CHAPTER 2

The Occupational Structure: I Patterns of Movement

The study of social mobility may be approached from various perspectives. We can focus on changes in socioeconomic status, whatever the particular occupational base on which the status rests, or on movements between occupational groups (clerks, farmers), ignoring status differences within each group. Concern may be with the opportunities for success of individuals or with the occupational structure of the society. In subsequent chapters attention centers largely on socioeconomic status, and the investigation deals with the factors associated with individual opportunity and achievement. This first substantive chapter on our research findings, in contrast, presents an analysis of the American occupational structure at large, specifically, of the movements of manpower among occupational groups.

The occupational structure is conceived of as consisting of the relations among its constituent subgroups; and these occupational subgroups, not the individuals composing them, are the units of analysis. The labor force has been divided for the purpose of this analysis into 17 occupational categories, an extension of the 10 major occupational groups of the U. S. Bureau of the Census. The seven additional categories represent simple subdivisions of Census categories; self-employed "professional, technical, and kindred workers" are distinguished from salaried ones. Similarly, "managers, officials, and proprietors" are separated into the self-employed ("proprietors") and the salaried ("managers"). "Sales workers" are divided into retail and other salesmen. Finally, three groups of manual workers have been partitioned by industry: there are three categories of "craftsmen, foremen, and kindred workers"—in manufacturing, in construction, and in

other industries—two categories of "operatives and kindred workers"—in manufacturing and in other industries—and the same two categories of "laborers, except farm and mine."

The structure of relations among these occupational groupings is defined in terms of the flow of manpower between them through time, either intergenerationally or intragenerationally. Each occupation is characterized by the inflow or recruitment of its manpower from various origins, on the one hand, and by the outflow or supply of sons to various destinations, on the other. For example, farmers are disproportionately recruited from their own ranks and from farm laborers, but they supply sons to a large variety of occupations in the next generation. This procedure of describing an occupation on the basis of its relations to the others in the social structure is analogous to the sociometric method, which also describes individuals in a group on the basis of their relations to the rest, and which also usually employs two criteria of relations: choices made and choices received. The analogy is intended to indicate that concern is with a structure of relations among units in a larger whole, but it must not be pressed too far. The units are large occupational groupings in our case, not individuals; and whereas self-choice is usually not considered in sociometric studies, self-recruitment and occupational inheritance occur, of course, and must be taken into account.

The flow of manpower among occupational groups reveals the dynamics of the occupational structure. To be sure, the 17 occupational categories used are not social groups in the conventional sense of the term. Most members of an occupational category are not in direct social contact and may not even share a common identification, because their occupational identification may be either broader ("professional") or narrower ("accountant") than the category delimited by the social scientist. Nevertheless, the occupational classes are meaningful social groupings and not entirely arbitrary categories. Their members share life chances and social experiences, and many of the direct social contacts of men at work and even at play are with others in a similar, if not necessarily the same, occupational category. The term "occupational grouping" might best convey the fact that although these are not corporate groups with distinct boundaries and pervasive social interaction among members, neither are they arbitrary categories, but they are meaningful social aggregates that affect the formation of many face-to-face groups.

The classification by father's occupation, however, raises additional problems. Whereas the occupational classification of sons represents actual groupings of individuals in 1962, the generation of fathers

never existed at any one time. Many of these fathers still pursued their occupations in 1962, that is, are part of the labor force that has been sampled. The occupational distribution of fathers is not an actual distribution of men existing at any earlier period. Even if all fathers had been in the labor force at some one time, they provide a sample of that universe biased by differential fertility. Thus a farmer has more weight in the generation of fathers than a professional because the farmer's higher fertility gives him a greater probability of falling into the sample through his sons. However, although origin categories do not refer to distinctive groupings of fathers, they do refer to distinctive groupings of sons: those who have similar occupational backgrounds and home environments. What is under consideration, therefore, is the movement of manpower from groupings that have common social origins, defined by father's occupation, to occupational groupings in 1962.1

