

II

THE EMPIRICAL INVESTIGATION OF CLASS MEDIATIONS OF THE INCOME DETERMINATION PROCESS

The next five chapters will each attempt to explore some of the hypotheses developed at the end of the previous chapter. Rather than encumber the text with lengthy descriptions and definitions of the data sets, variables, and statistical procedures employed in the analysis, I have placed these various methodological issues in three appendices at the end of the book. Although it is unnecessary to read these appendices closely in order to understand the results in the following chapters, it is probably a good idea at least to glance through the discussion of the operationalization of different variables.

5

Class and Occupation

Few issues have caused more confusion in the sociological analysis of inequality than the conflation of class and occupation. As was argued in chapter 1, most sociologists in fact view classes as no more than clusters of occupational categories arranged in some hierarchical fashion. In that chapter we discussed the distinction between class and occupation at the theoretical level; in this chapter we shall explore the empirical contours of the relationship between class and occupation.

The chapter will be divided into two main sections. The first will focus on the distribution of occupational positions within classes. The main purpose of this discussion will be to demonstrate the relative independence of the social relations of production from the technical relations of production. The second section will examine the relative explanatory power of class and occupational status (the most common

TABLE 5.1
Distribution of Occupations Within Classes

Occupation	Employers	Petty Bourgeoisie	Managers/ Supervisors	Semiautonomous Employees	Workers	All Classes	N
Upper white-collar							
Professionals	4.5%	9.8%	16.2%	4.7%	2.7%	8.1%	124
Technicians	.9	0.0	2.7	2.4	1.9	2.1	33
Managers, proprietors, and officials	70.5	30.4	16.6	3.6	.9	13.4	206
Teachers ^a	0.0	0.0	0.0	20.2	5.7	4.6	70
Subtotal	75.9	40.2	35.5	30.9	11.2	28.2	433
Lower white-collar							
Clerical	0.0	2.2	15.3	10.1	22.9	16.0	245
Sales	2.7	5.4	4.4	10.7	4.9	5.2	80
Subtotal	2.7	7.6	19.7	20.8	27.9	21.2	325
Upper blue-collar							
Craftsmen	5.4	9.8	13.4	16.7	11.3	12.1	185
Foremen	.9	0.0	7.3	0.0	0.0	2.5	39
Subtotal	6.3	9.8	20.7	16.7	11.3	14.6	224

Lower blue-collar

Operatives	.9	8.7	13.6	18.5	28.7	19.2	294
Laborers ^b	.9	2.2	2.2	3.0	7.4	4.3	66
Subtotal	1.8	10.9	15.8	21.5	36.1	23.5	360
Services	1.8	3.3	7.8	9.6	13.5	9.6	147
Farmers	11.6	28.3	.6	.6	.2	2.9	44
Total	100.0	100.0	100.0	100.0	100.0	100.0	
N	112	92	524	168	637	1,533	

Source: Data from 1969 Survey of Working Conditions. Percentages do not always add to 100% because of rounding. Formal operationalizations of class are presented in Table 2.4. The estimate for each of these class locations does not take into consideration the descriptions given in the *Dictionary of Occupational Titles*. These estimates thus correspond to the high estimate for semiautonomous employers and for managers/supervisors (top and middle managers are combined with bottom managers in these tables) and the low estimate for workers. All employers in the sample are included in the small-employer category, even though 8% of these employers in fact employed more than 100 workers and should be classified, strictly, as small capitalists. No estimate of the occupational distribution for proper capitalists was attempted because the N was so small. For a more detailed discussion of this data set, see appendix A, data sources.

^aAll teachers were classified as nonsupervisors regardless of their response to the supervision question. (See appendix B, variables, operationalizations of class.)

^bIncludes farm laborers.

^cIncludes farm managers and farm owners.

