THE DEMOCRATIC CLASS STRUGGLE IN THE UNITED STATES, 1948–1992[*]

Michael Hout
University of California, Berkeley

Clem Brooks
Indiana University, Bloomington

Jeff Manza
Pennsylvania State University

We present evidence of a historic realignment in the relationship between class and voting behavior in U.S. presidential elections in the postwar period. We take advantage of recent advances in class analysis and statistical methodology to introduce a distinction between "traditional" class voting and "total" class voting. Neither shows a decline in the postwar era. The realignment occurred since 1968, as professionals and nonmanagerial white-collar workers moved from voting for Republicans to supporting Democratic presidential candidates. Stronger support for Republicans among the self-employed and among managers has more than offset the shift of professionals and nonmanagerial white-collar workers to the Democrats. Skilled blue-collar workers have become volatile, moving away from their historic support for the Democratic Party without firmly attaching themselves to the Republican Party. Significant class differences in voter turnout also contribute to the total association between class and voting outcomes.

S cholars and political activists have long
debated the role of class divisions in
U.S. politics. At mid-century, research on the
"democratic class struggle" (Anderson and
Davidson 1943) was a central concern of the
sociology of politics. The seminal studies of
political behavior in the 1950s featured de-
tailed analyses of the organizational and sub-

jective aspects of class as factors in voting
(Berelson, Lazarsfeld, and McPhee 1954;
Campbell, Converse, Miller, and Stokes
[1960] 1980; Lipset [1960] 1981). Since the
1970s, most studies measuring the signifi-
cance of class divisions for U.S. politics have
concluded that class influences voting far
less than it once did (Manza, Hout, and
Brooks 1995). Authors often link these find-
ings to more general arguments about the
emergence of "new politics" cleavages
(Dalton 1988; Inglehart 1990; Clark and
Lipset 1991; Clark 1994) or to the increas-
ing importance of race (Huckfeldt and
Kohfeld 1989; Edsall 1991). Whatever the
interpretation, however, doubt about the sig-
nificance of class has become orthodoxy.

Is the case closed for the "declining politi-
cal significance of class"? We think that bet-
ter evidence is needed before such a verdict
can be reached. First, much of the evidence
for the declining significance of class is
based on an undertheorized concept of
"class," which usually consists of the simple
distinction between white-collar and blue-
collar occupations. This distinction ignores

significant advances in stratification theory (Erikson and Goldthorpe 1992) and class analysis (Wright 1985). Second, proponents base their case on dubious statistical manipulations, seldom employing multivariate models in their analyses. We develop new evidence of how class relates to voting behavior in the United States using a more sophisticated class schema—informed by recent developments in stratification theory and research—and a new statistical measure based on a multinomial logistic regression model for calibrating the extent of class voting. We apply the class schema and new statistical measure to American National Election Study (ANES) data to analyze U.S. presidential elections between 1948 and 1992. Our results challenge both the recent scholarly consensus that class voting is steadily declining and the broader claim that ongoing changes in party systems or mass publics require abandoning the study of the social bases of politics.

Our analysis of class voting in the United States begins with a theoretical distinction between what we term *traditional class voting* and *total class voting* and develops statistical models appropriate to each. Traditional models of class voting assume a close correspondence between the working class and parties on the left and between the middle class and parties on the center or right. This assumption may be embedded in models of class voting that identify the "natural" party of a given class (Rose and McAllister 1986; Weakliem 1995; Goldthorpe forthcoming) or in models that array classes and parties as ordered points on latent continua and examine the degree to which they are associated (Weakliem and Heath forthcoming). Whatever its particular form, this assumption is appropriate only for understanding the historically significant traditional pattern of the relationship between classes and political parties that has characterized most capitalist democracies in the twentieth century.

Class voting need not be limited to the combinations assumed in the traditional conception. First, class affects voter turnout as well as partisan choice (Verba, Nie, and Kim 1978). Class differences in participation probably have important consequences for the party system and public policy (Burnham

1982; Piven and Cloward 1988). Yet analyses of class voting in the United States rarely consider voting and nonvoting simultaneously (Weakliem and Heath forthcoming). We include nonvoting in our conception of the total effect of class on voting. Second, even within the ambit of partisan choice, traditional alliances are not the only class differences to consider. In other words, the sum of all class differences in voting behavior—which we term total class voting—is more inclusive than traditional class voting. Traditional class voting, while clearly important to the study of class voting, is a specific configuration in the comparative and historical alignment of classes and parties, but it is not the only way in which classes can differ at the polls. Traditional class voting contributes to total class voting, but the patterns of voting and partisanship can and do shift. Shifts in traditional class voting patterns are typically interpreted as *dealignment* (i.e., as confirmation of the declining importance of class for voting behavior). Our total class voting approach shows that while the traditional link between classes and parties have undergone *realignment,* the effect of class location on voting behavior remains significant.

Our distinction between traditional class voting and total class voting is related to Mair's (1993) distinction between "class politics" and "class voting." According to Mair, class voting signifies a tendency for classes to ally themselves with different parties in a given election; class politics require that these coalitions persist over several elections and become institutionalized. Total class voting as we have defined it requires only class voting. Discussions of the decline of traditional class voting implicitly assume—but do not demonstrate—an erosion of class politics. Although the United States has had low but significant class voting throughout the postwar period, class politics have never grown from it.

The concept of traditional class voting is deeply rooted in the literature. It is unavoidable when class is conceived or operationalized as a dichotomy. A multiclass approach implied by contemporary theories of class and stratification invites a distinction between total and traditional class voting, as does our decision to simultaneously consider several voting outcomes (including not vot-

ing). In our analysis of class voting in the United States since World War II, we specify one statistical model predicated on traditional class voting and another predicated on total class voting. The total class voting model fits the data better.

THE DECLINING POLITICAL SIGNIFICANCE OF CLASS

Most analyses of class voting in Western democracies in recent years have claimed that the effect of class on voting has declined significantly over time (Manza et al. 1995). This thesis holds that although there is variation from one country to another in the level of class voting, class is a less viable predictor of voting behavior in many capitalist democracies today than it was in earlier periods.

Theories of the Changing Class Bases of Politics

The claim that class voting is declining is closely associated with the post-1980 writings by Lipset. Lipset ([1960] 1981) developed an impressive array of case studies to argue that class struggles in democratic capitalist societies were moving from the workplace to the political arena. In the 1960 edition of *Political Man* he argued that, even in the United States, Republicans and Democrats "represent the interests of different classes" (p. 230). Lipset's more recent work, however, claims that Western democracies are now moving beyond class politics. For example, in the 1981 expanded edition of *Political Man* he argues that an important turn in the political life of post-industrial capitalist democracies has displaced class cleavages; class is no longer crucial to electoral politics (Lipset [1960] 1981; Clark and Lipset 1991; Clark, Lipset, and Rempel 1993).

Proponents of the declining political significance of class have advanced three hypotheses to explain it. First, newly politicized (or repoliticized) social divisions are supposedly replacing traditional class cleavages. In particular, intraclass divisions make cross-class appeals to workers by conservative parties and to the middle class by leftist parties into plausible electoral strategies. In the United States, racial divisions within the working class have been a focus of research.

Some evidence suggests that the Republican Party has successfully appealed to U.S. workers by invoking racial themes, often with an antiwelfare state rhetoric (Huckfeldt and Kohfeld 1989; Edsall 1991). "The politics of race disrupts class politics because, as long as the majority of blacks belong to a disadvantaged class, the social and political isolation of blacks benefits advantaged groups . . . by fracturing the political vehicle of lower-class interests: party competition structured along class lines" (Huckfeldt and Kohfeld 1989:1). Huckfeldt and Kohfeld (1989:6–16) cite the 1964 Goldwater campaign as a watershed, arguing that since then Republicans have captured an increasing share of the anti-Black, White working-class vote in presidential elections, thus driving down overall levels of class voting.

A second hypothesis maintained by adherents of the declining political significance of class approach argues that traditional political party loyalties are significantly declining as "voters begin to choose" (Rose and McAllister 1986), independent of class and status (Inglehart 1990, chap. 10). In this view, the number of voters who base their partisan choice on class considerations has sharply declined, while the size of the electorate open to appeals from all parties has increased proportionately (Weakliem 1995). The startling increase in the number of voters in the United States in recent elections identifying themselves as "independent" appears to extend a process of party dealignment that began in the late 1960s (Knoke and Hout 1974; Nie, Verba, and Petrocik 1979).

A related third hypothesis links the decline in class voting to changes in the social and ideological bases of political attitudes among mass publics, particularly among educated sectors of the middle class. For example, "two lefts"—one with a working-class constituency and one with a middle-class constituency—may maintain an uneasy coalition despite divergent ideological commitments and distinct social bases (Parkin 1968; Clark and Lipset 1991; Weakliem 1991; Clark et al. 1993). The apparent increase in middle-class support for leftist parties undermines class voting by confounding the traditional social bases of left-wing parties. Lipset ([1960] 1981) argues that while "both Lefts are in the

same party . . . they have different views and interests" (p. 511). Similarly, Inglehart and his colleagues argue that the emergence of "post-materialist" values transformed the class basis of the left by engendering a culture clash between the traditional working-class left and the nontraditional post-materialist left (Inglehart and Rabier 1986; Inglehart 1990).

Reconsidering the Declining Political Significance of Class

Alford's (1963) simple index of class voting set the standard for a generation of research on class voting. The Alford Index measures class voting as the percentage of persons in manual occupations voting for Left parties minus the percentage of persons in non-manual occupations voting for Left parties (Alford 1963:79–80). For over 25 years, this index has been the statistic most commonly used to measure the association between class and partisan choice in the United States and elsewhere. Most studies that use it find a decline in class voting. In fact, at least 10 key studies have analyzed the same dataset using the Alford Index (Manza et al. 1995).

The parsimony of the Alford Index comes from its restriction of both independent and dependent variables to dichotomous measures. That restriction is also its limitation. Researchers continue to use the Alford Index instead of measures based on newer statistical techniques for analyzing categorical data (Goodman 1965; Heath, Jowell, and Curtice 1985). Several researchers have noted limitations of the Alford Index and have sought to improve it, either by using multivariate analyses to capture the interaction of class with other social attributes to predict partisan choice (Franklin 1985; Franklin, Mackie, and Velen 1992), or by applying more sophisticated statistical techniques (Rose and McAllister 1986; Franklin et al. 1992) or class schemes (Nieuwbeerta 1995). But insofar as these studies operationalize their variables as dichotomies, they retain one essential drawback of the Alford Index.

