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CHANGES IN SUBJECTIVE SOCIAL CLASS IDENTIFICATION IN DETROIT BETWEEN THE 1950S AND 1971

by

Mark Evers

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Sociology)
in The University of Michigan
1974

Doctoral Committee:

Assistant Professor William M. Mason, Chairman
Professor Philip E. Converse
Associate Professor Reynolds Farley
Professor Roy Pierce

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CHAPTER I

FRAMEWORK, STRATEGY, AND OBJECTIVES

The most fundamental aim of this analysis is to get some insight into the meaning of the measure, subjective social class identification. As indicated below, this item has been asked in sample surveys for about thirty years. It has been assigned several different interpretations and been criticized--for the most part justly--on both theoretical and methodological grounds. We begin in the present chapter by critically reviewing this literature in the hope of arriving at a fruitful understanding of the issues and ambiguities involved.

Understanding class identification can only be the result of judiciously combining empiricism and theory. No amount of verbal "theorizing" can replace the tendering of empirically testable models that make explicit the process by which people arrive at their class identifications and that indicate what the concomitants and consequences of such identification might be. The models we propose are therefore processual, not only from the individual's standpoint, but in the aggregate as well, since this analysis is a study of social change looking at cross-sections of a population at several points in time. In this way we hope to reach meaningful conclusions about the role of class identification in stratification research, and more important, in the lives of the people sociologists study. The spirit of this inquiry is well represented by Converse's remark: "It is only such

observation of stability and change over a lengthening period of our national history that can provide an empirical test for some of the more important hypotheses as to the significance of social class in modern society" (Converse, 1958: 388).

Class and Class Identification in Sociology

In his review of the early class literature in American sociology, Charles Page distinguished two broad uses of social class which, while undoubtedly crude, can nevertheless serve as a point of departure for a discussion of social class (Page, 1940: 252). First, he cited the use of class "in the generally accepted sense as a group demarcated by economic factors: by income, economic function, or relation to a system of production." Second, class was sometimes seen as "based upon the 'subjective' elements of group consciousness."

The first, "objective" version of social class permeates the literature on social stratification. It typically involves nothing more than arbitrarily assigning individuals in certain categories of socioeconomic status indicators such as education, occupation, or income (or some composite index constructed from these indicators) to certain categories of social class. An example is the common classification of incumbents of white collar occupations as middle class members, and blue collar incumbents as members of the working class. Such usage presumably rests on analytical rather than conceptual utility.

The second, "subjective" variety of social class generally views a social class as a social psychological grouping which, although rooted in socioeconomic status, implies something more than status alone. The following is a typical description: "The social class . . .

refers to a grouping of people who feel a sense of identification and shared interest as a result of membership in a common stratum of society. This psychological unity tokens a degree of functional cohesiveness that the term stratum does not connote" (Campbell and others, 1960: 337). Centers makes a similar distinction, saying that "a man's class is a part of his ego, a feeling on his part of belongingness to something; an identification with something larger than himself" (Centers, 1949b: 27). Centers thus proposed class identification as a measure of this "belongingness."

Two observations follow from this conception of social class that are fundamental to an analysis of subjective class affiliations. First, the typical measure of subjective social class, whether assigned by an "informed observer" or self-assigned as in class identification, may be rooted in the strata of any number of social statuses. As sociologists have been aware at least since Sorokin's ground-breaking study (1927), there are many dimensions of stratification. One "middle class" person of low occupational status and meagre income may base his identification on his college education. Another of high occupational status but low education and income may also identify with the middle class. Others may somehow average their discrepant statuses. In contemporary United States society where the major components of social status, such as income, occupation, and education, are not highly crystallized, that is, where an individual is not usually a member of similar levels of different dimensions of social status, it might be expected that he often receives conflicting inputs about his social class. In the aggregate, the relationship between social

class and social status is likely to be rather small and probably complicated.

The second observation about social class refers to what may be called its scientific status or its utility in understanding the process of social stratification. The subjective view treats class as a social psychological grouping based in part on the different socioeconomic positions of members of different classes. Questions about the existence of a "psychological unity" that distinguishes membership in a social class from membership in (more or less) corresponding social strata are presumably empirical questions. If, in a structural system, social class is thought to vary with specified behavioral or attitudinal characteristics of individuals, and given that class is a function of socioeconomic status, then the utility of class rests on whether its correlation with these attitudes and behaviors remains after socio-economic status is taken into account.

We choose to distinguish between Page's "objective" and "subjective" versions of social class by referring to the former as strata rather than classes. An additional distinction, delineated at greater length in Chapter IV, is between our version of social class and the more familiar Marxian rendition. Dahrendorf aptly describes the latter: "Class is always a category for the purposes of the analysis of the dynamics of social conflict and its structural roots. . . ." (as quoted in Lasswell, 1965: 477-478). Although Centers attempts to locate class identification within the framework of an "interest group theory of social classes" (1949b: 26-29), thus broaching a Marxian class conflict schema, we feel that our analysis of subjective social class has little to do with social conflict.

We will discuss further our orientation toward class identification in the next sections. The discussion in this section makes no attempt to delineate and criticize all the uses of class in sociology. Rather, we have indicated in broad terms where class identification lies as a way of approaching the study of social class.

Previous Research

Class identification is actually a set of measures that derive from the subjective conception of social class we describe above. Basically, class identification refers simply to the social class to which a person feels he belongs. A variety of forms have been used to inquire into a person's social class so-defined, including the "closed form" where the respondent selects from a number of pre-specified alternative classes. Typically, the closed question offers four alternatives (upper, middle, working, or lower classes), three alternatives (upper, middle, or lower class), only two alternatives (middle or working class), or sometimes five or even more classes (e.g., upper, upper middle, middle, working, or lower class). As we point out in Chapter III, the number of alternative classes from which a respondent is allowed to choose appears to affect the distribution of responses. Other investigations have allowed the respondent to name his class affiliation without having pre-specified the class categories.

Conceptual ambiguity is one of the chief, if unfortunate, characteristics of the variable in its many applications in sociology. Interpretations include viewing class identification as an indicator of "class consciousness" (Centers, 1949b), as an indicator of life

style (Hodge and Treiman, 1968), as "the perception of . . . position in the status hierarchy" (Jackman and Jackman, 1973), and as a projective measure which corresponds to a person's desires as well as to his objective social position (Duncan and Featherman, 1972). These varied positions might well leave the researcher in a quandary as to just what he is measuring.

There is no evidence, for example, that a mere response to a closed class identification question indicates that class is salient to the individual (Gross, 1953). Data from The American Voter, for instance, illustrate this point. When respondents were asked, "Do you ever think of yourself as being in one of these [middle or working] classes?" fully one-third replied "no" yet went on to identify with one of the classes when asked which they would choose if forced to make a choice (Campbell and others, 1960: 343).

Thus the question critics usually ask, and rightfully so, is whether social class, in the subjective sense, is meaningful to the respondent or merely an analytical construct of consequence to the analyst (Gordon, 1958: 198). In other words, identification with, say, the middle class may well mean different things to different people. The assumption that there exists a class structure that is discernible in terms of a set of pre-specified classes seems to underly the belief that class identification indicates "class consciousness" or some sort of class structure. This is obviously circular reasoning. However, to the extent that an individual's subjective social class is associated with other attitudes and behaviors, we might say that class identification is somehow salient to the individual. The literature seems replete with such correlated attitudes and behaviors.

For instance, the impact of Centers' monograph (1949b) was probably not due to its finding that class identification is related to socioeconomic characteristics, since this had been illustrated previously (Cantril, 1943). Rather, more interesting was Centers' revelation that the social class with which a person identifies is related to a host of variables subsumed under his rubric "politicoeconomic orientations," including political conservatism, partisan voting, union membership, attitudes about government ownership of industry, etc. Campbell and his associates (1964) find further support for the relation of voting behavior to class identification, and Converse (1958) observes a fluctuating though substantial association over time between class identification and political attitudes and behaviors.

Many other variables have been shown to be associated with social class identification, including church membership (Centers, 1949b), job satisfaction (Centers, 1949b), newspaper reading habits (Haer, 1957), and membership in voluntary associations (Freeman and others, 1957). However, none of these investigators employ any rigorous controls to remove the effects of socioeconomic status. That is, we do not know whether socioeconomic status accounts for the association between social class identification and its correlates.

Close examinations of the relationship between subjective social class and indicators of socioeconomic status have been made only recently. Hodge and Treiman (1968) find that the associations of class with income, occupation, and education are loose, although each of the three indices of socioeconomic status exerts a significant effect on social class identification. However, all three together account for less than one-fifth of the variance in subjective social

class when the latter is expressed as a quantitative variable. Jackman and Jackman (1973) reanalyze the same national data set used by Hodge and Treiman, elaborating on the same socioeconomic determinants model proposed in the earlier study. This model, which posits that class identification depends on a person's education, family income, and head's occupation, constitutes what we term the "basic model" of class identification. Both of the above studies analyze this model in a least-squares regression framework, and elaborations in both studies build upon this basic model.

Jackman and Jackman (1973) argue that the pattern of effects of other key variables on the association between class identification and socioeconomic status may offer evidence supporting either a pluralist or interest group ("modified Marxian") theory of society. In the former view, class identification cannot crystallize around social status because status in advanced industrial societies is multidimensional and the dimensions are not highly interrelated. Thus, as we note in the previous section, many if not most individuals receive signals about their "true" class identification that differ among the dimensions of their social status. According to the interest group view (see Centers, 1949b), the effects of socioeconomic status, whose dimensions are highly interrelated, are at least partly mediated by key variables such as an individual's social contacts, who are supposed to be of a similar social standing as the individual in question. Moreover--and this is an issue examined at length in the present analysis--ethnic (or racial) cleavages in the population play a strong role in determining class identification under the interest group theory. The pluralist model predicts that universalistic criteria,

including education, occupation, and income, override ethnic group membership in determining class identification.

Because neither theory is highly enough specified to offer clearly distinctive hypotheses at all times, it is difficult to assess their value. However, even the evidence on either viewpoint as presented above is hardly unambiguous. Jackman and Jackman claim to find some support for the interest group approach. For example, social contacts have little direct bearing on class identification, and for at least two of the three socioeconomic variables, blacks show no association with class identification although whites do. However, work experience and union membership, which ought to have significant impact on class identification under the interest group theory, show little net effect in Jackman and Jackman's investigation. A bit of the disparity in what interest group and pluralist theories propose may be more semantic than real. For instance, the pluralist believes the different dimensions of socioeconomic status are loosely interrelated; the interest group advocate predicts they are highly correlated. Is a correlation of .4 between education and income high or low? The choice seems arbitrary.

We will not undertake to explicate or test these two approaches. However, we will accept the "basic model" which is common to both approaches, and under which class identification results from one's socioeconomic status, and examine this association in detail, charting its changes and looking at race and sex differences. No other investigation has looked at the changing association between socioeconomic status and class identification, although surveys that include a class identification item have been conducted for at least three decades.

Analysts have limited themselves to examining trends in the aggregate distribution of subjective social class, and these findings have differed depending at least partly on question wording or the number of alternative classes offered the respondent (cf. Tucker, 1966, 1968; Schreiber and Nygreen, 1970; Hamilton, 1966a, 1966b). One minimal constraint on tracing patterns of change using replication techniques is that the question and context of the item within the questionnaire be standardized (Duncan, 1969: 10). To the extent that this is not the case, the analyst would do well to exercise caution in interpreting the trends rather than dismissing the methodological explanation in favor of a so-called sociological or theoretical interpretation (e.g., Tucker, 1968).

Overall, the investigations of subjective social class identification have been fraught with methodological difficulties as well as inconsistent interpretations and theoretical framework. It is difficult to see how the latter problems can be resolved without dealing with the former. Interpretations of class identification will be more sure if based on a number of studies that have minimized differences in question wording and prespecified class alternatives. Further, studying shifts over time in associations of class identification with other variables is paramount if the role of subjective social class in sociology is to be clarified.

Framework

Implicit in the above discussion is the demand that class identification be developed into what Sheldon and Land term an "analytic social indicator." They propose that such indicators "serve as

components of explicit conceptual and causal models of the social systems or some particular segment thereof" (Sheldon and Land, 1972). Thus we propose--and Jackman and Jackman (1973) apparently concur--that class identification appear as the outcome of a processual model of socioeconomic achievement. This model has been implicit in much of the class identification literature. The present analysis elaborates this model by looking at the influences of the ascriptive characteristics of race and sex, and by plotting any changes in the parameters of this model between the 1950s and 1971. The last-mentioned focus of this analysis thrusts it into the mainstream of the social indicators "movement."

In addition, this analysis investigates whether the socioeconomic achievement model can account for any observed change in class identification. That is, if we observe a shift in the distribution of class identification, we would expect to observe a concomitant shift in the socioeconomic determinants of class identification. In this sense, we are in the business of explaining the change in class identification. This idea is further specified in the beginning of the fourth chapter.

The data we employ come from several Detroit Area Study (DAS) surveys conducted in the 1950s and in 1971. The DAS is an ongoing research project operating out of the Department of Sociology at the University of Michigan. Under its auspices, surveys of the Detroit area residents have been conducted annually since 1951, providing potential indicators of change for a number of characteristics of this population. The 1971 DAS was designed specifically to serve as an omnibus replication study of variables surveyed in earlier years (Duncan, 1970). Class identification was one of a number of questions

replicated in 1971. The next chapter provides further details of the study designs.

By beginning with a "social indicators" perspective using a measure so often obtained in surveys, we are starting with a fairly well-established index but at the same time with a much more uncertain concept underlying the measure. In this analysis, class identification is considered to indicate the choice of a person who is offered a specific set of social classes. This definition sticks very close to the measure itself. It avoids the logical leaps necessary for saying that class identification measures class consciousness. (Chapter IV discusses this problem more fully.) It stops short of viewing class identification as a projection. It is also a conservative definition: until more evidence is in, the most we are willing to say is that class identification indexes a person's position among a prespecified set of social classes. Its relation to socioeconomic status shows that it reflects, to some extent a person's social standing as it is conventionally defined. The possible or putative consequences of class identification, however, may be of more importance in grasping its meaning, if we take seriously the counsel that "the importance of the social psychology of stratification hinges, in the final analysis, upon the veracity of W. I. Thomas' dictum that things believed to be real are real in their consequences" (Laumann and others, 1970: 392-393). But given the predominance of theoretical and empirical attention on the determinants of class identification rather than its consequences, the present analysis opts to focus on the former, leaving the latter to future research.

Prospectus

This first chapter presents the issues involved in class identification theory and methodology, and suggests how this investigation intends to cope with some of these issues within the confines of its substantive focus. Chapter II describes the data we employ, paying particular attention to the differences among studies and within the 1971 study in question wording and questionnaire format, and trying to assess the impact of some of these differences. Chapter III outlines the change in class identification in the Detroit area population, looking at marginal shifts and change by race, sex, and cohort membership.

The fourth, fifth and sixth chapters examine the associations and changes thereof between class identification and the socioeconomic variables of occupation, education, and income. In particular, these chapters inquire into any differences in these associations over time, between males and females, and between blacks and whites. The ultimate aim of the analysis is to consider jointly the effects of socioeconomic status, race, sex, and time on class identification. Since such a multivariate problem is too complex to tackle and comprehend at once, the analysis proceeds in a more cumulative fashion. Chapter IV considers only males; Chapter V, only females; and Chapter VI focuses on differences between men and women in the association between class identification and the socioeconomic variables, looking both at changes in this association and at whether blacks and whites differ in the sex effect. The last chapter summarizes and discusses the findings of this analysis.

CHAPTER II

METHODOLOGICAL ISSUES

Introduction

This chapter describes the data and techniques which the analysis employs, and examines in detail a particular methodological problem arising from the use of two different questionnaire forms in one of the surveys. Most of the material in this chapter can be construed as a component of measurement error. The discussion focuses on ways in which certain types of error were minimized in the study design. More important, it concentrates on estimating various forms of error where possible, and on understanding what effect these might have on substantive issues of class identification and its changes.

General treatments of measurement error are readily available, and still another will not be given here. However, error which is peculiar to the measurement of change has received less attention (see, however, Coleman, 1968). This is especially true for change measured by survey data (see, however, Duncan, 1969: 10). A good beginning point for measuring change using survey data is to carefully standardize the measuring instrument. In the present case, the measuring instrument is the question in the questionnaire, in particular, the class identification item. At a minimum, the question wording must be replicated, including the response categories offered the respondent if the question is forced-choice. By implication,

standardizing implies much more: placing the question in a similar context within the different questionnaires, training interviewers similarly, using similar interviewing techniques, using comparable coding procedures, and sampling the same population in the same manner. Some of these items, such as sampling, are much easier to carry out than others, such as the question context. But all may contribute to error in measuring change, and the list is doubtless incomplete.

Following these procedures provides the basis for replication of the measurement. It also results in replication of any bias: "In a serious replication, one will repeat faithfully the 'errors' of the original study as well as adhere to its 'good ideas'" (Duncan, 1969, p. 27). This may well present problems in interpreting results, since the "change" being measured may be ambiguous. Sticky problems of reliability and validity--present in any cross-sectional analysis--take on an additional dimension since they may differ between measurements. Focusing solely on standardizing the measuring instrument especially ignores the important but almost intractable issue of construct validity: although the measurement is similar, the concept itself may have changed in meaning over time. Who knows, for example, whether social class, the referential concept in class identification, means the same to the general populace now as it did 15 years ago?

Class identification is a single measure of a rather vaguely defined concept, as prior discussion illustrated. However ambiguous the assessment of change offered by this measure, it must suffice until more sophisticated research designs allow us to sort out the measurement error involved. Previous research has not made much of a dent in attacking even the basic methodological issues confronting

the variable. This chapter will hopefully refocus the attention of the literature.

Sampling Designs

Data for the dissertation derive from surveys conducted in 1953, 1956, 1957, and 1971 by the Detroit Area Study. The 1953, 1956, and 1971 respondents were selected using multi-stage area probability designs which sampled roughly the Detroit Urbanized Area, including all of Wayne County (which contains the city of Detroit), and the contiguous, highly urbanized portions of Macomb and Oakland Counties. The area sampled in 1971 is somewhat broader than that covered by the earlier studies, compensating for the interim geographical expansion of the Detroit area population. The 1957 study covered only Wayne County residents, stratifying precincts according to political party and ethnic criteria. Although the 1957 sampling design differed markedly from that in other years, it is not immediately obvious what effect this difference might have.

All studies except that for 1953 covered adults aged 21 and over. The 1953 study, concentrating on family activities and child-rearing attitudes and behavior, sampled only mothers of age 21 and older with at least one child under the age of 19. Since the 1953 and 1957 studies consider only subpopulations of the adults in the Detroit area while the other studies concern all adults aged 21 and older, comparisons of the 1953 and 1957 data sets with the data from the other years will be effected, where feasible, by examining only subsamples of the latter studies.

Table 2.1 presents the respective sample sizes, response rates, and target populations. A more detailed description of the study designs, particularly of the 1971 study design, can be found in Fischer (1972).

Other Issues in the Measurement of Change

Comparability of the population sampled is only one important prerequisite in obtaining confident measurements of social change. From the list of procedures necessary for replication outlined above, similarities in interviewing techniques and procedures, and similarities in coding in our study designs will not be detailed. The four surveys were all carried out by the Detroit Area Study. Although continuity in the survey organization does not guarantee continuity in interviewing and coding operations, presumably it enhances the degree of similarity. Every attempt was made to make the 1971 DAS study a procedural as well as a substantive replication of selected portions of the prior studies (see Duncan, 1974 for a detailed description), although in some cases this was impossible due to the lack of documentation from previous studies. In one study it has been demonstrated that coding differences in 1956 and 1971 affect the estimates of change, although it is not clear how much this is due to procedural differences (which we might have been able to control, had the information been available), and how much is due to coders' interpreting responses differently (Duncan and Evers, 1974). Class identification, the focal question of the present analysis, would not seem to pose serious problems with respect to either interviewing or coding, since it is short and forced-choice.

Table 2.1.--Year of Survey, Sample Size, and Population Sampled in Studies Used in Present Analysis

Year	Sample Size	Population Sampled
1953	568	Detroit Urbanized Area; mothers 21 and older with child under 19
1956	797	Detroit Urbanized Area; adults 21 and older
1957	596	Wayne County; adults 21 and older
1971	1881	Detroit Urbanized Area; adults 21 and older

Comparability of the question wording between studies is a major advantage in the present analysis of social change. Table 2.2 presents the wording of the class identification item used in the four studies. Clearly, minor differences exist. The question in 1971 is an exact replication of that asked in 1956, and only a slight variant of that asked in 1957. In 1953 the same four class alternatives are listed as in 1956, 1957, and 1971, although their order is altered. Unfortunately, the study design does not permit definitive answers to whether this order difference matters. On the whole, the chief characteristic of the question wordings in the four years is a remarkable similarity.

Between-study comparability may also be tempered by differences in the context in which the question was asked within the various questionnaires. With the exception of the 1971 questionnaire, the various contexts will be delineated but not analyzed. Only the 1971 study design allows context effects to be analyzed in detail and tested. For the other studies, the contextual differences described below serve to lend a note of caution to any observation of change.

In the 1953 study, the class identification item is located at the beginning of the questionnaire, immediately following inquiries into the occupation of the respondent's husband. In the 1956 survey, the item falls in the midst of various attitudinal questions. Preceding the class item in this study are questions about child-rearing, attitudes toward blacks, military interference in foreign affairs, and free speech. Class identification in 1957 follows inquiries into the respondent's knowledge of his or her congressional representatives and attitudes about partisan politics.

Table 2.2.--Wording of Class Identification Item by Year of Study

Year	Question Wording
1953	A large city like Detroit is made up of various kinds of groups--Many people say that a big city is made up of class groups. If you had to place yourself in one of these groups, would you say that you are in the middle class, working class, upper class, or lower class?
1956	A large community like the Detroit area is made up of many kinds of groups. If you had to place yourself in one of these groups, would you say you are in the upper class, middle class, working class, or lower class?
1957	Of course, a large community like the Detroit area is made up of many kinds of groups. If you had to place yourself in one of these groups, would you say you are in the upper class, middle class, working class, or lower class?
1971	A large community like the Detroit area is made up of many kinds of groups. If you had to place yourself in one of these groups, would you say that you are in the upper class, middle class, working class, or lower class?

In 1971, two forms of the questionnaire were administered to randomly selected subsamples of the respondents. In one form, class identification followed "life-style" indicators which asked the respondent how many telephones and televisions were in the household as well as whether he or she owned a color television. Prior to these were items about tenure and years lived in the Detroit area. In the other 1971 form, the class question followed extensive inquiries into the occupations held by the respondent, and his or her father and spouse. Women were asked an additional question about their husband's father's occupation.

Obviously, the class identification inquiry is made in very different contexts in the various questionnaires, including a difference in two forms of the questionnaire in 1971. Only this last difference allows a limited examination of the effect of context on response, and may permit some generalization about whether the contexts of the class item in earlier studies have an effect on the response distribution and consequently on the estimates of change.

Form Effects in 1971

The wording of the class identification item is identical in the two questionnaire forms. However, its position in the questionnaire, hence its context, is different, and for a number of other items the two questionnaire forms also present alternative question wordings and sequences. Thus the form variable serves here as a potential proxy for a large number of characteristics which differ in the two forms (form A and form B) of the questionnaire.

Fortunately, we can presume that relatively few of these characteristics bear upon the class identification response. The criteria

for deciding among these items are both theoretical and methodological. First, it seems safe to assume that only status- or class-related characteristics may have an effect. Using simple deduction, it might be easy to claim that virtually any characteristic is ultimately class-related. We consider only a few items which appear directly related, as described below. The second criterion is the proximity of the item to class identification in one form but not in the other. Obviously this refers only to whether the characteristic is located prior and close to the class identification query in one of the forms. The notion is simple. If an inquiry about occupation, for example, is made immediately preceding class identification in one questionnaire form, but this same inquiry about occupation occurs subsequent to class identification in the other form, we might suspect class identification to be more closely associated with occupation among respondents who answered the first form of the questionnaire than among those who answered the second, because occupation would be more salient among form A respondents.

This is not a trivial example, nor are the issues it represents. In fact, this type of "form" problem can be seen as a variant of the so-called question wording problem which has plagued survey researchers for decades (see Schuman and Duncan, 1974 for a recent exposition). Seemingly trivial differences in the form of a question--be it the wording of the question, the alternative answer choices offered the respondent, whether it is open-ended or closed, or the placement of the item in different portions of the questionnaire--may have a marked impact on the distribution of responses or on the association of that item with other variables. The exposition in the preceding paragraph

stresses only the so-called associational effect of form, which has obvious implications for any multivariate analysis, including the study of social change. But the effect of form on the marginal distribution of responses is also of fundamental importance, especially in basic studies of social change which emphasize shifting marginal distributions. This is the point at which we begin the investigation of form effects.

Before going into detail about the different contexts and their possible effects on the class identification item, the most obvious question needs to be answered: Does the distribution of class identification differ in the two questionnaire forms? Table 2.3 presents the percentage distribution of class identification responses by form. Cursory examination shows that form A respondents are more likely to identify with the working and lower classes and less likely to identify with the middle class than form B respondents. A similar percentage identifies with the upper class in each form.

These differences, however, are not all statistically significant. Overall, class identification and form do not depart significantly from independence. When calculating the likelihood-ratio chi-square (Wilks, 1938) on the eight-cell class-by-form table (U, M, W, L class by form A, B), we obtain $X^2 = 5.39$, 3 degrees of freedom, and $P = .14$. Thus, for the entire distribution, there appears to be little difference between the two forms. But a closer inspection is illuminating. This chi-square value and the eight-cell table it represents, can be partitioned into three chi-square values and three two-by-two tables, each with one degree of freedom. This

Table 2.3.--Percentage Distribution of Class Identification Among Detroit Area Respondents in 1971, by Form of Questionnaire

Form	Class Identification[a]					
	U	M	W	L	Total	(N)[b]
A	2%	43	50	5	100%	(925)
B	2%	48	45	4	100%	(928)

[a]U = upper class, M = middle class, W = working class, L = lower class. This notation will be used throughout the text.

[b]Cases where class identification was not ascertained or where the response was "don't know" are excluded from this table and from all subsequent analyses.

allows us to look at form differences for three independent components of the eight-cell table.

Although this method of partitioning chi-squares for two-way tables has been available for many years (Cochran, 1952), unfortunately it has seen little use in sociology (however, see Goodman, 1968). Since this partitioning technique will be used frequently throughout the dissertation, it will be illustrated in detail at this point.