TABLE 5.2
Distribution of Classes Within Occupations

Occupation	Employers	Petty Bourgeoisie	Managers/ Supervisors	Semiautonomous Employees	Workers	Total
Upper white-collar Professionals	19.7%	8.6%	43.2%	12.1%	16.5%	100.0%
Technicians	4.0	7.3	68.5	6.5	13.7	100.0
Managers, proprietors, and officials	3.0	0.0	45.4	12.2	39.3	100.0
Teachers ^a	38.5	13.6	42.2	2.9	2.9	100.0
Lower white-collar Clerical	0.0	0.0	0.0	48.6	51.5	100.0
Sales	.9	2.2	31.7	10.7	54.5	100.0
Upper blue-collar Craftsmen	0.0	.8	32.7	6.9	59.5	100.0
Foremen	3.8	6.3	28.8	22.5	38.8	100.0
Lower blue-collar Operatives	3.1	4.0	48.2	12.5	32.1	100.0
Laborers ^b	3.2	4.9	37.8	15.1	38.9	100.0
Services	2.6	0.0	97.4	0.0	0.0	100.0
Farmers ^c	.5	2.8	22.8	10.0	63.9	100.0
All Occupations	.3	2.7	24.2	10.5	62.2	100.0
	1.5	3.0	16.7	7.6	71.2	100.0
	1.4	2.0	27.9	10.9	57.8	100.0
	29.5	59.1	6.8	2.3	2.3	100.0
	7.3	6.0	34.2	11.0	41.6	100.0

Source: Data from 1969 Survey of Working Conditions. Percentages do not always add to 100% because of rounding. Formal operationalizations of class are presented in Table 2.4. The estimate for each of these class locations does not take into consideration the descriptions given in the Dictionary of Occupational Titles. These estimates thus correspond to the high estimate for semiautonomous employers and for managers/supervisors (top and middle managers are combined with bottom managers in these tables) and the low estimate for workers. All employers in the sample are included in the small-employer category, even though 8% of these employers in fact employed more than 100 workers and should be classified, strictly, as small capitalists. No estimate of the occupational distribution for proper capitalists was attempted because the N was so small. For a more detailed discussion of this data set, see appendix A, data sources.

^aAll teachers were classified as nonsupervisors regardless of their response to the supervision question. (See appendix B, variables, operationalizations of class.)

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metric for occupations) in individual-level income determination equations. The purpose of this analysis, as explained in chapter 4, is less to explore the nuances of the relative contributions of social and technical relations of production in the determination of income than to demonstrate the importance of social relations of production as an independent determinant of income.

One preliminary comment on the operationalization of class that will be used in this chapter is necessary before proceeding. Except in the discussion of occupation-class distributions, I shall make no attempt to operationalize the "semiautonomous employee" class location. None of the data in this study had objective measures of control within the labor process, and it was impossible to define these class positions adequately. In the analysis of occupation-class distributions, I have used a purely subjective criterion for the semiautonomous employee category, in order to get a first-approximation impression of the contours of these distributions. In the rest of the book, however, this criterion is dropped, and the working class and the semiautonomous employee class location are merged into a single class category. For convenience, I shall refer to this combined category as the "working class" throughout the rest of this study, even though it in fact contains a certain proportion of semiautonomous employees (probably about 10% of the total in the combined category).

OCCUPATIONAL DISTRIBUTIONS WITHIN CLASSES

To argue that social relations of production (class relations) and technical relations of production (occupational relations) are theoretically independent dimensions of social relations is not to argue that they are empirically unrelated. Indeed, at the very heart of Marxist theory is the analysis of the relationship between forces and relations of production within modes of production, and this has direct implications for the relationship between occupations and classes as positions within the social structure.

Table 5.1 presents the occupational distribution within classes, and Table 5.2 the class distribution within occupations based on data from the 1969 Institute for Social Research Survey of Working Conditions (SWC). (See appendix A for details on this and other data sets.) The operationalizations of the class categories in these tables are the same as those discussed in chapter 2.