Studies based on a multiclass schema raise serious doubts about the hypothesized declining significance of class. Heath et al. (1985) introduced log-linear techniques for analyzing the interrelationships among class,

party, and election year in their reassessment of class voting in Britain since 1964. Their most important innovation was the integration of advances in stratification theory and class analysis into their analysis of British voting patterns. Their model included change in the marginal distribution of classes, change in the marginal distribution of votes, and a main effect of class on vote (but no three-way interaction that would imply change in the strength of association between the class and vote). Their model fit the data on recent British elections. The ratio of the expected log-odds for voting for the Labour party rather than the Conservative party for unskilled workers to that for the "salariat" fluctuate from election to election, but do not indicate a decline in class voting in Britain from 1964 through 1992 (Heath, Jowell, and Curtice 1991; Evans, Heath, and Payne 1991; Goldthorpe forthcoming; Weakliem and Heath forthcoming). In one specification, "negative" class voting fluctuated more widely than "positive" class voting, helping to explain the paradox of Labour party decline since the 1970s despite persistent class voting (Goldthorpe forthcoming).

These recent advances, and the questions they raise about the alleged declining political significance of class in other national contexts, warrant a new investigation of the U.S. case. Our approach applies the insights of Heath and his colleagues to the postwar U.S. time-series. We elaborate their approach in four significant ways. (1) We start with many more class categories (17) prior to applying the class schema to the data to avoid losing information on important aspects of occupational differentiation (Hout and Hauser 1992). We ultimately reduce the number of classes using statistical criteria (Goodman 1981). This procedure produces evidence of an important distinction between professionals and managers within the "salariat" category used by Heath et al. (1985) and Goldthorpe (forthcoming) in their analyses of class voting in Britain. (2) Our approach permits us to analyze four outcomes in U.S. presidential voting: did not vote, voted for an independent or minor-party candidate, voted for the Republican candidate, or voted for the Democratic candidate. (3) We use a multivariate logistic regression model to construct a summary in-

dex that measures various components of class voting and assesses changes in them. And, (4) we simultaneously compare all of the relevant classes. Heath et al. (1985; 1991) focus primarily on the contrast between the "salariat" and unskilled workers and extrapolate from this key contrast between two classes to the electorate as a whole. Our summary measure incorporates all contrasts into a single measure, and our graphs display each of the six classes separately.

CONCEPTUALIZING AND MEASURING TOTAL CLASS VOTING

Traditional class voting is but one pattern of class differences in voting behavior. Insofar as new alignments of classes and parties may have emerged in recent U.S. elections, a sound understanding of class voting should go beyond the limits imposed by a focus on the traditional pattern. We define *traditional class voting* as that portion of the statistical association between class and voting behavior that arises from the affinity of blue-collar classes for left-leaning parties and the affinity of white-collar classes for right-leaning parties. *Total class voting*, by contrast, includes all sources of the statistical association between class and voting behavior, including not voting at all.

In this paper we develop a statistical approach that enables us to assess changes in both traditional and nontraditional patterns. Our distinction between total class voting and traditional class voting permits us to investigate the extent to which all class differences in partisan vote have declined (total class voting), and whether working-class voters continue to support Democrats while middle-class voters support Republicans (traditional class voting pattern). We use two different statistical models to test for changes in traditional and total class voting in U.S. politics. For traditional class voting, we specify a "uniform difference" model that fixes the classes in a left-to-right political order and estimates the extent to which class (so constrained) is associated with partisan choice in each presidential election studied. We also specify a multinomial logistic regression model that estimates the total association between class and voting behavior (including nonvoting). This approach yields several co-

efficients for each election that we summarize by a new, general class-voting index that we term *kappa* (κ). Because this statistical framework can include controls for the effects of other variables that are important for voting and are correlated with class, we compare trends in the "gross kappa" (without controls) versus "net kappa" (with controls).

Throughout our analysis, we measure class effects as a function of their relative differences in vote choices. We take this approach in order to separate fluctuations in the popularity of candidates and parties from fluctuations in the association between class and voting behavior (Heath et al. 1985, 1991). Weakliem (1995) reviews the arguments favoring an absolute approach, but finds that relative class voting models fit the British election data better. We compare effects for each class to the average for all classes in each election (statistically adjusting for covariates in "net" analyses). In practice, this means that some care must be taken when reading trends in the coefficients relating to a specific class. For example, our data show that professionals had a particularly high propensity to vote for the Democrat (McGovern) in 1972. Looking at the simple percentages reveals that 45 percent of professionals voted for McGovern compared with 40 percent voting for Humphrey in 1968 and 47 percent for Carter in 1976. The 1972 percentage does not appear, at first glance, to stand out relative to professionals' voting in other years. However, it is distinctive relative to the other classes because McGovern fared so poorly among all other classes.

The Class Schema

A proper definition of class is critical to assessing the relationship between class and voting. Despite heated debates about specifics, contemporary stratification theorists and class analysts agree that the simple blue-collar versus white-collar distinction is inadequate for studying the causes and consequences of class. (Blau and Duncan 1967; Wright 1985; Erikson and Goldthorpe 1992; Goldthorpe 1995).

We take the Blau and Duncan (1967) schema as our point of departure in developing a class schema for the ANES data because it has so many initial distinctions and

because the ANES has used the U.S. Census codes since 1960. We elaborate this schema to distinguish between white-collar and blue-collar service workers and between farm owners and farm managers. We drop their distinctions among operatives and laborers from different industries due to lack of cases. We combine all elections with sufficient occupation data (1960 through 1992) and use a combination of theoretical and empirical criteria (i.e., homogeneity of voting outcomes; Goodman 1981) to reduce this 17-category schema to a more manageable 6-category subset: We arrive at the following significant distinctions:[1] (1) Professionals (salaried and self-employed); (2) Managers, administrators, and nonretail sales workers (including farm managers); (3) Owners and proprietors (including farm owners); (4) Nonmanagerial white-collar workers (retail sales, clerical, and white-collar service workers); (5) Skilled workers and foremen; (6) Semiskilled and unskilled blue-collar workers (including farm laborers and service workers).

This schema resembles the revised Erikson and Goldthorpe (1992; Erikson, Goldthorpe, and Portcarerro 1979) categories that Heath et al. (1985, 1991) used to study class voting in Britain (Weakliem and Heath forthcoming; Goldthorpe forthcoming). Heath and his colleagues, following Erikson and Goldthorpe's original practice, combined professionals and managers into a single class, which they referred to as the "salariat" (but which was referred to as the service class by Erikson and Goldthorpe [1992; also see Goldthorpe 1995]). The distinction between professionals and managers is not a routine feature of voting studies, but considering differences in mobility patterns (Hout 1983:73–76) and the fact that professionals typically draw their incomes from applying specialized knowledge within market sinecures while managers are embedded in the less sheltered corporate sector, we feel it is a

valuable distinction. Otherwise, our schema and theirs are nominally the same. Important national differences in coding notwithstanding (Erikson and Goldthorpe 1992:315–16), our schema shares with theirs a focus on degree of economic security, workplace authority, prospects for advancement, and sources of income (Heath et al. 1991:66; Evans 1992). Our schema, like Erikson and Goldthorpe's, embodies relational distinctions among classes rather than gradational distinctions (Erikson and Goldthorpe 1992: 29–47; Evans 1992).

Multinomial Logistic Regression

We use a multinomial logistic regression (MLR) model (Maddala 1983) to analyze how class affects voting behavior and whether the effects of class have changed since 1948. Neither class nor voting behavior is reduced to a dichotomy because MLR is designed for multiple outcomes and multiple predictors. Furthermore, MLR readily accommodates covariates. We estimate the gross effects of class on voting behavior in a three-way analysis that includes time (i.e., election year) as the only additional variable. We estimate the net effects of class on voting behavior with gender, race, region, age (including age-squared), and education as covariates.[2] Because of the complexity of MLR results, we present results in terms of our new measure of total class voting (kappa), then examine three contrasts coded as independent logistic regressions: (1) *Partisan choice*: voted for the Democratic candidate versus voted for the Republican candidate; (2) *Other-candidate choice*: voted for the Democratic or Republican candidate versus voted for someone else; (3) *Turnout*: voted versus did not vote.

All three contrasts are embedded in our index of total class voting. We address two questions: Has the political significance of class, conceptualized as the association between class and voting behavior, declined; and does the traditional conception of the ef-

---

fects of class miss some of the association between class and voting behavior? The two questions are so intricately linked that we cannot address them separately.

For each dependent variable, we evaluate 11 models. The first 6 models examine the "gross effects" of class, that is, they are three-way analyses involving class and election year as independent variables and voting behavior as the dependent variable, not controlling for any other variables. The remaining 5 models examine the "net effects" of class, that is, they control for variables that define social blocs. Our coding schemes for the covariates are shown in the Appendix. We pool data across all 11 surveys (12 elections) by entering election year into the analysis as a series of dummy variables (one for each election year). By using certain interaction terms—for example, class × election year—we can compare the changes in the effects of several variables without generating separate MLR equations for each election. In addition to comparing gross and net effects of class on voting, we include three other important interactions with election year: gender, race, and region. Our six gross effects models are:

Model 0: The *null model*. Includes only the intercept and is the baseline for the analysis. (For this model, – 2(log likelihood) is equivalent to the total sum of squares in an ordinary least squares analysis.)

Model 1: The *simple trend model*. Adds the main effect of election year to the null model.

Model 2: The *constant class effects model*. Adds the main effect of class to Model 1 (thus embodying either a "traditional" or "total" class voting perspective, depending on the empirical results).

Model 3: The *uniform differences model*. Adds a class × election year interaction to Model 2, constraining the rank order of classes in accord with the "traditional class voting" conception.

Model 4: The *linear trend model*. Adds a class × election year interaction to Model 2, allowing a realignment

of classes subject to the constraints of a linear time variate.

Model 5: The *full interaction model*. Adds an unconstrained class × election year interaction to Model 2. This model operationalizes the "total class voting" conception and allows for any realignment.

Every model except the null model has an equivalent net effects model. To fix ideas, we present the equations for four of the five net effects models in order.