The distributions of class identification for the two questionnaire forms, A and B, constitute a two-way contingency table, which as pointed out above is described by $X^2 = 5.39$, 3 df, and $P = .14$. The probability is about three in twenty that there is no real difference in the class identification distributions in the two forms. Alternatively, using conventional probability levels (say, .05), the hypothesis that the two forms yield identical distributions cannot be rejected. This table and its chi-square can be partitioned into three subtables, each with one degree of freedom, in order to determine whether some form difference <u>does occur</u> within this four-class distribution. Table 2.4 presents the original frequency distribution and the three subtables into which it has been partitioned, as well as the notation which will be used throughout the text to describe such partitions. For each of the four tables in the first column of Table 2.4, the model against which the data are being tested is a model of independence. That is, we hypothesize that form and class identification are independently distributed, or that class identification does not differ in forms A and B.

The partition of the overall association indicates that only the difference in the middle and working classes is significant. The

Table 2.4.--Partition of 1971 Form Difference in Class Identification

Table (frequencies)					Comparison	X^2	Df	P
	Class							
Form	U	M	W	L				
A	19	399	465	42	Total Association	5.39	3	.14
B	23	446	420	39				
	M	W						
A	399	465			M v. W	4.90	1	.03
B	446	420						
	U	(M+W)						
A	19	864			U v. (M+W)	0.36	1	.55
B	23	866						
	(U+M+W)		L					
A	883		42		(U+M+W) v. L	0.13	1	.72
B	889		39					

partition here proceeds by comparing first the middle and working classes, then the upper class and combined frequencies of the middle and working classes, and finally the lower class and all other classes combined. Note that in each succeeding step of the partition the categories which had previously been compared are collapsed or aggregated, and compared with the new category which was absent in the preceding table. This sequence progresses until all categories of a given variable are exhausted. The chi-square tests for the subtables are independent of one another, and the subtable chi-squares and degrees of freedom sum exactly to those describing the total frequency distribution.

Thus there is clear form effect (departure from independence) only for middle and working class identifiers. Since the vast majority of people identify with these two classes, this finding bears further attention. A basic question in this study of social change is whether this form difference in 1971 has any great effect on the estimate of change occurring since the earlier studies. At this point we compare responses in 1971 to those obtained in the 1956 survey. This is the most solid baseline since the 1956 question wording and target populations are strictly comparable to those in 1971. Estimates of change using the other baselines will be made in the next chapter. Rather than focus on substantive interpretations of change at this time, we now examine only the effect of the form difference on the parameters of change, using the most reliable comparison.

Table 2.5 presents the marginal distributions of class identification in 1956, and in 1971 for each questionnaire form. In the bottom half of the table the changes and partitions of changes between 1956 and 1971 (by form) are schematized, using the notation described

Table 2.5.--Percentage Distribution of Class Identification, in 1971 by Form, and in 1956; and Partition of Change in Class Identification by Form in 1971

Year	Form	Class Identification[a] U	M	W	L	Total	(N)[b]
1971	A	2%	43	50	5	100%	(925)
1971	B	2%	48	45	4	100%	(928)
1956	-	2%	35	61	1	100%	(775)

Comparison	1956 v. 1971-A X^2	Df	P	1956 v. 1971-B X^2	Df	P
Total association	33.34	3	.001[c]	51.47	3	.001
M v. W	14.92	1	.001	35.85	1	.001
U v. (M+W)	0.20	1	.66	0.02	1	.89
(U+M+W) v. L	18.22	1	.001	15.60	1	.001

[a]U = upper class, M = middle class, W = working class, L = lower class. This notation will be used throughout the text.

[b]Cases where class identification was not ascertained or reported "don't know" are excluded from this table and all subsequent analyses.

[c]Here and throughout the text, .001 indicates a maximum probability of .001. Other probabilities are exact, unless otherwise indicated.

above. Regardless of the form in 1971 with which the 1956 survey is compared, the overall shift is significant, the shift into the middle class and into the lower class are significant, and there is no appreciable change in the relative number of upper class identifiers.

However, it is impossible to get a clear statistical estimate of whether the amount of change measured by one form differs from the amount of change measured by the other form. To do this requires a form variable in 1956 comparable to that in 1971. As a substitute, we split the class identification frequencies for each category in 1956, allocating half to form A and half to form B. This creates a form variable in 1956 which has no effect on the class variable. A comparison with the form-class association in 1971 allows us to infer whether the emergence of the form difference has any serious consequences for the estimate of change, or whether the change measured by the two forms differs.

Although the design is somewhat contrived, the test of the difference in change is straightforward. The technique used to answer this and most other questions posed in the dissertation is log-linear analysis. This method is useful for any analysis where the variables are qualitative or categorical, because no assumptions need be made about the ordering or scaling of the categories of the variables. The method is of fairly recent vintage in the American statistical literature (see Goodman, 1970, 1972; Bishop, Fienberg, and Holland, 1974; Fienberg, 1974); because the technique has been little used in sociology, I will present a brief description here.

The log-linear model is based on the odds-ratio or cross-product ratio, which is a measure of association applicable to any 2-by-2

table. The odds-ratio is defined as $d = \frac{r_{11}r_{22}}{r_{12}r_{21}}$, where the r_{ij} denote the expected cell frequencies under a given model. Values of the odds-ratio range from 0 to $+\infty$, and the two variables are independently distributed when the odds-ratio is unity, and associated (not independent) when the odds-ratio differs from unity. By taking the logarithm of the odds-ratio, it is apparent that for two odds-ratios d_1 and d_2, if $(\log d_1) = -(\log d_2)$, then d_1 and d_2 represent an equal association, although one association will be positive (greater than unity, although designation of "positive" is arbitrary since the variables are categorical) and the other will be negative (less than unity).

The goodness of fit of the model (in a 2-by-2 table the only possible model is independence) can be determined using the likelihood ratio chi-square (Wilks, 1938), which is defined as $X^2 = 2\Sigma_i \Sigma_j x_{ij} \log(x_{ij}/r_{ij})$, where the x_{ij} and r_{ij} are observed and expected frequencies, respectively. More generally, $X^2 = 2\Sigma(\text{observed}) \log (\text{observed/expected})$, summing over all cells in a given contingency table. The likelihood ratio chi-square is asymptotic with the usual Pearson chi-square statistic, and the goodness-of-fit of a given model is determined by comparing the statistic against the chi-square distribution. While both the Pearson and likelihood ratio chi-square statistics are usually characterized by similar values, properties of the latter statistic make it invaluable as a tool in partitioning associations underlying log-linear models. This method of partitioning will be described below.

In analyzing any multi-dimensional contingency table, the concern is to investigate associations or interactions among two or more

variables. For a three-way table, for example, there is a total of $\binom{3}{2} = 3$ two-factor interactions, one three-factor interaction, as well as a "main effect" due to each of the three variables. In terms of the general ("saturated") log-linear model, then, there are seven parameters which describe the model completely (i.e., exhaust the degrees of freedom), as specified by the equation

$$\log r_{ijk} = a + b^{A}_{i} + b^{B}_{j} + b^{C}_{k} + b^{AB}_{ij} + b^{AC}_{ik} + b^{BC}_{jk} + b^{ABC}_{ijk} . \qquad (2.1)$$

Here,

$$a = \left(\frac{1}{IJK}\right) \sum_{i} \sum_{j} \sum_{k} \log r_{ijk} ,$$

$$b^{A}_{i} = \frac{1}{JK} \sum_{j} \sum_{k} \log r_{ijk} - a ,$$

$$b^{AB}_{ij} = \frac{1}{K} \sum_{k} \log r_{ijk} - a, \text{ etc.}$$

Thus the following constraints are imposed:

$$\sum_{i} b^{A}_{i} = \sum_{j} b^{B}_{j} = \sum_{k} b^{C}_{k} = 0 ,$$

$$\sum_{i} b^{AB}_{ij} = \sum_{j} b^{AB}_{ij} = \sum_{i} b^{AC}_{ik} = \sum_{k} b^{AC}_{ik} = \sum_{j} b^{BC}_{jk} = \sum_{k} b^{BC}_{jk} = 0 ,$$

and

$$\sum_{i} b^{ABC}_{ijk} = \sum_{j} b^{ABC}_{ijk} = \sum_{k} b^{ABC}_{ijk} = 0 .$$

Rather than describing the models in terms of equations of the type (2.1), it is simpler to list which associations or interactions are being fit under a given model. Of course, there is a one-to-one

correspondence between fitting certain interactions and specifying certain parameters. For example, in the elementary model of mutual independence among variables A, B, and C, all parameters to the right of b_k^C in equation (2.1) would be set equal to zero, to yield $\log r_{ijk} = a + b_i^A + b_j^B + b_k^C$. Only the main effects of each of the three variables are being fit to the data. Were an association between, say, A and B, also fit, we would specify an additional parameter b_{ij}^{AB}. Using an iterative algorithm to calculate the maximum likelihood estimates of the expected cell frequencies, the goodness-of-fit of the model is tested by calculating the likelihood ratio chi-square statistic, with the degrees of equal to the number of cells in the table less the number of parameters fitted.

Many of the models considered here are equivalent to logit models because a dependent variable is specified (Bishop, 1969). For example, one model in this section considers class identification to be a function of form and occupation. In models of this type, the n-factor interaction among the n independent variables is always fitted, for information about relations among the independent variables is of no substantive import.

Two additional points should be made. First, all the models considered here are "hierarchical," meaning that if a higher-order interaction is fit, all lower-order interactions or effects involving the same variables are also fit. In other words, higher-order effects cannot be included without simultaneously fitting related lower-order terms. For example, fitting the three-factor interaction involving A, B, and C (A-B-C) implies that A-B, A-B, B-C, A, B, and C are also fit.

Second, the statistical significance of a given term is determined in step-wise fashion, by comparing models with and without the effect in question and testing for the significance of the difference of the chi-squares describing the fits of the two models. This method of partitioning is possible because the likelihood ratio chi-square associated with a hierarchical model can be partitioned additively. As in the case described above, the model which includes the A-B parameter will always have a chi-square value no larger than the model without the parameter, and the number of degrees of freedom in the model with A-B will always be less than the number for the model without A-B, because more parameters are being fit in the former case. Thus, when the chi-squares and degrees of freedom of two hierarchical models are differenced, the probability that the effect missing in one model and present in the other is significant can be determined.

To estimate whether the change measured by the two forms differs, we fit a sequence of log-linear models. The first takes into account the three two-way associations (class-year, form-year, and class-form), that is, it assumes that the change in class identification is similar for both forms. This model fits well, with $X^2 = 1.83$, 3 df, and $P = .61$. Thus there is no evidence that the shift in class identification for the two forms differs, but it does assume that there is a difference in class identification between the two forms, which is identical in both years. What if we eliminate the latter assumption as well? We fit a model which assumes only that class identification has changed between 1956 and 1971, but which also assumes that class is unrelated to form, and that the relative frequency of the two forms is identical. This model specifies only

class-year and form effects. The model fits the data well, with X^2 = 5.56, 7 df, and P = .50. From this rather indirect test, we infer that the form of the questionnaire has little effect on our estimate of the change between 1956 and 1971. Analogous models fitting just the relative frequencies of middle and working class identifiers yields similar results, although the fits of the two models, as measured by the probability levels, are not as good (class-year, form-year, and class-form: X^2 = 1.46, 1 df, P = .34; class-year, form: X^2 = 4.90, 3 df, P = .18). Nevertheless, for the total population, a negligible effect of form on the estimate of change remains the most reasonable conclusion.

A search for "causes" of the 1971 form effect is guided by a general framework that assumes that some stimulus in the questionnaire, that differed in forms A and B, led the respondent to give slightly different responses in the two forms. A determinant might be detected by finding a difference in the association between the stimulus variable and class identification in the two forms. Note that such a finding does not allow us to statistically "explain away" the form difference in class identification. The only way to explain the difference would be to find <u>no difference</u> in the association between forms, and to find a marginal shift in both class identification and the other "causal" variable. In that case, a between-form difference in one variable is assumed to lead to a between-form difference in the other variable. Since neither variable is exogenous, if this were to occur, the search would continue for additional causal factors, etc. Thus statistical explanations in the customary sense are not the goal of this particular analysis.

Conforming to the above guidelines for choosing determinants of the form difference, seven variables seem most likely candidates for examination: tenure, number of televisions in the household, whether the household has a color television, number of telephones in the household, the education and occupation of the respondent, and spouse's occupation (if married). The last three follow the class identification model which posits traditional socioeconomic characteristics as determinants. Income is not included because it appears subsequent to class identification in both questionnaire forms. The first four items are life-style indicators which might be broadly interpreted as socioeconomic items. These appear immediately prior to class identification in form A; the others appear prior in form B. It seems wise not to dismiss any variable which might be directly related to class identification and which differs markedly in placement in the two questionnaire forms. (A list of items which appear before the class identification question in both forms appears in the Appendix.)

What we wish to test here is whether there is a three-way interaction among class identification, the socioeconomic variable of interest, and the form of the questionnaire. On the basis of the above arguments, we will look at form differences in association between class identification and each of the seven socioeconomic variables, whose percentages are arrayed in Table 2.6. The interaction test is made by fitting the three two-way associations of class, form, and the socioeconomic variable. For instance, in the joint distribution of class identification, education, and form, we fit class-education, class-form, and education-form. An acceptable fit indicates that there is no significant difference in the class-education association

Table 2.6.--Percentage Distribution of Class Identification by Socioeconomic Variable and Form, 1971 Detroit Area Residents

Socioeconomic Variable and Category	Form A Class Identification						Form B Class Identification					
	U	M	W	L	Total	(N)	U	M	W	L	Total	(N)
Tenure												
Own or buying	2%	46	50	2	100%	(721)	2%	50	45	2	100%	(701)
Rent	2%	32	52	14	100%	(196)	3%	39	48	10	100%	(219)
Number of televisions[a]												
1	2%	37	54	8	100%	(338)	2%	41	50	7	100%	(374)
2	2%	46	50	2	100%	(364)	2%	51	44	2	100%	(366)
3 or more	3%	50	45	2	100%	(208)	5%	57	37	1	100%	(175)
Own color television[a]												
Yes	3%	49	46	2	100%	(497)	3%	56	39	2	100%	(447)
No	1%	36	56	7	100%	(405)	2%	41	51	6	100%	(456)
Number of telephones[b]												
1	2%	36	56	6	100%	(416)	2%	43	51	4	100%	(429)
2	2%	50	46	2	100%	(378)	3%	54	40	4	100%	(349)
3 or more	2%	55	37	6	100%	(105)	5%	54	39	2	100%	(120)
Education												
Grade school	2%	22	70	6	100%	(135)	2%	36	56	6	100%	(137)
High school	1%	37	56	6	100%	(513)	1%	44	50	4	100%	(533)
College +	4%	65	29	1	100%	(277)	6%	63	28	3	100%	(256)
Occupation[c]												
Upper white	3%	64	32	1	100%	(213)	6%	68	25	2	100%	(196)
Lower white	1%	48	46	5	100%	(276)	1%	54	41	4	100%	(256)
Upper manual	2%	37	56	6	100%	(109)	1%	38	59	2	100%	(112)
Lower manual	1%	25	67	6	100%	(291)	2%	34	56	7	100%	(323)
Spouse's occupation												
Upper white	2%	66	32	0	100%	(196)	2%	72	26	1	100%	(172)
Lower white	3%	49	47	2	100%	(192)	3%	55	40	2	100%	(180)
Upper manual	0%	36	60	4	100%	(110)	2%	44	50	4	100%	(127)
Lower manual	2%	29	62	7	100%	(220)	2%	38	56	4	100%	(241)

[a] 27 cases without televisions excluded from panel.

[b] 54 cases without telephones excluded from panel.

[c] Here and throughout text, occupation categories are defined as follows: upper white = professional and managerial; lower white = sales and clerical; upper manual = craftsmen, foremen, and kindred; lower manual = operatives, service workers and laborers.

between form A and form B. In other words, the null hypothesis that the correspondence of a person's education and his class identification is identical in the two forms cannot be rejected, if the above model fits the data adequately. If it does not fit adequately, the "no interaction" model is rejected, and we infer that the association differs in the two questionnaire forms.

Inspection of the percentage data in Table 2.6 shows plainly that within any category of a socioeconomic variable, there is a higher percentage of people identifying with the middle class in form B than in form A. This follows from the previous finding that form B respondents are more likely to identify with this class. However, this is no indication that the association between the variable and class identification differs between forms. In fact, the evidence of such an interaction is wholly negative. Table 2.7 summarizes the fits of the previously specified model which tests for this interaction. In no case--for neither the four-class nor the two-class distribution, and for none of the seven socioeconomic variables--is the difference in association between the two forms statistically significant. Only for education does the difference approach a significant level, and here the relation is stronger in form A than in form B--just the opposite of what we expect on the basis of the above discussion. Thus far it seems overwhelmingly clear that the form difference in class identification has little effect on the association with other variables which are highly relevant to the analysis of class identification. Moreover, the effort to identify a variable or set of variables which triggered the form difference has come to naught.

Table 2.7.--Fits of Class-Form, Class-Socioeconomic Variable, Form-Socioeconomic Variable Model for Four-Category Class Identification Distribution and for Middle and Working Class Distribution

Socioeconomic Variable	U, M, W, L class			M, W class		
	X^2	Df	P	X^2	Df	P
Tenure	1.39	3	.71	0.10	1	.75
Number of televisions	1.60	6	.95	0.32	2	.85
Own color television	0.81	3	.85	0.22	1	.64
Number of telephones	8.56	6	.20	0.95	2	.62
Education	8.56	6	.20	4.94	2	.08
Occupation	7.23	9	.61	2.33	3	.51
Spouse's occupation	6.82	9	.66	0.24	3	.97

In the final pages of this chapter we wish to determine whether the form effect is different for men and women. The motivation behind this turn in the analysis rests on the idea that the class identification model, hence the meaning of class identification, differs for the two sexes. This reasoning will be spelled out in detail later, but at its core is the empirical observation that the socioeconomic life cycle, and the mode of status transmission, is quite dissimilar for men and women, especially married women. Women may well base their class affiliations on different criteria than men. Thus the relation of class identification to socioeconomic variables may differ for men and women, and the sensitivity to the context of the class variable may differ as well.

Table 2.8 presents the 1971 class identification distribution by form and sex. There appears to be little difference between forms for men, and a rather marked difference for women, in the middle and working class categories. Table 2.9 presents partitions of the form difference, separate for men and women. The form effect is due only to middle and working class females. However, there is no unequivocal evidence that the effect differs significantly for men and women. A model which assumes the form effect is similar for both sexes (class-form, class-sex, and sex-form) fits the data adequately for the four-class distribution (X^2 = 3.68, 3 df, P = .30), but less well for just middle and working class identifiers (X^2 = 3.42, 1 df, P = .06). This implies that, although sex specifies the class-form relation, we cannot say with any commanding assurance that the sex difference is real.

Table 2.8.--Percentage Distribution of Class Identification by Sex and Form, 1971 Detroit Area Residents

Sex	Form	Class Identification					
		U	M	W	L	Total	(N)
Male	A	3%	46	48	3	100%	(413)
Male	B	4%	47	48	2	100%	(404)
Female	A	1%	41	52	6	100%	(512)
Female	B	2%	49	44	6	100%	(524)

Table 2.9.--Partition of Form Difference in Class Identification, by Sex, for 1971 Detroit Area Residents

Comparison	Men			Women		
	X^2	Df	P	X^2	Df	P
Total association	0.78	3	.85	8.38	3	.04
M v. W	0.01	1	.92	8.33	1	.004
U v. (M+W)	0.39	1	.53	0.05	1	.83
L v. (U+M+W)	0.38	1	.54	0.01	1	.92

The prior examination of class-socioeconomic variable interactions with form can be carried out for the two sexes separately. This elaboration of the analysis yields an answer to two important questions. First, with the class-form association specified more precisely than before, is there now any clue to the cause of the form effect? Second, if we look within sex groups, is there any evidence of a difference in the association of class and the socioeconomic status indicators between the two forms which was not previously identified?

This analysis is carried out analogously to the prior one. It will be described only very briefly, for as before the findings are almost wholly negative. Table 2.10 presents the percentage data, and Table 2.11 summarizes the fit of the log-linear model for all variables in both sex categories. In only two cases--both involving the four category class distribution--can the model be rejected. One case relates class identification and the number of telephones in the household for males; the other concerns the association of tenure and class for females. Both of these findings are due to differences in lower class identification, rather than to middle or working class identification where the bulk of the people lie--a finding inferred from comparing the four-class and two-class tests. In no case is there any significant interaction involving only the middle and working class identifiers.

The sequence of largely negative findings reported above in this case is not the least bit disappointing. Just the opposite. An analyst would hope that a variable such as form would have little effect on the

Table 2.10.--Percentage Distribution of Class Identification by Socioeconomic Variable, Form, and Sex, 1971 Detroit Area Residents

Socioeconomic Variable and Category	Form A Class Identification U	M	W	L	Total	(N)	Form B Class Identification U	M	W	L	Total	(N)
Males												
Tenure												
Own or buying	2%	48	48	2	100%	(326)	4%	49	46	1	100%	(315)
Rent	5%	37	51	7	100%	(83)	2%	38	54	6	100%	(88)
Number of televisions[a]												
1	3%	43	50	4	100%	(141)	1%	40	55	4	100%	(143)
2	3%	49	45	2	100%	(172)	4%	46	49	1	100%	(172)
3 or more	2%	48	48	1	100%	(89)	8%	59	31	1	100%	(83)
Own color television[a]												
Yes	4%	53	43	1	100%	(227)	5%	53	41	1	100%	(222)
No	2%	38	55	5	100%	(172)	2%	39	56	4	100%	(173)
Number of telephones[b]												
1	4%	40	53	4	100%	(192)	2%	42	53	2	100%	(191)
2	3%	53	43	1	100%	(169)	4%	50	44	3	100%	(143)
3 or more	0%	54	42	5	100%	(41)	11%	57	32	0	100%	(56)
Education												
Grade school	3%	15	76	6	100%	(68)	4%	30	67	0	100%	(54)
High school	2%	40	55	3	100%	(193)	1%	39	58	3	100%	(214)
College +	5%	68	26	1	100%	(152)	8%	66	24	2	100%	(135)
Occupation												
Upper white	5%	68	26	1	100%	(126)	9%	71	20	0	100%	(111)
Lower white	2%	54	41	3	100%	(63)	2%	67	21	0	100%	(45)
Upper manual	2%	37	56	6	100%	(106)	1%	38	60	2	100%	(104)
Lower manual	2%	27	69	3	100%	(116)	2%	28	66	4	100%	(143)
Spouse's occupation												
Upper white	2%	73	26	0	100%	(55)	4%	56	40	0	100%	(50)
Lower white	3%	49	47	1	100%	(156)	4%	54	41	1	100%	(143)
Manual	3%	33	58	5	100%	(96)	2%	41	56	1	100%	(104)

[a] 17 cases without televisions are excluded from panel.

[b] 25 cases without telephone are excluded from panel.

Table 2.10.--Continued

Socioeconomic Variable and Category	Form A Class Identification U	M	W	L	Total	(N)	Form B Class Identification U	M	W	L	Total	(N)
							Females					
Tenure												
Own or buying	2%	44	52	2	100%	(395)	1%	52	44	3	100%	(386)
Rent	0%	28	53	19	100%	(113)	3%	40	44	13	100%	(131)
Number of televisions[c]												
1	1%	32	57	10	100%	(197)	2%	42	47	9	100%	(231)
2	1%	42	54	3	100%	(192)	1%	56	40	4	100%	(194)
3 or more	3%	51	42	3	100%	(119)	2%	55	41	1	100%	(92)
Own color television[c]												
Yes	2%	46	49	3	100%	(270)	1%	60	37	2	100%	(225)
No	1%	35	56	8	100%	(233)	2%	42	48	8	100%	(283)
Number of telephones[d]												
1	1%	32	59	7	100%	(224)	2%	43	50	6	100%	(238)
2	1%	46	49	3	100%	(209)	2%	56	37	5	100%	(206)
3 or more	3%	56	34	6	100%	(64)	0%	52	45	3	100%	(64)
Education												
Grade school	1%	28	64	6	100%	(67)	1%	40	49	10	100%	(83)
High school	1%	35	57	8	100%	(320)	1%	48	46	5	100%	(319)
College +	3%	62	34	2	100%	(125)	2%	60	34	4	100%	(121)
Occupation												
Upper white	1%	59	39	1	100%	(87)	1%	64	32	4	100%	(85)
Lower white	1%	46	47	5	100%	(213)	1%	51	44	4	100%	(211)
Manual	1%	25	66	8	100%	(178)	2%	40	49	9	100%	(188)
Spouse's occupation												
Upper white	1%	64	35	0	100%	(141)	1%	79	20	1	100%	(122)
Lower white	3%	50	44	3	100%	(36)	0%	60	35	5	100%	(37)
Upper manual	0%	36	61	4	100%	(104)	2%	45	49	4	100%	(121)
Lower manual	2%	25	65	8	100%	(130)	1%	36	57	6	100%	(143)

[c]10 cases without television are excluded from panel.

[d]28 cases without telephone are excluded fron panel.

Table 2.11.--Fits of Class-Form, Class-Socioeconomic Variable, Form-Socioeconomic VAriable Model for Four-Category Class Identification Distribution and for Middle and Working Class Distribution, by Sex

	Males						Females					
	U, M, W, L class			M, W class			U, M, W, L class			M, W class		
Socioeconomic Variable	X^2	Df	P	X^2	Df	P	X^2	Df	P	X^2	Df	P
Tenure	2.41	3	.49	0.11	1	.75	8.20	3	.04	0.47	1	.49
Number of televisions	8.56	6	.20	4.64	2	.10	6.08	6	.41	1.83	2	.40
Own color television	0.19	3	.98	0.01	1	.91	2.91	3	.40	0.51	1	.47
Number of telephones	13.08	6	.04	0.78	2	.67	9.96	6	.13	4.52	2	.10
Education	9.46	6	.15	3.32	2	.19	7.69	6	.26	3.48	2	.17
Occupation[a]	7.67	9	.57	1.49	3	.68	6.03	6	.42	3.98	2	.13
Spouse's occupation[a]	5.95	6	.43	4.33	2	.11	8.81	9	.45	0.94	3	.82

[a]Because only 11 female respondents reported holding an upper manual occupation, and only 12 men reported that their spouses held upper manual occupations, females holding these occupations (either self-reported or as spouses of male respondents) were combined with those holding lower manual occupations. See previous table.

interpretations and tests he makes. In this analysis we have teased out an effect of the variable on the marginal distribution, but we found that it was related to little else which may plausibly be affected by the form variable and in turn have an effect on class identification. The investigation by no means purports to be exhaustive, but the variables included in the examination comprise a set which is most likely to have an effect given extant theory about class identification and the formats of the respective questionnaires. The absence of significant evidence clears the path for further analysis.