The occupational structure constitutes the framework of social mobility within which individuals must achieve occupational success or suffer failure.2 Changes in the size of the various occupations reflect changes in the demand for different occupational services, which, in turn, often have their source in technological advances, as exemplified by the declining demand for farm workers consequent to improved farming methods and higher farm productivity. These structural changes require a redistribution of manpower. But the actual amount of occupational mobility observed far exceeds that necessary to effect the redistribution of manpower. Some of this additional mobility results from educational improvements that alter the quality of the manpower supplied, and some of it results from indirect repercussions of changes in demand. For example, a need for professionals is most likely to be met by those men who have acquired in their early environments the social skills and habits appropriate to professional pursuits, those aware of various professional careers and able to afford the prolonged education requisite to professional status, that is, by sons of other white-collar workers. If the need for these other whitecollar workers does not decline at the same time as that for professionals is increasing, the outflow of sons will create a demand in the lower white-collar occupations, a secondary product of the demand for professionals. Moreover, a high demand for professionals may lead

¹ The same applies to first occupation in respect to intragenerational mobility. Classification by first occupation refers to groupings of men with common early career experiences, not to occupational groupings that actually existed at any one time, since different times are involved for men of different ages.

² This analysis is not concerned with the question of the socioeconomic mobility achieved by whole occupational groupings.

to the lowering of previously existing barriers to entry—for instance, by no longer restricting admission to professional schools to whites—with the result that more qualified men from lower strata can now move up into this level.

The flow of manpower in the occupational structure, rather than merely the net redistribution necessitated by shifts in demand, delineates the existential conditions governing the individual's chances of socioeconomic success. The analysis of this pattern of movement provides a baseline for the investigation, in subsequent chapters, of historical trends, the process of social mobility, and the factors associated with individual achievements.

THE FLOW OF MANPOWER

In order to determine whether movement from an occupational origin to an occupational destination entails upward or downward mobility, it is necessary to rank the occupations. Table 2.1 presents a rank order of the 17 occupational groupings and the data on which this ranking is based. The criteria are median income and median education. The percentage increase in income or education is indicated as one moves up the ranks.³ Only five of these percentage differences are not in the same direction. In these cases the two are equally weighted, which means that the larger percentage difference determines the rank. The one exception is the placement of retail salesmen above craftsmen, which has been made to maintain the nonmanual-manual distinction.

Differences between manufacturing and other craftsmen, and between manufacturing and other laborers, are not available, and the mean difference across the same industry line for operatives is small. Hence, in considering upward and downward mobility, the industry partition of these three major occupational groups is treated as a horizontal one. To wit, movement between manufacturing and other industry within each of the three manual groups is considered to be horizontal and counted neither as upward nor as downward mobility.

This ranking differs in a few respects from the customary ranking of the ten major occupational groups. Nonretail salesmen fall between the two subgroups of "managers, officials, and proprietors" of the Census classification, so that only salaried managers remain above these other salesmen. Proprietors have descended to a point that may confound, or possibly delight, doctrinaire Marxists, though by virtue of their income levels they are still above clerks and retail salesmen

TABLE 2.1. RANKING OF SEVENTEEN OCC. CATEGORIES BY SOCIO-ECONOMIC STATUS, FOR MALES 14 AND OVER EMPLOYED IN 1962

		ome	Years	of Schooling
Occ.	Median (dollars)	Percentage Difference	Median	Percentage Difference
Professionals			······································	
Self-Empl.	\$12,048	ነ		
Salaried	6, 842	76.1	16.4	
Monayer		-5.5		28.1
Managers	7,238		12.8	•
Salesmen, Other	6,008	20.5		-1.5
baresmen, Omer	6,008	8.3	13.0	
Proprietors	5,548	0.0	12.1	7.4
•	0,010	7.2	14.1	-3.2
Clerical	5, 173		12.5	-5.2
		69.9		1.6
Salesmen, Retail	3,044		12.3	
Craftsmen		-44.5		9.8
Mfg. Other	5,482 ^a		11.2	
		4.1		9.8
Construction	5, 265		10.2	***
_		13,6		2.0
Operatives				
Mfg.	4,636		10.0	
Other	4 900	10.2		-3.8
Other	4,206	30.1	10.4	
Service	3, 233	30.1	10.3	1.0
	0, 200	47.7	10.3	15.7
Laborers				79.1
Mfg.				
Other	2, 189	9,9	8.9	1.1
Farmers	1 000		_	
armers	1,992	200 B	8.8	
Farm Laborers	488	308.2	0 9	6.0
Carm Laborers	488		8.3	

SOURCE: Current Population Reports, P-60, #41, Consumer Income: "Income of Family and Persons in the United States: 1962," October 21, 1963, and Special Labor Force Report, #30, "Educational Attainment of Workers, March, 1962," May, 1963. (Some figures include minor estimates entailed in combining detailed occupation groups. All data subject to sample error and to distortion due to inclusion of men outside age range 25-64.)