The MLR equation for the net effects model equivalent to Model 1 is:[3]

$$\hat{y}_{ij} = \lambda_{0j} + \sum_{t=1}^{T-1} \lambda_{tj}^T D_{it} + \sum_{p=1}^{P} \lambda_{pj}^Z Z_{ip}$$

$$+ \sum_{t=1}^{T-1} \sum_{p=1}^{P} \lambda_{tpj}^{TZ} D_{it} Z_{ip}, \qquad (1)$$

where y_{ij} is the logit transform of the expected probability that person i ($i = 1, \ldots N$) will be in category j ($j = 1, \ldots 4$) of voting behavior; the D_{it} ($t = 1, \ldots T$) are dummy variables for the election years, and the Z_{ip} ($p = 1, \ldots P$) are the covariates. Class does not enter this model. To identify the model, we specify that $\lambda_{04} = \lambda_{t4}^T = \lambda_{p4}^Z = \lambda_{tp4}^{TZ} = 0$, and that λ for the last category of each set of dummy variables equals 0. In some calculations, we use the alternative normalization that the sum of λ terms equals 0. In practice we do not actually include all of the DZ products, only those that are statistically and substantively important in each model (gender, race, and region). To this simple trend model, we add the main (additive) effect of class (symbolized by X_{ik}, for $k = 1, \ldots K$ classes) to form the net "constant class effects" model:

$$\hat{y}_{ij} = \lambda_{0j} + \sum_{t=1}^{T-1} \lambda_{tj}^T D_{it} + \sum_{k=1}^{K-1} \lambda_{kj}^C X_{ik}$$

$$+ \sum_{p=1}^{P} \lambda_{pj}^Z Z_{ip} + \sum_{t=1}^{T-1} \sum_{p=1}^{P} \lambda_{tpj}^{TZ} D_{it} Z_{ip}. \qquad (2)$$

In this model, class affects voting behavior, but its effects remain constant through time. If this is the preferred model for the data, then we can infer that the political significance of

---

[3] The equivalent gross effects model eliminates all of the terms involving the Z_{ip} variables.

class is not declining. Preferring this model (on empirical grounds) would also support the traditional view of class effects, provided that the order of the λ_{kj}^C terms accords with the traditional view that white-collar classes are more likely than other classes to vote and to support the Republican Party.

The first net effects model to include a changing class effect is the "uniform differences" model, which is patterned after the "unidiff" model of Erikson and Goldthorpe (1992) and the "multiplicative uniform layer effect" model of Xie (1992). The uniform differences model imposes a specific constraint on the three-way interaction of class, vote, and election year by ranking classes according to voting behavior in the same order in each year. All that changes is a multiplicative scalar that increases or decreases the absolute size of each interclass gap (keeping the ratio of one gap to another constant). For the net uniform class differences model, the MLR is:

$$\hat{y}_{ij} = \lambda_{0j} + \sum_{t=1}^{T-1} \lambda_{tj}^T D_{it}$$

$$+ \sum_{t=1}^{T-1}\sum_{k=1}^{K-1} \left(1 + \delta_{tj} D_{it}\right) \lambda_{kj}^C X_{ik}$$

$$+ \sum_{p=1}^{P} \lambda_{pj}^Z Z_{ip} + \sum_{t=1}^{T-1}\sum_{p=1}^{P} \lambda_{ptj}^{TZ} D_{it} Z_{ip}. \qquad (3)$$

This model is identified using the same constraints we used to identify the other models, (i.e., by setting the parameter for the top category of each categorical variable to 0). Change in the effect of class on voting outcome j is captured by the eleven δ_{tj} terms (one for each outcome j) in this model. The relative distances between classes do not change over time. The persistent differences among classes simply expand or contract according to the election-specific multiplier $\left(1 + \delta_{tj}\right)$.[4]

Another interesting constraint on the class election interaction involves linear trends. If

the direction of change differs by class but is regular over time, then this model may be an easily summarized approximation to the data:

$$\hat{y}_{ij} = \lambda_{0j} + \sum_{t=1}^{T-1} \lambda_{tj}^T D_{it} + \sum_{k=1}^{K-1} \lambda_{kj}^C X_{ik}$$

$$+ \sum_{k=1}^{K-1} \phi_{kj} X_{ik} Z_{i0} + \sum_{p=1}^{P} \lambda_{pj}^Z Z_{ip}$$

$$+ \sum_{t=1}^{T-1}\sum_{p=1}^{P} \lambda_{ptj}^{TZ} D_{it} Z_{ip}, \qquad (4)$$

where Z_{i0} is a score from 0 to 11 for the election year (1948 = 0, 1952 = 1, . . . , 1992 = 11). This model allows for a realignment that alters the traditional class voting pattern, but specifies that any realignment can be summarized as a simple progression from the initial points specified by the λ_{kj}^C parameters in one direction (i.e., toward the Democrats, the Republicans, voting, or not voting, depending on the value of j and the sign of ϕ_{kj}).

The full interaction model removes the constraints on the three-way interaction among class, vote, and election year. Full interaction represents total class voting because it allows the classes to array themselves in any order in any election year (requiring 44 more degrees of freedom than the uniform differences model to estimate all those permutations of order). It is also a "realignment" model because it allows change, not only in the relative differences among classes, but also in the rank order of classes from most to least Democratic.

The uniform differences model (equation 3), the linear trend model (equation 4), and the realignment model can be used to test the hypothesis that the political significance of class is declining. If the political significance of traditional class voting is declining, then the δ_{tj}, and/or λ_{ktj}^{CT} parameters will decrease as t increases; equivalently, the ϕ_{kj} will have the opposite sign from the corresponding λ_{kj}^C. A strong version of declining significance would require a monotonic decrease, (i.e., $\delta_{48j} > \delta_{52j} > \ldots \delta_{88j} > \delta_{92j} = 0$, and/or $\phi_{kj} > 0$,[5] and/or $\lambda_{48j}^{CT} > \lambda_{52j}^{CT} > \ldots > \lambda_{88j}^{CT} > \lambda_{92j}^{CT} = 0$), but we consider any pattern in

---

[4] Weakliem and Heath (forthcoming) put similar constraints on the distances between voting outcomes. A stronger traditional class voting model would also predetermine the order of classes by placing constraints on the λ_{kj}^C parameters (e.g., by constraining them to be proportional to income or socioeconomic status) (Hout and Hauser 1992).

[5] Assuming that $\lambda_{kj}^C > 0$, which is true if semiskilled and unskilled workers are the most Democratic in 1948.

which the δ and/or λ^{CT} terms approach 0 to be evidence in favor of the declining political significance of class.

Logistic Regression Models

We present the results of our MLR analysis as independent logistic regressions of the form (using the full interaction model to illustrate):

$$\hat{y}'_{ij} = \beta_{0j} + \sum_{k=1}^{K} \beta_{kj}^{C} X_{ik} + \sum_{t=1}^{T} \beta_{tj}^{T} D_{it}$$

$$+ \sum_{t=1}^{T} \sum_{k=1}^{K} \beta_{ktj}^{CT} X_{ik} D_{it}$$

$$+ \sum_{p=1}^{P} \beta_{pj}^{Z} Z_{ip} + \sum_{t=1}^{T} \sum_{p=1}^{P} \beta_{ktj}^{PT} P_{ip} D_{it}, \qquad (5)$$

where $\hat{y}'$ is one of the three logits voting contrasts we analyze, β_{kj}^{C} indicates the effect of class k on voting contrast j, β_{tj}^{T} is the effect of election year t on voting contrast j, β_{ktj}^{CT} is the interaction between class k and election year t in determining voting contrast j, β_{pj}^{Z} is the effect of covariate p on voting contrast j, and β_{ptj}^{ZT} assesses changes in the effects of those covariates. The β terms are identified by constraining them to sum to 0 (i.e., $\sum_{k} \beta_{kj}^{C} = \sum_{t} \beta_{tj}^{T} = \sum_{t} \sum_{k} \beta_{ktj}^{CT} = 0$ for $j = 1, 2, 3$). We use two criteria to choose among the various models: the standard calculation of chi-square tests based on differences in the $-2(\log$ likelihood) statistics between models and the *Bic* values associated with the chi-square tests (Raftery 1995).

A NEW CLASS VOTING INDEX

The enduring appeal of the Alford Index, despite its statistical shortcomings, is its simplicity and ease of use. Our MLR approach solves the statistical problems of the Alford Index at the cost of considerable complexity. Researchers analyzing more than one or two elections or one or two countries need an index that compresses the MLR and logistic regression results into one or a few numbers that can be easily compared over a long time-series or among countries. To fill that need we propose an index of class voting based on the MLR approach. Following Goodman (1991), we define the index as the standard deviation of class differences in vote choice

in a given election. In a given election, our index provides a simple summary of total class voting that can be disaggregated to assess the relative contributions of traditional factors and realignment factors to the overall association. By comparing the index across elections, we can gauge changes in total class voting or its components. Our index can be calculated from the gross or net MLR or logistic regression coefficients.

Our index of total class voting, called "kappa" (κ_t), varies by time (election year), which is indicated by subscript t ($= 1, \ldots, T$). In terms of the parameters of the full interaction model,

$$\kappa_t = \left[\frac{1}{KJ} \sum_{j=1}^{J} \sum_{k=1}^{K} \left(\lambda_{kj}^{C} + \lambda_{ktj}^{CT} \right)^2 \right]^{\frac{1}{2}}, \qquad (6)$$

where κ_t is the standard deviation of class differences across the J voting outcomes (including not voting). In this application, T equals the 12 presidential elections, and J equals the four voting outcomes (Democrat, Republican, other, did not vote). In practice, however, only a handful of ANES respondents exercised the "other candidate" voting option in the years when no major independent candidate ran for president—years other than 1968, 1980, and 1992. For years that lacked a significant independent candidate, the large contrast between the "other" category and the other three categories inflates kappa in a way that we regard as spurious. Therefore, we treat the "other" votes as censored in those years and leave the λ_{kt3}^{CT} out of the calculation.[6]

When the application calls for decomposition, kappa is broken down into sub-kappas that apply to any of the separate voting outcomes ($j = 1, \ldots, J$). From the logistic regression results (equation 5):

$$\kappa_{tj} = \left[\frac{1}{K} \sum_{k=1}^{K} \left(\beta_{kj}^{C} + \beta_{ktj}^{CT} \right)^2 \right]^{\frac{1}{2}}, \qquad (7)$$

where κ_{tj} is the standard deviation of class differences in voting contrast j in election year t. We refer to κ_{t1} as "partisan kappa," κ_{t2} as "other candidate kappa," and κ_{t3} as

---

[6] We renormed the other λ_{ktj}^{CT} so that they sum to 0 across the three voting outcomes $\{j = 1, 2, 4\}$.