CHAPTER III

PATTERNS OF CHANGE

Aggregate Change Between the Baseline Years and 1971

The number of times various populations of Americans have been asked about their class identification suggests that this variable not only is a prime target for class investigators, but that it also might be a target for those interested in measuring trends or in developing social indicators. As indicated in the first chapter, the data we are using were collected primarily for the latter purpose. This chapter presents the broad outline of change for the survey population. We begin by tracing the aggregate shift in class identification, and explicate these findings by looking at race, sex, and cohort differences in the change we observe.

Although measurements of class identification have been taken periodically since the time of the original Fortune survey (1940), studies of change are nevertheless rare. Among those which exist, the findings are not consistent. These studies seem to be fraught with methodological difficulties, most notably the lack of standardization in question wording among the various studies being compared.

Two recent investigations illustrate the difficulty. Based on a national sample of adult men in the United States in 1963, Tucker (1968) reports that 20 percent fewer respondents in his sample identify

with the working class than was the case in Centers' national study in 1945 (Centers, 1949b). However, Centers allowed his respondents to choose from among the upper, middle, working, or lower classes. Tucker gave his respondents the two additional alternatives of upper-middle class and lower-middle class. This disparity gave Tucker's respondents a greater opportunity to choose some form of middle class identification, and probably biased his sample away from working class identification.

Schreiber and Nygreen (1970) compare the marginal distributions of two surveys by the Gallup organization (both reported in Centers, 1949b: 77), of Tucker's study, and of seven surveys taken by the Survey Research Center. This gives a total of ten national observations between 1949 and 1968. They report a general trend toward rising working class identification until 1960, after which it dropped off, staying at a level just above that reported in 1945. However, these comparisons include four different sets of class categories which the respondent was offered for his choice of identification. Generalizing about trends across all studies is necessarily confined to those categories common to all studies. Even this operation may be imprudent, since the options offered a respondent may well affect his choice in ways the investigator would not anticipate (see, e.g., Schuman and Duncan, 1974). Strict standardization of question wording seems to be a minimal constraint if observations at different points in time are to be compared (Duncan, 1969: 10).

Of course, in practice, this ideal is frequently difficult to obtain. Chapter II points out that the exceptions to strict standardization in the present data sets are minor if not trivial. If we are correct in this assessment and if the short-term variation in class

identification is as slight as other trend measurements indicate, we would expect to find a shift between the 1950s and 1971 which is similar regardless of the baseline study we use. Table 3.1 displays the marginal distributions in class identification for the various studies. It includes subsamples of the 1956 and 1971 studies to effect the maximum number of comparisons among the four survey samples. Nevertheless, there are only four independent observations in the table.

We observe an aggregate shift for the Detroit area as a whole between 1956 and 1971, for the population of Detroit mothers between 1953 and 1971, and for Wayne County residents between 1956 and 1971, with an additional observation for the latter in 1957. The data show an increase in middle and lower class identification, and a concomitant decrease in working class identification, for the entire Detroit area population. In the population of mothers, we see a similar pattern of change, although in the baseline year the proportion in both the middle and lower class is somewhat higher than the 1956 Detroit area baseline. Whether the baseline differences are due to differences in the populations under study, to something more general such as a sex differential, or due to the three year time gap, is an open question. The similarity in 1971 of the distribution of mothers and all Detroit area residents suggests that population differences are not the cause. Finally, for Wayne County residents, the trend again resembles that of the other two comparisons, although the shift into middle class identification is not as prominent. The similarity in the 1956 and 1957 distributions reinforces the notion of small short-run variations. The overall "trend" is more difficult to cull from the data than it would be if the target populations in all four

Table 3.1.--Percentage Distribution of Class Identification of Respondents in the Detroit Area by Population Covered and Year

Population	Year	Class Identification[a] U	M	W	L	Total	(N)
Detroit Area	1956	2%	35	61	1	100%	(775)
	1971	2%	46	48	4	100%	(1853)
Detroit Area: Mothers with child under 19	1953	2%	42	54	2	100%	(561)
	1971	1%	47	46	7	100%	(601)
Wayne County	1956	3%	35	61	1	100%	(663)
	1957	2%	32	64	2	100%	(575)
	1971	2%	38	54	6	100%	(1281)

[a]U = upper class, M = middle class, W = working class, L = lower class. Cases where class identification was not ascertained or responding "don't know" are excluded from analysis.

years were similar. Nevertheless, the data in Table 3.1 show consistently that identification with the middle and lower classes has increased between the 1950s and 1971, and that working class identification has decreased.

Using the techniques described in Chapter II, we can test for significance of these shifts, and partition the shifts to find out where changes occurred among the four class identification categories. In essence, following the significance test and partitioning procedures tells us whether the casual observations made in the previous paragraph are statistically worthwhile.

Table 3.2 presents partitions for five comparisons implicit in the previous table. Panel (1) shows that the overall shift in class identification among Detroit area residents is highly significant. Partitioning this change indicates significant shifts in middle, working and lower class identification, with upper class identification remaining constant. These surges in middle and lower class identification also characterize the subpopulations of Detroit mothers and Wayne County adults, as panels (2), (4), and (5) disclose. Thus, regardless of the baseline year and the population within Detroit we observe, we find a consistent pattern of change, with more middle and lower class identifiers, and fewer people identifying with the working class, in 1971 than in the baseline years in the 1950s.

Does this pronounced shift signal a long-term or secular trend in class identification, or are these merely two points along a line of short-term fluctuations in the variable? If there is lots of short-run variation, then the changes from one year to the next should be nearly as large as changes for longer intervals. We have data for 1956-1957

Table 3.2.--Partition of the Aggregate Change in Class Identification for Populations in the Detroit Area

Population	Years Compared	Partition	X^2	Df	P
(1) Detroit Area	1956 v. 1971	Total	52.17	3	.001[a]
		M v. W	31.49	1	.001
		U v. M+W	0.03	1	.87
		U+M+W v. L	20.65	1	.001
(2) Detroit Area: Mothers with child under 19	1953 v. 1971	Total	24.49	3	.001
		M v. W	5.40	1	.02
		U v. M+W	1.10	1	.29
		U+M+W v. L	17.99	1	.001
(3) Wayne County	1956 v. 1957	Total	3.48	3	.32
		M v. W	0.77	1	.38
		U v. M+W	1.70	1	.19
		U+M+W v. L	1.01	1	.31
(4) Wayne County	1956 v. 1971	Total	31.80	3	.001
		M v. W	4.58	1	.03
		U v. M+W	0.42	1	.52
		U+M+W v. L	26.80	1	.001
(5) Wayne County	1957 v. 1971	Total	25.20	3	.001
		M v. W	9.18	1	.002
		U v. M+W	0.73	1	.39
		U+M+W v. L	15.29	1	.001

for the population of Wayne County. Looking at panel (3) of Table 3.2, we see that there is virtually no short-term change. This finding is consistent with the conjecture that the shifts we observe from the 1950s to 1971 represent secular trends.

We have described the gross pattern of change between the 1950s and 1971, and have presented evidence that the shift is both pervasive and secular. We begin now to explore several dimensions of this change by asking whether the two basic social distinctions of race and sex bear in any way upon class identification and its trend.

Race and Sex Differentials

Most of the subsequent analysis describes findings separately for males and females, for blacks and whites. Justification for this approach emerges from the conception that class identification is a subjective product of the stratification process and from widespread documentation of black-white and male-female differences in this process. Daniel (1972) and Jackman and Jackman (1973) present evidence that blacks and whites differ in the way their socioeconomic positions affect their subjective class affiliations. Specifically, the latter study shows that blacks' class identification does not rest in any significant way on their educational attainment or occupational status, as it does for whites. As we note in Chapter V, published evidence of a sex differential is sparse, perhaps because the possibility has not been broached. Nevertheless, if we work within the status attainment-class identification framework, acknowledgment of gross sex differentials in status attainment leads us to expect either a sex

differential in class identification, or that men and women identify with similar social classes on sex specific bases.

This section focuses on race-sex subgroup differences in class identification and on subgroup differences in the change described above. The analysis uses data from DAS studies in 1956, 1957, and 1971. Recall that the 1956 and 1971 data sets are the primary source of material in the dissertation for two reasons. First, of all four studies employed, only those in 1956 and 1971 sample the entire adult population of the Detroit area. Second, the 1971 class identification question is an exact replication of the 1956 question wording; questions in the other two studies (1953 and 1957) are minor variants of that wording.

For the white population, the 1956 and 1971 data sets are used exclusively. In each case, "whites" includes all non-blacks. For the black population, combining the 1956 and 1957 data sets yields a larger baseline sample. That the 1957 target population includes only Wayne County adults does not gainsay the appropriateness of combining the 1957 sample with the 1956 Detroit area sample for black respondents, since in 1956 all black respondents lived within Wayne County.

Table 3.3 shows the marginal shifts in class identification for the four subgroups. Perhaps the most startling aspect of the frequencies is that blacks, regardless of sex and year, are much less likely than whites to identify with the middle class, and much more likely to identify with both the working and the lower class. Marked sex differences in class identification are not prominent.

Table 3.3.--Percentage Distribution of Class Identification for Black and White Males and Females in the Detroit Area, 1956 and 1971[a]

		1956 Class Identification						1971 Class Identification					
Sex	Race	U	M	W	L	T	(N)	U	M	W	L	T	(N)
Male	White	2%	38	59	0[b]	100%	(301)	3%	53	43	1	100%	(654)
Male	Black	4%	13	81	3	100%	(113)	3%	21	69	7	100%	(163)
Female	White	1%	40	58	1	100%	(340)	1%	51	45	3	100%	(796)
Female	Black	6%	18	72	4	100%	(125)	3%	24	58	15	100%	(240)

[a]1956 and 1957 samples are combined for blacks.

[b]Percentage greater than 0, less than 0.5.

Blacks and whites also appear to differ in the pattern of their shifts between the two years. Tests of significance and partitions of within subgroup shifts are summarized in Table 3.4. The model against which these tests are made is the model of independence. Blacks seem to differ rather markedly from whites only among the males. Black males display no significant shift whatsoever; white males show a significant increase only in middle class identification. White females, however, manifest the same surge in middle class identification as white males, and display the influx of lower class identifiers which we previously found for the entire Detroit area population. White women, then, are the only subgroup to reflect the pattern of shifts which characterizes the Detroit residents in the aggregate. Although in the cross-section they differ, black women and white women closely resemble one another in their patterns of change; however, among black females the shift into middle class identification is not statistically significant.

A number of questions about these race-sex differentials deserve more rigorous examination. Suggesting that black and white men, for example, have different patterns of change implies that the 1956 differential is not the same as that in 1971, or that there is a statistical interaction involving class identification, race, and year for Detroit area men. Are black men more similar to white men in 1971 than in the past, or has the disparity increased? Do members of both racial groups experience a similar upgrading in their self-perceptions of class or did these subjective "benefits" accrue solely to whites as the above observations imply? Fitting a log-linear model to the joint distribution of race, year, and class for males (shown in the top two

Table 3.4.--Partition of Aggregate Change in Class Identification Between 1956 and 1971 for Black and White Males and Females in the Detroit Area

Sex	Race	Comparison	X^2	Df	P
Male	White	Total Association	25.42	3	.001
		M v. W	21.25	1	.001
		U v. (M+W)	1.52	1	.22
		(U+M+W) v. L	2.65	1	.10
Male	Black	Total Association	6.53	3	.09
		M v. W	3.36	1	.07
		U v. (M+W)	0.02	1	.89
		(U+M+W) v. L	3.14	1	.08
Female	White	Total Association	21.78	3	.001
		M v. W	15.34	1	.001
		U v. (M+W)	0.39	1	.53
		(U+M+W) v. L	6.05	1	.01
Female	Black	Total Association	15.38	3	.002
		U v. W	3.39	1	.07
		U v. (M+W)	1.04	1	.31
		(U+M+W) v. L	10.94	1	.001

rows of Table 3.5) provides an answer to these questions. The model of three two-way associations (race-year, race-class, class-year) provides an adequate fit to the data, both when considering all four class categories and when fitting the model only for middle and working class identifiers. See Table 3.5. The inference, therefore, is that the race differential of 1956 is maintained in 1971, with black and white men shifting their class affiliations at the same rate.

Is the pooled race differential for males statistically significant? The answer--a hearty "yes"--is evident by the very poor fit to these data of the model which omits the effect of race on class (i.e., which fits only the associations of race-year and class-year; see Table 3.5).

Analogous findings emerge for women. The between-year difference is similar for black and white women, and a pooled cross-sectional differential suffices to estimate the disparity in class identification in both survey years. Table 3.5 summarizes the fits of the alternative models which allow us to make these assertions.

Thus for both men and women, the two racial groups parallel one another in their change. One final question remains about the race differential: Are the cross-sectional differences between blacks and whites and the rate of change similar for both men and women? Here we look at the joint distribution of class, race, year, and sex. The model being fit posits independent effects on class identification of race, year, and sex, and it assumes the three-way interaction among the three independent variables. (Race, sex, and year are independent variables and their interrelations are of no concern; thus we fit the highest order interaction among them, analogous to the conventions of logit analysis. See Goodman, 1972.) This model fits the data well, with

Table 3.5.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Race, and Year, for Four-Category Class Identification Distribution and for Middle and Working Class Identification Distribution, Detroit Area Residents, 1956 and 1971

Model	U, M, W, L class			M, W class		
	X^2	Df	P	X^2	Df	P
Males						
(1) race-year, class-year, class-race	1.22	3	.75	0.02	1	.90
(2) race-year, class-year	94.80	6	.001	75,49	2	.001
Difference, (2) - (1)	93.58	3	.001	75.47	1	.001
Females						
(1) race-year, class-year, class-race	0.16	3	.98	0.003	1	.95
(2) race-year, class-year	103.35	6	.001	51.54	2	.001
Difference, (2) - (1)	103.19	3	.001	51.53	1	.001

X^2 = 12.44, 12 df, and P = .41 for the four-category class distribution, and X^2 = 3.88, 4 df, and P = .42 for the middle and working class identifiers. Thus, a single, pooled estimate of change suffices to describe the shift in class identification for both males and females, blacks and whites, and any combination of the four groups.

The change in class identification between 1956 and 1971, and the racial differential in both years, are well established. What of the difference between men and women? The prior model assumed a sex differential by fitting the effect of sex on class identification, but was it necessary? The only other investigation which explicitly compares men and women is Centers' (1949a), which finds negligible differences in the marginal distributions. Here we test for a sex effect by eliminating the sex-class association from the model described in the previous paragraph, and comparing that model with this one by looking at the difference in X^2 between the two models. Table 3.6 summarizes this procedure. The results are intriguing. For the four-class distribution, a sex effect is quite evident. The fit of the model without the association (model (2)) is poor, and the difference between this model and that which includes the sex effect is highly significant. On the other hand, if we confine our attention to just middle and working class identifiers, sex adds nothing to the description of the relationships (compare models (1) and (2) in Table 3.6). The implication is clear: the sex differential is only relevant for the extreme class identification categories, for the comparison being made here. Referring back to Table 3.3, the primary sex difference appears to be a disproportionate tendency for women to identify with the lower class.

Table 3.6.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Race, Sex, and Year, for Four-Category Class Identification Distribution and for Middle and Working Class Identification Distribution, Detroit Area Residents, 1956 and 1971

Model	U, M, W, L class			M, W class		
	X^2	Df	P	X^2	Df	P
(1) race-sex-year race-class, sex-class, year-class	12.44	12	.41	3.88	4	.42
(2) race-sex-year, race-class, year-class	27.79	15	.02	3.98	5	.55
Difference, (2) - (1)	15.34	3	.002	0.10	1	.75

Although this sex differential is statistically significant, its localization in the least populated class groups inhibits much further analysis. We might also note that the absence of a difference in middle and working class identification does not imply a similarity between men and women in the mechanisms which generate these class affiliations. Further analysis will focus on this issue.

The shift into middle class identification and out of the working class is the predominant finding thus far. In the mid-fifties, roughly a third of the Detroit area population chose a middle class affiliation, and in 1971 this approached 50 percent. At both ends of this shift, whites were about twice as likely as blacks to identify with the middle class. Some reasons for this race difference will be examined in the next two chapters. Finally, men and women differ in neither their rate of change in class identification nor in their propensities to identify with the middle or working classes in either the 1950's or 1971, although women appear more likely than men to identify with the extreme classes at both times.

Cohorts and Class Identification

A further dimension of change that we investigate in this section is the relation of class identification to cohort membership in our population. General motivation for this line of inquiry stems from the intrinsic usefulness of the concept of cohort for understanding many varieties of social change (Ryder, 1965). More specifically, we argue that the class identification of a cohort of people is in part determined by the cohort's unique historical experience, and that events of the historical period in which a cohort's class identification

crystallizes may have a lasting impact on the subjective class structure of that cohort. In Ryder's words, "Each new cohort makes fresh contact with the contemporary social heritage and carries the impress of that encounter through life" (1965: 884).

What types of "historical events" may have such an effect? Most models of class identification specify the individual's socioeconomic characteristics as determining factors. Extrapolating from the level of the individual to the social and economic structure, we might posit that the general economic state of the nation may also affect a cohort's class identification. In particular, we look for the influence of economic conditions during the cohort's formative years of adult economic activity. That is, if the argument holds that class identification crystallizes during the years people reach adulthood (some relevant correlates of adulthood being the end of formal schooling, entry into the labor force, marriage and family formation), then the state of the economy during these years may well affect class affiliations. According to the cohort framework specified above, these effects would persist throughout the cohort's life cycle, and, in this sense, fluctuations of the business cycle would serve to differentiate the class identification distributions of cohorts.

The post-1929 Great Depression serves as a temporal focus. Cohorts whose members recall struggling to begin their careers during these years might well hold different self-perceptions of class than those reaching their adult years in the more prosperous times either before or after the Depression. Depression cohorts would be more likely to identify with either the lower or working class than older or younger cohorts. The input cohort in 1971, whose members reached maturity

during the even more affluent sixties, would be less likely than any previous cohort to identify with the working or lower class.

This rather crude theory suggests that the change in class identification we have documented is due to a succession of cohorts, rather than to a secular change occurring in all cohorts. The upgrading in class identification between the 1950s and 1971 is a result of both mortality of the Depression cohort members and the influx of more recent affluent cohorts. A finding of a cohort differential in 1956 which corresponds to past business cycle fluctuations, the maintenance of this differential in 1971, and a markedly different pattern for the input cohort in the latter year, would be consistent with the cohort model of change we are looking for.

We begin by looking separately at the four race-sex subgroups. Although this complicates the analysis, the knowledge that blacks react differently than whites to fluctuations in the business cycle, and cognizance of black-white and male-female differences in socioeconomic attainment, caution us to treat the four race-sex subgroups separately. At the end of this section we focus on these subgroup differences.

Table 3.7 gives the distribution of class identification by cohort, race, sex, and year. Because approximately fifteen years elapsed between the two main points of observation in 1956 and 1971, we use fifteen year cohorts. The 1971 age categories match exactly the cohorts defined by their age in 1956. The 1957 data for the black sample match the 1956 sample by age rather than cohort. Consequently for blacks the baseline-1971 match is not precise, but we assume this is of little consequence. The format of Table 3.7 facilitates intra-cohort comparisons. For example, the 21-34 year olds in 1956 are

Table 3.7.--Percentage Distribution of Class Identification of Detroit Area Respondents by Sex, Race, and Cohort, 1956 and 1971

Sex	Race	1956 Class Identification							1971 Class Identification						
		Age	U	M	W	L	T	(N)	Age	U	M	W	L	T	(N)
Male	White								21-35	3%	55	41	1	100%	(235)
		21-34	3%	36	61	0	100%	(110)	36-49	6%	51	43	0	100%	(196)
		35-49	1%	40	59	0	100%	(98)	50-64	1%	56	42	1	100%	(151)
		50+	2%	39	58	1	100%	(93)	65+	0%	44	49	7	100%	(68)
Male	Black								21-35	2%	20	67	11	100%	(55)
		21-34	0%	13	84	3	100%	(38)	36-49	4%	24	65	7	100%	(46)
		35-49	7%	17	76	0	100%	(46)	50-64	2%	14	80	5	100%	(44)
		50+	3%	7	83	7	100%	(29)	65+	6%	33	56	6	100%	(18)
Female	White								21-35	0%[a]	56	40	4	100%	(257)
		21-34	2%	38	61	0	100%	(127)	36-49	1%	54	45	0[a]	100%	(250)
		35-49	2%	32	64	2	100%	(120)	50-64	2%	45	51	3	100%	(199)
		50+	0%	52	47	1	100%	(92)	65+	2%	46	43	9	100%	(90)
Female	Black								21-35	1%	27	50	23	100%	(105)
		21-34	4%	18	71	6	100%	(49)	36-49	1%	23	67	9	100%	(78)
		35-49	8%	16	73	3	100%	(37)	50-64	9%	20	64	7	100%	(44)
		50+	5%	21	72	3	100%	(39)	65+	8%	31	54	8	100%	(13)

[a]Percentage greater than 0.0, less than 0.5.

members of the same cohort as people 36-49 in 1971. For any race-sex subgroup, following this or any row across the table gives the intra-cohort shift.

The cohort of people aged 35-49 in 1956 corresponds approximately to the group of people who began their careers during the Depression. In 1930, they were between 9 and 23 years old. By 1940 they were 19 to 33. We expect these people to be more likely than members of the other two cohorts and the input cohort in 1971, to identify with the working and lower classes, since these two classes are at the lower end of the subjective class structure. Moreover, we expect the disparity to remain invariant between 1956 and 1971.

Look first at the upper panel of Table 3.7, which shows the distribution of class identification by cohort and year for white males. In 1956, men in the youngest cohort are less likely to identify with the middle class than those in the other cohorts. By 1971, this cohort (now aged 36-49) is still somewhat less likely to have middle class identifiers than either the next older cohort or the input cohort, but members of the oldest cohort are now the least likely to consider themselves middle class. They are also the most likely to identify with the lower class.

These observations do not coincide with the expectations stated above; they imply a somewhat different cohort effect than the hypothesized one both in 1956 and in 1971, and a shift in the cohort effect between the two years. But are these effects observed for white males merely due to sampling error? We fit two models. The first, taking as given the three two-way associations among cohort, class identification, and year, tests the null hypothesis that the cohort effect is

identical in 1956 and 1971. We look here at only those cohorts common to both years, with cohort-year indicating an intracohort shift. This model describes the experience of white males very well, with $X^2 = 1.87$, 6 df, P = .93. We infer that, contrary to the previous casual remarks about a change in the cohort effect between 1956 and 1971, the cohort differential is invariant in the two years.

This finding refutes not only our particular hypothesis about a changing cohort differential, but any more general model of social change which asserts that people of different ages will show different responses to change as they grow older. The "fixation" model, for instance, proposes that proneness to change declines with age (Carlsson and Karlsson, 1970). Under this model, we would expect the youngest cohort to shift its class affiliations most, with the rate of change declining monotonically with the increasing age of the cohort. This implies a three-way interaction among cohort, class identification, and year--an interaction which white males do not display.

The model we fitted to the data "takes as given" a cohort differential. A model without this association (fitting only cohort-year and class-year) assumes that the class identification of the three cohorts is identical, and that the change in class was homogeneous for all cohorts. This model fits the data for white males very poorly, with $X^2 = 27.89$, 12 df, P = .006. Thus we reject the hypothesis that the three cohorts are similar in their class affiliations, and from the previous model we know that the association is similar in both years. Therefore a pooled class-cohort association is sufficient to describe these data.

Pooling this association involves merely taking the upper panel of Table 3.7 and collapsing across the year dimension. A partition of this association tells us which categories of class identification and which cohorts constitute the overall relation between class identification and cohort. The top panel of Table 3.8 presents one such partition. Most of the association is due to the disproportionate number in the oldest cohort who identify with the lower class, and another portion is due to the middle cohort's being less likely to identify with the upper class. This particular pattern hardly follows from the "economic condition" model we presented earlier. The middle cohort, whose members reached adulthood in the midst of the Depression, show a disporportionate tendency to identify with the middle and working classes <u>combined</u>, and none of the cohorts differs markedly in its frequency identifying with either in the middle <u>or</u> the working class. Perhaps the most remarkable aspect of the partition is that it specifies that the cohort differential involves only the extreme classes, rather than the middle and working classes with which most of the people identify, hence with which most of the analysis is concerned.

The 1971 input cohort remains to be examined, but we turn first to a brief description of the cohort differential for black males and for white and black females. Table 3.7 shows data for these three subgroups, respectively, in the second, third, and fourth panels. Before beginning the discussion, a couple of cautions are in order. First, the smaller sample size of blacks means that any cohort differential (or any other association) which shows up in the percentage table is much less likely to be significant for blacks than if we observe identical figures for whites. Second, as should be clear from the

Table 3.8.--Partition of the Association Between Class Identification and Cohort Membership for Detroit Area Whites, Pooled 1956 and 1971 Observations, by Sex

Sex	Comparison	X^2	Df	P
Male	Total Association	24.52	6	.001
	M v. W	2.01	2	.36
	U v. (M+W)	8.29	2	.02
	21-34 v. 50+[a]	0.17	1	.68
	35-49 v. (21-34 + 50+)	8.12	1	.004
	L v. (U+M+W)	14.22	2	.001
	21-34 v. 35-49	1.61	1	.21
	50+ v. 21-49	12.61	1	.001
Female	Total Association	21.93	6	.001
	M v. W	6.03	2	.05
	35-49 v. 50+	4.91	1	.03
	21-34 v. 35+	1.11	1	.29
	U v. (M+W)	0.97	2	.61
	L v. (U+M+W)	14.93	2	.001
	21-34 v. 50+	14.76	1	.001
	35-49 v. (21-34 + 50+)	0.17	1	.68

[a]Cohort designated by age in 1956.

discussion of white males, dealing with a three-dimensional table where one or more variables are polytomous is a very complicated process and not one readily amenable to the sort of verbal data reduction which results when we deal with dichotomous variables or interval variables. We prefer, therefore, to shorten the discussion by concentrating primarily on statistically significant and/or substantively meaningful results.

As with white males, we begin by assuming a cohort differential, and look for a change in the cohort pattern between study years. We expect no change in whatever differential we observe. For black males (panel 2 of Table 3.7), it appears that the 1956 pattern where the middle cohort is more likely to identify with the middle class actually reverses in 1971, with that cohort now being the least likely to identify with the middle class, and the most likely to identify with the working class. The 1971 pattern seems also to conform rather closely to the economic condition model.

