the data more formally. We begin with the basic diagonal model represented by equation (2). This gives a reasonable fit to the data. The  $\chi^2$ -value is 26.3 with 19 degrees of freedom,  $P = 0.12$ . The origin weight is 0.39 and the destination weight is therefore 0.61. We can test whether the origin weight is significantly lower than the destination weight by comparing the fit of this model with that of a model in which the origin and destination weights are constrained to equal 0.5. This constrained model yields a  $\chi^2$ -value of 32.8 with 20 degrees of freedom, a difference of 6.5 with 1 degree of freedom.

We therefore reject the hypothesis that the origin weight equals the destination weight. Extending this idea we can calculate a 95% confidence interval for the origin

TABLE 2  
*Proportions voting Labour by father's class and head of household's class †*

<i>Father's class</i>	<i>% voting Labour in the following head of household's classes:</i>				
	<i>Salariat</i>	<i>Routine non-manual</i>	<i>Petty bourgeoisie</i>	<i>Foremen</i>	<i>Working-class</i>
Salariat	11 (303)	22 (74)	17 (47)	13 (16)	21 (86)
Routine non-manual	13 (79)	23 (30)	0 (12)	33 (12)	27 (30)
Petty bourgeoisie	11 (122)	19 (47)	11 (75)	19 (31)	34 (111)
Foremen	14 (96)	35 (34)	12 (34)	48 (31)	49 (111)
Working-class	24 (283)	35 (156)	27 (114)	39 (122)	51 (696)

†Figures in parentheses give the cell frequencies.



weight: we determine the set of origin weights which yield a  $\chi^2$ -value of 30.1 or less (i.e. with a fit which is not significantly worse at the 5% level than that provided by our estimated origin weight of 0.39). (See Cox and Hinkley (1974), chapter 7.) Using this method we obtain a 95% confidence interval of 0.30–0.47 for the origin weight.

Table 3 shows the standardized residuals from this basic model. We have calculated these using the formula

$$SR = (n_{ij} - N_{ij}m_{ij}) / \{N_{ij}m_{ij}(1 - m_{ij})\}^{1/2} \quad (8)$$

where  $n_{ij}$  represents the observed number voting Labour in the  $ij$  cell,  $N_{ij}$  represents the number of respondents in the  $ij$  cell and  $m_{ij}$  represents the estimated probability of voting Labour.

As we can see, the residual in the top right-hand cell of the table (representing long range downward mobility) is well in excess of 2.0. We therefore test specifically for asymmetrical mobility effects and fit equation (4) to the data. This model fails to show a significant improvement in fit (change in  $\chi^2$ -value, 2.8 with 1 degree of freedom,  $P = 0.09$ ).

One difficulty here is that Goldthorpe's class schema was not designed to be straightforwardly hierarchical. Whereas the salariat is clearly superior in most sociological senses to the working-class, Goldthorpe holds that the petty bourgeoisie, routine non-manual and foremen and technician classes differ in their class interests but not necessarily in their status or social and material advantages. Notions of upward and downward mobility between these classes (and between these three classes and the working-class) are therefore of doubtful validity. Goldthorpe accepts the notion of upward and downward mobility as applying only to movements in and out of the salariat.

This suggests that a rather different formulation of asymmetrical mobility effects is needed for Goldthorpe's class schema. The hypothesis should now be reformulated as follows: for people mobile out of the salariat the origin weight will be relatively large whereas for people mobile into the salariat the origin weight will be relatively small. We can model this as follows:

$$\left. \begin{aligned} m_{1j} &= p_1 m_{11} + (1 - p_1) m_{jj}, \\ m_{i1} &= p_2 m_{ii} + (1 - p_2) m_{11}, \\ m_{ij} &= p_3 m_{ii} + (1 - p_3) m_{jj} \quad \text{if } i \text{ or } j \neq 1. \end{aligned} \right\} \quad (9)$$

TABLE 3  
*Standardized residuals from the basic model for Labour voting*

<i>Father's class</i>	<i>Residuals in the following head of household's classes:</i>				
	<i>Salariat</i>	<i>Routine non-manual</i>	<i>Petty bourgeoisie</i>	<i>Foremen</i>	<i>Working-class</i>
Salariat	0.73	0.71	1.43	-1.10	-2.60
Routine non-manual	-0.65	-0.09	-1.53	0.25	-1.48
Petty bourgeoisie	0.44	0.02	-0.15	-0.72	-0.13
Foremen	-1.39	0.96	-1.21	1.71	1.06
Working-class	-0.70	0.09	0.18	-0.19	0.73

Thus we allow the origin weights to differ depending on whether the respondent comes from salariat origins, has reached a salariat destination or occupies some other cell of the mobility table respectively.