"turnout kappa." When the effect of class is 0 for some combination of voting (outcomes) (*j*) and election years (*t*), then $\beta_{kj}^C + \beta_{ktj}^{CT} = 0$ for all $k = 1, \ldots, K$ for that combination $\{t,j\}$, leading to $\kappa_{tj} = 0$. Similarly, increases in class effects (either β_{kj}^C or β_{ktj}^{CT}) result in proportional increases in κ_{tj} according to the formula:

$$\frac{\partial \kappa_{tj}}{\partial \beta_{kj}^C} = \frac{\partial \kappa_{tj}}{\partial \beta_{ktj}^{CT}} = \frac{\beta_{kj}^C + \beta_{ktj}^{CT}}{K\kappa_{tj}}.$$

Kappa has several desirable statistical properties that make it a more defensible and sensitive measure of class voting than the Alford Index or related measures. First, because the coefficients in equations 6 and 7 are based on log-odds-ratios, transformations of the marginal distributions of class or vote do not affect them (Goodman 1965, 1991). It follows that kappa speaks to one major statistical drawback of the Alford Index (or any approach not based on odds ratios): The conflation of marginal distributions with the intrinsic association between class and voting outcome. Second, because kappa does not require that class or voting outcome be dichotomous, it provides a uniform metric for comparative and historical analyses based on suitable class and voting typologies.

Finally, and most important, kappa can gauge total class voting or traditional class voting. If kappa is calculated from the full interaction model, as we propose, it shares with that model a freedom from assumptions about the intrinsic order of classes and parties in relation to one another. In this way, kappa allows for realignment while avoiding any cross-election (or cross-national) assumptions about the political tendencies of particular classes. Thus, kappa is commensurate with total class voting. Kappas based on the total class voting model can be compared with kappas based on a model that incorporates the constraints of traditional class voting (e.g., the uniform differences model or Goldthorpe's forthcoming topological model).

DATA

We analyze total class voting and traditional class voting in U.S. presidential elections from 1948 through 1992. We use a single data set—the American National Election

Studies (ANES)—to maximize comparability among the points in the time-series. The 1952 through 1992 data are drawn from the ANES for that interval; the 1948 data are drawn from a question about voting in the 1948 election that was part of the 1952 ANES. We recognize that the 1948 data lack the immediacy of data from the other years, but given the pivotal importance of the 1948 election (Alford 1963, table B-3), we felt compelled to include these 1948 data.[7] The ANES is a stratified random sample of voting-age Americans. Sample sizes vary from approximately 1,200 to 2,500 respondents in a given election year.

The rate of voting as reported in the ANES is high compared with official statistics. In 1964, 1976, 1980, 1984, and 1988, the ANES validated the self-reports obtained in the personal interview by checking whether local election rolls showed a vote for the respondent. False negatives (i.e., people who reported voting but who were not recorded as having voted) in the validation data and a lack of such data for years prior to 1964 make the validation data inappropriate for our purposes. We proceed with the self-report data: We recognize that they overstate the true rate of turnout and even get the trend in voter turnout wrong, but we believe that it accurately reflects the trend in differential turnout.[8]

We work with a single data file in which election year is a variable. For the analyses presented here, we selected only those respondents who were in the labor force at the time of the survey and for whom we had data for all the variables of interest (including previous occupation for the unemployed who were, by definition, looking for work). We refer to these respondents as the *experienced labor force*.

Table 1 presents percentage distributions by class and voting outcome for each election year between 1948 and 1992. Turnout among the experienced labor force compared

---

[7] The 1948 Michigan study cited by Alford (1963) coded occupation so crudely that the analysis supports little more than the white-collar/blue-collar split.

[8] Biases in the ANES data will show up in the intercepts and main year effects of the MLR and logistic regression results, but not in the coefficients we use to calculate total kappa, partisan kappa, or turnout kappa.

Table 1. Percentage Distribution by Election Year of Voting Behavior and Class: U.S. Experienced Labor Force, 1948–1992

Election Year	Voting Behavior				Class						Number of Cases
	Voted Democratic	Voted Republican	Voted Third Party	Did Not Vote	Professionals	Managers	Owners and Proprieters	Nonmanagerial White-Collar Workers	Skilled Workers	Semiskilled and Unskilled Workers	
1948	35	24	0	41	9	6	20	17	29	18	1,022
1952	32	37	0	31	9	6	20	17	29	18	1,022
1956	32	42	0	26	13	8	17	20	15	28	1,005
1960	43	39	0	18	14	9	21	18	16	21	574
1964	51	22	0	26	15	12	17	16	14	26	845
1968	31	30	7	33	19	8	13	26	15	18	852
1972	23	41	0	36	22	12	10	29	16	12	1,221
1976	32	29	2	37	18	11	12	27	11	21	1,278
1980	23	33	7	37	18	12	11	28	12	20	936
1984	25	39	0	35	23	8	12	27	9	20	1,261
1988	28	39	1	33	23	12	14	21	10	20	726
1992	32	23	14	31	25	12	12	21	11	19	1,437
Net Change											
1948–1960	8	15	0	–23	5	3	1	1	–13	3	—
1960–1980	–19	–7	7	19	4	3	–11	10	–4	–2	—
1980–1992	8	–9	7	–6	6	0	2	–7	–1	–1	—

Note: The net change calculations were carried out to more decimal places than reported here. All calculations were rounded independently.

with that among the general population is difficult to ascertain due to misreporting. Persons in the labor force backed the winning candidate in every election except the closely contested 1968 election in which their vote was split between Nixon and Humphrey.

The ANES data capture the major changes in the U.S. occupational structure, although there appears to be a middle-class bias compared to other national surveys. The professional and managerial classes increased in size, whereas the owners and proprietors (especially farmers) and skilled working classes declined. The semiskilled and unskilled working class declined less (the 1972 ANES figure is anomalous compared with figures from other sources for the early 1970s). The nonmanagerial white-collar class shows a more pronounced increase from 1964 to 1972 than it does in other sources (Hout 1988), followed by an unprecedented decrease after 1984. We cannot account for these anomalies. However, as long as the ANES respondents are representative of their classes, our statistical controls for composition ensure that these anomalies do not bias our estimates of the key class × election year interaction effects.

FINDINGS

Descriptive Results

Kappa values for the association between class and the four voting outcomes (with and without controls for other important variables) cycle between .20 and .40 but show no consistent trend (Figure 1).[9] The gross total class-voting index in the United States increased 30 percent from 1948 to 1956, dropped back to just below its 1948 level by 1964, and then repeated the up-and-down cycle through 1976. The 1980 election, with low turnout and John Anderson's independent candidacy, produced the highest gross total class voting index in the ANES series.

The three values for the 1984 through 1992 election years do not differ substantially from each other or from the average for the entire series. In short, this first look at the data, taking the full array of classes and voting outcomes into account, contains no evidence of a decline in the political significance of class. Thus, the gross effect of class on voting outcome fluctuates from election to election without any discernible long-term trend.[10]

The trend in the net total class voting index shows the consequences of an important interaction between race and election year. Adding gender, race, region, age, and education (and changes in their effects) as covariates produces a series similar to the series for the gross index, except for 1968–1972. During that period, the rapid increase in turnout by African Americans (whose civil rights, including the right to vote, were violated in many states prior to the Voting Rights Act of 1965) leads to an apparent increase in the gross total class voting index because race is not statistically controlled.

Combining voter turnout, partisan choice, and other candidate voting (when relevant) shows that class remains a significant feature of Americans' voting patterns throughout the post-World War II period. The level fluctuates within ± 30 percent (± 50 percent when the covariates are partialled out), but the trend is not unidirectional. The four successive decreases in the net total class voting index between 1956 and 1972 are consistent with the thesis that a significant dealignment may have begun in the 1960s as postulated by advocates of the racial realignment thesis (Huckfeldt and Kohfeld 1989). However, from 1976 through 1992, gross and net total class voting indexes returned to levels found in the 1950s. Although these results show no clear pattern of class dealignment, we cannot yet discern whether the resurgence in the total class voting index in the 1980s and 1990s represents a reopening of the traditional class cleavages or the emergence of a class realignment. To answer that question

---

[9] We followed Cleveland's (1994) principles of graphic display to construct most of the graphics in this paper. The most important parameter in a graph is the aspect ratio, i.e., the length of the y-axis relative to the length of the x-axis. Except where noted, we set the aspect ratio at the value that "banks the data to 45 degrees."

[10] "Trendless fluctuation" is the term coined by Sorokin ([1927] 1964:152) to describe fluctuations in social mobility in the first quarter of the twentieth century. Heath et al. (1985) also used the term to describe class voting in Britain since the 1960s.
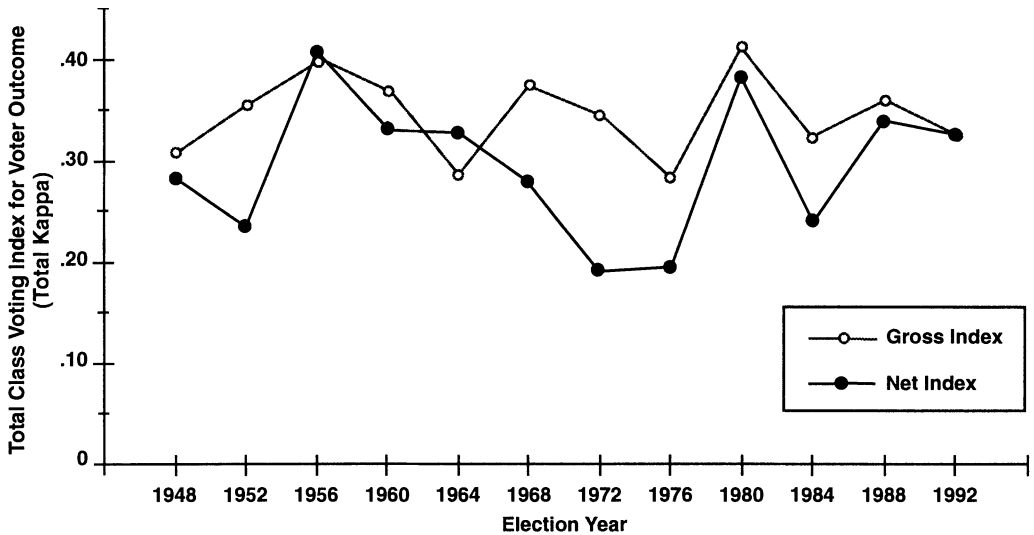
Figure 1. Total Class Voting Indexes (Kappa) for Four Voter Outcomes, by Election Year: U.S. Experienced Labor Force, 1948–1992

Note: Indexes are from multiple logistic regression models predicting the four voter outcomes: voted Democratic, voted Republican, voted third party, or did not vote.

we can examine the coefficients from the MLR results that are inputs to the kappa values or examine the logistic regression results for partisan choice and voter turnout. We find the logistic regression results easier to interpret, so we move to them now.