³ The index of occupational socioeconomic status for individuals used elsewhere in the book is similarly based on income and education, but for specific occupations.

^aExcludes foremen, who are concentrated in manufacturing and whose median income is \$7073.

TABLE 2.2, MOBILITY FROM FATHER'S OCC. TO 1962 OCC., FOR MALES 25

Father's							Respo	ndent's	Occur	ation	Respondent's Occupation in March, 1962	h, 196.	2					
Occupation		83	က	4	တ	9	7	œ	6	10	11	12	13	14	15	16	17	Total ^a
Professionals 1 Self-Empl.	16.7	31.9	6.6	9.5	4.4	4.0	1.4	2.0	1.8	2.2	2.6	1.6	7.8	4.	2.2	2.0	80	100.0
2 Salaried	3.3	31.9	12.9	5.9	4.8	7.6	1.7	8	4.4	1.0	6.9	5.2	3.4	1.0	9.	8.	2.	100.0
3 Managers	3.5	22.6	19.4	6.2	7.9	7.6	1.1	5.4	5.3	3.1	4.0	2.5	1.5	1,1	œ.	ī.	Τ.	100.0
4 Salesmen, Other	4,1	17.6	21.2	13.0	6.9	5.3	3.5	2.8	5.4	1,9	2.6	3.7	1.7	٥.	œ	1.0	e.	100.0
5 Proprietors	3.7	13.7	18.4	5.8	16.0	6.2	3.3	3.5	5.2	3.9	5.1	3.6	2.8	ů	1.2	1.1	4.	100.0
6 Clericai	2.2	23.5	11.2	5.9	5,1	8.8	1.3	6.6	7.1	1.8	e5 80	4.6	5.6	1.0	1.8	1.3	0.	100 0
7 Salesmen, Retail	۲.	13.7	14.1	8.8	11.5	6.4	2.7	5.8	3.4	3.1	8.8	5.1	4.6	.1	3.1	2.2	°.	100.0
Craftsmen 8 Mfg.	1.0	14.9	8,5	2.4	6.2	6.1	1.7	15.3	4.4	4.4	10,9	6.2	4.6	1.7	2.4	4.	٠.	100.0
9 Other	6	11.1	9.5	3,9	6.5	7.6	1.5	7.8	12.2	4.4	8.3	9.2	4.6	1.2	2.8	6	e.	100.0
10 Construction	đ,	6.7	7.1	2.6	ж г	6.5	90,	10.4	8.2	13.9	7.5	6.2	5.2	1.1	4.3	8.	9.	100.0
Operatives	1.0	8.6	5.3	2,4	5.6	6.0	1.4	12.2	7.3	3.2	17.9	6.9	5.1	4.0	е. га	80	9.	100.0
12 Other	9.	11.5	5.1	2.5	6.6	6.3	1,4	7.1	9.3	4.9	10.4	12.5	5.9	2,1	4.2	6.	1.1	100.0
13 Service	œ	8.8	7.4	3.5	6.0	9.0	1.9	8.0	6.4	5,4	11.7	8.1	10.5	2.7	3.3	1.0	63	100.0
Laborers 14 Mfg.	٠.	6.0	5.3		3.3	4.4	.7	10.7	6.0	2.8	18.1	9.4	4.	7.1	8.	1.7	σ.	100.0
15 Other	4,	4.9	3,51	2.5	3.5	œ 	7.7	7.7	8.2	5.4	12.7	10.6	8.1	3.4	9.9	6.	1.1	100,0
16 Farmers	9.	4.3	4.1	1.2	6.0	4.3	1.1	5.6	6.7	5.8	10.2	8.6	8,4	2.4	5.4	16.4	3.9	100.0
17 Farm Laborers	2	1.9	2.9	9.	4.0	8.	1,2	6.4	6.6	5.8	13.1	10.8	7.5	3.2	9.2	5.7	9.4	100.0
Trotalb	1.4	10.2	4.9	3.1	7.0	6.1	1.5	7.2	7.1	4.9	9.9	7.6	5.5	2.1	4.3	5.2	1.7	100.0

(who are nevertheless their educational superiors). Retail sales is the lowest white-collar occupation.