However, sampling error alone may account for the change we observe. Fitting the three two-way associations among class identification, cohort, and year for black males (only for cohorts common to both years) gives an acceptable fit to the data (X^2 = 10.95, 6 df, P = .09). Does the class identification even differ among the three cohorts of this subgroup? Fitting a class-year and cohort-year model indicates that the answer is "no," since this model which excludes the class-cohort parameter fits adequately (X^2 = 13.71, 12 df, P = .32). Thus there is no evidence of a cohort differential in either year for black males.

Turning to white women, their distribution is in the third panel of Table 3.7. These people show little evidence of a cohort interaction with the change in class identification. In both years the middle cohort is the most likely to identify with the working class. If this observation holds up under statistical scrutiny, it provides the only solid evidence thus far that the depression cohort behaves as we hypothesize. The model assuming no three-way interaction among class identification, cohort, and year (again omitting the 1971 input cohort) fits the data adequately (X^2 = 9.78, 6 df, P = .13), and the model which assumes no cohort differential in either year fits very poorly (X^2 = 34.86, 12 df, P = .001). Although for white women the cohort has a substantial impact on their class affiliations, the evidence is somewhat marginal that the cohort effect is identical in both years.

As with white males, but with less justification, we pool the cohort-class identification association across years and partition this association to see which class categories and cohorts it involves. The bottom panel of Table 3.8 presents this partition. The middle cohort is significantly more likely than the oldest cohort to identify with the working class, and the oldest cohort is much more likely than the youngest cohort to identify with the lower class. These provide somewhat ambiguous support for our hypothesis. The latter finding comprises most of the chi-square value describing the association of cohort and class identification for white females. This subgroup is consistent with white males in that most of the cohort effect we observe concerns only the extreme class identification categories.

Finally, in the bottom panel of Table 3.7, black females show little sign of any cohort effect. The oldest cohort may be somewhat

more likely than the other two cohorts to identify with the middle class, but the difference is probably not statistically significant. Indeed, both the model assuming the three two-way associations among class identification, cohort, and year, and that assuming no class-cohort association, fit these data extremely well (respectively: $X^2 = 1.62$, 6 df, P = .95; $X^2 = 6.93$, 12 df, P = .86). For people common to both years, the cohort has no bearing on the class identification of black women.

We now look at the 1971 input cohort (those 21-35 years old) by comparing it with people older than 35 that year. The economic conditions model suggests that, because these people began their careers during more affluent times than any other cohort, we will find members of the input cohort more prone to identify with the middle class. However, for none of the subgroups in Table 3.7 does the input cohort differ markedly from the other cohorts in its middle class identification. Except for black females, we cannot reject the hypothesis that the input cohort's class identification distribution is identical to that of the other three 1971 cohorts combined. Comparing those 21-35 with those 36 and older yields a two-by-four table. The class identification of the input cohort is not significantly different for white males ($X^2 = 0.76$, 3 df, P = .86), for black males ($X^2 = 1.86$, 3 df, P = .60), or for white females ($X^2 = 6.87$, 3 df, P = .08). However, for black females the difference is significant ($X^2 = 14.21$, 3 df, P = .003), and partitioning shows that most of this association is due to the disproportionate number of lower class identifiers in the input cohort (L v. (U+M+W): $X^2 = 10.27$, 1 df, P = .001). Once again, the only cohort effect culled from the data

involves only an extreme class identification category. That this effect prevails only for black women prevents any obvious interpretation.

We have submitted the data to a careful search for cohort effects, tying the analysis together with a loosely specified model about the influence of economic conditions on class identification. It seems clear that where class identification has shifted, the change is homogeneous with respect to cohort. There is no evidence that class identification "crystallizes" in the early stages of the adult life cycle and remains invariant thereafter. Likewise, we find no support for the notion that a person's willingness to change his class identification rigidifies as he ages. The only significant cohort effects repeatedly crop up as age differences in the cross-section. These might be due to socioeconomic disparities of people of different ages (differences in income, education, and occupation, for example) which in turn may be cohort-related phenomena. But this is probably too simplistic a causal interpretation as well, since these cross-sectional differences almost always involve only the upper or lower class category, with which relatively few people identify. In short, no facile or substantively meaningful interpretation comes to mind as a way of explaining the inconsistent pattern of results we observe.

We conclude by summarizing the findings and testing for the race and sex differentials implied in prior discussions. Consider the data in Table 3.8 as a joint distribution of class identification by year, cohort, race, and sex. (This summary omits the 1971 input cohort.) Class identification is the dependent variable and the others are independent variables. The analysis in this section shows a class identification difference among cohorts for white males and females,

but not for blacks. The cohort effect appears to differ between white men and white women. Finally, for each sex subgroup of whites, the cohort effect is similar in both years.

Is this black-white and male-female difference significant? Model (1) in Table 3.9 fits the four-way interaction among the independent variables (as do all subsequent models in this section) and independent effects on class identification of cohort, race, sex, and year. That is, under model (1) none of the variables interact in their effect on class, which assumes that the cohort difference is similar for males and females, blacks and whites, and in 1956 and 1971. This model does not fit.

The second model in Table 3.9 incorporates interactions of cohort, class identification and sex, and cohort, class identification, and race. Here we specify that the cohort effect differs by sex but that this difference is the same for blacks and whites, and that the cohort effect differs by race, but that this difference is the same for men and women. The model fits and the fit is significantly better than model (1) which does not include the two three-way interactions. Models (3) and (4) in this table show that when either of the three-way interactions (sex-cohort-class or race-cohort-class) are omitted, the fit to the data is significantly worse than model (2).

Model (2), then provides the best fit, and in this sense the best summary of the data. That it does not assume that the cohort effect on class identification is associated with year underscores the remark that the cohort does not directly bear upon the change in class identification. The change we observe occurs regardless of cohort membership, and even the 1971 input cohort closely resembles

Table 3.9.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Cohort, Sex, Race, and Year, for Detroit Area Residents in 1956 and 1971.

	Model[a]	X^2	Df	P
(1)	year-class, cohort-class, race-class, sex-class	83.22	54	.007
(2)	year-class, cohort-race-class, cohort-sex-class	43.14	42	.42
	difference, (1) - (2)	40.08	12	.001
(3)	year-class, sex-class, cohort-race-class	60.96	48	.10
	difference, (3) - (2)	17.82	6	.007
(4)	year-class, race-class, cohort-sex-class	66.49	48	.04
	difference, (4) - (2)	23.35	6	.001

[a]All models fit four-way interaction among year, cohort, race, and sex.

people of other ages. The cohort differences we find are consistent for the three cohorts in 1956 and in 1971. Although this persistence implies some relevance of the cohort to class identification, its isolation primarily in the upper and lower class categories, and its interaction with the sex and race of the individual combine in a pattern which permits only prolonged description and which defies substantive interpretation. In this sense the cohort seems of dubious value in getting at the mechanism of social change, although this examination has allowed us to reject several simplistic models of change.

Summary and Conclusion

This chapter provides a basic outline of the shift in class identification for the Detroit area population between the 1950s and 1971. The population in the latter year shows substantially more middle class and lower class identifiers than Detroit area residents in the 1950s, with identification with the upper class remaining constant. Disaggregation by sex and race shows that men and women and blacks and whites do not differ in their patterns of change, although both race and sex groups differ in the cross-section. Disaggregation of the shift by cohort shows that the three cohorts we identify participate about equally in the change in class identification. Thus the change in class identification seems to be a pervasive phenomenon.

The results of this chapter should caution other investigators who make easy assertions about the "direction" of the shift in class identification as well as about its causes after a cursory examination

of the marginals. Class identification does not act as a unidimensional, interval-scale variable in its change. The shift is away from working class identification, which many observers would expect. But it is a shift both into the middle class and into the lower class. The former may be explainable in terms of shifts in socioeconomic well-being. Our analysis turns to this topic in the next chapter. The shift toward lower class identification, however, turns counter to expectations based on a socioeconomic status model. We are not prepared now to conjecture about the lower class dimension of change. But it reminds us that we are dealing with a four-category variable, whose relations with other variables, including time (year) may be quite complex. The log-linear technique has allowed us to discover patterns which other techniques which assume linearity would have masked. Perhaps a wise first step in clarifying some of the conceptual ambiguity enshrouding the variable would be to gather appropriate data to ascertain dimensionality and other scaling properties.

CHAPTER IV

SOCIOECONOMIC STATUS AND CLASS IDENTIFICATION AMONG DETROIT AREA MEN

Theoretical Issues

This chapter examines the relationship of class identification and socioeconomic status among males in the Detroit area. It takes as its point of departure the basic model of the socioeconomic determination of class identification, as described in Chapter I and in Hodge and Treiman (1968) and Jackman and Jackman (1973). Both our objectives and the techniques we employ, however, differ from these two previous studies. These studies concentrate on a single cross-sectional observation for developing their respective models of class identification and testing their hypotheses. They also both use regression techniques with class identification appearing as a scaled dependent variable.

In the present chapter we focus on the change in class identification and its relationship to the change in socioeconomic status. The core issue is whether the correspondence of socioeconomic status and class identification changes over time. We argue below that this correspondence can be construed as an indicator of the class consciousness of a population. We also wish to know whether the shift in the socioeconomic composition of the population can account for the change

in class identification. If it can, this adds weight to the idea that socioeconomic status is a causal factor in class identification.

The issue of class consciousness inevitably arises in discussions of class identification. We have successfully eschewed this point thus far, but an examination of the concept and measurement of class consciousness at this time will be helpful.

The present analysis does not accept class identification as an indicator of class consciousness, at least as Marx conceived of the latter. For Marx, class consciousness is the product of a person's objective class situation, which is in turn based on a person's relation to the means of production (Feuer, 1959: 43). And class consciousness is not the product of the class situation alone, but also of the process of class conflict by which society changes. It can be argued that because in the Marxian scheme the ultimate motivation behind social change lies in the objective relations of people to the means of production, then class consciousness as Marx viewed it is primarily an epiphenomenon. That is, Marx did not harbor any psychological determinism in his model of social change (Popper, 1966: chapter 16). On the other hand, to the extent that class consciousness indicates the accurate perception of class interests, then the class will act accordingly to follow its historical path. The latter interpretation gives Marxian class consciousness a central role in social change, although such consciousness is still rooted in the relation of the class to the means of production.

The usefulness of Marx in explaining class consciousness in a theoretical sense is restricted due to his "historicist" perspective. Marx clearly conceived of classes and class consciousness only insofar

as they define the social conflict that inevitably characterizes the transformation of societies in any particular historical period leading ultimately to socialism. Popper argues that this constitutes historical prophecy rather than social theory (1959). At the least, class consciousness rests on historical assumptions that are difficult if not impossible to test.

This argument about the use of class identification runs against the grain of much of the literature in the area. Centers' pioneering effort (1949b), for example, bases most of its theory and inferences on the assumption that class identification is a valid measure of class consciousness. Jackman and Jackman (1973) take a step in the right direction in choosing to distinguish between class identification and class consciousness. They state that class identification "deals with perceived self-location in the socioeconomic structure" (1973: 569). On the other hand, class consciousness "deals with a series of issues arising from this perceived self-location, such as the intensity of the perception, and its effect on political orientations" (1973: 569).

Thus, Jackman and Jackman treat class identification as the individual's own perception of his position in a society's system of stratification, and in this sense class identification is affected by a person's socioeconomic status. Of course, socioeconomic status is not unidimensional and the dimensions do not correlate highly. Hodge and Treiman point out the implications of this fact for class identification: "When, as in the United States, equally salient objective criteria of social status such as education and income share a common variance of no more than 30 percent, numerous individuals

will be able to support different class identifications when different criteria are employed" (1968: 535). The correspondence between class identification and various indicators of socioeconomic status is well established. Ever since Cantril's investigation (1943), the evidence on this count has been consistent, and it has been taken as support that people base their class affiliations on their objective social standing.

Class identification can be interpreted simply as a measure of where people place themselves in a pre-specified class structure. The low nonresponse to this question (typically one or two percent) may confirm our belief that the item serves a valid frame of reference for most people. But operations that alter this frame of reference have been shown to change responses. There is little evidence of an explicit, consensual class structure, since rather minor changes in the measuring instrument affect people's class affiliations. However, once the structure is defined ("pre-specified"), class identification covaries meaningfully with other variables.

In this analysis, the associations of class identification and the socioeconomic variables of education, occupation, and income, are considered to be measures of class consciousness (cf., Duncan, 1970). Such a measure surely does not indicate class consciousness in the traditional Marxian sense. Instead we are talking of class consciousness in terms of the relation between perceptions of positions in a class structure, and objective locations in a socioeconomic structure. That is, people holding different occupations or earning different incomes tend to identify with different social classes. The more rigidly class perceptions align with these status indicators, the

greater the degree of class consciousness (as we define it) in the population. Certainly, the structure of socioeconomic status is multidimensional. Thus, our version of class consciousness will be multidimensional as well. We look only at class consciousness with respect to education, occupation, and income. The techniques we use to measure class consciousness do not assume that either class identification or the socioeconomic variables are scaled indexes. This allows us to examine whether the relationships are linear, as other multivariate investigations assume, as well as where the departures from linearity or monotonicity take place.

In addition to looking at class consciousness and its changes we inquire whether the shift in socioeconomic status can account for the shift into middle class identification for white men. Secular trends toward higher scoial standing for people in the United States are well documented. In general, people earn more (Miller, 1966; Merriam, 1968), have more schooling (B. Duncan, 1968), and hold higher status occupations (O. D. Duncan, 1966), now than in the past. Whether these trends suffice to explain the shift in class identification is a question of considerable interest.

Last, we will try to replicate Jackman and Jackman's (1973), finding that blacks and whites differ in their objective status-subjective class associations. They demonstrate that blacks, unlike whites, show no significant (linear) association between their class identification and either education or occupational status. Income, however, appears to be a salient determinant for both racial groups. Replication of this finding using techniques that make fewer

assumptions about the form of the distribution would further support the notion that among blacks the ascriptive racial factor outweights the achievement factors, which are so important for the class identification of whites (Jackman and Jackman, 1973: 578).

Relations Among White Males

Chapter III documented an increase from 38 percent to 53 percent in the identification with the middle class for white males. We now ask whether this increase is associated with a corresponding shift in the education, occupation, or income composition of these white males residing in the Detroit area. Has the association of these socioeconomic variables with class identification tightened or loosened with time?

Table 4.1 shows the distribution of white men identifying with the middle and working class by their education, occupation, and income in both 1956 and 1971. Note that the focus now is on only middle and working class identifiers. This will be the analytical focus throughout the rest of the dissertation. There are two important reasons for looking at only the middle and working classes.

First, the vast majority of the respondents in either 1956 or 1971 have chosen to identify with these two classes. Only a small number have affiliated with the upper or lower classes. Because this is a multivariate analysis and because the log-linear technique of analysis works from multi-way frequency tables, to include the extreme class categories would yield a sizeable number of empty cells. Statisticians have yet to determine the robustness of the technique in the face of many zero cells. More specifically, the problem lies

Table 4.1.--Percentage Distribution of Class Identification of White Detroit Area Males, by Occupation, by Education, and by Income, 1956 and 1971

Socioeconomic Variable and Category	1956 Class Identification				1971 Class Identification			
	M	W	T	(N)	M	W	T	(N)
Occupation[a]								
Upper white	82%	18	100%	(56)	78%	22	100%	(203)
Lower white	61%	39	100%	(36)	64%	36	100%	(87)
Upper manual	33%	67	100%	(73)	39%	61	100%	(174)
Lower manual	18%	82	100%	(126)	37%	63	100%	(147)
Education								
College	72%	28	100%	(65)	77%	23	100%	(242)
High school	35%	65	100%	(141)	45%	55	100%	(306)
Grade school	22%	78	100%	(87)	28%	72	100%	(75)
Income[b]								
1. High	65%	35	100%	(48)	78%	22	100%	(224)
2. Med. high	49%	51	100%	(79)	47%	53	100%	(188)
3. Med. Low	25%	75	100%	(124)	32%	68	100%	(121)
4. Low	34%	66	100%	(38)	39%	41	100%	(57)

[a]Occupation categories: upper white = professional, managerial; lower white = sales and clerical; upper manual = craftsmen, foremen, and kindred; lower manual = operatives, service workers, and laborers.

[b]Income categories: 1956: 1 = $10,000+; 2 = $7,000-9,999; 3 = $4,000-6,999; 4 = $0-3,999. 1971: 1 = $15,000+; 2 = $10,000-14,999; 3 = $6,000-9,999; 4 = $0-5,999.

in cells of zero expected frequency rather than cells of zero observed frequency. But in most of the models explored here, we assume higher-order interactions, which would assure many cells of zero expected frequency.

The second reason for excluding the upper and lower class categories is because we have observed that the major changes in class identification involved the middle and working classes. Thus for the purpose of explaining social change, the extreme class categories are largely irrelevant.

The top panel of Table 4.1 shows that the association of class identification and occupation may have shifted between 1956 and 1971, with white collar workers maintaining similar class identifications, and blue collar workers, especially those in the lower manual category, becoming much more likely to identify with the middle class in 1971 than they were in 1956. There remains in 1971 a marked difference among the four occupation categories in their percentages of middle and working class identifiers. Nevertheless this difference seems to have diminished since 1956.

A model which fits the associations of class identification and year, class identification and occupation, and occupation and year can be used to test for this change in the relationship between class identification and occupation. The model assumes that the association did not change between 1956 and 1971. It fits the data poorly, with $X^2 = 7.42$, 3 df, and $P = .06$. The class consciousness of white men, with respect to their occupation, has apparently lessened with time. If we order the occupation categories as they appear in Table 4.1, two findings emerge. First, in either year, the

lower the level of the occupation, the more likely one will identify with the working class. Second, the increase in middle class identification for white males is negatively related to occupation: those with lower status occupations are much more likely to have shifted toward middle class identification than those with higher status occupations. Indeed, upper white collar workers are actually a bit less likely to identify with the middle class in 1971 than they were in 1956.

Turning to education and its association with class identification, the data in the middle panel of the table don't exhibit the same sort of interaction with year that characterized the relationship between class identification and occupation. Within any of the three education categories, the increase in middle class identification is between five and ten percentage points. A model assuming that the association between education and class identification is unchanged between 1956 and 1971 (fitting class-education, education-year, and class-year) fits these data quite well, with $X^2 = 0.27$, 2 df, and $P = .88$. Clearly, white men's class consciousness, with respect to education, is unchanged.

The bottom panel of Table 4.1 shows the relation of class identification and income in the two years. Within all but the "medium high" income category we observe some increase in middle class identification. The highest income people seem to have shifted somewhat more than the lowest, but the model assuming the three two-way associations among class identification, income, and year fits the data adequately ($X^2 = 3.18$, 3 df, $P = .36$). We cannot reject the

hypothesis that the income-class identification association is identical in 1956 and 1971.

A close examination of the "income" panel of Table 4.1 shows that the relation of income and class identification is not monotonic both in 1956 and in 1971. The lowest income group in both years has a higher proportion identifying with the middle class than the next higher income group. Among the upper three income categories we find a monotonic pattern similar to that characterizing the associations of class identification with both education and occupation. This departure from the expected pattern for income is striking both in its magnitude and in its consistency, at least in this subgroup of white males. We hesitate to address its implications without first looking at the remainder of the data.

The class consciousness of these white males, then, diminishes when we consider their occupations but remains constant when looking at their educational and income levels. Even the change in the occupation-class identification association is of borderline statistical significance. For this subgroup, class affiliations are embedded in socioeconomic characteristics in 1971 much as they were in 1956.

The foregoing analysis implies that neither education, occupation, nor income "explains" the shift in class identification. That is, if any of the three socioeconomic variables completely accounts for the shift into the middle class, we would observe no change in class identification between 1956 and 1971 within categories of a socioeconomic variable. The aggregate shift in class identification would correspond to an aggregate shift in the socioeconomic composition

of the population, with the association between class identification and the socioeconomic indicators remaining constant.

However, we observe a change in social class identification within most of the categories of education, occupation, and income. This net shift, controlling for the change in socioeconomic composition between 1956 and 1971, was fitted to the data in the above models by including a class-year parameter. Obtaining a good fit when eliminating this parameter implies that the shift in class identification is accounted for by the change in socioeconomic status. In this way we test for the significance of the net shift in class identification, once the shift in education, occupation, or income is taken into account.

For the joint distribution of occupation, class identification, and year, this model takes into account the associations between occupation and class, and occupation and year. The model fits the data (upper panel of Table 4.1) poorly, with $X^2 = 13.11$, 4 df, and $P = .01$. This should not be surprising, since the class-occupation association must be similar in both years in order for occupation to work as an explanatory variable, and the previous findings indicate that the probability of a similar association is quite small.

Fitting similar models for both education (education-class and education-year) and income (income-class and income-year) will determine whether either of these two socioeconomic variables can account for the shift in class identification. The middle and lower panels of Table 4.1 show the data for education and income, respectively. The models for both variables provide an adequate but not exceptionally good fit (education: $X^2 = 5.68$, 3 df, $P = .13$; income: $X^2 = 5.34$,

4 df, P = .25). The difference in X^2 and df between this model and the previous model, which tests for class consciousness, provides a test of significance for the effect of year on class identification. This net effect will not be significant if the socioeconomic variable explains the change in class identification. This difference is significant for the model relating education, class identification, and year (X^2 = 5.41, 1 df, P = .02), but it is not significant for the income model (X^2 = 2.15, 1 df, P = .14). Thus, income is the only socioeconomic characteristic we look at that statistically explains the shift into middle class identification for white males.

There is good cause to wonder whether the behavior of the relations of class identification and occupation, and class identification and income might not be complementary pieces of a slightly more complex model of social change. Specifically, these findings bring to mind the so-called "embourgeoisement" thesis prevalent in British literature on social stratification (Goldthorpe and others, 1968). The broad outline of this thesis is disarmingly simple. The argument proposes a sequence wherein the advances of industrialization lead to the increasing affluence of the blue collar worker relative to the white collar worker, which is accompanied by the blue collar worker's taking on traditionally white collar life-styles, values, attitudes, and behaviors. In other words, society is becoming increasingly "middle class," and the primary determinant of this trend is economic.

For our data, the "embourgeoisement" thesis may have possible explanatory power for the shift into middle class identification for white males. Under the thesis, we would expect the disproportionate

shift among men lower in the occupational structure to be explained by their disproportionate gains in income over the time period covered. We can test this idea by fitting models to the joint distribution of class identification, income, occupation, and year.

The first model we fit provides a conservative test of the thesis, by assuming independent effects of income and occupation on class identification. Under the model we fit the three-way interaction among income, occupation, and year (which takes as given any change in the income-occupation association), and the two-way associations between income and class, and occupation and class. The model provides a relatively poor fit to the data, with $X^2 = 36.31$, 25 df, and $P = .07$. An alternative model that uses up more degrees of freedom by assuming that occupation and income interact in their effects on class identification, also provides a poor fit, with $X^2 = 28.83$, 16 df, and $P = .03$. The difference between these two models, which is not significant ($X^2 = 7.48$, 9 df, and $.50 < P < .75$), indicates that there is in fact no interaction between income, occupation, and class identification.

The disproportionate shift in class identification among the blue collar workers cannot be explained by their gains in income relative to white collar workers. In this sense "embourgeoisement" seems hardly viable as an explanation for either the interaction of class identification and occupation with year, or the shift in class identification itself. This is, of course, a rather narrow test of the embourgeoisement thesis, but it joins with other negative evidence (Goldthorpe and Lockwood, 1963).

In looking at the effect of socioeconomic status on the change in class identification, we wish ideally to examine the three

socioeconomic variables simultaneously. Unfortunately, this is difficult to accomplish given the categorization of variables presented in Table 4.1. The sample size is simply inadequate to handle a cross-tabulation of education, occupation, income, class identification, and year--a table containing 192 cells. Two make-shift solutions involve creating a socioeconomic index from education, occupation, and income, or dichotomizing each of the three socioeconomic variables. We choose the latter procedure because it allows us to distinguish the net effects of each of the three socioeconomic variables.

Table 4.2 presents the percentage distribution of class identification for white males, cross-tabulated by year, occupation (white collar, manual), education (college or more, high school or less), and income (high, low). Perhaps the most striking aspect of the percentages is the virtual absence of a shift in class identification within any of the categories of socioeconomic status. This suggests that, at a minimum, the three socioeconomic variables jointly account for the increase in middle class identification. That is, net of the effects of socioeconomic status on class identification, the change in class identification is not significant. We test this by fitting alternative models to the data. In the first, we assume the following: a four-way interaction among income, education, occupation, and year, the independent effects on class identification of income, education, and occupation, and a shift in class identification. This model fits well, with $X^2 = 8.38$, 11 df, and $P = .68$. An alternative model, which is identical to the previous model except that it assumes the shift in class identification is nil, also fits the data well, with $X^2 = 9.76$, 12 df, and $P = .64$. From the difference between these

Table 4.2.--Percentage Distribution of Class Identification of White Detroit Area Males by Occupation, Education, Income, and Year

Income[a]	Education	Occupation[b]	1956				1971			
			M	W	Total	(N)	M	W	Total	(N)
High	College +	White collar	83%	17	100%	(36)	87%	13	100%	(157)
		Manual	50%	50	100%	(8)	53%	47	100%	(32)
High	Less than college	White collar	68%	32	100%	(28)	63%	37	100%	(68)
		Manual	31%	69	100%	(54)	42%	58	100%	(154)
Low	College +	White collar	67%	33	100%	(12)	56%	44	100%	(25)
		Manual	50%	50	100%	(8)	53%	47	100%	(15)
Low	Less than college	White collar	48%	52	100%	(25)	43%	57	100%	(30)
		Manual	17%	83	100%	(116)	22%	78	100%	(118)

[a]Income categories: 1956: high = $7,000+, low = $0-6,999; 1971: high = $10,000+, low = $0-9,999.

[b]Occupation categories: white collar = professional, managerial, sales, and clerical; manual = craftsmen, foremen, operatives, service, and laborers.

two models, we infer whether the net shift in class identification is significant. The difference in chi-square is 1.38, which with 1 degree of freedom, has a probability of .24. Thus the net shift in class identification is not significant, and we can infer that the change in class identification for white males is accounted for by a shift in socioeconomic status.