Class Differences in Partisan Vote Choice

Classes in the United States differ significantly in their propensities to vote for Democrats over Republicans (Table 2). The spread in partisan choices—the percent voting Democratic among those voting either Democratic or Republican—among classes is 30 percentage points or more in 8 of the 12 elections between 1948 and 1992. The dominant effect in these data, however, is election year itself—the relative popularity of the Democratic and Republican candidates swings widely. The large effect for election year makes these descriptive data on partisan choice tricky to interpret. For example, the seven-point increase in professionals' support for the Democratic candidate from 1968 to 1976 may appear modest, but it represents a dramatic swing in the tendency of professionals to vote Democratic relative to the other classes, which swung away from the Democrat (McGovern) in 1972 and then

back (to Carter) in 1976. The Alford Index falls off sharply at the end while our index—partisan kappa—cycles up and down.

To remove the confounding effects of election year and the covariates, we must select a model predicting partisan choice. Goodness-of-fit statistics in Table 3 show the fit of all eleven models. The first bloc of numbers in Table 3 shows the –2(log likelihood) statistics and degrees of freedom for the six gross effects models and five net effects models. The second bloc shows differences in –2(log likelihood) and degrees of freedom for pairs of models. If the null hypothesis is true, these differences of –2(log likelihood) are distributed as chi-square with degrees of freedom equal to the difference between the degrees of freedom for the two models being compared. In choosing models we focus on the differences in –2(log likelihood). We also refer to the *Bic* statistics, avoiding models that produce negative *Bic* values (Raftery 1995). On the basis of the log likelihood differences we select the full interaction model—the realignment model—for both the gross effects model and net effects model. On the basis of *Bic*, we select the linear trend model (Model 5) among the gross effects models and net effects models. Both models contain useful information, so we present the

Table 2. Percentage Distribution of Partisan Choice[a] by Class and Election Year: U.S. Experienced Labor Force, 1948–1992

Election Year	Class						Index		
	Profes-sionals	Man-agers	Owners and Proprietors	Non-managerial White-Collar Workers	Skilled Workers	Semi-skilled and Unskilled Workers	Total	Alford Index	Class Voting Index for Choice (Partisan Kappa)[b]
1948	40	38	53	52	75	75	59	27	64
1952	30	29	36	35	62	63	46	28	60
1956	26	41	44	39	47	53	43	13	36
1960	39	47	50	45	65	65	52	19	40
1964	57	59	60	74	76	87	70	20	56
1968	40	38	49	50	56	72	50	18	47
1972	45	18	24	39	28	52	36	2	55
1976	47	35	39	58	61	69	52	19	51
1980	43	29	32	42	61	43	42	13	43
1984	42	32	23	42	40	46	39	6	36
1988	44	28	28	53	28	58	42	7	53
1992	61	49	36	63	60	67	58	9	43
Net change									
1948–1960	–1	9	–3	–7	–11	–10	–7	–8	–24
1960–1980	4	–18	–18	–3	–4	–21	–10	–7	3
1980–1992	17	20	4	21	–1	24	16	–4	–1

[a] Percent voting Democratic of those voting either Democratic or Republican.

[b] Full interaction model (gross).

results of both sets of models. Of the changes in the gross effects of class, linear trends capture roughly one-half; of the changes in the net effects of class, roughly three-fifths are linear. The differences in –2(log likelihood) and *Bic* imply different conclusions regarding the significance of the nonlinear component, but they agree that the linear trend in the effect of class on partisan choice is significant.

We reject the uniform differences model, which operationalizes the concept of traditional class voting. Rejecting it implies that significant realignment of class loyalties underlies the pattern of linear and nonlinear change in U.S. presidential elections. Note that the uniform differences model captures only 12 percent of the full interaction between class and partisan choice over time.

Class realignment can take many forms. The estimates of class-specific trends in partisan choice based on the net effect of class

(controlling for gender, race, region, age, education, and significant trends in their effects) reveals the shape of postwar class realignment in the United States. The numbers on the *y*-axes in Figure 2 are sums of the maximum-likelihood estimates of the terms that determine partisan kappa (i.e., $\beta_{k1}^C + \beta_{k1}^{CT}$). The dots show the net effect of class as implied by the full interaction model; the lines show the corresponding values for the linear trend model.[11]

---

[11] Any analysis that imposes a linear trend on a short time-series (although the 44-year time span of the ANES is substantial, it contains only 12 observations) runs the risk of high leverage by a single outlying election. To guard against the possibility that we overinterpreted linear extrapolations that hinged on a single election, we refitted the linear change model 12 times, each time dropping one of the elections from the analysis. For each of the 12 analyses of all 11 elections, we recorded the interaction term and plotted the re-

Table 3. Goodness-of-Fit Statistics for Selected Models of Partisan Vote Choice: United States, Experienced Labor Force, 1948–1992

Model	Description	Gross Effects Model			Net Effects Model		
		−2(LL)[a]	d.f.	Bic	−2(LL)[a]	d.f.	Bic
Model 0	Null	10,840	7,822	—	—	—	—
Model 1	Simple trend	10,555	7,811	—	9,638	7,759	—
Model 2	Constant class effect	10,330	7,806	—	9,541	7,754	—
Model 3	Uniform differences	10,310	7,795	—	9,526	7,743	—
Model 4[b]	Linear trend	10,254	7,801	—	9,465	7,749	—
Model 5	Full interaction	10,173	7,740	—	9,420	7,688	—
Model 0 – Model 1	Year effect	285	11	187	—	—	—
Model 1 – Model 2	Class: main effect	225	5	180	98	5	53
Model 2 – Model 3	Class: uniform difference	20	11	−79	15	11	−84
Model 2 – Model 4	Class: linear trend	76	5	31	76	5	31
Model 2 – Model 5	Class: realignment	157	66	−434	121	66	−471
Model 3 – Model 5	Class: non-uniform differences	137	55	−356	106	55	−387
Model 4 – Model 5	Class: nonlinear realignment	81	61	−465	45	61	−501
Decomposition of Full Interaction (Percent)							
A.	Uniform	13	17	—	12	17	—
	Non-uniform	87	83	—	88	83	—
B.	Linear	48	8	—	62	8	—
	Non-linear	52	92	—	38	92	—

[a] −2(log likelihood).

[b] Preferred model.

Note: N = 7,823. The covariates included in the net results are: Race, gender, age, education, region, and interactions among year and region, year and gender, and year and race.

The steepest slope representing linear change in the net effect of class on partisan choice pertains to professionals. The straight line shows that the log-odds on voting for the Democrat over the Republican rose from −.54 (indicating strong Republican preference) in 1948 to .46 (indicating a strong Democratic preference) in 1992. In a close election, an effect of −.54 translates to about 63 percent voting Republican; an effect of .46 translates to about 61 percent voting Democratic. The shift of professionals from the Republicans to the Democrats probably occurred more abruptly than the linear model

implies. The large negative residual in 1964 and very large positive residual in 1972 (i.e., the difference between the effect estimated from the full interaction model and the effect estimated from the linear change model) suggest that the change started later and culminated sooner than the linear model predicts. It would be just as appropriate to view the change among professionals as a two-step sudden realignment that transformed the class with the most stable Republican support into a Democratic stalwart between 1964 and 1972.[12] Nonmanagerial white-collar workers resembled professionals, moving from modest Republican support (an average level corresponding to 4 to 8 percentage

sults. For the most part, the results we report are robust. Taken together, the sensitivity analyses show that the case for realignment would have been even stronger if we had done this study before the 1992 election. Details available upon request.

---

[12] Recall that the value of the term for professionals in 1972 reflects their stability in the face of massive defections by other classes.
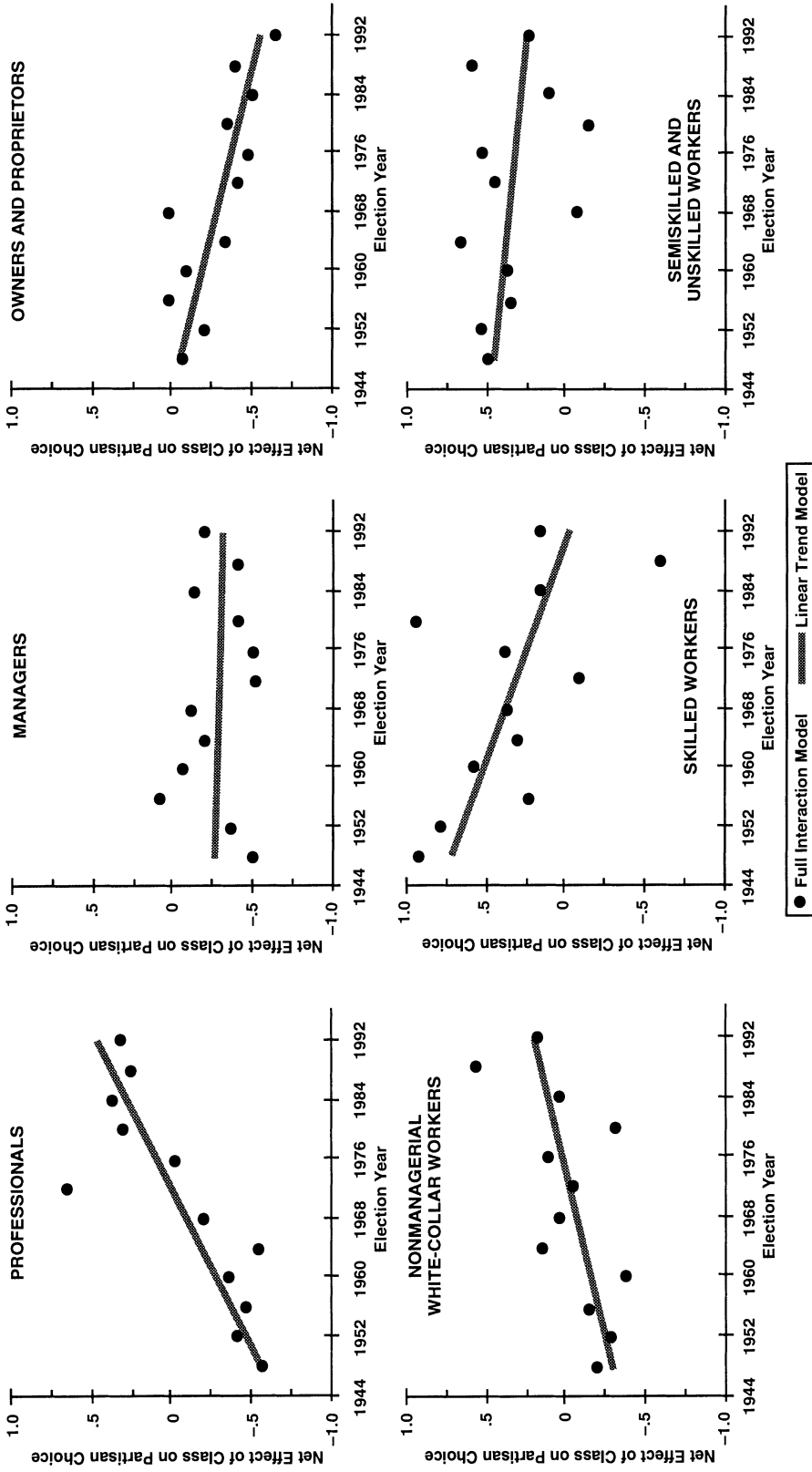
Figure 2. Maximum Likelihood Estimates of the Net Effect of Class on Partisan Choice by Election Year, Class, and Model: U.S. Experienced Labor Force, 1948–1992