Table 2.2 presents the transition matrix of intergenerational mobility; that is, the movements between father's occupation and respondent's 1962 occupation. These movements can be considered to consist of two steps, from social origin to entry into the labor market, and from the latter to present occupation. The pattern of movement from father's to first occupation is shown in Table 2.3, and intragenerational mobility from first to present occupation is shown in Table 2.4.4 The percentages in the tables, computed horizontally, reveal the outflow from occupational origins to occupational destinations. The total row in Table 2.2 indicates the per cent of men in the various occupational destinations. It is evident that the 17 occupational categories were not equal in size in 1962, ranging from 1½ per cent of the total labor force for self-employed professionals to 10 per cent each for salaried professionals and operatives in manufacturing.

By and large the percentages are highest in the major diagonal and decrease with movement away from it, a reflection of a prevailing tendency toward self-recruitment and occupational inheritance. But the pattern is by no means entirely consistent. Fewer sons of retail salesmen become retail salesmen than become clerks, proprietors, other salesmen, managers, or salaried professionals. Sons of operatives outside manufacturing have a greater chance of becoming salaried professionals than the higher-status (hence closer to the diagonal) sons of craftsmen outside manufacturing, and nearly as good a chance as sons of proprietors. The intragenerational matrix (Table 2.4) shows that the likelihood of rising to the status of independent businessman is better for workers who begin their careers as either skilled craftsmen or semiskilled operatives than for men whose first jobs are as clerks, even though the latter are only one step below business owners in the socioeconomic status hierarchy. Perhaps manual workers are more likely than clerks to start working for self-employed fathers whose business they later inherit.

Although percentages within the same column can be compared, tables in this form do not permit meaningful direct comparisons across columns. Thus sons of self-employed professionals are nearly twice as likely to become salaried professionals as they are to become self-employed professionals (Table 2.2, row 1). But this is in part because of the fact that there are today seven times as many salaried as self-employed professionals, a fact indicated in the total row at the bottom

⁴ The raw data on which these tables are based are presented in Appendix J, Tables J2.1, J2.2, and J2.3.