Two general observations can immediately be made on the basis of these tables. First, with very few exceptions, every occupational category is distributed across all class categories (see Table 5.2). Managers constitute at least 20% of every occupational category except farmers and unskilled laborers, and workers constitute at least a third of every occupational category except for professionals, managers, foremen, and farmers. Certain occupational categories (such as craftsmen and sales) have class distributions relatively similar to the population as a whole, and thus knowing that an individual falls into one of these occupations tells you virtually nothing about his or her likely class location. In fact, on the basis of the data from Tables 5.1 and 5.2, less than 15% of the economically active population in the United States in 1969 were in occupational categories in which more than two-thirds of the individuals fell into a single class location. Even if we drop the distinction between workers and semiautonomous employees, this would only increase to about 25%. In other words, when class is defined in terms of social relations of production, it is clearly a mistake to equate the "working class" with manual labor and the "middle class" with mental (or white-collar) labor.

The second general conclusion from these tables is that although most occupations are represented within each class location, the distribution of occupations is quite different within different classes (Table 5.1). Just under 61% of all workers occupy blue-collar occupational positions, compared to 48% of semiautonomous employees, 44% of managers, 24% of the petty bourgeoisie and 10% of employers. On the other extreme, 70% of all employers and 30% of all petty bourgeois say that their occupation is "manager, proprietor or official," compared to 17% of all managers/supervisors, 4% of all semiautonomous employees, and less than 1% of all workers.

If anything, these estimates probably understate somewhat the differences between classes in occupational composition. For one thing, since the contradictory location between the working class and the petty bourgeoisie is defined by strictly subjective criteria (see chapter 2), it is likely that this category includes many positions which, on objective criteria, should belong in the working class. Unless these incorrect classifications are evenly distributed across occupations, then an adequate objective measure of autonomy would change the occupation-class distribution. Similarly, some supervisors in the Survey of Working Conditions are undoubtedly purely nominal supervisors, lacking any real control (authority) over the labor of their "subordinates," and thus they should be classified within the working class itself.

We can get some conception of the likely error introduced by merging nominal supervisors with real managers/supervisors from a second data set, the Panel Study of Income Dynamics (PSID). Because of some limitations in the randomness of this sample, it is less useful than the Survey of Working Conditions for getting a general idea of the overall class-occupation distribution (see appendix A). It can, however, give us a rough idea of the difference in occupational distributions between nominal supervisors and proper managers, since all supervisors in the survey were also asked: "Do you have any say in the pay or promotions of your subordinates?" Table 5.3 indicates the distribution of occupation for men only (Tables 5.1 and 5.2 are for men and women) in three categories—the working class, mere supervisors (those who have no say in pay or promotions), and proper managers—using PSID data. There was no basis for distinguishing the working class from semiautonomous employees in the Panel Study, and thus the worker category includes both class locations. (For comparative purposes, the SWC figures for male workers combined with male semiautonomous employees are also presented in the table.) Even allowing for some error because the PSID sample was not altogether random, it is clear from Table 5.3 that a much higher proportion of male supervisors than of proper managers are in blue-collar occupations (52% compared to 25%). A much higher proportion of managers than mere supervisors, in contrast, give "manager" as their occupation (41% compared to 14%).

Another way of assessing the relationship between class and occupation is to compute the multiple correlation coefficient between a series of dummy variables (0–1 variables) for class and a metric of occupational position such as occupational status. If we use three dummy variables to represent class (one for workers, one for managers, and one for employers), the multiple correlation between class and occupational status for the PSID data is .38. The correlation of the worker dummy variable alone is $-.31$. These correlations indicate that class and occupational position are related, but that most of the variance in occupations (at least as measured by occupational status) occurs within class positions rather than between class positions.

These findings have two central implications for Marxist theory. First, and perhaps most important, they confirm the conceptual distinction between the technical and social relations of production. Although there is clearly an empirical relationship between the two, they cannot be collapsed into a single typology. Given technical functions within production are performed by a variety of positions within the social relations of production, and every class location contains positions involving a wide range of technical activities.