Note: Points and lines in these graphs represent logistic regression coefficients normed to sum to zero within election year. The models control for the effects of gender, race, region, age, education, and statistically significant trends in these effects.
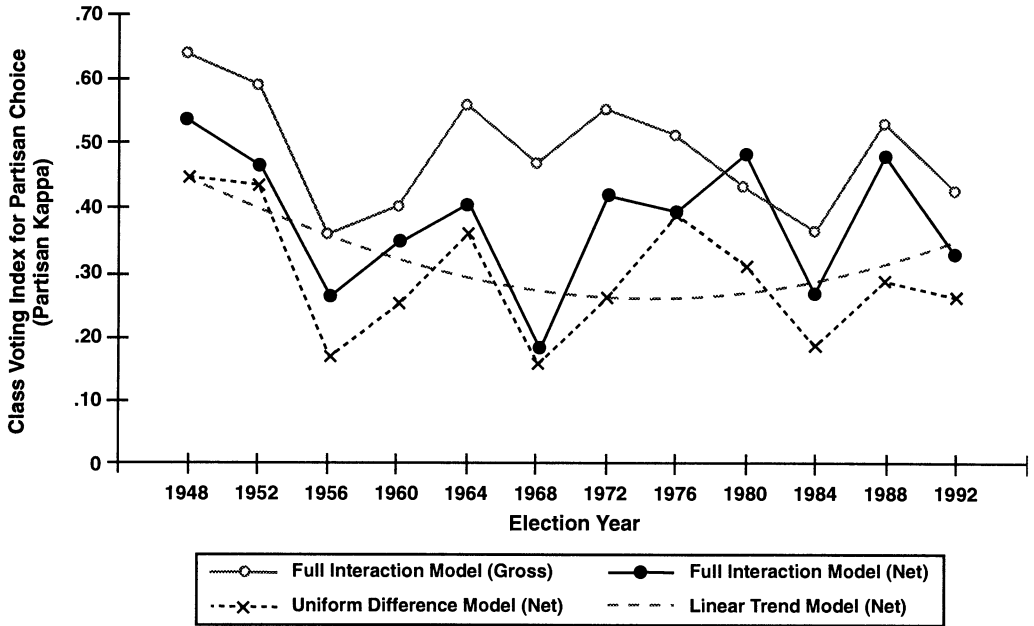
Figure 3. Class Voting Indexes (Partisan Kappa) for Partisan Choice, by Election Year for Four Models: U.S. Experienced Labor Force, 1948–1992

points) from 1948 to 1960, to indifference from 1964 to 1984, to supporting the Democrat (at levels corresponding to 8 and 4 percentage points) in 1988 and 1992.

Managers voted on the Republican side in every election except 1956 (when they were where they would be expected to be if class had no effect), averaging a level of Republican support (−.25) that corresponds to 4 percentage points in a close election. Owners and proprietors moved from indifference to strong Republican support, especially since 1972. Their net coefficient (−.71) in 1992 corresponds to a Republican majority of 68 percentage points in a close election. We might better characterize the voting behavior of skilled manual workers as "dealigned" and "destabilized" rather than "realigned." The linear trend is downward, but after 1972 the spread on both sides of the line is more extreme than that for any other class. Skilled workers were on a course of dealignment from 1948 through 1972, but they have been volatile since, strongly supporting Carter in 1976 and 1980, then moving back toward Reagan and Bush in 1984–1988 (but not 1992). Yet the 1972 and 1988 elections are the only ones for which skilled workers gave more than average support to

the Republicans. The 1988 election is exceptional in that they were as Republican as were owners and proprietors and more Republican than were managers (net of the covariates, especially race and education).[13] On balance, the best reading of this evidence is a cautious one. Skilled workers are up for grabs—party strategies and candidate popularity influence the voting outcome for this class more than for any other class. Semiskilled and unskilled workers have also moved up and down in a wide band (±.25 around a line with a shallow slope of −.019 per election). They shift much less than the skilled worker class does; the net change is about 5 percentage points less Democratic in a close election over the entire 12-election span.

To assess the implications of these class-specific trends for the debate on the declining political significance of class, Figure 3 presents partisan kappas for each election, as implied by four of the six models that allow for changes in class effects: gross and net full interaction models, net uniform differences model, and the net linear trend model. Parti-

---

[13] Without controls, skilled workers are right at the (very pro-Republican) mean in 1972 and 10 percentage points pro-Bush in 1988.
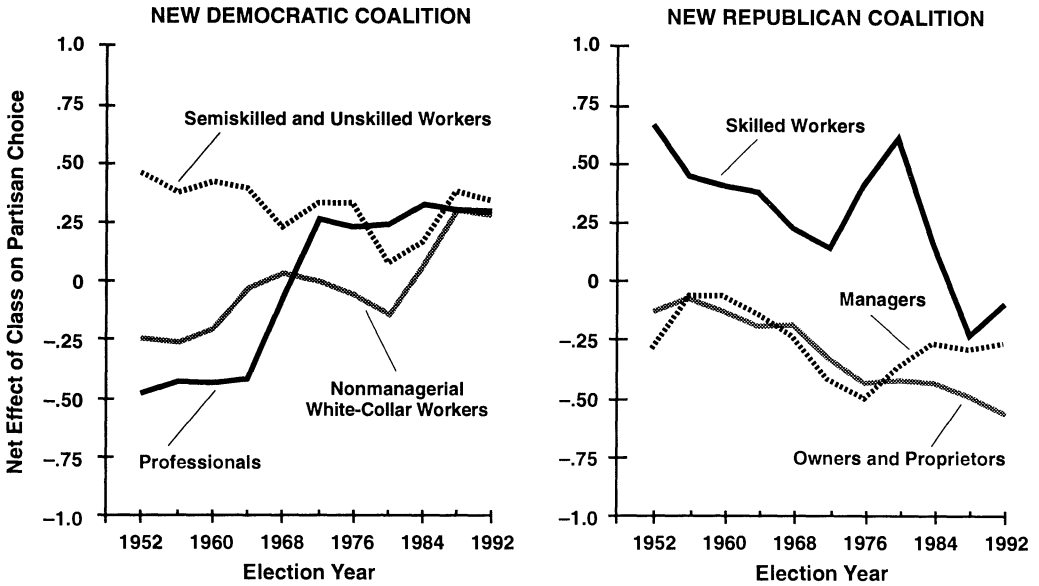
Figure 4. Three-Year Weighted Moving Average of Net Effect of Class on Partisan Choice, by Election Year and Class: Full Interaction Model, United States, 1948–1992

Note: Points and lines in these graphs represent logistic regression coefficients normed to sum to zero within election year, then smoothed by a three-year moving average. The models control for the effects of gender, race, region, age, education, and statistically significant trends in these effects.

san kappas for the gross and net full interaction models change from election to election, but show no consistent trend. Partisan kappas for the linear trend model are not linear; they curve downward in a smooth arc (as the classes converge) then back upward (as they realign). Of special interest to those who equate the declining political significance of class with a decline in traditional class voting is the trend in partisan kappas based on the uniform differences model. Even this model fails to move consistently downward, despite expectations to the contrary. In other words, even if we ignore the realignment and examine trends in traditional class voting, we find evidence only of trendless fluctuation, not a decline.

To gain another perspective on the political realignment of classes in the United States, we have rearranged the results from the full interaction model to produce Figure 4. The left panel presents the trends in net class effects for the three classes that supported the Democratic candidates in 1988 and 1992; the right panel presents these trends for the three classes that supported the Republican candidate in those two elec-

tions.[14] The early years are well-described by the white-collar versus blue-collar dichotomy; the gaps within strata are much smaller than the gap between strata in 1948–1956. By the 1980s, professionals and non-managerial white-collar workers had moved far from other white-collar classes and remarkably close to the semiskilled and unskilled workers. Meanwhile the skilled workers had approached the levels of managers and owners and proprietors.

Class Differences in Voter Turnout

The second critical component of the association between class and voting behavior in the United States is the effect of class on voter turnout. Increasing class differentials in voter turnout may be an element of total class voting that is invisible to those who focus exclusively on partisan choice (Burnham 1982; Piven and Cloward 1988). The ANES

---

[14] The coefficients are minimally smoothed by a three-year weighted moving average centered on year t; the weights are .25 for year $t - 1$, .50 for year t, and .25 for year $t + 1$.