TABLE 2.3 MOBILITY FROM FATHER'S OCCUPATION TO FIRST JOB, FOR MALES 25 TO 64 YEARS OLD: OUTFLOW PERCENTAGES

Dothonic							Fİ	First Job										
Occupation		61	m	4	2	9	-	00	6	10	11	12	13	14	15	16	17	Total ^a
Professionals 1 Self-Empl.	10.5	27.6	2.2	4.4	«.	17.9	4.4	2.6	3.2	٥.	4.6	6.7	2.0	1.0	2.8	1.2	1.6	100.0
2 Salaried	1.2	29.5	3.7	2.1	0.	12.3	6.0	3.9	4.7	1.6	9.7	7.6	3.4	3.1	5.3	ιż	2.0	100.0
3 Managers	1.9	18,2	8. 8	3.5	φ.	20.8	5,9	2.9	4.4	1.7	10.0	11,5	1.8	2.5	6.7	ī,	1,1	100.0
4 Salesmen, Other	2.6	17.0	2.6	11.4	1.0	17.2	8.9	1,4	2.8	4.1	9.0	9.5	1.8	1.2	3,7	0.	2,3	100.0
5 Proprietors	1,9	14.0	3,9	5,1	4.4	12.5	11,0	3.7	8	2.5	10.1	9,4	4.6	2.4	5.9	್ಳ	2,2	100.0
6 Clerical	4.	18.0	2.3	1.7	64	21.9	4.3	2.8	5.7	1,0	13.2	9.4	3.1	8.8	5.7	۲.	1,3	100.0
7 Salesmen, Retail	1.5	10.0	2.5	2.1	1.8	19.3	11.8	3,3	3.0	۳,	15.5	8.0	2.1	3.9	8.0	۲.	4.3	100.0
Craftsmen 8 Mfg.		6.5	∞.	ro.	.1	14.4	5.2	9.6	3.6	2.6	25.3	8.9	4.4	8 13	4. 8.	63	1.8	100.0
9 Other	10	6.1	4.	∞.	۳.	13,9	-0 *9	-3.9	10,1	1.6	15.0	13.6	3.6	3,9	10.9	£.	4.3	100.0
10 Construction	1.	5.7	∞.	9.	۰.	12.5	٠. ا	4,1	5.2	10,4	17.0	11.0	6.0	3,1	9.2	1,1	5.7	100.0
Operatives 11 Mfg.	r9.	4.1	4.	1.0		11,1	3,9	4,1	2.6	1.7	35.9	7.7	5. 1	8.6	6.1	63	3.0	100.0
12 Other		5.5	23	۳,	ار	10.9	4.6	3.4	4.1	1.6	13.2	28.6	3.5	4.6	8.7	4.	3.9	100.0
13 Service	.2	4.4	1.4	1.2	e3.	13,8	4.2	8,8	6.0	2.2	18.2	12.9	10.1	6.7	4.8	۲.	4.1	100,0
Laborers 14 Mfg.	٥.	8.8	∹:	0	٠.		8.	ī	4.1	1,1	23.2	9.1	4.1	22.2	r.	r;	7.7	100.0
15 Other	1,1	3,2	67	ī.	۲.	9,4	4.4	2.5	3,1	1.0	16.0	12,8	6,5	6.8	21.9	۲.	6.3	100.0
16 Farmers	23.	3,3	4.	4	e5.	4,1	2.3	1.9	2.0	1,8	9.7	8.5	2.2	4.0	7.5	10,2	37.8	100.0
17 Farm Laborers	∾.		67	~7	e.	2.4	1,1	9.	3,1	1.0	10.6	7.0	2.9	5.5	5.9	1.5	54.5	100.0
aRows as shown do not total 100 0	or total	100		since men not reporting first job are not shown separately	t reno	ting fi	rst tob	are no	t show	repar	afelv							

Rows as shown do not total 100.0, since men not reporting first job are not shown separately.

TABLE 2, 4 MOBILITY FROM FIRST JOB TO 1962

st	Respondent's Occupation Control of the Control of t		ĺ		•	COCC			1									
Job	н	2		 	,	1		7	TI TION	Marc	1, 1962							
Professionals	L	ĺ	ľ			0	٥	_	80	6	10	11	19 15	ŀ	1	l		
1 Self-Empl.	53.5	5 25.5	5 1.8		4.7.9	т с								41	15	16	17	Totala
2 Salaried	6.5	54.5	_							7	•	. 7	۰.	•	.0 2.5	Ç	•	,
3 Managers						4.		†	1,6 2,	2.0	.4	1.2	1.2 1.0				•	0.004
	7	4.02	4 35.7		4.3 9.1	1 6,6	6 2,3		2.3 4 1					•	·	1.0	7	.1 100.0
4 Salesmen, Other	9.	8.5	5 25.1	1 23.7	7 12.4	5.0							1.4 1.2	9.	3 1.2	9.	4.	.4 100.0
5 Proprietors	6	6.8	8 19.2		6.4 36.3			٠			1.3 5,4		3.9 2.8	0.	•	4	0	0 100 0
6 Clerical	1,6	13,0	0 17.3			-					.4 4.3	3 4.3	3 3.0	6.	2, 1	63 80		0 100
7 Salesmen, Retail	2.1	10.0	15.6		_						2.6 5.6	6 4.2	4.4	1.0	. 8 . 8	1.2		9 100 0
O						11.0	5.1	4.5	4.8	67	9 6.1	1 7.4	3,1	1.1			•	9 9
8 Mfg.	6.	8,7	7,8	5	5 12 9	7										•		0.00
9 Other		•					•	22.5	7.5	4.3	3 9.1	3.5	3.7	0		,		
	:	n n	9	1.9	10,3	4.1	3.4	10,9	21.3	4				•	#.	er ev	•	100.0
10 Construction	۳.	5.6	3,4	1.6	11.1		¢				7:7	5.5	3.6	1.4	1.7	1,2	۲.	100.0
Operatives							•	x x	13.2	26.2	5.0	4.3	2.4	1.0	60	6	•	
11 Mfg.	4.	·	T,												•	1,	æ.	100.0
12 Office	:	5	•	N. 0	7.0	6.2	1.7	13.4	6.7	4.6	18.8			•				
	ņ	5.0	9	3.0	8.7	4.3	1.1	7.3	10.8	9		1		2.2	2	2.0	9	100.0
13 Service	s.	7.1	4,9	1.4	6.9	Ľ					n D	15.0	6.0	1.4	4.3	1.8	1.0	100
Laborers						•	1.7	χ. 4	6.4	6.2	13.3	7.7	19.8	2,5	ac ac	•		
14 Mfg.	e.	5,5	6	1.5	6	ď									•	.	r.	100.0
15 Other	-2	ur VC	, t			•	T. 7	10.5	0.3	3,9	18,1	80	7.3	8.2	6.3	4		
16 Farmere		•	ř	4	6.7	4,1	1,3	6.3	9.6	6.8	10.5	10.8	e c		;		· •	100.0
	7	e,	2,6	1.8	3.8	3,0	1.2	2,2	ď	u		•	•	4	11.5	2.1	6	100.0
17 Farm Laborers	.2	1,7	2,4	œ	7	¢		;	•	4,	xo xo	5.0	4.6	1.4	3.6	30.0	2.0	100
AROWS as shown Jan		1		:	;	·	;	. d	6,3	5.5	10,4	9.3	5.8	2.8	6.7	19.3		901