TABLE 5.3
Distribution of Occupations Among Managers and Supervisors, Males Only

Occupation	Panel Study of Income Dynamics		Survey of Working Conditions	
	Managers ^a	Supervisors	Workers ^b	Workers ^b (males only)
Professional, technical, and kindred	27.0%	24.0%	15.8%	11.2%
Managers, officials, and proprietors	41.1	13.7	2.6	1.7
Clerical and sales	6.5	10.0	15.0	14.5
Craftsmen, foremen, and kindred	20.0	29.6	23.4	23.3
Operatives	3.8	13.3	29.1	31.8
Laborers, farm laborers, and services	1.1	8.6	13.9	17.4
Farmers and farm managers	.5	.5	.2	0.0
Total	100	100	100	100
N	557	528	1383	408

Note: Percentages do not always add to 100% because of rounding.

^aManagers are defined as supervisors who report that they have some say in the pay and promotions of their subordinates.

^bThe category "worker" in this table includes people in semiautonomous employee class locations as well as the working class proper.

Second, these results suggest that occupations may constitute one critical basis for the internal divisions within classes. Occupational locations determine intraclass strata through two primary mechanisms:

1. Occupational positions reflect different market capacities and thus contribute to reproducing privileged segments of classes at the level of exchange relations (i.e., income).

2. Occupational positions are one of the central criteria for status and thus contribute to reproducing privileged segments of classes at the level of ideological relations.

To the extent that salient occupational and class divisions coincide, those classes are likely to be more united, in terms both of the life experiences of people within the class and collective action by the class. One of the striking features of Table 5.1, in these terms, is that the small-employer class location is much more homogeneous in its mix of technical activities than is any other class. Proper capitalists would, if anything, be even more homogeneous.

If this general interpretation is valid, then when sociologists study the relationship of occupational status to income, they are really studying the interconnections between two dimensions of stratification *within* classes. The limitation of such research is not so much the variables that are chosen for study, but the variables that are left out of the analysis, in particular class relations.

The rest of this chapter directly compares the explanatory power of class and occupational status within regression equations predicting income. While the results hardly prove the general interpretation of the relationship of occupational status to class discussed above, they establish the importance of studying the relationship of class to status in the analysis of income inequality.

CLASS AND OCCUPATIONAL STATUS AS PREDICTORS OF INDIVIDUAL INCOME

To compare the explanatory power of class and occupational status, data from the Panel Study of Income Dynamics will be used. This data set was chosen over the Survey of Working Conditions both because the sample size is considerably larger and because it has a much more refined measure of the managerial class location (i.e., manager = supervisor with some say in pay and promotions of subordi-

nates). The major limitation of the Panel Study is that the questions on class location were asked only of men, and thus all analyses using these data must exclude women. Nevertheless, the greater precision in the operationalization of class is more important for the present purposes, and thus I shall rely almost exclusively on the PSID data.¹

The basic regression equation which will be used to compare class and occupation status is:

$$\begin{aligned} \text{Income} = & \beta_1 \text{ Occupational Status} + \sum_{i=2}^4 \beta_i \text{ Class Dummies} \\ & + \beta_5 \text{ Number of Employees} + \beta_6 \text{ Education} \\ & + \beta_7 \text{ Age} + \beta_8 \text{ Seniority} + \sum_{i=9}^{11} \beta_i \text{ Background} \end{aligned}$$

where the class dummies consist of three 0–1 variables: workers, employers, and managers (thus the category left out combines the petty bourgeoisie and mere supervisors); and the background variables consist of father's education, father's occupational status, and general parental economic condition. (All of these variables are described in appendix B.) Income will be measured by the individual's total annual taxable income from all sources before taxes, including such things as wages, interest from savings and investments, rents, etc.² Throughout this analysis, income will be measured in raw (unlogged) dollars, for reasons discussed in appendix B.