Table 4. Percentage Distribution of Voter Turnout by Class and Election Year: U.S. Experienced Labor Force, 1948–1992

Election Year	Class Voter Turnout						Index	
	Professionals	Managers	Owners and Proprietors	Nonmanagerial White-Collar	Skilled Workers	Semiskilled and Unskilled-Workers	Turnout Alford	Turnout Kappa
1948	68	77	69	60	56	40	17	51
1952	76	85	77	74	68	50	15	51
1956	87	91	75	75	75	63	13	59
1960	86	89	84	86	81	73	9	34
1964	82	83	76	76	75	62	13	36
1968	80	71	73	67	64	52	15	41
1972	76	74	65	61	57	49	15	42
1976	77	73	62	62	54	53	14	40
1980	79	70	74	62	56	45	20	50
1984	78	79	65	63	61	46	19	50
1988	81	77	70	67	54	49	23	52
1992	81	78	75	68	54	56	20	48
Net change								
1948–1960	18	12	14	26	25	33	−8	−17
1960–1980	−8	−18	−10	−24	−25	−28	11	16
1980–1992	2	7	1	6	−2	11	0	−2

data show that class differences in voter turnout were lowest in the 1960s (Table 4). The 1960 election had the highest turnout for four classes; turnout for professionals and managers peaked in 1956. Subsequent elections show a faster falloff in turnout among the blue-collar classes compared to that among the white-collar classes. The net dropoff from 1960 to 1980 (the election with lowest turnout in the ANES series for labor force participants) among professionals is 7 percentage points; among semiskilled and unskilled workers the net dropoff is 28 percentage points. Most of the increase in turnout since 1980 occurred among managers, nonmanagerial white-collar workers, and semiskilled and unskilled workers.

Goodness-of-fit statistics (Table 5) show little evidence for an interaction between class and election year. These results surprise us, considering the differences among the percentages in Table 4. The preferred model is Model 2, the model of "no change" in nonvoting by class. The modest improvements in fit obtained by adding class election year in-

teraction terms require more degrees of freedom than the small improvement in fit warrants. We are reluctant to leave such an important decision to the fit statistics alone, however, so we again graphed the results to better assure ourselves that voter turnout by class has not changed significantly since 1948 (or, more salient, since the 1960s). Figure 5 shows the trend in the class voting index for voter turnout (turnout kappa). Figure 5 reveals a large gap between the gross and net turnout kappas for the full interaction models; education and the other covariates explain about one-half of the gross differences by class in voter turnout. Further, the trends are smoother than the corresponding trends for the indexes for partisan choice (Figure 3). More a cycle than a trendless fluctuation, Figure 5 indicates a slight drop in turnout by class from 1948 to 1960. After 1968, differentials reappear, peaking in 1988. The turnout kappas calculated from the uniform differences model correspond almost exactly to those calculated from the net full interaction model, indicating that to the ex-

Table 5. Goodness-of-Fit Statistics for Selected Models of Voter Turnout: United States, Experienced Labor Force, 1948–1992

		Gross Effects Model			Net Effects Model		
Model	Description	$-2(LL)^a$	d.f.	Bic	$-2(LL)^a$	d.f.	Bic
Model 0	Null	15,357	12,166	—	—	—	—
Model 1	Simple trend	15,189	12,155	—	13,718	12,103	—
Model 2[b]	Constant class effect	14,704	12,150	—	13,642	12,098	—
Model 3	Uniform differences	14,697	12,139	—	13,633	12,087	—
Model 4	Linear trend	14,692	12,145	—	13,620	12,093	—
Model 5	Full interaction	14,656	12,095	—	13,578	12,043	—
Model 0 – Model 1	Year effect	169	11	65	—	—	—
Model 1 – Model 2	Class: main effect	484	5	437	75	5	28
Model 2 – Model 3	Class: uniform difference	7	11	−97	9	11	−94
Model 2 – Model 4	Class: linear trend	12	5	−35	22	5	−25
Model 2 – Model 5	Class: realignment	48	55	−469	64	55	−454
Model 3 – Model 5	Class: non-uniform differences	41	44	−373	55	44	−359
Model 4 – Model 5	Class: nonlinear realignment	36	50	−434	41	50	−429
Decomposition of Full Interaction (Percent)							
A.	Uniform	14	20	—	15	20	—
	Non-uniform	86	80	—	85	80	—
B.	Linear	25	9	—	35	9	—
	Non-linear	75	91	—	65	91	—

[a] −2(log likelihood).

[b] Preferred model.

Note: N = 7,823. The covariates included in the net results are: Race, gender, age, education, region, and interactions among year and region, year and gender, and year and race.

tent that this cycle is important, it has to do with a uniform closing and then opening of class differences in turnout. There is no evidence here of a reordering of classes with respect to their effect on turnout.

Two class-specific trends (not shown) also raise questions about the choice of the "no change" model, indicated by the fit statistics. The two sharpest class-specific trends are diverging trends for the classes with the highest and lowest voter turnout. If these results were replicated in a larger data set, (e.g., the CPS series that began in 1964 [Wolfinger and Rosenstone 1980]), then we would conclude that the effect of class on nonvoting was increasing. For now, we must regard these results as evidence that the effect of class on voter turnout has not declined.

A conclusion of "little or no change" in the effect of class on voter turnout should not be

mistaken for a conclusion of "no effect." Class has a substantial effect on turnout. The gap between the turnout for professionals and for semiskilled and unskilled workers averages 1.6 on the logit scale, which corresponds to a range of 77 percent to 40 percent (using 60 percent as the average turnout). These differentials are consistent with many previous studies (Manza et al. 1995).

CONCLUSIONS

Class continues to matter for U.S. politics. Even in the election with the narrowest spread between managers and semiskilled and unskilled workers (12 percentage points in 1956), class differences are twice as large as the much-discussed "gender gap" in recent U.S. elections (6 percentage points). Rumors of a declining significance of class persist
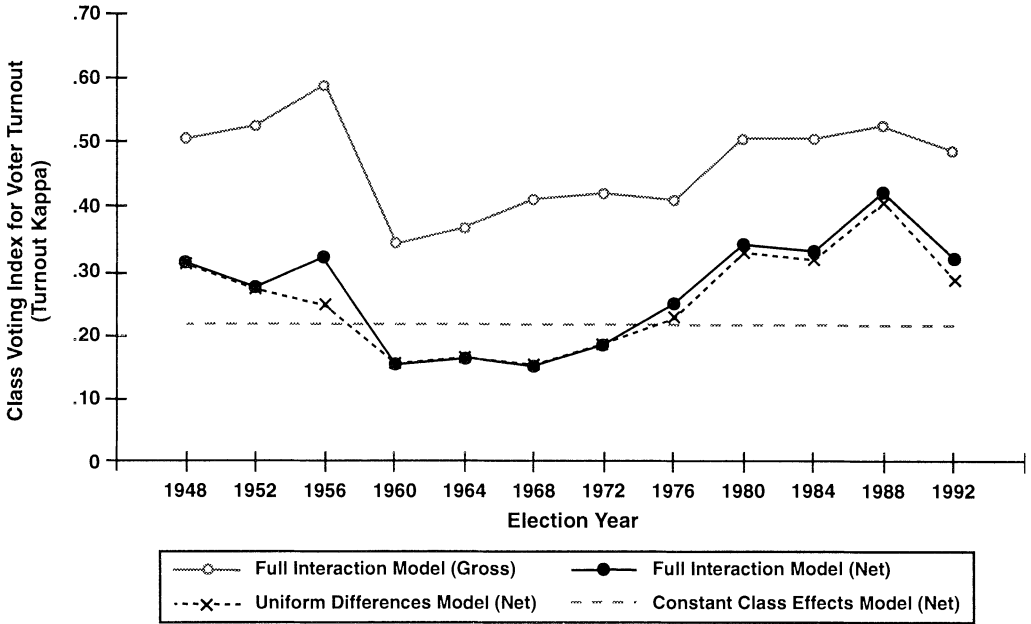
Figure 5. Class Voting Index (Turnout Kappa) for Voter Turnout, by Election Year for Four Models:
U.S. Experienced Labor Force, 1948–1992

because previous research underestimated the importance of class in the 1980s and 1990s. We have sought to rectify methodological and conceptual problems with previous research. The outcome of our efforts is a time-series of total class voting measures. It shows that total class voting has moved up and down within a wide range during the postwar era, but that the increases have consistently canceled the decreases with a lag of at most four elections. No net trend appears. However, these fluctuations should not obscure the magnitude of the effect of class on voting behavior in the United States.

Within this broad picture of trendless fluctuation, some important shifts have occurred in the alignment of particular classes with particular parties. Nonmanagerial white-collar workers moved so sharply toward the Democratic Party that their odds on voting Democratic do not differ from those of semi-skilled and unskilled workers, net of differences due to race, education, and other attributes. Professionals also would be indistinguishable from these semi- and unskilled blue-collar and nonmanagerial white-collar workers if they were more similar on the covariates. Professionals actually moved

closer to the Democratic Party before the nonmanagerial white-collar workers did. Most of the change related to professionals occurred in the late 1960s, reversing their pattern of the late 1940s and 1950s when they were often the most pro-Republican class.

A second important shift within the overall context of trendless fluctuation is the increasing volatility of the voting behavior of skilled workers in recent elections. No other class exhibits the dramatic election-to-election swings of this group that was once a mainstay of the New Deal coalition. These results show that the attention of political commentators (Edsall 1991) and scholarly analysts (Halle and Romo 1991; Piven 1992) to skilled workers is warranted. Future work is needed to enrich our understanding of the politics of blue-collar workers.

These results confirm the utility of our distinction between "total" and "traditional" class voting for understanding political behavior in the United States and, perhaps, in other democratic capitalist societies as well. The patterns of *traditional* class partisanship have altered without engendering a decline in the total effect of class on voting behavior. To equate (total) class voting with the

traditional class alignment between workers and the Democratic Party (and between high-level white-collar workers and the Republican Party) is to miss the key scenario of class realignment. By distinguishing total class voting from traditional class voting, we have brought into focus the path by which traditional class politics have given way to new patterns of class voting in the United States.

Who wins under the new alignments? Despite assumptions to the contrary, leftist parties could not forge a majority under the old alignment (Przeworski and Sprague 1986). Blue-collar workers never were a majority of the electorate in any industrial nation. As farming declined, the white-collar phalanx emerged to deny industrial workers the majority. The occupational trends likely to prevail in the next 20 years also work against the traditional leftist coalition (Nieuwbeerta 1995). No one can predict whether the emerging Democratic coalition of semi-skilled and unskilled workers, nonmanagerial white-collar workers, and professionals will prove to be any more successful. The degree of moderation necessary to keep professionals in the fold may ultimately blunt the left's agenda (Przeworski and Sprague 1986). But the occupational trends lend some credence to the coalition. The volatility of the skilled workers makes the case even more complicated, for just when the non-managerial white-collar workers (the majority of whom are female) came into the Democratic fold, skilled workers (the majority of whom are male) departed. Their departure takes two forms: Some vote Republican and some do not vote. The dynamics merit detailed analysis in panel studies.