TABLE 2.5. MOBILITY FROM FATHERIS OCCUPATION TO OCCUPATION IN 1962, FOR MALES 25 TO 64 YEARS OLD: RATIOS OF OBSERVED FREQUENCIES TO FREQUENCIES EXPECTED ON THE ASSUMPTION OF INDEPENDENCE

					Respo	ndent's	Occup	Respondent's Occupation in March, 1962	1 Marc	h, 1962							
Father's Occupation	-	62	60	4	2	9	7	80	6	10	11	12	13	14	15	16	17
Professionals	11.7	£	1.2	9.0	9.	2.	σ.	۳.	۵,	rů.	۳.	67	ಣ	ď	s.	4.	ī,
	2.3	3,1	1,6	1.9	۲.	1.2	1:1	rs.	9.	2	.7	۲.	9.	ro.	.1	~	τ.
Z	ស្ន	2.2	2.5	2,0	1.1	1.2	۲.	80		9.	4.	٠,	e.	ιά	. 2	۲.	٦.
4 Salesmen, Other	6.0	1.7	2.7	4.1	1.3	6.	2,2	4.	∞.	4.	. ن	rů.	۵.	۰.	87	61	63
5 Proprietors	2.6	1.3	2,3	1.9	2.3	1.0ª	2.1	ιņ	٠.	œ.	ı.	ιū	ıc.	63	e.	.2	oj.
6 Clerical	7:6	2,3	1.4	1.9	Ŀ.	1.4	œ.	o.	1.0a	4.	4.	ဖ္	1.0ª	ιĊ	4.	·.	°.
7 Salesmen, Retail	rů.	1.3	1.8	8.8	1.6	1.0ª	1.7	œ.	rc.	9.	o,	t-	φ.	۳.		4.	٥.
Craftsmen 8 Mfg.	۲.	1.5	1,1	∞,	б .	1.0	1:1	2,1	6.	6.	1.1	œ.	0 0	∞.	9.	ام	۳.
9 Other	φ.	1,1	1.2	1.2	6	1, 2	1.0	1.1	1.7	6	∞.	1,2	œ.	9.	9.	2.	. 2
10 Construction	9,	.7	6.	œ.	1.2	1.3	ī.	1,4	1,1	2.8	œ	00	6.	• 2	1.0	27	4.
Operatives		80	۲.	6	œ	1.0	6	1:1	1.08	9.	8	o.	6.	1.9	φ.	83	4
	4.	1.1	9	90	σ	1.09	6.	1.0	1.3	1.0	1.0ª	1.7	1.1	1.0	1.0	7,	٠.
13 Service		6.	6.	1	6.	1.5	1.2	1.1	6.	1.1	1,2	1.1	1.9	1.3	æ	63	~ :
Labor 14 Mfg.	٠.	9.		63	ro.	۲.	ů,	1.5	90	9.	1.8	1,2	1,7	3,3	1,4	٠,	٠.
15 Other	۳.	ď	4.	Φ,	ū	1,4	1,1	1,1	1.1	1.2	1.3	1.4	1.5	1.6	2,3	67.	٠.
16 Farmers	4.	4.	w.	4.	6	Ŀ.		80.	o.	1.2	1.0ª	1,1	6.	1,1	1.3	3.2	2,3
17 Farm Laborers	.1	67	4	67	9.	æ	œ.	в .	6.	1.2	1.3	1.4	1.4	1,5	2,1	1:1	5.5
a Bounds to unity from showe (other indices shown as 1,0 round to unity from below).	above	other	indices	shown	as 1.0	round	to unit	y from	below								