This model uses two extra degrees of freedom, compared with model (2), and makes a significant improvement: the change in  $\chi^2$ -value is 6.3 with 2 degrees of freedom,  $P=0.04$ . And the origin weights differ in the predicted direction: for the downwardly mobile out of the salariat it is 0.66; for the upwardly mobile into the salariat it is 0.32; for the remainder it is 0.40. The last two weights are not significantly different from each other, however, as is shown by comparing this model with the more parsimonious model which sets them to the same value:

$$\begin{aligned} m_{1j} &= p_1 m_{11} + (1 - p_1) m_{jj}, \\ m_{ij} &= p_2 m_{ii} + (1 - p_2) m_{jj} \quad \text{if } i \neq 1. \end{aligned} \quad (10)$$

This new model (which is the same as the DM-1 model described by Sobel (1981)) conditions the weights on the origin categories and distinguishes salariat origins from all other origins. It uses one fewer degree of freedom than model (9), and the difference in fit is not significant. (The change in  $\chi^2$ -value is 0.9,  $P=0.34$ .)

Our preferred model, then, is given by equation (10). Comparing it with the base-line model (equation (2)) we have a significant improvement in fit (the change in  $\chi^2$ -value is 5.2 for the loss of 1 degree of freedom,  $P=0.02$ ) and we can conclude that the origin weight of the downwardly mobile from the salariat is different from that of other voters. Our estimate of the origin weight for the downwardly mobile from the salariat is 0.65, whereas for the other respondents the estimated origin weight is 0.35. We calculate the 95% confidence region for this pair of parameters (again using the method of Cox and Hinkley (1974)). The point within the region where the parameters are closest is  $p_1=0.42$ ,  $p_2=0.37$ , and that where they are furthest apart is  $p_1=0.92$ ,  $p_2=0.33$ , giving a confidence interval for the difference of 0.05–0.59.

We have attempted to replicate our results by using the hierarchical Registrar-General's class schema. With this class schema the model of asymmetrical mobility effects described by equation (4) becomes appropriate unlike the situation with the non-hierarchical Goldthorpe schema.

The results can be briefly summarized. The basic diagonal model (equation (2)) yields a reasonable fit ( $\chi^2=34.1$  with 19 degrees of freedom,  $P=0.02$ ). Some of the residuals from the basic diagonal model exceed 2.0, but they have no evident pattern and the model of asymmetrical mobility effects (equation (4)) does not yield a significant improvement (change in  $\chi^2$ -value, 0.6 for the loss of 1 degree of freedom,  $P=0.44$ ).

Our results do, then, appear to depend on the class schema which we use. We obtain markedly superior fits to the data when using Goldthorpe's class schema, and this is in line with previous research comparing the merits of various schemas. Our interpretation of these results is that the Registrar-General's scheme does not represent particularly well the social bases of political behaviour (and of course it was not designed with this in mind).

The failure of the hierarchical Registrar-General's scheme to show asymmetrical mobility effects also suggests that status emulation may not be a mechanism which generates such effects. Our preferred explanation for the asymmetry which appeared when we used Goldthorpe's schema would instead be in terms of countermobility.

We do not have the data to make a direct test of the countermobility explanation, but there is one relevant investigation which can be made. Countermobility largely occurs in the early stages of people's careers, i.e. people who have been downwardly mobile, but have failed to return to their class of origin by, say, 40 years of age are likely to remain in their downwardly mobile state. We would expect hopes of return to fade gradually among older people and we would expect their perception of their class interests to adjust accordingly. In other words, the asymmetry in *de facto* mobility chances is greater among younger people, and so we would expect the asymmetry in their political behaviour also to be greater.

To test this hypothesis we divide the sample into two—those 39 years of age and younger ( $N=1091$ ) and those 40 years of age and older ( $N=1641$ ). We find that the basic diagonal model gives an exceptionally good fit for the older respondents ( $\chi^2=15.5$  with 19 degrees of freedom,  $P=0.69$ ) compared with the fit for the younger respondents ( $\chi^2=25.1$  with 19 degrees of freedom,  $P=0.16$ ). As expected, the origin weight for the younger respondents is rather greater than the origin weight for the older respondents. However, the difference is not significant. Life-history data charting people's occupational and voting histories is needed to provide a more convincing test.

## 5. DISCUSSION

This is the first time, to our knowledge, that formal statistical methods have shown asymmetrical mobility effects on political behaviour. Although previous researchers have tested for asymmetry in a rather similar fashion to ours (de Graaf and Ultee, 1990; Weakliem, 1992), they were unable to reject the null hypothesis. The difference in results may simply be because Britain is different from the other countries which have been studied, or because the recent period is different from the earlier periods which previous scholars have looked at. We think that these possibilities are unlikely to be the main explanation. Certainly, there is no reason to suppose that the postulated mechanism of countermobility is unique to Britain. And it would be rather surprising that results which were first suggested (for other countries) in the 1950s suddenly became true of Britain in the 1980s.