While the effect of class on voting behavior is clearly undergoing some important changes, class differentiation itself remains a stable feature in the landscape of U.S. politics. Has realignment taken the *struggle* out of class differences? In his classic statement on the matter, Lipset ([1960] 1981), leaves identifying the nature of class interests in an electoral context up to the analyst: "Even though many parties renounce the principle of class conflict or loyalty, an analysis of their appeals and support suggests that they do represent the interests of different classes" (p. 230). We have shown that class support of political parties in the United States has shifted significantly since the 1960s. A full analysis of the political appeals of the parties is beyond the scope of this paper. However, since the late 1960s Republicans have developed strategies to pry skilled workers loose from the Democrats (Phillips 1969). Together these suggestions about candidates' appeals and our strong evidence about their social bases of support point to a continuing political significance of class in U.S. electoral politics.

Michael Hout is Professor of Sociology and Director of the Survey Research Center at the University of California, Berkeley. The present article is the latest contribution by Hout, Brooks, and Manza to the "End of Classes" debate. Their previous contributions have been published in International Sociology, the Annual Review of Sociology, and two edited volumes. Hout is also involved in the Bell Curve controversy. He and six Berkeley colleagues have written Understanding Inequality in America: Beyond the Bell Curve Controversy (forthcoming, Princeton University Press).

Clem Brooks is Assistant Professor of Sociology at Indiana University, Bloomington. His interests are political sociology, quantitative methods, and public opinion research. He is currently working on a study of the decline of welfarist liberalism and (with Jeff Manza) a study of the attitudinal basis of the political realignment documented in the present article.

Jeff Manza is Assistant Professor of Sociology at The Pennsylvania State University, and Research Associate at the Population Research Institute there. His major research interests are political sociology, class analysis, and social policy. In addition to his collaborative work with Brooks, he is conducting research (with Fred Block) on the consequences of a negative income tax regime and a historical study of policy experts and political change in the United States between 1932 and 1950.

Appendix. Coding of Covariates Used in the Analysis

Covariate	Type of Covariate	Code
Education (years)	Continuous	0–16
Age and $(Age)^2$	Continuous	18–89
Gender	Categorical	Women/ Men
Race	Categorical	Black/ Other
Region	Categorical	Northeast/ South/ Midwest/West

REFERENCES

Alford, Robert. 1963. *Party and Society.* Chicago, IL: Rand McNally.

Anderson, Dewey and Percy Davidson. 1943. *The Democratic Class Struggle.* Stanford, CA: Stanford University Press.

Berelson, Bernard R., Paul F. Lazarsfeld, and William N. McPhee. 1954. *Voting: A Study of Opinion Formation in a Presidential Campaign.* Chicago, IL: University of Chicago Press.

Blau, Peter and Otis D. Duncan. 1967. *The American Occupational Structure.* New York: Wiley.

Burnham, Walter Dean. 1982. *The Current Crisis in American Politics.* New York: Oxford University Press.

Campbell, Angus, Philip E. Converse, Warren E. Miller, and Donald E. Stokes. [1960] 1980. *The American Voter.* Chicago, IL: University of Chicago Press.

Clark, Terry Nichols. 1994. "Race and Class vs. the New Political Culture." Pp. 21–78 in *Urban Innovation: Creative Strategies for Turbulent Times,* edited by T. N. Clark. Thousand Oaks, CA: Sage.

Clark, Terry Nichols and Seymour Martin Lipset. 1991. "Are Social Classes Dying?" *International Sociology* 6:397–410.

Clark, Terry Nichols, Seymour Martin Lipset, and Michael Rempel. 1993. "The Declining Political Significance of Class." *International Sociology* 8:293–316.

Cleveland, William S. 1994. *The Elements of Graphing Data.* Murray Hill, NJ: Hobart Press.

Dalton, Russell. 1988. *Citizen Politics in Western Democracies: Public Opinion and Political Parties in the United States, Great Britain, West Germany and France.* Chatham, NJ: Chatham House.

Edsall, Thomas. 1991. *Chain Reaction.* New York: Norton.

Erikson, Robert and John H. Goldthorpe. 1992. *The Constant Flux: Class Mobility in Industrial Society.* Oxford, England: Oxford University Press.

Erikson, Robert, John H. Goldthorpe, and Lucienne Portocarrero. 1979. "Intergenerational Class Mobility in Three Western European Societies: England, France, and Sweden." *British Journal of Sociology* 30:415–30.

Evans, Geoff. 1992. "Testing the Validity of the Goldthorpe Class Scheme." *European Sociological Review* 8:211–32.

Evans, Geoff, Anthony Heath, and Clive Payne. 1991. "Modelling Trends in the Class/Party Relationship." *Electoral Studies* 10:99–117.

Franklin, Mark N. 1985. *The Decline of Class Voting in Britain.* Oxford, England: Clarendon Press.

Franklin, Mark N., Thomas T. Mackie, and Henry Velen. 1992. *Electoral Change: Responses to Evolving Social and Attitudinal Structures in Western Countries.* New York: Cambridge University Press.

Goldthorpe, John H. 1995. "The Service Class Revisited." Forthcoming in *Social Change and the Middle Classes,* edited by M. Savage and T. Butler. London, England: UCL Press.

———. Forthcoming. "Modelling the Pattern of Class Voting in British Elections, 1964–92." In *The Political Significance of Class,* edited by G. Evans. Oxford, England: Oxford University Press.

Goodman, Leo A. 1965. "On the Statistical Analysis of Mobility Tables." *American Journal of Sociology* 70:564–85.

———. 1981. "Criteria for Determining Whether Certain Categories in a Cross-Classification Table Should Be Combined." *American Journal of Sociology* 87:612–50.

———. 1991. "Measures, Models, and Graphical Displays in Cross-Classified Data." *Journal of the American Statistical Association* 86:1085–111.

Halle, David and Frank Romo. 1991. "The Blue Collar Working Class." Pp. 152–84 in *America at Century's End,* edited by A. Wolfe. Berkeley, CA: University of California Press.

Heath, Anthony, Roger Jowell, and John Curtice. 1985. *How Britain Votes.* Oxford, England: Pergamon Press.

———. 1991. *Understanding Political Change: The British Voter, 1964–1987.* Oxford, England: Pergamon Press.

Hout, Michael. 1983. *Mobility Tables.* Beverly Hills, CA: Sage.

———. 1988. "More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s." *American Journal of Sociology* 93:1358–1400.

Hout, Michael and Robert M. Hauser. 1992. "Symmetry and Hierarchy in Social Mobility." *European Sociological Review* 8:239–66.

Hout, Michael, Jeff Manza, and Clem Brooks. Forthcoming. "The Social Bases of the Realignment of U.S. Presidential Class Voting." In *The Political Significance of Class,* edited by G. Evans. Oxford, England: Oxford University Press.

Huckfeldt, Robert and Carol W. Kohfeld. 1989. *Race and the Decline of Class in American Politics.* Champaign, IL: University of Illinois Press.

Inglehart, Ronald. 1990. *Culture Shift in Advanced Industrial Society.* Princeton, NJ: Princeton University Press.

Inglehart, Ronald and Jacques-Rene Rabier. 1986. "Political Realignment in Advanced In-

dustrial Society: From Class-Based Politics to Quality of Life Politics." *Government and Opposition* 21:456–79.

Knoke, David and Michael Hout. 1974. "Social and Demographic Factors in American Political Party Preferences." *American Sociological Review* 39:700–13.

Lipset, Seymour Martin. [1960] 1981. *Political Man*. Expanded ed. Baltimore, MD: Johns Hopkins University Press.

Maddala, G.S. 1983. *Limited Dependent and Qualitative Variables in Econometrics*. New York: Cambridge University Press.

Mair, Peter. 1993. "Explanations of the Electoral Debility of the Class Left in Ireland." Chap. 13 in *The Development of Industrial Society in Ireland*, edited by J. H. Goldthorpe and C. Whelan. Oxford, England: Oxford University Press.

Manza, Jeff, Michael Hout, and Clem Brooks, 1995. "Class Voting in Capitalist Democracies Since WWII." *Annual Review of Sociology* 21:137–63.

Nie, Norman H., Sidney Verba, and John Petrocik. 1979. *The Changing American Voter*. Enlarged ed. Cambridge, MA: Harvard University Press.

Nieuwbeerta, Paul. 1995. *Class Voting in Comparative Perspective*. Ph.D. Dissertation. Department of Sociology, University of Nijmegen, Nijmegen, The Netherlands.

Parkin, Frank. 1968. *Middle Class Radicalism*. New York: Praeger.

Phillips, Kevin. 1969. *The Emerging Republican Majority*. New York: Anchor.

Piven, Frances Fox. 1992. "Structural Constraints and Political Development: The Case of the American Democratic Party." Pp. 235–64 in *Labor Parties in Postindustrial Capitalism*, ed-

ited by F. F. Piven. New York: Oxford University Press.

Piven, Frances Fox and Richard A. Cloward. 1988. *Why Americans Don't Vote*. New York: Pantheon.

Przeworski, Adam and John Sprague. 1986. *Paper Stones: A History of Electoral Socialism*. Chicago, IL: University of Chicago Press.

Raftery, Adrian E. 1995. "Bayesian Model Selection in Sociology." *Sociological Methodology* 25:18–46.

Rose, Richard and Ian McAllister. 1986. *Voters Begin to Choose: From Closed Class to Open Elections in Britain*. Newbury Park, CA: Sage.

Sorokin, Pitrim A. [1927] 1964. *Social and Cultural Mobility*. Glencoe, IL: Free Press.

Verba, Sidney, Norman H. Nie, and Jae-on Kim. 1978. *Participation and Political Equity*. Cambridge, England: Cambridge University Press.

Weakliem, David. 1991. "The Two Lefts? Occupation and Party Choice in France, Italy and the Netherlands." *American Journal of Sociology* 96:1327–61.

———. 1995. "Two Models of Class Voting." *British Journal of Political Science* 25:254–71.

Weakliem, David and Anthony F. Heath. Forthcoming. "The Secret Life of Class Voting: Britain, France, and the United States Since the 1930s." In *The Political Significance of Class*, edited by G. Evans. Oxford, England: Oxford University Press.

Wolfinger, Raymond E. and Steven J. Rosenstone. 1980. *Who Votes?* New Haven, CT: Yale University Press.

Wright, Erik Olin. 1985. *Classes*. London, England: Verso.

Xie, Yu. 1992. "The Log-Multiplicative Model for Comparing Mobility Tables." *American Sociological Review* 57:380–95.