But do each of the three socioeconomic variables exert a significant net influence on class identification? The work of Hodge and Treiman (1968) and Jackman and Jackman (1973) suggests they do. We test for these effects by fitting several alternative models, each of which can be compared with the last model above which assumed that each of the three variables of occupation, education, and income independently influences class identification. Let us call this the baseline model. To test for the significance of the net effect of occupation, we assume the four-way interaction among the independent variables of education, occupation, income, and year, and the two two-way associations of education and class and income and class. Thus the difference between this model and the baseline model is the omission in this model of the effect of occupation on class identification. This model fits the data very poorly, with $X^2 = 56.57$, 13 df, and P = .001. The difference between this model and the baseline model is $X^2 = 46.81$, 1 df, and P = .001, which indicates that the net effect of occupation on class identification is highly significant.

If we omit the education-class identification association from the baseline model, we obtain $X^2 = 38.66$, 13 df, and P = .001, and the difference between the two models ($X^2 = 28.90$, 1 df, P = .001) indicates that the net effect of education is also highly significant.

Omitting the income-class identification association from the baseline model yields $X^2 = 40.99$, 13 df, and P = .001. The difference between this model and the baseline model is also highly significant, with $X^2 = 31.23$, 1 df, and P = .001. Thus, each of the three socioeconomic variables contributes independently to the choice of a class identification. Moreover, the change in the socioeconomic structure of the population of white males is sufficient to account for the increase in middle class identification between 1956 and 1971.

By reducing the number of categories in the socioeconomic variables, we have not only simplified the data, but have also simplified the effects of the socioeconomic variables on class identification and its change. The change in the relation of occupation and class identification detected in Table 4.1 is nowhere evident in Table 4.2, and it need not be included in the model which fits the latter data. The non-monotonic association between class identification and income we noted when income was treated as a four-category variable, also disappears when we dichotomize income (compare high and low income, within education and occupation categories, in Table 4.2). Although combining some of the categories obviously does violence to some of the complexity in the data, it also permits us to examine more variables simultaneously, and in this sense, to perform a more sophisticated multivariate analysis.

We can succinctly summarize the relation of class identification and socioeconomic status by referring to the model which fits the data in Table 4.2. Recall that it assumed net effects on class identification of occupation, education, and income. If we look at these three associations by pooling the data in 1956 and 1971, we

obtain three four-fold tables that describe everything of note in the table other than the relations among the independent variables. Briefly, these are the associations we find: Seventy-two percent of white collar workers and 32 percent of manual workers identify with the middle class; 76 percent of those with at least some college and 37 percent of those with less schooling identify with the middle class; and 62 percent of high income men and 31 percent of low income men choose a middle class identification. The relationships, rather than the magnitudes of the percentages, describe both 1956 and 1971 data sets. Clearly, middle class identification has surged (and working class identification has concurrently declined) in the interim; however, the shift in the distribution of the three socioeconomic variables suffices to account for the change in class identification among white males.

Relations Among Black Males

Chapter III found that black men did not in any major way shift their class identifications between the 1950s and 1971. Yet we know that blacks have made considerable gains in socioeconomic status, at least in the 1960s (Farley and Hermalin, 1972). Perhaps the failure of blacks to base their class identifications on their education levels and occupations (Jackman and Jackman, 1973) accounts for their failure to upgrade their subjective class structure in the face of socioeconomic progress.

This section first looks at this "class consciousness" of black men. We wish not only to see if their class consciousness has changed, but as well to see if the findings of Jackman and Jackman (1973)

replicate. We conclude by examining the differences between black and white males in the way class identification relates to the three socioeconomic variables.

Table 4.3 presents the class identification of black men by occupation, by education, and by income, for 1956 (combined with 1957--but we refer to the two years combined as 1956) and 1971. For occupation, in 1956 both the upper white collar and upper manual workers are roughly twice as likely to identify with the middle class than men in the other two categories. By 1971, the more familiar positive association, which characterizes white men, has emerged. We caution against putting too much stock in these and other casual observations for blacks, for their sample size, especially in the baseline years, is quite small. For instance, there is no statistical evidence that the class-occupation relation changed between 1956 and 1971. A model assuming three two-way associations among class identification, occupation, and year fits these data very well (X^2 = 1.39, 3 df, P = .71).

We might infer that the class consciousness of black men is similar in the two years, but we have yet to test whether there is any class consciousness at all. Are class identification and occupation related in any significant way? The question can be answered by eliminating the class-occupation parameter from the above model. The relatively poor fit of this model (X^2 = 11.10, 6 df, P = .07) implies that the relation between class identification and occupation is necessary for a good fit. Indeed, the difference between the fit of this model and the prior one that includes the effect of occupation on class identification is highly significant (X^2 = 10.10, 3 df,

Table 4.3.--Percentage Distribution of Class Identification of Black Detroit Area Males, by Occupation, by Education, and by Income, 1956 and 1971

Socioeconomic Variable and Category	1956 Class Identification				1971 Class Identification			
	M	W	T	(N)	M	W	T	(N)
Occupation[a]								
Upper white	29%	71	100%	(7)	47%	53	100%	(15)
Lower white	14%	86	100%	(7)	38%	62	100%	(13)
Upper manual	25%	75	100%	(12)	29%	71	100%	(28)
Lower manual	12%	88	100%	(78)	15%	85	100%	(89)
Education								
College	33%	67	100%	(6)	32%	68	100%	(22)
High school	22%	78	100%	(46)	26%	74	100%	(84)
Grade school	6%	94	100%	(54)	13%	87	100%	(39)
Income[b]								
1. High	14%	86	100%	(7)	48%	52	100%	(25)
2. Med. high	25%	75	100%	(10)	15%	85	100%	(33)
3. Med. Low	21%	79	100%	(43)	16%	84	100%	(51)
4. Low	5%	95	100%	(41)	26%	74	100%	(31)

[a]Occupation categories: upper white = professional, managerial; lower white = sales and clerical; upper manual = craftsmen, foremen, and kindred; lower manual = operatives, service workers, and laborers.

[b]Income categories: 1956: 1 = $10,000+; 2 = $7,000-9,999; 3 = $4,000-6,999; 4 = $0-3,999. 1971: 1 = $15,000+; 2 = $10,000-14,999; 3 = $6,000-9,999; 4 = $0-5,999.

P = .02). Thus, black men are class conscious with respect to their occupations, and we cannot show that this variety of class consciousness has changed between 1956 and 1971.

The relation of education and class identification is shown in the middle panel of Table 4.3. In both 1956 and 1971 education shows the familiar monotonic pattern, with more highly educated men being more likely to identify with the middle class. Moreover, data in both years display an almost identical pattern. A model assuming that the association of class and education is present in the data and similar in both years fits very well, with $X^2 = 0.80$, 2 df, and P = .67. A model without the class-education parameter fits very poorly, with $X^2 = 11.40$, 4 df, and P = .02 and the difference between these two models is $X^2 = 10.60$, 2 df, P = .005. We infer that the effect of education on class identification for black men is significant, and that this form of class consciousness is also similar in both years of observation.

Income and its relation to class identification can be found in the bottom panel of Table 4.3. In 1956 the two middle income groups show the greatest tendency to identify with the middle class. In 1971, we observe a different though still non-monotonic pattern. Now the two middle income groups are the least likely to identify with the middle class. Nearly half of those in the highest income category identify with the middle class, and about a quarter of those earning the least income chooses a middle class affiliation. This apparent shift in class consciousness is statistically significant, since fitting the three two-way associations among class, income, and year provides a poor fit to the data ($X^2 = 8.08$, 3 df, P = .04).

For black males, then, "class consciousness" or the association of class identification with socioeconomic status variables, shows no change for education and occupation, but a marked shift for income. Given the patterns of the income-class association in each year, we cannot say that class consciousness with respect to income has increased or decreased with time, only that it has changed.

Nevertheless, in this population of black males, we find a significant association with class identification and all three socioeconomic variables. At first glance, this appears to conflict with the findings of Jackman and Jackman (1973), who uncovered a significant association only for class identification and income. At this point there may be a number of causes of the difference in findings. Jackman and Jackman use a different statistical technique (analysis of covariance), they employ a different measure of class identification (five class categories, with an interval scale assumed), they look jointly at males and females, and they sample the entire population of the United States in 1964. Any of these differences between their analysis and the present one could conceivably account for the difference in findings. It is best at this time to set aside substantive comparaisons until we have considered more of the Detroit area data.

Although there is evidence in the present data that the class identifications of both black and white men relate significantly to their socioeconomic statuses, we have yet to examine whether and how the two racial groups differ in their "class consciousness." Other research (Jackman and Jackman, 1973) suggests that they indeed differ.

We attempt here both to replicate that finding and to see whether any differences or similarities are modified between survey years.

We look first for a race differential in the association of occupation and class identification. The top panels of Tables 4.1 and 4.3 present the relevant data. There is clearly a race differential in class identification, regardless of the occupation one holds or the year of the observation. Chapter III indicated that this race effect did not alter between 1956 and 1971. We now wish to know whether it differs depending on the occupation category. Such a difference implies a three-way interaction among class identification, occupation, and race. We can test for this interaction by looking at the difference in fits between one model that includes this effect and another that leaves it out. The first model builds in the following effects: a three-way interaction among occupation, race, and year, an effect of year on class identification, and a joint effect of race and occupation on class identification. This model assumes that the interaction of race, occupation, and class is similar in both years. The model provides an acceptable, though not very good, fit, with $X^2 = 10.20$, 7 df, and $P = .18$.

The difference in fits between this model and another which posits independent effects of occupation and race on class identification is of borderline statistical significance ($X^2 = 7.18$, 3 df, $P = .07$). This latter model provides a rather poor fit to the data, with $X^2 = 19.38$, 10 df, and $P = .07$.

The difference between the two models, which provides the statistical test for the interaction, is not a result designed to inspire confidence in either accepting or rejecting the interaction.

Taking the fitted frequencies (pooling across years) in the model that assumes an interaction, we observe virtually no association for blacks--about 14 percent of lower manual workers identify with the middle class, and a third of each of the other three groups shows middle class identification. Among whites, the percentages identifying with the middle class are as follows: upper white collar, 78 percent; lower white collar, 63 percent; upper manual, 39 percent; and lower manual, 29 percent. However, our analysis shows that this race difference is not quite statistically significant. A very minor alteration in the methodology (category demarcations, the focus only on middle and working class, etc.) might well yield a statistically significant difference between blacks and whites.

Turning to the relation of education with class identification, we fit models to the data described in the middle panels of Tables 4.1 and 4.3. The first model assumes that education and race interact in their effects on class identification. It also takes as given the change in class identification and the three-way interaction among year, education, and race. This model fits the data extremely well, with $X^2 = 1.07$, 5 df, and $P = .96$. However, a model not including the class-race-education parameter, but assuming indpendent effects on class identification of race and education, also fits the data ($X^2 = 6.87$, 7 df, $P = .44$). But the difference between these two models is also statistically significant ($X^2 = 5.80$, 2 df, and $P = .05$), which implies that the effect on class identification of education is different for black and white men. Inspection of Tables 4.1 and 4.3 shows that the association is clearly stronger for white men than for black men in both years. The black-white difference

in identification appears to increase as educational levels increase. That is, the class consciousness of black men, although significant, appears to have an upper limit, with never more than a third of the men at the highest education levels identifying with the middle class. However, approximately three-fourths of college educated white men identify with this social class.

The bottom panels of Tables 4.1 and 4.3 describe the association of income and class identification for white and black men, respectively. Neither blacks nor whites show a monotonic effect of income on class identification in either year. A model which assumes that blacks and whites differ in this effect (assuming also an interaction among race, income, and year, and an association of class and year) provides a relatively poor fit to the data (X^2 = 11.74, 7 df, P = .11). Another model specifying independent effects on class identification of race and income also yields an unspectacular fit (X^2 = 16.51, 10 df, P = .09). However, the difference between these two models is not significant (X^2 = 4.77, 3 df, P = .19), which implies that blacks and whites do not differ in the way their income affects their class identifications. Thus only for education does the class consciousness of black and white men show a difference marked enough to manifest statistical significance. The difference for occupation is marginal and for income it is nil.

Conclusion

This chapter has demonstrated the pervasiveness of "class consciousness" among men in the Detroit area. Regardless of the dimension of socioeconomic status, the year of the observation, or the

racial group, class identification consistently aligns with social standing. The variations we observe are not the presence or absence of this relation, but differences in its pattern in time (for the occupation of white males and the income of black males) and between the two racial groups (for education). Finally, a relatively simple model shows that the shift in class identification among white males is explainable in terms of their shift in socioeconomic status.

The relevance of socioeconomic status for class identification seems clear. Our findings in this sense reconfirm the inferences of others. Many of our findings also suggest, however, that techniques assuming linearity in the associations may be unjustified. This may be true primarily for blacks, but the non-monotonic relation of class identification and income occurs for both blacks and whites. The next chapter, which examines the effects of socioeconomic status on the class identifications of women, will provide additional evidence on these matters.

CHAPTER V

SOCIOECONOMIC STATUS AND CLASS IDENTIFICATION AMONG DETROIT AREA WOMEN

Issues in the Class Perceptions of Women

A major challenge facing anyone analyzing class or stratification characteristics of individuals is to explicate the role and position of women in the stratification process. To date this has not been done. Although the lack of a definitive analysis of women has recently been decried as an example of "intellectual sexism" (Acker, 1973), an alternative explanation lies in the conceptual and empirical problems associated with typical discontinuities in female work. These include far-from-universal rates of entry into the work force after completing education, high rates of exit when first marrying and during child-bearing, moderate rates of part-time work during and substantial rates of re-entry following childrearing years. Moreover, these patterns have been shifting rapidly over the last 70 years. The roles of wife-mother and worker have traditionally conflicted for the majority of American women. The disruption of and lack of commitment to career working patterns among most women have made the study of female socioeconomic achievement forbiddingly complex.

The class identification literature is exceptional to much of the work in the stratification-class arena in its inclusion of women in the analyses. Although Centers did not look at women in his first

study (1949b), he followed very shortly with a paper showing that men and women had almost identical subjective class distributions, and assured the reader "that the class consciousness of the American woman is of much the same character and direction as that of the American male, and that in both it appears to stem from the dynamics of the socio-economic position occupied by the individual in the social order" (1949a: 407-8).

Perhaps Centers' failure to find a sex differential quieted other potential investigation, since no analysis since that time compares men and women. Given their very different positions in the socioeconomic system, not distinguishing between the sexes seems incautious. The best empirical investigations of class identification (Hodge and Treiman, 1968; Jackman and Jackman, 1973) combine men and women. Both of these analyses posit a basic model in which class identification depends on an individual's education, family income, and head's occupation. The implicit units of analysis here are both family and individual. For men, this ambiguity is usually not problematic. Virtually all men are in the labor force and most contribute substantially to the family income. For women, ambiguities abound. They may or may not be in the labor force depending on their marital status, whether they are currently rearing children, or whether they can afford to adhere to traditional injunctions about working during marriage. If not currently working, does a woman's previous job influence her class identification? If not working, and divorced, separated, or widowed, does the former husband's occupation still bear upon her current class affiliation? Perhaps the ambiguity is clearest and easiest to investigate for currently married,

currently working women whose husbands are also in the labor force. Does such a woman choose her social class on the basis of her husband's occupation (as the models in prior literature suggest), her own occupation, or some combination of the two?

These questions need not be narrowly construed as relevant only to class identification. In a broader framework, the issue at stake is the status transmission among married women. In an intergenerational focus, assortative mating studies show that men and women whose fathers held similar occupations are more likely to marry than those of unlike socioeconomic background (Warren, 1966). In other words, women do not appear to use marriage as a means of upward mobility (Rubin, 1969). These studies agree in their use of the woman as a passive possessor of status. Her origins reflect her father's status. Her current status is her husband's. This assumption deserves to be questioned, and the class identification data at hand provide a way of addressing the issue.

We look at currently married, currently working white women living in the Detroit area in 1971. (Only 51 black women of this status were in the sample. We choose not to combine them with white women, and their number is too small to examine them separately.) Table 5.1 shows the percentage distribution of the class identification of these women by their own occupations and their husbands' occupations. Although the relatively small base frequencies make inferences somewhat shaky, effects of both a woman's own occupation and that of her husband can be detected. The question is whether the influence of either is significant, or whether one effect is greater than another.

Table 5.1.--Percentage Distribution of Middle and Working Class Identification by Occupation and Husband's Occupation, for Currently Married, Currently Employed White Women in the Detroit Area, 1971

Husband's Occupation	Own Occupation	M	W	Total	(N)
Upper white collar	Upper white collar	93%	7	100%	(29)
	Lower white collar	80%	20	100%	(25)
	Manual	57%	43	100%	(7)
Lower white collar	Upper white collar	88%	12	100%	(8)
	Lower white collar	90%	10	100%	(10)
	Manual	50%	50	100%	(6)
Upper manual	Upper white collar	25%	75	100%	(8)
	Lower white collar	48%	52	100%	(23)
	Manual	36%	64	100%	(14)
Lower manual	Upper white collar	57%	43	100%	(7)
	Lower white collar	29%	71	100%	(17)
	Manual	26%	74	100%	(23)

Comparing three log-linear models allows us to assess the relative significance of own occupation and husband's occupation on class identification. A first model assumes that both occupations have an independent effect on class identification, and that the husband's and his wife's occupations are related. This model fits the data adequately, with $X^2 = 7.20$, 6 df, and P = .30. What if we delete the effect of the husband's occupation but allow the influence of the woman's occupation to remain? Such a model fits very poorly indeed ($X^2 = 29.64$, 3 df, P = .001). A working, married woman clearly bases her class affiliation, at least in part, on the occupation of her husband. And what if we delete the effect of the woman's own occupation, but allow the effect of her husband's occupation to remain? This model is consistent with the others in class identification literature. Such a model provides a marginally acceptable fit ($X^2 = 12.80$, 8 df, P = .12), and the difference between this model and the first, which included the effect on class identification of her own occupation as well as the effect of her husband's, is not statisically significant at the .05 level ($X^2 = 5.59$, 2 df, P = .06). However, the borderline nature of the last-mentioned result doesn't lend much conviction to the assertion that a woman's own occupation is of no consequence to her class identification. Nevertheless, the results strongly support the notion that a woman's husband's occupation is more important than her own in determining her class identification.

This finding can be read as justification for using husband's occupation as the relevant occupational base for class identification for women who are both employed and currently married (for married women not in the labor force there is no other option). And it might

indicate support for the notion that a woman who is married tends to derive status through her husband's economic activities rather than through her own. In subsequent investigations herein, we make this assumption, namely, that a woman's own occupation is the relevant occupational variable, unless she is married, in which case her husband's occupation influences her class identification. This is consistent with previous research on class identification. However, this decision by no means implies that currently married, currently working women's occupations are not relevant to their class identification, or to their status perceptions in general. For instance, the above findings are in accord with a model where the husband's occupation merely intervenes between his wife's occupation and her class identification. This sort of model implies a strong theory about status transmission among women, in particular for married women. At the present time no such theory exists, and we will not develop one in this analysis.

In this chapter we will look at the association between socioeconomic status and class identification for women in much the same manner that we looked at these associations among men in Chapter IV. For whites and blacks separately, we look at changes in the relations between identification and the three socioeconomic variables, education, occupation, and income. Second, for white women, we examine whether any of the three socioeconomic variables alone, or all three combined, will account for the shift into middle class identification between 1956 and 1971. We also compare white and black women, as we did men, to see if their levels of "class consciousness" with respect to the three socioeconomic characteristics are similar.

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Relations Among White Women

We begin by looking at the class consciousness of white women. One might hypothesize, on the basis of a) the increasing activity of women in the workaday world outside the household, and b) the putative growth in the "consciousness" of women regarding their status in general and their status relative to men in particular, that women are becoming increasingly "class conscious," as we define the term. That is, as their socioeconomic status becomes more relevant to them in their everyday activities, their class identifications will align more closely with their social standing.

As of now, there is relatively little evidence concerning the status consciousness of women, let alone its growth over the past years. Two studies seem pertinent. Duncan and Evers (1974), using DAS data sets from 1956 and 1971, document a change toward increasing open-mindedness among both men and women about the range of jobs they believe women might hold. However, in 1971, 74 percent of the males and 62 percent of the females felt that women should be denied certain kinds of jobs. Mason and Bumpass (1973), using the 1970 sample of ever-married women in the National Fertility Study, find evidence of widespread traditional attitudes toward sex-role segregation. For example, over three-fourths of the women felt it is best if a woman remains in the household and the man achieves in the labor force.

This rather meagre evidence does not support the notion of extensive "liberal" or "tolerant" attitudes toward women's place in society, but there is some indication of a shift in that direction over the past several years. Are women becoming more "class conscious" as well? Table 5.2 presents our evidence. It shows the class

Table 5.2.--Percentage Distribution of Class Identification of White Detroit Area Females, by Occupation, by Education, and by Income, 1956 and 1971

Socioeconomic Variable and Category	1956 Class Identification				1971 Class Identification			
	M	W	T	(N)	M	W	T	(N)
Occupation[a]								
Upper white	72%	28	100%	(68)	72%	28	100%	(248)
Lower white	44%	56	100%	(62)	54%	46	100%	(124)
Upper manual	32%	68	100%	(82)	48%	52	100%	(151)
Lower manual	22%	78	100%	(96)	35%	65	100%	(223)
Education								
College	74%	26	100%	(43)	71%	29	100%	(192)
High school	36%	64	100%	(214)	49%	51	100%	(473)
Grade school	32%	68	100%	(75)	40%	60	100%	(98)
Income[b]								
1. High	63%	37	100%	(41)	75%	25	100%	(209)
2. Med. high	42%	58	100%	(84)	47%	53	100%	(226)
3. Med. Low	33%	67	100%	(119)	38%	62	100%	(141)
4. Low	40%	60	100%	(81)	43%	57	100%	(139)

[a]Occupation categories: upper white = professional, managerial; lower white = sales and clerical; upper manual = craftsmen, foremen, and kindred; lower manual = operatives, service workers, and laborers.

[b]Income categories: 1956: 1 = $10,000+; 2 = $7,000-9,999; 3 = $4,000-6,999; 4 = $0-3,999. 1971: 1 = $15,000+; 2 = $10,000-14,999; 3 = $6,000-9,999; 4 = $0-5,999.

identification of white women (middle and working class identifications only) by their occupations (or their husband's occupations if they are married), by their educational levels, and by their family incomes, for both 1956 and 1971.

For the effect of occupation on class identification, found in the upper panel of the table, we see that the tendency to identify with the middle class is positive in relation to occupational status. This pattern is consistent in both years, but for each of the three lower categories of occupation, we see an upward shift in the proportion choosing a middle class identification. The result is a somewhat more marked association between class and occupation in 1956 than in 1971. If anything, white women have become less class conscious over time.

To test this apparent interaction among class identification, occupation, and year, we fit a model that assumes that the class-occupation association is unchanged between the two years. The model takes as given the associations between class and year, occupation and year, and occupation and class. This model provides an adequate fit to the data, with $X^2 = 3.64$, 3 df, and $P = .30$. The class consciousness of white women with respect to their occupations, is similar in 1956 and 1971.

The middle panel of Table 5.2 presents the distribution of class identification by education in both years. The pattern resembles that of the relation of class identification and occupation. First, in either year, more highly educated women are more likely to choose middle class identification than women of less education. Second, those in the two "lower status" education groups increase

in middle class identification. College educated women show a slight decline in the proportion choosing the middle class between 1956 and 1971. This again suggests a slight decline in class consciousness. However, a model that assumes no change in the education-class association (that takes as given class-education, class-year, and education-year) fits these data adequately, with $X^2 = 2.93$, 2 df, and $P = .23$. Thus, we also find no support for a changing class consciousness of white women with respect to education.

The association of income and class identification is found in the bottom panel of Table 5.2. For both 1956 and 1971 income is related to class identification, but not monotonically. With the exception of the lowest income group, the higher the income, the more likely a woman is to identify with the middle class. Women in families with the least income are somewhat more likely than those in the next higher category to identify with the middle class. (Recall the similar pattern among white men; we compare men and women in the next chapter.)

This similarity in the pattern in both years suggests an identical class consciousness regarding income in both years. The model assuming the associations of class and income, class and year, and income and year, tests the null hypothesis of no change in class consciousness. This model fits the data very well indeed, with $X^2 = 0.74$, 3 df, and $P = .86$. Thus, although we observe a slight increase in middle class identification within each category of income, the association between class identification and income is remarkably similar in 1956 and 1971. Whether we consider their education, their occupation, or their

income, there is no evidence that the class consciousness of white women has changed.

For any socioeconomic variable, a shift within categories in the percentage identifying with the middle class implies that the socio-economic variable does not completely account for the change in class identification. This point was elaborated in Chapter IV. However, as we noted in that chapter, this within category change may be small enough to be attributable to sampling error alone. A test for whether the shift in class identification is explained by a shift in socio-economic status in the population can be made by eliminating the class-year parameter from each of the above three models we fitted for occupation, education, and income, respectively.

For occupation, we assume only that class identification is related to occupation, and that the occupation composition of the population changes between 1956 and 1971. That is, the model fits the associations of class-occupation and occupation-year to the data in the upper panel of Table 5.2. This model does not describe the data well (X^2 = 15.97, 4 df, P = .003), indicating that the upgrading of occupations alone cannot account for the shift into middle class identification among white Detroit area women.

Will the shift in educational levels suffice to explain the shift in class perceptions? The marginals in education, in the middle panel of the table, show almost a doubling in the proportions of college women (.13 in 1956, .25 in 1971). However, a model assuming only associations between class and education, and education and year, does not fit the data well, with X^2 = 10.89, 3 df, and P = .01. Although the educational composition of women clearly improved over

the 15-year time span between surveys, this alone does not explain their shift into middle class identification.

If the findings for white males serve as a guide, we would be most likely to find income to be the socioeconomic variable that accounts for the shift in class identification. Indeed, the model that assumes only class-income and income-year fits the data in the lower panel of Table 5.2 quite well (X^2 = 3.82, 4 df, P = .43). The difference between this model and one incorporating a class-year parameter is not statistically significant (X^2 = 3.08, 1 df, P = .08), which indicates that the change in class identification is not significant once we control for the shift in income for our population of white females. Thus, as was the case for white men, of the three socioeconomic variables only income accounts for the increase in middle class identification.

We can infer from these findings that education, occupation, and income <u>separately</u> exert a significant influence on class identification that is similar in both years. A somewhat more sophisticated set of questions can be addressed to this set of relations among the socioeconomic status variables and class identification. Namely, do the variables each have an independent <u>net</u> influence on class identification, as they did for white men, and do these net effects remain invariant between years, as we might infer from the unchanging "class consciousness" we observe above? Finally, do the three socioeconomic variables <u>combined</u> account for the shift in class identification?