In this equation the effect of class on income is measured by the combined effect of the three class dummies and number of employees since, in terms of the conceptual framework developed in chapter 2, number of employees indicates how close to the petty bourgeoisie is the class position of small employers. The regressions will also be run without number of employees, in order to compare the class dummies alone to status.

¹In any event, the results using SWC data are virtually identical to those reported here (see Wright and Perrone, 1977, p. 44, and Wright, 1976b, p. 349).

²In an earlier version of this study (Wright, 1976b), four other income variables were also used: the average income over the previous seven years (or the maximum number of years in that period in which the individual worked); a very crude measure of nonwage income; annual earnings; and imputed hourly earnings. Since the results using these variables are virtually all consistent with the results simply using annual income, I have limited the presentation to this single income variable. For a discussion of the regressions using all five measures of income, see Wright (1976b, pp. 177–79).

The strategy for comparing the predictive power of class and occupational status will be to examine how the explained variance (R^2) in this equation changes as status, class, and number of employees are included and excluded in various combinations. This is a rather crude method for comparing the explanatory power of different variables. But since the purpose of this particular exercise is to demonstrate the relevance of class to hard-nosed empiricists, it provides a useful criterion for comparing class and status.

Part A of Table 5.4 presents the results for the various regression equations predicting total annual income. Part B presents an explicit comparison of the explained variance contributed by class and status in these equations.

The full equation explains just under 35% of the variance in income. When class and number of employees are dropped from this equation, the explained variance decreases to 25% (line 3, Table 5.4); when status is dropped, on the other hand, the explained variance only decreases to 32% (line 4, Table 5.4). When status, class, and number of employees are all dropped, the explained variance declines to 20% (line 5). Thus, net of status, background, education, and the other variables, class and number of employees explain 10% of the variance in income (line 11, Table 5.4), whereas status, net of class and the other variables, explains only 2% of the variance (line 13).

Similarly, if we examine equation (2) in Table 5.4, we see that net of education and status, class and number of employees explain 11.3% of the variance in income (line 18, Table 5.4), whereas status net of class, number of employees, and education explains only 4.3% of the variance (line 20). Furthermore, if we add variables to the equation lacking both class and status (i.e., in this case, the simple regression of income on education), we see that class and number of employees, net of education, explain 16% of the variance in income (line 22); the class dummies alone, net of education, explain 13.4% of the variance (line 23); while status, net of education, explains only 8.7% (line 24).

Finally, when we compare class and status directly, we find that each of them alone explains just about 18% of the variance in income (lines 9 and 10a, Table 5.4) while class and number of employees explain just over 20% of the variance (line 10).³

³If we look simply at nonwage income (asset income, interest, dividends, profits, etc.) as mentioned in note 2, the difference between the explanatory power of class and status is even more striking: the class dummies by themselves explain 23% of the variance in nonwage income, occupational status only 3%. (See Wright, 1976b, p. 178.)

TABLE 5.4
Regression Equations for Comparisons of Class and Occupational Status with Annual Taxable Income as Dependent Variable

A. Beta Coefficients for Independent Variables in Equation												
	Employer Dummy	Manager Dummy	Worker Dummy	No. of Employees	Occupational Status	Education	Father's Education	Father's Occupational Status	Parents' Economic Condition	Age	Seniority	R ²
1.	.07	.12	(.01) ^a	.27	.21	.19	-.03	(0)	.04	.15	.10	.347
1a.	.29	.12	(.01)	— ^b	.22	.19	-.04	(0)	.04	.15	.09	.324
2.	.09	.12	(-.02)	.26	.27	.10	—	—	—	—	—	.303
2a.	.31	.12	(-.02)	—	.28	.09	—	—	—	—	—	.281
3.	—	—	—	—	.28	.20	-.04	(.01)	.05	.17	.13	.250
4.	.07	.15	(-.01)	.28	—	.31	-.03	.02	.03	.19	.10	.323
4a.	.30	.15	(-.01)	—	—	.31	-.05	.02	.04	.20	.09	.297
5.	—	—	—	—	—	.31	-.04	.04	.05	.24	.13	.204
6.	—	—	—	—	.37	.09	—	—	—	—	—	.187
7.	.11	.16	-.05	.28	—	.24	—	—	—	—	—	.260
7a.	.34	.16	-.05	—	—	.24	—	—	—	—	—	.234
8.	—	—	—	—	—	.32	—	—	—	—	—	.100
9.	—	—	—	—	.43	—	—	—	—	—	—	.181
10.	.13	.20	-.07	.28	—	—	—	—	—	—	—	.204
10a.	.36	.20	-.07	—	—	—	—	—	—	—	—	.178