More plausibly the difference is because most previous investigators have tested only for global mobility effects. But both the verbal formulations of the early researchers and our more formal modelling focus on a rather small number of specific cells in the mobility table, particularly the top right-hand cell representing people downwardly mobile from the salariat to the working class. In this context it is worth noting that Blau and Duncan (1967) in their pioneering study of the effect of mobility on fertility found that, if there were any substantial effect of mobility, it was confined to the extremes of long distance upward or downward mobility.

Certainly, global tests of mobility effects such as that represented by equation (4) do not appear to be well suited for investigations using Goldthorpe's class schema. And as we have seen they are no more successful with the explicitly ordered Registrar-General's schema. Much of the mobility tapped by such global models will be short range between classes which do not have particularly distinctive class interests, norms or social organization. It is not clear on theoretical grounds why asymmetrical mobility effects should be found between such classes.

## ACKNOWLEDGEMENTS

The 1987 British election study was funded by the Sainsbury Family Charitable Trusts, Pergamon Press and the Economic and Social Research Council (grant A00250005), and was directed by Anthony Heath, Roger Jowell (Social and Community Planning Research), John Curtice (University of Strathclyde), Sharon Witherspoon and Julia Field (Social and Community Planning Research). We are very grateful to the funders, and to the co-directors of the study. We would like to thank Sir David Cox, the referees, and the discussants at a Social Statistics Section meeting for their comments on this paper.

## REFERENCES

- Blau, P. M. (1956) Social mobility and interpersonal relations. *Am. Sociol. Rev.*, **21**, 290–295.
- Blau, P. M. and Duncan, O. D. (1967) *The American Occupational Structure*, p. 387. New York: Wiley.
- Brewer, R. I. (1986) A note on the changing status of the Registrar-General's classification of occupations. *Br. J. Sociol.*, **37**, 131–140.
- Cox, D. R. and Hinkley, D. V. (1974) *Theoretical Statistics*. London: Chapman and Hall.
- Dempster, A. P., Laird, N. M. and Rubin, D. B. (1977) Maximum likelihood from incomplete data via the EM algorithm (with discussion). *J. R. Statist. Soc. B*, **39**, 1–38.
- Duncan, O. D. (1966) Methodological issues in the analysis of social mobility. In *Social Structure and Economic Development* (eds N. J. Smelser and S. M. Lipset). Chicago: Aldine.
- Goldthorpe, J. H. (1987) *Social Mobility and Class Structure in Modern Britain*, 2nd edn. Oxford: Clarendon.
- de Graaf, N. D. and Ultee, W. (1990) Individual preferences, social mobility and electoral outcomes. *Elect. Stud.*, **9**, 109–132.
- Heath, A. F. (1981) *Social Mobility*. London: Fontana.
- Heath, A. F., Jowell, R. and Curtice, J. (1985) *How Britain Votes*. Oxford: Pergamon.
- Heath, A. F., Jowell, R., Curtice, J., Evans, G. A., Field, J. and Witherspoon, S. (1991) *Understanding Political Change: the British Voter 1964–1987*. Oxford: Pergamon.
- Hope, K. (1971) Social mobility and fertility. *Am. Sociol. Rev.*, **36**, 1019–1032.
- Jackman, M. R. (1972) The political orientation of the socially mobile in Italy: a re-examination. *Am. Sociol. Rev.*, **37**, 213–222.
- Knoke, D. (1973) Intergenerational occupational mobility and the political party preferences of American men. *Am. J. Sociol.*, **78**, 1448–1468.
- Lipset, S. M. and Bendix, R. (1959) *Social Mobility in Industrial Society*, pp. 70–71. Berkeley: University of California Press.
- Little, R. J. S. and Rubin, D. B. (1987) *Statistical Analysis with Missing Data*. Chichester: Wiley.
- Marshall, G., Newby, H., Rose, D. and Vogler, C. (1988) *Social Class in Modern Britain*. London: Hutchinson.
- Sobel, M. (1981) Diagonal mobility models. *Am. Sociol. Rev.*, **46**, 893–906.
- (1985) Social mobility and fertility revisited. *Am. Sociol. Rev.*, **50**, 699–712.
- Swaddle, K. and Heath, A. F. (1989) Official and reported turnout in the British General Election of 1987. *Br. J. Polit. Sci.*, **19**, 537–570.
- Weakliem, D. (1992) Does social mobility affect political behaviour? *Eur. Sociol. Rev.*, to be published.
- Wilensky, H. L. and Edwards, H. (1959) The skidder: ideological adjustments of downward mobile workers. *Am. Sociol. Rev.*, **24**, 215–230.