We make these queries without the guidance of any set of hypotheses that follow from either theory or previous investigations. In this sense this part of the investigation is exploratory. We can

address the questions, as we did for white males by dichotomizing the three socioeconomic variables and cross-tabulating them simultaneously with class identification in 1956 and 1971. Table 5.3 presents the results. The pattern of percentages in this table is not as clear as it was for men (cf., Table 4.2). Although net effects of education, occupation, and income are prominent in portions of the table, the patterns are not always consistent and there seems to be a considerable number of within category shifts--both increases and decreases--in class identification between the survey years. For instance, among low income, college-education women in 1956, 75 percent of those holding white collar jobs and only 17 percent of the blue collar incumbents identify with the middle class. In 1971, we see a drop in the former group to only 41 percent identifying with the middle class, and the latter group surged to 43 percent middle class identification. Of course, at least some of these seeming inconsistencies may be due to sampling variation.

To systematically answer the above questions, we begin by looking at whether the effects of the three socioeconomic variables are independent. The first model we fit, and all subsequent models below, takes as given the four-way interaction among the independent variables (income, education, occupation, and year). This model also assumes that income, education, and occupation influence class identification, that these effects are independent of one another, and that they are similar in 1956 and 1971. This is listed as model (1) in Table 5.4. We see that the model clearly does not fit the data well. The three subsequent models listed in the table assume that various combinations of two of the three socioeconomic variables interact in their effects

Table 5.3.--Percentage Distribution of Class Identification of White Detroit Area Females by Occupation, Education, Income, and Year

Income[a]	Education	Occupation[b]	1956 M	1956 W	1956 Total	1956 (N)	1971 M	1971 W	1971 Total	1971 (N)
High	College +	White collar	100%	0	100%	(15)	86%	14	100%	(114)
		Manual	71%	29	100%	(7)	52%	48	100%	(23)
High	Less than college	White collar	52%	48	100%	(40)	68%	32	100%	(119)
		Manual	34%	66	100%	(62)	38%	62	100%	(172)
Low	College +	White collar	75%	25	100%	(16)	41%	59	100%	(32)
		Manual	17%	83	100%	(6)	43%	57	100%	(7)
Low	Less than college	White collar	44%	56	100%	(62)	42%	58	100%	(76)
		Manual	23%	77	100%	(99)	38%	62	100%	(155)

[a]Income categories: 1956: high = $7,000+, low = $0-6,999; 1971: high = $10,000+, low = $0-9,999.

[b]Occupation categories: white collar = professional, managerial, sales, and clerical; manual = craftsmen, foremen, operatives, service, and laborers. For married women, occupation refers to husband's occupation.

Table 5.4.--Summary of Selected Models Fitted to the Joint Distribution of Class Identification, Occupation, Education, Income, and Year for White Detroit Area Females, 1956 and 1971[a]

	Models[b]	X^2	Df	P
(1)	income-class, education-class, occupation-class, year-class	36.74	11	.001
(2)	occupation-education-class, income-class, year-class	35.16	10	.001
	difference, (1) - (2)	1.58	1	.21
(3)	occupation-income-class, education-class, year-class	26.45	10	.003
	difference, (1) - (3)	10.29	1	.001
(4)	education-income-class, occupation-class, year-class	27.02	10	.003
	difference, (1) - (4)	9.72	1	.002
(5)	occupation-income-class, education-income-class, year-class	21.03	9	.01
(6)	occupation-income-class, education-income-class, occupation-year-class	18.39	8	.02
	difference, (5) - (6)	2.64	1	.10
(7)	occupation-income-class, education-income-class, education-year-class	12.35	8	.14
	difference, (5) - (7)	8.68	1	.003
(8)	occupation-income-class, education-income-class, income-year-class	21.01	8	.007
	difference, (5) - (8)	0.02	1	.88

[a]See Table 5.3 for data.

[b]All models fit four-way interaction among occupation, education, income, and year.

on class identification, but in each case, we assume that the effects are the same in both years.

The fits of models (2), (3), and (4) are all very poor, although the fits themselves are not really the point in question. Rather, the difference between each of these models and the first model indicates whether the interaction parameter is significant. The difference between models (1) and (2) shows clearly that occupation and education do not interact significantly in their effects on class identification. However, if we examine the differences between the next two models and model (1), we note that both occupation and income, and education and income, respectively, interact in their effects.

The exact nature of these interactions can be most easily discerned by collapsing across categories of the variables that are not of interest. In looking at the interaction of occupation and income with class identification, we take the data represented in Table 5.3 and pool across years and across education categories. The percentage identifying with the middle class for income and occupation groups are as follows: high income-white collar, 75 percent; high income-blue collar, 39 percent; low income-white collar, 45 percent; and low income-blue collar, 32 percent. Occupation appears to have more effect on class identification among high income women than among low income women; alternatively, income has more influence among white collar workers than among manual workers.

For the income-education interaction with class identification, we collapse across years and occupation groups. For income and education groups, the percentage identifying with the middle class are as follows: high income-college educated, 82 percent; high income-less

than college, 48 percent; low income-college, 48 percent; low income-less than college, 36 percent. Thus, income seems to have more influence on class identification among college educated women than among those with less education. These data suggest that women of both higher occupational or educational status are for some reason more sensitive in their class perceptions to income than those of low status. The reasons for this are not apparent.

The next several models in Table 5.4 address the issue of whether the net effects of occupation, education, or income on class identification change between 1956 and 1971. Model (5) incorporates the two interaction effects we previously found to be significant (class-occupation-income, class-education-income), but it assumes that all the effects on class identification are identical in both years. Clearly this model provides a poor fit to the data. Models (6), (7), and (8) allow the effects of occupation, education, and income, respectively, to differ in 1956 and 1971. Only model (7) fits adequately, and the difference between this fit and that for model (5) indicates that the net effect of education on class identification is significantly different in the two years. This is somewhat surprising in light of the data in Table 5.2 and the finding described in the succeeding page, that, when education is trichotomized, its gross association with class identification does not differ significantly in the two years. If we take the data in the middle panel of Table 5.2 and dichotomize education as we have done here (less than college, college plus), a model assuming the three two-way associations among class identification, education, and year, fits the data quite well, with $X^2 = 0.21$, 1 df, and $P = .64$. Thus the

previous finding of no change in the association between class identification and education is not merely a consequence of the categorization of education. In the present analysis, with a two-category education variable, the net shift in the association between education and class identification is clearly significant, and building this interaction into the model results in the only model (model (7) in Table 5.4) that comes close to describing the rather complex interactions occurring in the data.

The only other parameters we have not fitted in the data are the four-way interactions involving the dependent variable and combinations of three independent variables. None of these significantly improve the fit to the data, and for brevity's sake we have not described these additional models in Table 5.4. Model (7) is therefore the best fitting model, although the probability level shows that the data do not closely conform to the assumptions of this model, either. This model indicates that the three socioeconomic variables together do not affect class identification in a way that accounts for the change between 1956 and 1971, because the influence of education differs in the two years. Moreover, each of the three variables interacts with at least one other variable in its effect on class identification.

The complexity of this last set of findings contrasts sharply with the earlier investigation that looked at the socioeconomic variables one at a time. For instance, we found that changing incomes alone could account for the shift in class identification. When examining the effect of income in conjunction with education and occupation, relations suddenly become more complicated and income in a sense

"loses" its explanatory power. We found that income interacted with both a woman's education and her (or her husband's) occupation in its effect on class identification. The effect of education, in turn, differed for the two survey years. These findings, then, defy easy interpretation, especially in light of the paucity of relevant theory or prior investigations. At the least, they suggest that an additive model greatly oversimplifies the relationship between socioeconomic status and class identification for white women.

Relations Among Black Women

We turn now to examine the association between class identification and socioeconomic status and its changes among black Detroit area women. This section begins by looking at patterns of class consciousness and their shifts, and goes on to compare black and white women in these relations.

Chapter III revealed that the proportions of middle and working class identifiers among black females did not change significantly between the 1950s and 1971. We look now at whether these women base their class identifications on their occupations, their educational levels, and their family incomes in 1956 and 1957 (combined--the two years are jointly referred to as 1956) as they do in 1971. Table 5.5 displays the percentages identifying with either the middle or working class by the three socioeconomic variables, respectively, in 1956 and 1971.

In the top panel, we see a familiar monotonic association between occupation and class identification in 1956. Only 12 percent of black women holding lower manual occupations choose to identify with the

Table 5.5.--Percentage Distribution of Class Identification of Black Detroit Area Females, by Occupation, by Education, and by Income, 1956 and 1971

Socioeconomic Variable and Category	1956 Class Identification				1971 Class Identification			
	M	W	T	(N)	M	W	T	(N)
Occupation[a]								
Upper white	40%	60	100%	(5)	29%	71	100%	(21)
Lower white	36%	64	100%	(11)	27%	73	100%	(30)
Upper manual	25%	75	100%	(4)	38%	62	100%	(21)
Lower manual	12%	82	100%	(74)	28%	72	100%	(116)
Education								
College	21%	79	100%	(14)	34%	66	100%	(41)
High school	23%	77	100%	(61)	27%	73	100%	(119)
Grade school	16%	84	100%	(38)	34%	66	100%	(38)
Income[b]								
1. High	33%	67	100%	(3)	44%	56	100%	(25)
2. Med. high	0%	100	100%	(7)	27%	73	100%	(30)
3. Med. Low	21%	79	100%	(47)	22%	78	100%	(58)
4. Low	22%	78	100%	(51)	31%	69	100%	(67)

[a]Occupation categories: upper white = professional, managerial; lower white = sales and clerical; upper manual = craftsmen, foremen, and kindred; lower manual = operatives, service workers, and laborers.

[b]Income categories: 1956: 1 = $10,000+; 2 = $7,000-9,999; 3 = $4,000-6,999; 4 = $0-3,999. 1971: 1 = $15,000+; 2 = $10,000-14,999; 3 = $6,000-9,999; 4 = $0-5,999.

middle class. This proportion increases as occupational status increases, and among upper white collar incumbents, two-fifths of the women identify with the middle class. In 1971, this monotonic pattern vanishes. In all but the upper manual category, slightly less than 30 percent of the women identify with the middle class. Thirty-eight percent of the upper manual workers choose this social class.

Thus for occupation, the class consciousness may well have disappeared between years, although the very small frequencies in all but the lower manual group, especially in 1956, make this inference a bit shaky. A model that assumes that the association between occupation and class identification is identical in the two years (and one that takes as given the changes in occupation and class identification) provides a fair fit to the data (X^2 = 4.90, 3 df, P = .18). By eliminating the association between class and occupation from this model, we test for the significance of this association. Such a model fits the data reasonably well (X^2 = 7.07, 6 df, P = .32), and the difference between this model and the former, which included the class-occupation parameter, is not significant (X^2 = 2.17, 3 df, P = .54). Thus black women display no class consciousness relative to the occupations they hold. The shift we observe in Table 5.5 is attributable to sampling error alone.

The relation of education to class identification is found in the middle panel of the table. In neither year is the pattern monotonic. In 1956, women with a high school education are slightly more likely than college education women to identify with the middle class, with those in the grade school category being the least likely. By 1971, the high school educated are the least likely to identify with the

middle class, and grade school and college educated women are the most likely. A model taking as given the education-class association, and shifts in both education and class identification, fits these data quite well, with $X^2 = 1.53$, 2 df, and $P = .46$. Thus, if we assume that black women are class conscious with respect to their education, we can find no change in this consciousness.

However, in either year, there is at most a seven percentage point difference in the class identification between any two education categories. This would hardly seem to constitute class consciousness. Indeed, removing the education-class parameter from the previous model results in both a very good fit to the data ($X^2 = 1.97$, 4 df, $P = .74$) and a fit that does not differ significantly from the model incorporating the association between class identification and education ($X^2 = 0.44$, 2 df, $P = .80$). There is no evidence that black women identify with social classes on the basis of their educational attainment.

The bottom panel of Table 5.5 shows the class identification of black women as it relates to their family income in 1956 and 1971. The lack of black families in 1956 in the two upper income groups makes casual observation of this relationship rather risky for that year. In 1971 we observe a pattern that is by now familiar: an increasing tendency to identify with the middle class as income increases, with the exception of the lowest income level, where this monotonic association reverses. A model that assumes that class identification is related to income and that the relationship is similar in the two years fits the data adequately ($X^2 = 3.31$, 3 df, $P = .34$). One that assumes only that the income and class identification

distributions have changed, but which eliminates the class-income parameter, also fits the data (X^2 = 7.58, 6 df, P = .27), and the difference between the fits of this and the former model (X^2 = 4.27, 3 df, P = .23) indicates that class identification is not significantly associated with family income for black women.

Given the contrary results for black men in the previous chapter, the above findings are startling in their confirmation of Jackman and Jackman's (1973) observation that blacks do not base their class identification on their socioeconomic characteristics. We now examine whether women in the two racial groups differ in their socioeconomic status-class associations, as Jackman and Jackman assert they do. We put off until the next chapter a direct comparison of men and women in their relations between socioeconomic status and class identification.

Tables 5.2 and 5.5 comprise the data we draw upon in this analysis. The upper panels of both tables show the association of occupation and class identification. Recall that for white women this association was similar in both years. For blacks there was no evidence of an association in either year. We ask now whether this apparent racial difference is significant. A model that assumes an interaction among race, occupation, and class identification, that assumes that class identification changed between 1956 and 1971, and that takes as given the interaction among race, occupation, and year, fits the data adequately (X^2 = 8.66, 7 df, P = .28). One without the race difference in the association between class identification, but which assumes independent effects of race and occupation, fits rather poorly (X^2 = 17.67, 10 df, P = .06). The difference between these two

models indicates whether black and white women differ in the way their occupations are related to their class perceptions. This difference is substantial, since the difference in fits between the two models is significant (X^2 = 9.01, 3 df, P = .03). This concurs with Jackman and Jackman's finding that the class identification of blacks is unrelated to their occupations, that for whites the two variables are significantly related, and that the difference between blacks and whites is statistically significant.

We also found that the education of black women does not bear on class identification, as it does for white women. A model assuming a race difference in the education-class association, also taking as given the shift in class identification and the interaction among race, education, and year, fits these data well (X^2 = 4.58, 5 df, P = .47). A model that instead posits that race and education independently influence class identification also provides an adequate fit (X^2 = 12.25, 7 df, P = .09), but a fit that is significantly poorer than the model incorporating the race-education-class interaction (X^2 = 7.67, 2 df, P = .02). Thus, black and white women differ substantially in their effects of education on class identification, with a strong effect holding for whites, and a negligible effect prevailing for blacks. This finding again corresponds to that of Jackman and Jackman (1973).

The bottom panels of Tables 5.2 and 5.5 show the associations between income and class identification for white and black women, respectively. A model that assumes a race difference in the effect of income on class identification, a shift in class identification, and an interaction among race, income, and year, fits these data very well (X^2 = 4.34, 7 df, P = .74). However, a model assuming that black and

white women do not differ in the influence of income on class identification (fitting income-class and race-class instead of income-race-class) also fits very well (X^2 = 7.12, 10 df, P = .71), and the difference between the two models is not significant (X^2 = 2.78, 3 df, P = .43). Thus the paradoxical finding emerges that for black women the association between income and class identification is not significant, for whites it is, but blacks and whites do not significantly differ in this relationship.

This last finding need not be read as a disconfirmation of Jackman and Jackman (1973), since they also obtained mixed results in the effect of income on class identification with the different data sets they examined. On the whole, black women are much less inclined than white women to use their socioeconomic characteristics as the basis for their class identifications. It also appears, although this has yet to be explicitly tested, that black women differ from black men in the relation of their class perceptions and their social standings.

Summary and Conclusion

The analysis in this chapter finds little evidence of a changing class consciousness among women. By looking at each of the three dimensions of socioeconomic status separately, we show that the association of socioeconomic status with class identification was unchanged between 1956 and 1971 for white women. Moreover, the shift in income alone was sufficient to account for the surge in middle class identification among white women between the two years. Examining the effects of all three socioeconomic variables simultaneously yields a rather

complicated set of interactions where income interacts with both a woman's education and her occupation in its effect on class identification, and the effect of education differs in the two years.

Black women do not base their class identifications on any of their socioeconomic characteristics, although we can demonstrate that they differ from white women in this respect only for their educational levels and for their occuations. These latter findings concur with those of Jackman and Jackman (1973) and, in light of the seemingly contrary findings for men described in the previous chapter, we might say that their assertion that ascription outstrips achievement in its bearing on the class perceptions of blacks may apply only to females.

At times this chapter made casual reference to apparent differences or similarities between men and women of one or the other racial group. This separation of the sexes has served as a framework for the analysis thus far. In the following chapter we turn to a comparison of men and women in the way their socioeconomic characteristics affect their class identifications.

CHAPTER VI

THE EFFECT OF SEX ON CLASS IDENTIFICATION

This chapter examines whether the influence of the socioeconomic status variables on class identification differs for males and females. It first looks at sex effects on this process for whites and blacks separately and in the final section examines the influence on class identification of sex and race simultaneously. This final section effectively summarizes all the associations among class identification, socioeconomic status, sex, race, and year, which have been the focus of most of the previous analysis.

The findings in Chapter III show that males and females are similar in their relative numbers of middle and working class identifiers and that this similarity characterizes both blacks and whites. However, this does not necessarily imply that the process by which members of the two sexes arrive at their class identifications are similar. That is, the effects of socioeconomic characteristics on class identification may differ for men and women. We have argued previously that this may be the case simply because women and men play quite different roles in the stratification system, finding themselves in somewhat different labor markets (Oppenheimer, 1970), and accruing quite different rewards for equivalent work (Suter and Miller, 1973). Discrimination against women may, for example, lead them to value their training less than men value theirs, hence, women may perceive their social class

less in terms of their educational level than do men. Likewise, since women generally contribute less to family income than do men, they may well be less "class conscious" about family income than are men.

This chapter proceeds to investigate these possible sex differentials by fitting models to the previously described data. We will not again describe the data in detail except to summarize significant findings resulting from the model-fitting process. The effect of each socioeconomic variable will be examined separately. Data for whites are displayed in Table 4.1 for males and Table 5.3 for females. Table 4.3 shows the data for black males; Table 5.5, for black females.

Sex and Socioeconomic Status for Whites

We first look at the sex difference in the effect of occupation on class identification in both 1956 and 1971. Because the procedure here is typical of what is followed throughout the chapter, we describe it in detail. We begin by assuming that a very simple model operates where each of the independent variables of sex, occupation, and year independently affects class identification. That is, under the assumptions of this model, the influence of occupation is similar for males and females and in 1956 and 1971. Likewise, the difference between males and females in their class identifications is identical for all occupation groups and in both years. Finally, a similar shift in class identification characterizes males and females and incumbents of all four occupational categories. This model, then, fits the following associations to the joint distribution of class identification, occupation, sex, and year: class-occupation, class-sex, class-year, and occupation-sex-year (the latter is the highest

order interaction among the independent variables). This is essentially a baseline model because it is the simplest way all three independent variables can affect class identification, assuming of course that all three indeed have an influence. This is model (1) in Table 6.1. It provides a poor fit to the data.

The poor fit of model (1) tells us that, most likely, there is an interaction in the data that we haven't taken into account. (It may also imply that we have assumed certain effects that are in fact negligible and only waste degrees of freedom, but this is less likely in a model this simple.) The second model in Table 6.1 assumes an additional interaction between class identification, occupation, and sex. That is, we assume under model (2) that the effect of occupation on class identification differs for males and females. Although it seems to provide a somewhat better fit to the data than the first model without the interaction, the difference between the two models is clearly not significant. Thus we infer that the influence of occupation is similar for the two sexes.

The third model tests for the difference between males and females in their shift in class identification. As mentioned before, Chapter III shows no difference, hence we should not expect this interaction adds anything significant to a model describing the data. Indeed, model (3) fits the data poorly, and the difference between the models with and without the class-sex-year interaction is not at all significant.

The remaining three-way interaction involves class identification, occupation, and year. This interaction implies a change in "class consciousness" for the white population. Chapter IV found

Table 6.1.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Occupation, Sex, and Year, for Detroit Area Whites, 1956 and 1971[a]

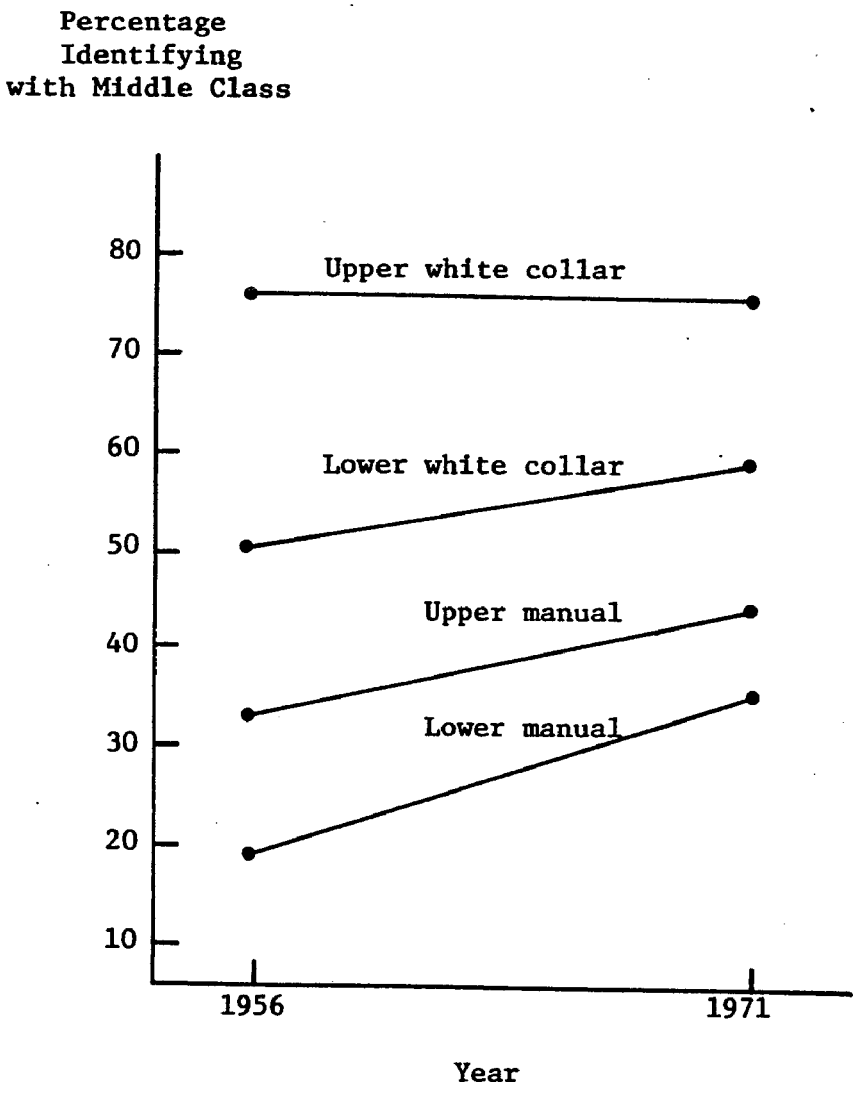
	Model	X^2	Df	P
(1)	occupation-sex-year, class-occupation, class-sex, class-year	18.94	10	.04
(2)	occupation-sex-year, class-year, class-occupation-sex	12.04	7	.10
	difference, (1) - (2)	6.91	3	.07
(3)	occupation-sex-year, class-occupation, class-sex-year	18.93	9	.03
	difference, (1) - (3)	0.01	1	.92
(4)	occupation-sex-year, class-sex, class-occupation-year	9.06	7	.25
	difference, (1) - (4)	9.89	3	.02
(5)	occupation-sex-year, class-occupation-year	10.63	8	.22
	difference, (5) - (6)	1.57	1	.21

[a]Models are fitted to data in the upper panel of Table 4.1 and the upper panel of Table 5.2.

evidence of such a change for white males. Chapter V shows no change for white females. Model (4) assumes that the change in the association of occupation and class identification is similar for both males and females. The model fits the data fairly well, and the difference between models (1) and (4) shows that this interaction is clearly significant. The only way to fit a model that assumes that this shift in class consciousness differs for men and women (as implied by the findings of Chapters IV and V) is to specify a four-way interaction among class identification, occupation, sex, and year. Such model, of course, fits the data perfectly, and results in no data reduction at all.

Is there any difference between the class perceptions of males and females? Model (2) shows that the effect of occupation on class identification is similar for both sexes and model (3) shows that the shift is similar. Model (4) builds in a sex difference in the marginal distribution of class identification, but Chapter III indicates that this effect is most likely negligible. Indeed, model (5), which differs from model (4) only in its lack of a sex effect on class identification, fits the data equally as well as model (4). Model (5), then, can be taken as the model that best describes the data.

This model indicates that the association between class identification and occupation differs in 1956 and 1971, and that both men and women display this shift in class consciousness. The interaction among class identification, occupation, and year, pooled across sex categories, is displayed in Figure 6.1 We observe here what we described for men in Chapter IV. The increase in middle class identification occurs for all but the highest occupational group,



Note: Figures based only on middle and working class identifiers. Percentage of middle class identification derived from the fit of model (5), Table 6.1, with figures pooled across sex categories.