Rounds to unity from

TABLE 2.6. MOBILITY FROM FATHERIS OCCUPATION TO FIRST JOB, FOR MALES 25 TO 64 YEARS OLD: RATIOS OF OBSERVED FREQUENCES TO FREQUENCES

	ĺ							;	1	THE PROPERTY OF	3						
Father's						Respo	Respondent's First Job	s First	gg								
Occupation	-	~	<u>«</u>	4	4	4	-		،	;							
Professionals	L		,	•	,	•	-	0	2	2	F	12	13	14	15	16	17
1 Self-Empl.	15.2	8	1.8	3.3	1.4	1.7	6.	œ	œ	0.	63	9	ıç	c	4	,	,
2 Salaried	1.8	4.1	3.0	1.6	٥.	1,2	1.3	1,2	1.2	۲.	9		6		: -	• •	: -
3 Managers	2,8	2,5	2,3	2.6	1.5	2.0	1.2	σ,	1.2	œ	۲.	1.0ª		rc	· œ		: -
4 Salesmen, Other	3,7	2,3	2,1	8.5	1.8	1.6	1.9	4.	7.	۲.	9	6	rc.	2	. LC		
5 Proprietors	2,8	1.9	3,2	3,7	9.7	1.2	2.3	1.1	1.0	1,1	.7	6	6	ic		• -	: •
6 Clerical	9.	2.5	1.9	1.2	e.	2,1	o,	٠ <u>.</u>	1,5	4.	o,	6	90	6	-	•	: -
7 Salesmen, Retail	2.2	1.4	2.1	1.5	3.1	1.8	2,5	$1,0^{3}$	œ.	٦.	1.03	7.	LC	α	: :		
Ü											į	:	:	•	•	4	ņ.
8 Mfg.	۲.	0,	۲.	4.	2.	1.4	1.1	3.0	1.0	1.2	1.7	æ	1.2	1.7	و	-	-
9 Other	۲.	φ.	e.	9	ı.	1,3	1.3	1,2	7.2	7	1.03	- 6	-	•		: -	: (
10 Construction	6	α	E	*	•	:	:	;	;	:	·	1	>	•	#	7	,
(•	:	*	•	7	I.Z	- - -	I.4	4. 8.	<u></u> 1	1.0^{2}	9:	9.	1:1	e5.	4.
Operatives 11 Mfg.	4.	9	ಞ	7	r.	1.0	8	6,		α	•	t					
12 Other	4.	œ	8.	2	-	1.0			: -	•	ri c		3 '	<u>,</u>	æ :	٦.	cv.
13 Service		9	1.2	0	ı.		-	1 0		9	٠ . د -	9 9] (ī.	ಣ
Lahorers				,	2	1	:	:	1		7	7.7		 	1.0	7,	e.
14 Mfg.	0.	5	۲.	٥.	٥.	ī,	1,0ª	4.	1,1	ı	1.6	œ	-	4	٥		ı
15 Other	1,6	4	٦.	4.	8	6	6	۰.	× •	r.	:		<u> </u>			: 0	o -
16 Farmers	es.	ī.	ణ	e.	'n	4	4	4	L.		•	•	٠ ا				4.
17 Farm Laborers	· cc	-	¢		. 1				•		:	•	٠	œ.	ກຸ	20 20 20 20 20 20 20 20 20 20 20 20 20 2	2,7
	:	•	3	;	•	3.	z.	7.	8.	4.	.7	9.	œ	1:1		ıç.	3.8

aRounds to unity from above (other indices shown as 1,0 round to unity from below).