B. Comparison of Explained Variance of Class and Status

	Increment in R ²
11. Class and no. employees, net of status, education, and others (1-3) ^c	.097
12. Class net of status, education, and other variables (1a-3)	.074
13. Status net of class, no. employees, education, and other variables (1-4)	.023
14. Status net of class, education, and other variables (1a-4a)	.027
15. Class and no. employees net of education and other variables (4-5)	.120
16. Class net of education and other variables (4a-5)	.093
17. Status net of education and other variables (3-5)	.046
18. Class and no. employees net of status and education (2-6)	.113
19. Class net of status and education (2a-5)	.093
20. Status net of class, no. employees, and education (2-7)	.043
21. Status net of class and education (2a-7a)	.046
22. Class and no. employees net of education (7-8)	.160
23. Class net of education (7a-8)	.134
24. Status net of education (6-8)	.087
25. Class and no. employees minus status (10-9)	.023
26. Class minus status (10a-9)	-.003

Source: Data from Panel Study of Income Dynamics.

^aCoefficients in parentheses are less than their standard error.

^bDashes indicate that the variable is left out of the equation.

^cThe numbers in parentheses refer to the equations in part A of the table.

CONCLUSIONS

These results strongly confirm the first two hypotheses in chapter 4. The individual's position within class relations, measured by either the class dummies and number of employees or the dummies alone, clearly has a significant impact on income, independent of occupational status (hypothesis 1.1); and, net of education, the impact of class on income is considerably greater than the effect of status on income (hypothesis 1.2). Thus, even at the individual level of analysis, location within the social relations of production is a relatively powerful predictor of income.

There are several things which these results do *not* indicate. They do not indicate that class alone is sufficient for understanding income inequality at the individual level. Class, as we have measured it, accounts for only 20% of the variance in total annual income. While this proportion would undoubtedly be increased if we had more refined measures of class locations and contradictory locations within class relations, still it is clear from the data that a great deal of the total variation in incomes occurs within classes.

The data also do not indicate that occupational status, or other metrics of occupational position, are inconsequential for understanding income variation. Occupation, as an indicator of position both within the labor market and within ideological relations, clearly plays a role in determining individual income, as reflected in the fact that occupational position generally does account for some of the variance in income even when one controls for class and other variables at the individual level of analysis.

The individual level of analysis, however, is not the heart of a Marxist theory of income determination. Showing that class compares favorably with status as a predictor of individual income is important mainly in convincing people that class is worth studying. This chapter, I hope, has accomplished this minimal task.

We can now shift our terrain to the really interesting questions: the ways in which class structurally mediates the income determination process.

6

Class and Income

THE LOGIC OF THE ANALYSIS

In chapter 5 we analyzed the relative explanatory power of class and status within individual income determination equations. The proportions of explained variances compared were all variances in individual income. In this chapter the unit of analysis shifts from the individual as such to the class structure itself. While the data that we will explore are all tagged onto individuals, the analysis centers on structural positions, not on the individuals who fill those positions.

The logic of such an analysis might be clearer if we look at an example other than the investigation of class structure. Suppose we were interested in studying various structural characteristics of business organizations. In particular, we might be interested in the differences between large, bureaucratically organized corporations and small, less bureaucratically structured businesses. One could hypothe-