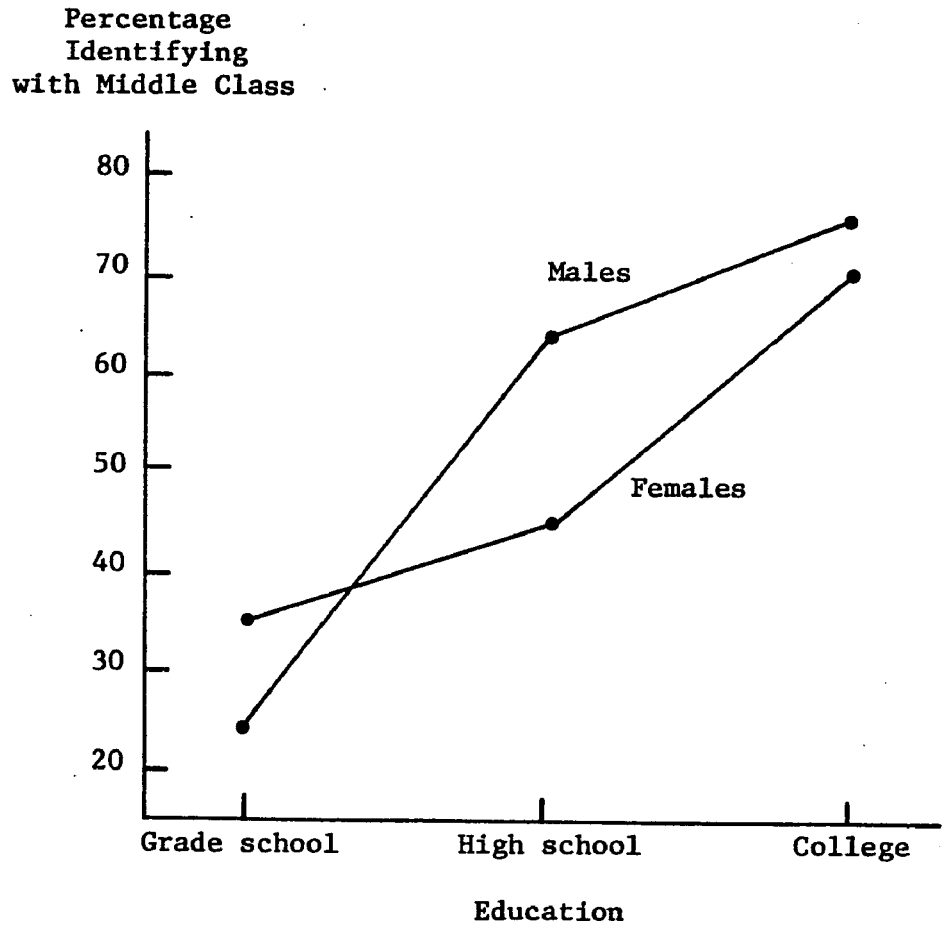
Figure 6.1--Fitted Percentage of White Detroit Area Residents Identifying with the Middle Class, by Occupation and Year

and the lower the status of the occupation, the greater the increase in middle class identification between 1956 and 1971. As a result, occupation discriminates between the two social class groups less well in 1971 than it did in 1956. All occupational groups appear to be converging toward similar class identifications.

The next set of models, summarized in Table 6.2, examines the sexual difference in the effect of education on class identification for Detroit area whites. The first model, which assumes that the effects of education, sex, and year are independent, fits the data fairly well. However, model (2), which posits that the influence of education on class identification differs for men and women, provides a significantly better fit than model (1). Figure 6.2 presents the fitted percentage of males and females identifying with the middle class, by their educational levels. For both sexes, the percentage of middle class identifiers increases with education. However, among those with at least some high school education, males are clearly more prone than females to see themselves as belonging to the middle class. Under model (2) this sexual difference prevails in both years.

The third model in Table 6.2 posits that the influence of education on class identification differs in 1956 and 1971. This model also fits the data, but the difference in fits between model (3) and model (1) shows that including the parameter of class-education-year does not provide any significant improvement over the model where the effect of education on class identification is similar in both years.

Thus far we have shown that men base their class perceptions more closely on their educational attainments than women, and that the



Note: Figures based only on middle and working class identifiers. Percentage of middle class identification derived from model (2), Table 6.2, with figures pooled across years of observation.

Figure 6.2--Fitted Percentage of White Detroit Area Residents Identifying with the Middle Class, by Sex and Educational Level

Table 6.2.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Education, Sex, and Year, for Detroit Area Whites, 1956 and 1971[a]

	Model	X^2	Df	P
(1)	education-sex-year, class-education, class-sex, class-year	9.33	7	.23
(2)	education-sex-year, class-year, class-education-sex	3.21	5	.68
	difference, (1) - (2)	6.12	2	.05
(3)	education-sex-year, class-sex, class-education-year	6.98	5	.24
	difference, (1) - (3)	2.54	2	.28
(4)	education-sex-year, class-education-sex	16.57	6	.01
	difference, (4) - (2)	13.36	1	.001

[a]Models are fitted to data in the middle panel of Table 4.1 and the middle panel of Table 5.2.

effect of education on class identification is similar in 1956 and 1971. Perhaps the upgrading of edcuational levels between the two years is sufficient to account for the shift in class identification for this white population. Since this was not the case for either white males or white females examined separately, it would be surprising to obtain this result in this analysis that examines both sexes at once. Indeed, model (4), under which the shift in class identification is eliminated or assumed to be explained by the shifts in the educational composition of men and women, provides a very poor fit to the data. For whites in Detroit, the shift in education alone is insufficient to account for the change in class identification.

Concerning the association of income and class identification, previous analysis showed that for both white men and white women, their "class consciousness" is unchanged between 1956 and 1971, and the shift in income between the two years is sufficient to account for the shift in class identification. This suggests that males and females relate their class identifications to their family incomes in similar manner. The first model in Table 6.3 posits that both sexes share the same shift in class identification, and that both similarly perceive their social classes on the basis of their incomes. It also posits a difference between men and women in their class identifications. This model fits the data very well.

Model (2) takes as given a sexual difference in the effect of income on class identification. This model also fits well, although the fit is not significantly better than that provided by model (1), which assumes that the effects of income are the same for men and

Table 6.3.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Income, Sex, and Year, for Detroit Area Whites, 1956 and 1971[a]

	Model	X^2	Df	P
(1)	income-sex-year, class-income, class-sex, class-year	7.48	10	.68
(2)	income-sex-year, class-year, class-income-sex	3.92	7	.79
	difference, (1) - (2)	3.55	3	.31
(3)	income-sex-year, class-sex, class-income-year	4.55	7	.71
	difference, (1) - (3)	2.93	3	.40
(4)	income-sex-year, class-income, class-year	7.75	11	.74
	difference, (4) - (1)	0.27	1	.60
(5)	income-sex-year, class-income	13.16	12	.36
	difference, (5) - (4)	5.41	1	.02

[a]Models are fitted to data in the bottom panel of Table 4.1 and the bottom panel of Table 5.2.

women. Thus we find no evidence of a difference in the way men and women base their class identifications on their incomes.

The third model assumes that the effect of income on class identification has changed between 1956 and 1971. The difference between the fits of this model and model (1), which assumes that the effect of income is independent of the year of observation, indicates that the class consciousness of Detroit area whites with respect to income is similar in the two years.

These models clearly demonstrate that income does not interact in its effect on class identification with either sex or year. Thus model (1), which posits independence among the effects of sex, year, and income, remains the simplest description we have discussed thus far. However, previous analysis has also shown that males and females share similar class identifications. Model (4) excludes this sex-class parameter, and a comparison with model (1) indicates that this even more parsimonious model describes the data very well. The effect of family income on class identification as well as the shift in class identification and the distribution of class identification, are similar for white men and women.

As we mention above, previous analysis showed that, for white males and females separately, the shift in income accounts for the change in class identification between 1956 and 1971. Model (5) looks at whether the change in class identification can be similarly explained when considering males and females simultaneously. This model eliminates the class-year parameter. Although the model fits the data fairly well, the difference between models (4) and (5) is

significant, indicating that the shift in income among Detroit area whites is insufficient to account for the shift in class identification.

For whites, sex appears to have an effect on the influence of socioeconomic status on class identification only for education. Men align their class perceptions more closely to their educational attainments than do women. However, for incomes and occupations, men and women are quite similar in the way the characteristics affect class identifications. This is an intriguing result, for as we have operationalized these three socioeconomic variables, education alone reflects the personal experience of all women. The "occupation" of married women is that of her husband, and income refers to family income. Moreover, of the three socioeconomic variables, men and women are most alike in their educational attainments, and occupational and income differences are more pronounced and well documented. Yet men and women agree most in their effects of occupation and income on class perceptions, and disagree markedly in the bearing of education on class identification. This education differential may be partly explained by the lower occupational status and lower income returns a woman receives for a given level of education, when compared to a man. Testing this notion would require substantial partitioning of the female sample--looking separately at working and non-working women, married and unmarried--and would also require us to consider the effects of the socioeconomic variables simultaneously. Although this is surely an analysis of crucial concern to the understanding of the basis of sex differences in class perceptions, it also demands too much of the sample size and statistical techniques we employ here.

We will again consider the sex effects for Detroit area whites, in comparison to those of blacks, in the last section of this chapter. The next section compares the socioeconomic effects on class identification for black men and women.

Sex and Socioeconomic Status for Blacks

Let us begin by recapitulating the previous findings concerning the relation of occupation to class identification for blacks. For men, we found evidence of a small association of occupation with class identification, but no shift in either this association or in class identification between 1956 and 1971. Women had no association between their occupations and their class identifications in either year, and class identification did not shift significantly between the two years. Model (1) in Table 6.4, which assumes an association of class identification with occupation, a difference between men and women in their class identifications, and a shift in class identification, fits the data well for blacks.

The second model in this table assumes that the association between class identification and occupation is different for men and women. This might follow from the previous finding that the relation is significant among men but not among women. However, although model (2) fits well ($P = .48$), it does not differ significantly from model (1) ($P = .56$), indicating that men and women are similar in the association between occupation and class identification.

Model (3) tests for whether the shift in class identification differs for men and women. The difference in fits between this model and the first model suggests that if black men and women shifted their

Table 6.4.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Occupation, Sex, and Year, for Detroit Area Blacks, 1956 and 1971[a]

	Model	X^2	Df	P
(1)	occupation-sex-year, class-occupation, class-sex, class-year	8.56	10	.57
(2)	occupation-sex-year, class-year, class-occupation-sex	6.51	7	.48
	difference, (1) - (2)	2.05	3	.56
(3)	occupation-sex-year, class-occupation class-sex-year	8.44	9	.49
	difference, (1) - (3)	0.12	1	.73
(4)	occupation-sex-year, class-sex, class-occupation-year	6.94	7	.43
	difference, (1) - (4)	1.61	3	.66
(5)	occupation-sex-year, class-occupation, class-year	10.17	11	.52
	difference, (5) - (1)	1.61	1	.20
(6)	occupation-sex-year, class-year	20.14	14	.13
	difference, (6) - (5)	9.97	3	.02
(7)	occupation-sex-year, class-occupation	17.17	12	.14
	difference, (7) - (5)	7.01	1	.008

[a]Models are fitted to data in top panel of Table 4.3 and top panel of Table 5.5.

class identifications between 1956 and 1971, then the shift was similar for both sexes. The fourth model looks at the possibility of a change in class consciousness of blacks with respect to their occupations. From previous findings we would expect to find no shift, and the difference between models (1) and (4) indicates that this variety of class consciousness for blacks is indeed identical in both years.

The results thus far imply that a very simple mechanism underlies the way blacks base their class perceptions on their occupations. However, an even simpler model may describe what is operating. We first ask whether sex is related to class identification. Model (5) tells us it is not. Males and females do not significantly differ in their class identifications. Secondly, we ask whether class identification is related to the occupations of blacks. The findings for the two sexes separately were somewhat contradictory, with a slight association only in evidence for males, and none at all detected for females. Model (6), which eliminates the class-occupation parameter, fits quite poorly and the significant difference between models (5) and (6) implies that the association between class and occupation is statistically significant for blacks. Finally, we ask whether the shift in class identification is significant. For men and women separately, the change in middle and working class identifications was not quite significant. However, model (7), which omits the class-year parameter, provides a significantly poorer fit than model (5), which includes this parameter. Thus, the black population in Detroit as a whole changed its class identification significantly between 1956 and 1971.

Model (5) in Table 6.4 summarizes the effect of occupation on class identification and its change for black males and females in Detroit. This model assumes that occupation and class identification are associated in a similar manner for males and females and in 1956 and 1971. It also posits that blacks experienced a shift in class identification, regardless of their occupation or their sex. Thus sex has no direct effect on the class perceptions of blacks and the manner in which occupations bear on class identification is similar for black men and women.

Previous analysis found the effect of education on class identification to be significant for men, but not for women. The first model in Table 6.5 posits that men and women differ in their class identifications, that they are similar in the way their education influences their class identifications, and that a similar shift in class identification characterizes both men and women and people of all educational levels. The model fits the data fairly well.

If we build in a sexual difference in the effect of education on class identification, as implied by the previous findings, the fit (model (2)) is very good and significantly better than the model without this interaction. Thus black men tie their class perceptions to their educational attainments, but black women do not--a picture that closely approximates the findings for whites described in the previous section.

The third model examines whether the effect of education on class identification differs in the two years. The model does not provide a fit that is significantly different from model (1), which posits that the influence of education is invariant with year. Thus

Table 6.5.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Education, Sex, and Year, for Detroit Area Blacks, 1956 and 1971[a]

	Model	X^2	Df	P
(1)	education-sex-year, class-education, class-sex, class-year	8.33	7	.30
(2)	education-sex-year, class-year, class-education-sex	2.43	5	.79
	difference, (1) - (2)	5.90	2	.05
(3)	education-sex-year, class-sex, class-education-year	6.00	5	.31
	difference, (1) - (3)	2.33	2	.31
(4)	education-sex-year, class-sex-education	6.49	6	.37
	difference, (4) - (2)	4.06	1	.04

[a]Models are fitted to data in middle panel of Table 4.3 and middle panel of Table 5.5.

we find no evidence that the effect of education on class identification is changing for blacks. The last model in Table 6.5 informs us that the change in class identification, net of the change in the educational attainments of blacks, is statistically significant. In other words, the shift in educational composition is not sufficient to account for the change in class identification.

Turning to the influence of income on class identification, previous findings showed that women did not relate their class identifications to their family incomes, but men showed both a significant association and a shift in this association between the two years. In 1956, the two middle income groups were most likely to identify with the middle class. In 1971, however, men in these two categories were the least likely to identify with the middle class.

The first model in Table 6.6 assumes independent effects of income, sex, and year on class identification. In other words, women and men are assumed to base their class perceptions on their incomes in a similar manner, and the change in class identification is taken to be identical for the two sexes. This model fits fairly well, although the significance level of .22 is not as good as we might desire. However, the second model, which posits that men and women differ in the way income bears on class identification, also provides a poor fit, and the difference between models (2) and (1) indicates that black men and women don't differ significantly in the association of class identification and income.

The third model looks at whether the relation of class and income—the "class consciousness" of blacks with respect to income—changes between the two years. This model fits the data somewhat

Table 6.6.--Summary of Selected Models Fi-ted to Joint Distribution of Class Identification, Income, Sex, and Year, for Detroit Area Blacks, 1956 and 1971[a]

	Model	X^2	Df	P
(1)	income-sex-year, class-income, class-sex, class-year	13.03	10	.22
(2)	income-sex-year, class-year, class-income-sex	11.42	7	.12
	difference, (1) - (2)	1.61	3	.66
(3)	income-sex-year, class-sex, class-income-year	8.20	7	.32
	difference, (1) - (3)	4.83	3	.18
(4)	income-sex-year, class-income, class-year	16.28	11	.13
	difference, (4) - (1)	3.24	1	.07
(5)	income-sex-year, class-year	26.48	14	.02
	difference, (5) - (4)	10.20	3	.02
(6)	income-sex-year, class-income	21.11	12	.05
	difference, (6) - (4)	4.83	1	.03

[a]Models are fitted to data in lower panel of Table 4.3 and lower panel of Table 5.5.

better than model (1), but the difference between the two fits is not significant, indicating no support for the notion of a changing class consciousness among blacks.

As we noted in previous discussion, the class identification of blacks is not related directly to their sex. Model (4), which eliminates this effect, fits the data (though quite poorly), and the difference between this model and model (1), which includes the effect of sex on class identification, is not statistically significant.

The two remaining models in Table 6.6 differ from model (4) in eliminating the effect on class identification of income (model (5)) and year (model (6)), respectively. Neither of these models fits the data adequately, implying that both the net association of class identification with income, and the shift of class identification over time, are significant and must be included in a model describing the pattern of relations among blacks.

Which model among (1), (2), (3), and (4) fits the data best? The choice is partly arbitrary. We might select model (4) since models (2) and (3) and previous analysis show that none of the three-way interactions involving class identification is significant by itself. However, model (3) provides the best fit, looking only at the various probabilities of the different models. Moreover, model (3) fits significantly better than model (4) (difference $X^2 = 8.08$, 4 df, $.025 < P < .05$). At the same time, it is clear that model (3) does not fit significantly better than model (1), which assumes no three-way interactions involving class identification. On the basis of parsimony alone, the first model is preferable over the third. This skirting among models (1), (3), and (4) shows the arbitrariness

of adopting statistical criteria alone. The model that fits best depends partly on one's perspective and the starting point. There is no escaping the ambiguity of these results.

This section shows that for blacks, as for whites, sex affects the socioeconomic determination of class identification only with respect to education. As with whites, women are less "class conscious" in the way their education influences their class identifications than are men. For occupation and income, sex has no ascertainable influence on the way the variables relate to class identification. The following section compares blacks and whites and men and women simultaneously. Further summary and discussion of sex effects follows relevant analysis in that section.

Sex, Race, and the Effect of Socioeconomic Status on Class Identification

This final section considers simultaneously the influence of sex, race, and socioeconomic status on class identification. In effect, the following analysis summarizes much of the investigation from Chapters IV, V, and the previous two sections of the present chapter. We begin by looking at the effect of occupation on class identification, and turn subsequently to the effects of education and income. The data are described in Tables 4.1, 4.3, 5.2, and 5.5 for white males, white females, black males, and black females, respectively. As we stated at the outset of this chapter, these data were described in detail in Chapters IV and V; they will not receive close attention here except by way of summarizing significant findings emerging from this analysis.

For occupation, we propose models which are fitted to the joint distribution of class identification, occupation, sex, race, and year. Table 6.7 summarizes nine models which we propose to fit the data. Model (1) serves as a baseline model. It assumes that each of the four independent variables of sex, race, year, and occupation independently influences class identification. Given prior findings of an interaction of occupation and class identification with year for whites and with race for women, we would not expect model (1), which assumes no interactions, to fit the data well. Indeed, it fits very poorly. The next three models assume, respectively, an interaction of class identification and occupation with race, sex, and year. The difference between each of these three models and model (1) is significant, indicating that all three interactions are statistically significant. (None of these models fits the data well, but the issue here is the difference in fits rather than the fit of any given model.) In other words, the influence of occupation on class identification differs by race, by sex, and by year. We will return to the exact nature of these interactions shortly.

Do sex and race interact in their effects on class identification? We know that blacks and whites differ substantially in their class perceptions, and that men and women of either racial group do not. Model (5) assumes that sex and race do not influence class identification independently. The difference between this model and model (1), which assumes that the effects are independent, is not significant. Thus there is no evidence that the effect of race on class identification differs for males and females.

Table 6.7.--Summary of Selected Models Fitted to Joint Distribution of Class Identification, Occupation, Race, Sex, and Year, for Detroit Area Residents, 1956 and 1971[a]

	Model[b]	X^2	Df	P
(1)	class-occupation, class-race, class-sex, class-year	45.41	25	.007
(2)	class-occupation-race, class-sex, class-year	30.56	22	.11
	difference, (1) - (2)	14.86	3	.002
(3)	class-occupation-sex, class-race, class-year	36.28	22	.03
	difference, (1) - (3)	9.14	3	.03
(4)	class-occupation-year, class-race class-sex	34.30	22	.05
	difference, (1) - (4)	11.11	3	.01
(5)	class-race-sex, class-occupation, class-year	43.52	24	.009
	difference, (1) - (5)	1.89	1	.17
(6)	class-race-year, class-occupation, class-sex	45.01	24	.006
	difference, (1) - (6)	0.41	1	.52
(7)	class-sex-year, class-occupation, class-race	45.40	24	.005
	difference, (1) - (7)	0.01	1	.91
(8)	class-occupation-race, class-occupation-sex, class-occupation-year	10.68	16	.83
(9)	class-occupation-race, class-occupation-sex, class-year	21.23	19	.32
	difference, (9) - (8)	10.55	3	.014
(10)	class-occupation-race, class-occupation-year, class-sex	19.05	19	.45
	difference, (10) - (8)	8.37	3	.039
(11)	class-occupation-sex, class-occupation-year, class-race	26.14	19	.13
	difference, (11) - (8)	15.46	3	.001

[a]Models are fitted to data in upper panels of Tables 4.1, 4.3, 5.2, and 5.5.

[b]All models assume the four-way interaction among occupation, race, sex, and year.

Model (6) tests for a change in the race differential in the two years of observation. Chapter III found no evidence of such an interaction. Here we again note that this parameter is not significant.

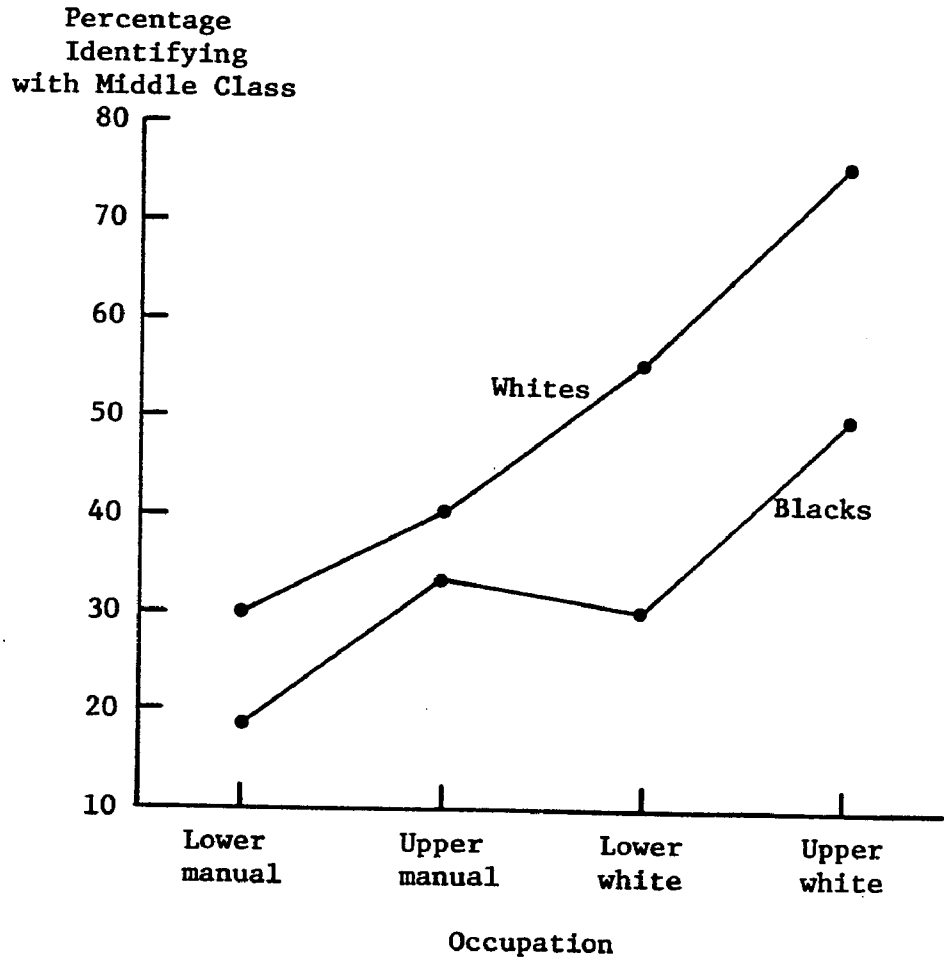
The seventh model is, in a sense, also redundant, since we have established that men and women share similar class identifications. Model (7) takes as given a sex difference in class identification and a shift in this sex effect between the two years. This interaction is not statistically significant.

Up to this point the analysis has established that the effect of occupation on class identification differs by race, sex, and year. We now wish to ascertain whether each of these three interactions is significant, net of the other ones. Model (8) incorporates all three interactions. Comparing the fit of model (8) with each of the three subsequent models which omit, respectively, the interaction of class-occupation-year (model (9)), class-occupation-sex (model (10)), and class-occupation-race (model (11)), will tell us whether each of the three interactions is significant, net of the other two. This is clearly the case, since the difference in fits is significant for all three comparisons.

Model (8) in Table 6.7, then, summarizes a complicated pattern of interactions involving the effect of occupation on class identification. Generally, this effect differs for blacks and whites, for males and females, and it has changed between the mid-1950's and 1971. Furthermore, these three interactions are independent of one another, which means that regardless of one's sex, the influence of occupation on class identification differs by one's race, etc.

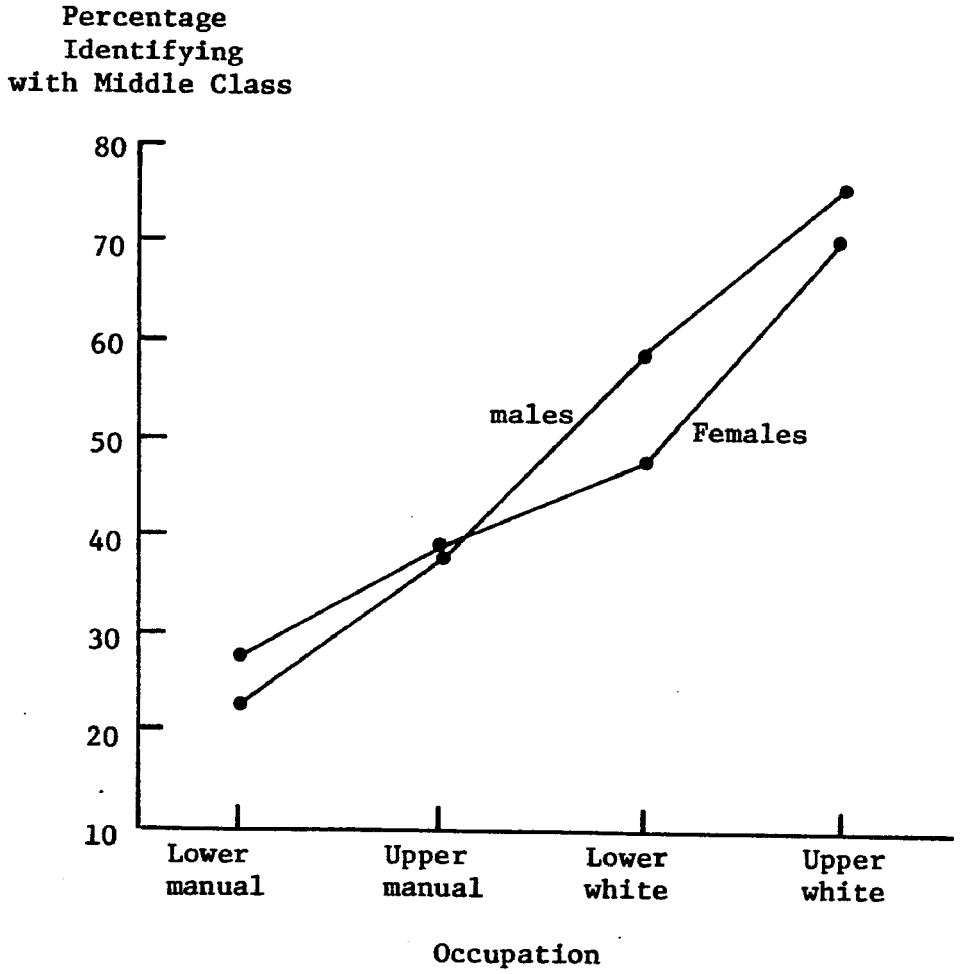
The patterns of these interactions are portrayed in Figure 6.3. Diagram A describes the racial difference in the effect of occupation on class identification. Whites exhibit a strong, positive association of occupation and class identification, where holders of successively higher status occupations are more prone to adopt a middle class identification. Blacks, however, not only are much less likely than whites to identify with the middle class, but white collar incumbents differ from their white counterparts much more than blue collar workers. An increase in occupational status, then, does not close the racial gap in class perceptions; rather it makes it wider. But, as Siegel shows (1965), it is at the upper status levels where income discrimination against blacks is greatest. The findings described here may be the subjective reflection of such discrimination.

Diagram B in Figure 6.3 shows the difference between men and women in their associations between class identification and occupation. At first glance, the two sexes appear quite similar. However, among blue collar workers, women are more likely than men to identify with the middle class; among white collar workers, women are less likely to identify with the middle class. This reversal suggests a similar interpretation to the one we proffered for the racial difference: the subjective "returns" from occupation are less for women than for men at the white collar level. One might wish to attribute this to income discrimination or to the systematically lower status white collar jobs held by women, but such an interpretation is a bit hasty in these data where the occupation assigned a housewife is her husband's. Nevertheless, this sexual difference may at least



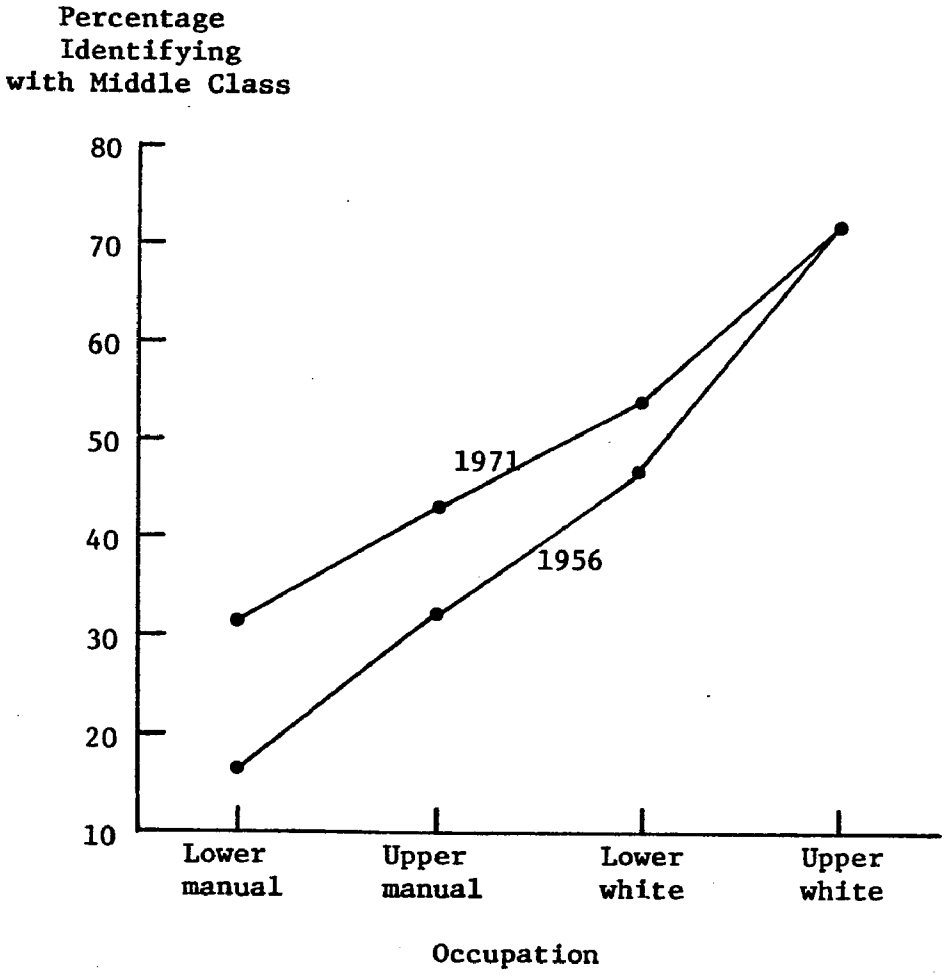
Note: Figures based only on middle and working class identifiers. Percentage of middle class identification derived from model (8), Table 6.7, with figures pooled across categories of sex and year for Figure 6.3A, across categories of race and year for Figure 6.3B, and across categories of race and sex for Figure 6.3C.

Figure 6.3A--Fitted Percentage of Detroit Area Residents Identifying with the Middle Class, by Race and Occupation



Note: Figures based only on middle and working class identifiers. Percentage of middle class identification derived from model (8), Table 6.7, with figures pooled across categories of sex and year for Figure 6.3A, across categories of race and year for Figure 6.3B, and across categories of race and sex for Figure 6.3C.

Figure 6.3B--Fitted Percentage of Detroit Area Residents Identifying with the Middle Class, by Sex and Occupation



Note: Figures based only on middle and working class identifiers. Percentage of middle class identification derived from model (8), Table 6.7, with figures pooled across categories of sex and year for Figure 6.3A, across categories of race and year for Figure 6.3B, and across categories of race and sex for Figure 6.3C.

Figure 6.3C--Fitted Percentage of Detroit Area Residents Identifying with the Middle Class, by Year and Occupation

partly follow from socioeconomic inequality, although only further decomposition would allow us to move beyond speculation.

Diagram C shows the year difference in the effect of occupation. The graph is familiar: the association between occupation and class identification diminishes with time. Among all but the upper white collar group, middle class identification is more likely in 1971 than in 1956, and the lower the occupational status, the greater the shift we observe. This upward shift may be part of a general trend toward identification with a so-called "middle class" life style--a notion popularly portrayed in the press, but undocumented in social science research. At any rate, the shift into middle class identification is clearly not due to a shift in the occupations held by the populace (nor by an overall shift in educational levels or incomes, as we show subsequently). It is rather a shift in perception, accompanied by but not completely explained by, a shift in socioeconomic status, and we might be wise in future investigations to incorporate social psychological mechanisms into models which purport to generate class identification and its changes.

Turning now to the effect of education on class identification, recall the previous findings of both a sexual difference and a racial difference in the way education bears on class identification. The models in Table 6.8 confirm these findings.

The first model, which posits that sex, race, education, and year indpendently influence class identification, does not fit well. Under model (2), we assume that the effect of education differs for blacks and whites. The addition of this effect significantly improves the model. Model (3) differs from model (1) by incorporating a sex

Table 6.8.--Summary of Selected Models Fitted to the Joint Distribution of Class Identification, Education, Race, Sex, and Year, for Detroit Area Residents, 1956 and 1971[a]

	Model[b]	X^2	Df	P
(1)	class-education, class-race, class-sex, class-year	32.02	18	.02
(2)	class-education-race, class-sex, class-year	18.50	16	.30
	difference, (1) - (2)	13.52	2	.001
(3)	class-education-sex, class-race, class-year	19.43	16	.25
	difference, (1) - (3)	12.59	2	.002
(4)	class-education-year, class-sex, class-race	29.85	16	.02
	difference, (1) - (4)	2.16	2	.34
(5)	class-education-race, class-education-sex, class-year	7.93	14	.89
	difference, (2) - (5)	10.57	2	.005
(6)	class-education-race, class-education-sex	25.20	15	.05
	difference, (6) - (5)	17.27	1	.001

[a]Models are fitted to data in middle panels of Tables 4.1, 4.3, 5.2, and 5.5

[b]All models assume the four-way interaction among education, race, sex, and year.

Table 6.8.--Summary of Selected Models Fitted to the Joint Distribution of Class Identification, Education, Race, Sex, and Year, for Detroit Area Residents, 1956 and 1971[a]

	Model[b]	X^2	Df	P
(1)	class-education, class-race, class-sex, class-year	32.02	18	.02
(2)	class-education-race, class-sex, class-year	18.50	16	.30
	difference, (1) - (2)	13.52	2	.001
(3)	class-education-sex, class-race, class-year	19.43	16	.25
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(4)	class-education-year, class-sex, class-race	29.85	16	.02
	difference, (1) - (4)	2.16	2	.34
(5)	class-education-race, class-education-sex, class-year	7.93	14	.89
	difference, (2) - (5)	10.57	2	.005
(6)	class-education-race, class-education-sex	25.20	15	.05
	difference, (6) - (5)	17.27	1	.001

[a]Models are fitted to data in middle panels of Tables 4.1, 4.3, 5.2, and 5.5

[b]All models assume the four-way interaction among education, race, sex, and year.

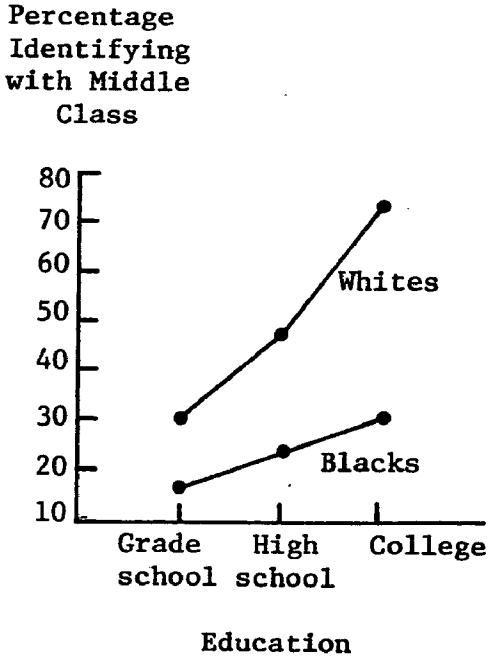
difference in the effect of education on class identification. This model also fits significantly better than model (1), and we infer that the interaction among class identification, education, and sex is significant. Model (4) assumes that the association between class identification and education differs in 1956 and 1971. Such an interaction was not found previously, and here models (1) and (4) are not significantly different from one another in their fits.

Are the race and sex interactions with education and class identification both significant and independent of one another? Model (5) makes this assumption. The model fits the data very well indeed, and the difference between models (2) and (5) indicates that the data are fit significantly better by a model assuming both interactions than one which assumes only the interaction among class identification, education, and race.

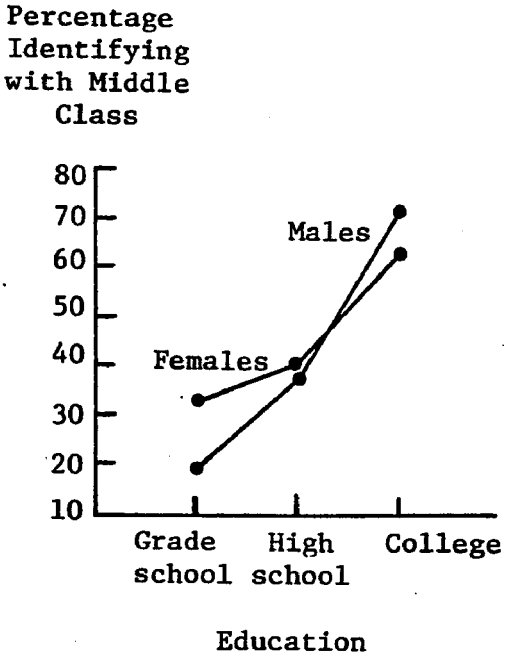
The final model in Table 6.8 differs from model (5) in omitting the class-year parameter. If the model fits well and if the difference in fits between models (5) and (6) is not great, we could infer that the shift in educational attainments explains the shift in class identification. That is, given the shift in education and the association of education with class identification, the net shift in class identification would not be significant. However, this is by no means the case. Model (6) fits very poorly and the net shift in class identification is statistically significant. Again, a change in socioeconomic status does not account for a change in class identification.

The race and sex interactions with class identification and education are depicted in diagrams A and B of Figure 6.4, respectively.

6.4A



6.4B



Note: Figures based only on middle and working class identifiers. Percentage of middle class identification derived from model (5), Table 6.8, with figures pooled across categories of sex and year for Figure 6.4A, and across categories of race and year for Figure 6.4B.

Figure 6.4A--Fitted Percentage of Detroit Area Residents Identifying with the Middle Class, by Education and Race

Figure 6.4B--Fitted Percentage of Detroit Area Residents Identifying with the Middle Class, by Education and Sex

In diagram A, note that blacks are less likely than whites at any educational level to identify with the middle class, and that the slope for whites is a good deal steeper than the slope for blacks. This corresponds generally to the findings for the racial difference in the effect of occupation, although here the slope for blacks is monotonic, and the black occupation slope was not monotonic. Nevertheless, the interpretation still holds that at higher status levels the difference in class perceptions between blacks and whites is greater than at lower status levels.

Diagram B depicts male-female differences in the association between class identification and education. Among those of grade school education or less, males are considerably below females in the proportion of middle class identifiers. At the highest level of education, men exceed women in middle class identification. Again this pattern approximates the sex difference found for the effect of occupation on class identification. Further clues to the interpretation of these racial and sexual interactions may be offered by looking at the effect of income on class identification.

The previous investigation of the effect of income on class identification specified that income interacts with no other variable in its effect. Its influence is alike for blacks and whites, for males and females, and for years of observation. There is also evidence that income may be able to account for the shift in class identification.

We may expect the first model in Table 6.9, which assumes independent effects on class identification of income, race, sex, and year, to fit the data reasonably well. Indeed, model (1) does provide

Table 6.9.--Summary of Selected Models Fitted to the Joint Distribution of Class Identification, Income, Race, Sex, and Year, for Detroit Area Residents, 1956 and 1971[a]

	Model[b]	X^2	Df	P
(1)	class-income, class-race, class-sex, class-year	30.47	25	.21
(2)	class-income-race, class-sex, class-year	23.49	222	.37
	difference, (1) - (2)	6.98	3	.07
(3)	class-income-sex, class-race, class-year	25.49	22	.27
	difference, (1) - (3)	4.99	3	.17
(4)	class-income-year, class-race, class-sex	26.68	22	.22
	difference, (1) - (4)	3.79	3	.28
(5)	class-income, class-race, class-year	32.07	26	.19
	difference, (5) - (1)	1.59	1	.21
(6)	class-income, class-race	41.08	227	.04
	difference, (6) - (5)	9.01	1	.003

[a]Models are fitted to data in lower panels of Tables 4.1, 4.3, 5.2, and 5.5.

[b]All models assume the four-way interaction among income, race, sex, and year.

Table 6.9.--Summary of Selected Models Fitted to the Joint Distribution of Class Identification, Income, Race, Sex, and Year, for Detroit Area Residents, 1956 and 1971[a]

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(1)	class-income, class-race, class-sex, class-year	30.47	25	.21
(2)	class-income-race, class-sex, class-year	23.49	222	.37
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(3)	class-income-sex, class-race, class-year	25.49	22	.27
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(6)	class-income, class-race	41.08	227	.04
	difference, (6) - (5)	9.01	1	.003

[a]Models are fitted to data in lower panels of Tables 4.1, 4.3, 5.2, and 5.5.

[b]All models assume the four-way interaction among income, race, sex, and year.

an adequate description of the data. The three subsequent models propose that the influence of income on class identification differs by race, by sex, and by year, respectively. There is no evidence that any of these three differences is statistically significant. This contrasts sharply with the findings for occupation and education, a point the discussion will turn to shortly.

As we have documented frequently, men and women hold similar class identifications. Model (5), which omits this parameter, does not differ significantly from model (1), which includes it.

Finally, we ask whether the shift in incomes between 1956 and 1971 is sufficient to explain the shift in class identifications. The last model in Table 6.9 assumes that the net shift in class identification is nil. Clearly, this assumption is false, since the model fits very poorly.

Model (5) provides the most adequate summary of the data. It tells us that class identifications differ by family income, by race, and by year. The income effect is similar for males and females, for blacks and whites, and in 1956 and 1971. Unlike the effects of both occupation and education, we find here no evidence of a race or a sex difference in the influence of the socioeconomic status indicator on class perceptions.

Concerning racial differences, these findings correspond quite closely to those of Jackman and Jackman (1973), which the last two chapters described. This replication suggests that the ascriptive characteristic of race does indeed impinge on the way the universalistic socioeconomic characteristics of education and occupation bear on class perceptions. Not only do blacks hold lower status occupations

and attain less educationally than whites, which directly accounts for a substantial disparity between the two racial groups in the place they tend to locate themselves in a subjective social class structure, but better educated blacks and black incumbents of higher status occupations also differ from whites in their class identifications even more than those of lower educational and occupational status.

The similarity between blacks and whites in their subjective social class "returns" to income is at odds with the racial differences in the patterns of occupation and education. Subjectively, then, income may be a more universalistic criterion of social class than either education or occupation. This suggests as well that if the income differences between blacks and whites are greater at the upper ends of the education and occupation distributions, then the greater racial disparities in class identification at these upper extremes may simply be due to greater disparities in income. This is one of a number of hypotheses which, given an appreciably larger sample size, might be put to a test.

The lack of a sexual difference in the effect of income on class identification, and its existence for both education and occupation, are also worth mentioning, although their explanation doesn't necessarily parallel that offered for the racial differences. We are cautious in interpreting these sexual interactions because of possible misspecification due to the assignment of husband's occupation and family income to married, working women. Chapter V indicated, following a cursory analysis, that husband's occupation seemed more relevant to a married working woman's class perceptions than her own. Family income was also assigned in lieu of personal income for reasons of

data compatibility. More detailed data and a larger sample would enable a more thorough investigation of class perceptions among women. The interactions with sex identified in this analysis ought to encourage such a study. They also argue forcefully against ignoring sex as a pertinent variable in the study of class perceptions.

Finally we note that none of the socioeconomic variables alone were sufficient to account for the shift in class identification. To be sure, there occurred an upward shift in the distribution of all three characteristics--education, occupation, and income--but none of these could explain the shift out of working class identification and into middle class identification, which occurred among Detroit area residents. Had the data been of adequate size (particularly for blacks), the three socioeconomic variables could have been considered simultaneously in their effects on class perceptions, as was done for whites in Chapters IV and V. Thus, the three variables may have affected class identification cumulatively, resulting in a statistical explanation of the change in class identification. But no socioeconomic variable alone was able to explain the shift.

CHAPTER VII

CONCLUSIONS

Summary of the Findings

The research described in the previous chapters comprises a study of the class identifications of people in the Detroit area, with four related focuses: 1) the change in class identification between the 1950s and 1971; 2) the effects of the socioeconomic variables of occupation, education, and income on class identification and its changes; 3) the difference between blacks and whites in the association of class identification and socioeconomic status, and changes in this association; and 4) the difference between men and women in the association of class identification and socioeconomic status, and changes in this association.

The data derive from several cross-sectional sample surveys taken in the Detroit area in the 1950s and one survey made in 1971. The 1971 questionnaire was administered in two different forms to two random subsamples of the population. The class identification item differed in its placement among other questions in the two forms. Chapter II shows, however, that although the distribution of class identification differs slightly for the two subsamples, this difference has no effect on the estimate of the change in class identification, nor does the form difference appear to vary with the sex of the respondent. A number of other variables, which appear prior to class

identification in the questionnaire, are examined for their relation to questionnaire form and to class identification in order to gather clues to explain the form difference in class identification. There is no evidence that the association of any of these variables and class identification differs for the two forms. Thus, the form difference seems to have no pernicious effect on the description of class identification, its changes and its causes.

The third chapter focuses on the change in class identification. Regardless of which year in the 1950's (for which we have survey data) is selected as a baseline, we observe a shift out of identification with the working class and into both middle class identification and lower class identification. This shift characterizes both blacks and whites, although blacks are much less likely to identify with the middle class than whites, both in the 1950s and in 1971. We find also that men and women both changed largely in a similar manner, except that women alone increased in lower class identification. Examination of the shift within three cohorts shows that each of the cohorts changed to a similar degree.

The analysis then turns to the effects of the socioeconomic status variables of occupation, education, and income on class identification among men in the Detroit area. For white males, each of the three variables is highly related to class identification and the relationship with occupation alone changed (loosened) with time. If all three variables are considered simultaneously, they can account for the shift into middle class identification. For black males, the association between class identification and occupation, education, and income, respectively, are also present, and only the association with income

changes with time. We also find evidence that blacks and whites differ in the way their educational attainments affect their class perceptions, with this association being a good deal stronger for white men than black men.

The class identifications of married, working women tend to be based more on their husbands' occupations than on personal occupations. This is offered as prima facie support for considering husband's occupation as the relevant occupational variable in the investigation of the class identifications of women.

For white women, the associations between the three socioeconomic variables and class identification do not change over time, and the shift in income accounts for the shift in class identification. Black women do not associate their class identifications with their socioeconomic characteristics.

The last part of the analysis looks specifically at the effect of sex on the relationship between socioeconomic status and class identification for the two racial groups separately. Among whites, sex has no direct bearing on class identification and an indirect bearing only via education, where the influence of education on class identification is somewhat stronger for men than women. Both men and women have relaxed their relations of class identification with occupation over time. Men and women are also similar in their alignments of class identification with income, and this association has not changed between the mid-1950s and 1971.

For blacks, men and women also hold similar class identifications, and both sexes tie their occupations and incomes to their class identifications to a similar degree. However, like whites, the class

identifications of men are more closely aligned to their educational attainments than are the class identifications of women.

Considering blacks and whites together, the influence on class identification of both occupation and education is greater for men than for women. Also, whites relate these two socioeconomic variables to their class identifications more closely than do blacks. Only for occupation has the association with class identification changed with time.

Discussion

Although an intensive investigation of a relatively narrow topic and a small number of variables, this analysis touches on a variety of theoretical and methodological issues. To organize this discussion, let us take each of the four above-mentioned focuses of the study in turn.

Change. This analysis has taken a number of surveys whose design and questionnaire construction are comparable enough to give us confidence that the change described is not attributable solely to methodological differences among studies. Although the importance of baseline-followup similarity might seem obvious, it has sometimes been overlooked or underplayed in past studies of the change in class identification. Seemingly trivial differences, such as a change in the order of the social class alternatives or the addition or deletion of one social class, can markedly and unpredictably affect responses (see Schuman and Duncan, 1974 for one such example). Further research would do well to address these issues systematically, for they are

vital not only to class identification studies, but to survey investigations in general.

The effect of socioeconomic status. Almost every investigation of class identification has assumed that class perceptions are a result, at least in part, of a person's socioeconomic attributes. The present analysis also follows this line of reasoning. It elucidates this model by showing that these associations need not be linear or even monotonic. Conventional regression techniques, which make assumptions of linearity, may not always do justice to reality.

Furthermore, the present analysis makes no assumption that class identification is a variable with ordered or interval categories. The ordering and unidimensionality issues have received no attention by class identification researchers. Daniel's (1972) research suggests, however, that among blacks, upper and lower class identification may have a sharply different basis (perhaps ideological) than identification with the middle and working classes (perhaps socioeconomic). Thus class identification may be a two dimensional attribute, and simplifying analysis by combining middle and upper classes, and the working with the lower class, may only further obfuscate the meaning of class identification. Further investigation also needs to be done in this area, and the low (but possibly growing) proportion of people who identify with the extreme lower and upper classes, points to the need for larger samples.

The racial difference. This area has been investigated by both Hodge and Treiman (1968) and Jackman and Jackman (1973). The former study suggested that the racial difference in class identification is attributable to differences in socioeconomic status. The latter,

using the same data as Hodge and Treiman, found significant interactions among race, class identification, and socioeconomic status for both occupation and education. These interactions were also found in the present study. We devoted much attention to this discussion, and need not reiterate it here. Suffice it to say that this racial interaction seems pervasive enough to deserve the attention of future investigators, especially in light of the marked changes in black socioeconomic achievement that are currently under way in the United States.

The sexual difference. This is the first study (to our knowledge) that has looked at the difference between males and females in the bearing of socioeconomic status on class identification. We find that women differ from men in the effect on class perceptions of both education and occupation. These differences may be due to income differentials between men and women, or to more "subjective" mechanisms which result from something such as socialization differences in the way men and women come to value their educational attainments or work life activities. As further research bearing on relevant attitudinal differences between the sexes emerges, insights into the class identification difference may accrue and lead to a theoretical model that more adequately explains this disparity between the sexes.

APPENDIX

QUESTIONS IMMEDIATELY PRECEDING SUBJECTIVE CLASS IDENTIFICATION ITEM IN FORM A AND FORM B OF 1971 QUESTIONNAIRE

FORM A

Now I'd like to ask you some questions about your background. First, how long have you lived in the Detroit area?

(If not entire life) Where did you live most of your life before you came here? Where were you born? Have you ever lived on a farm?

(If yes) Where? Between what ages?

Do you (and your family) own this (home/apartment), rent it or what?

How many TV sets, if any, do you have here at home?

(If any) Do you have a color TV set?

How many telephones do you have here at home, counting any extensions you may have?

A large community like the Detroit area is made up of many kinds of groups. If you had to place yourself in one of these groups, would you say that you are in the upper class, middle class, working class, or lower class?

FORM B

Are you presently working?

(If yes) What kind of work do you do? Who do you work for? What kind of business or industry is that? Do you work for yourself or someone else?

(If not presently working) For your last job, what kind of work did you do? Who did you work for? What kind of business or industry is that? Did you work for yourself or someone else?

What kind of work did your father do while you were growing up?

What kind of business or industry was that?

Did he work for himself or someone else?

(Married respondents) Is your (husband/wife) presently working?

(If yes) What kind of work does (he/she) do? Who does (he/she) work for? What kind of business or industry is that? Does (he/she) work for (himself/herself) or someone else?

(If no) For (his/her) last job, what kind of work did (he/she) do? Who did (he/she) work for? What kind of business or industry was that? Did (he/she) work for (himself/herself) or someone else?

(Married women) What kind of work did your husband's father do while your husband was growing up? What kind of business or industry was that? Did he work for himself, or someone else?

(If respondent or spouse is not head of household) Is (head) presently working?

(If yes) What kind of work does (he/she) do? Who does (he/she) work for? What kind of business or industry is that? Does (he/she) work for (himself/herself) or someone else?

(If no) For (his/her) last job, what kind of work did (he/she) do? Who did (he/she) work for? What kind of business or industry was that? Did (he/she) work for (himself/herself) or someone else?

A large community like the Detroit area is made up of many kinds of groups. If you had to place yourself in one of these groups, would you say that you are in the upper class, middle class, working class, or lower class?

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