ő RATIOS 64 YEARS OLD: FOR MALES 25 TO 6

1					Respor	Respondent's Occupation in 1962	Occup	ation in	1962								
Job		67	က	4"	s.	9	٠	œ	6	10	11	12	13	14	15	16	12
Professionals 1 Self-Empl.	37.3	2,5	83	1.5	4.	2.	e.	2.	н.	۹.	٠:	٠.	٠.	•	ف	٠.	4.
2 Salaried	4.5	5,4	1,6	්	œ.	φ,	2	62	e.	۲.	.1	67	2.	•	т.	67	.1
3 Managers	6.	2.0	4.5	1.4	1,3	1.1	1.5	e.	9.	9.	67	≈.	61	٠.	e.	۲.	
4 Salesmen, Other	4.	∞.	3,2	7.6	1.8	æ	1.8	Τ.	ů,	e	ır.	ro.	r.	0.	0.	.1	٥.
5 Proprietors	9.	۲.	2.4	2.0	5.2	4.	1.7	.2	e.	•1	4.	9.		4.	ro.	۲.	٥.
6 Clerical	1.1	1.3	2.2	8. 3	œ	2.9	1.2	9.	9.	ı.	9.	9.	œ.	ī.	4.	61	
7 Salesmen, Retail	1.4	1.0	2.0	2,3	1.7	1.9	8.3	9.	7.	φ.	9.	1.0	9.	ιņ	4	. 23	٥.
Crafts 8 Mfg.		σ.	1.0	∞,	1,7	۲.	δ.	3.1	1.08	Ġ,	o.	ē.		4.	G,	4.	0.
9 Other	2.	е :	œ.	9.	1,5		2,2	1,5	3.0	1.0	۲.	۲.	.7	9,	4.	.2	4.
10 Construction	.2	· 3	4	ĸ.	1.6	r.	27	1.2	1.8	5.3	ro.	9.	4	ច	7	4.	ı.
Operatives 11 Mfg.	હ	9.	Ŀ	9.	1.0	1.08	1,1	1.9	6,	٥.	1.9	1.0	6	1.5	œ	4.	63
12 Other	۳.	œ.	œ.	φ.	1.3	۲.	.7	1.0a	1.5	1.4	1.0	2.0	1,1	7.	1,0a	4.	9.
13 Service			9	4.	60	œ.	œ.	9	٠ <u>.</u>	3.3	2.3	1.0ª	3,6	1.2	1.4	.1	
Laborers 14 Mfg.	6.	ī.	r.	œ.	4.	1,08	œ.	1.5	۲.	æ	1.8	1.2	1.3	3,8	1.5	e,	1.0
15 Other	2.	ιŝ	7.	œ	1.0	.7	œ	œ.	1.4	1,4	1,1	1:4	11	1:1	2.7	4.	9.
16 Farmers	2.	63.	63	9.	ı.	rs.	æ	9.	8.	1.1	œ.	۲.	6.	.7	œ.	7.0	3.0
17 Farm Laborers	,1	2	e,	~3	t	4	۲.		6	1:1	1,0	1.2	1	1,3	1.6	3.7	4,1

of the table. Whereas the ratio of self-employed to salaried professionals for the entire sample is 1:7, the ratio among sons of self-employed professionals is 1:2. These sons exceed the chance all sons have of becoming self-employed professionals even more than they exceed the chance all sons have of becoming salaried professionals. The sons of self-employed professionals who follow in their father's footsteps, though fewer in number than those who go into salaried professions, pre-empt a proportionately larger share of the positions in the free professions.

The influence of social origins on occupational destinations finds expression in the relative, not the absolute, proportion of men with the same origin who end up in a certain occupation, specifically, in the ratio of the per cent from a given origin in one occupation to the per cent of the total labor force in this occupation. The last row in Table 2.2, which presents the percentage distribution of the total labor force in the several occupations, serves as the standard against which all percentages in the body of the matrix are compared, the divisor in the desired ratio. By dividing each value in the matrix by the corresponding figure in the total row at the bottom of its column, we obtain an index of the influence of occupational origins on occupational destinations.⁵ This ratio, which has been termed the "index of association" or "social distance mobility ratio,"6 measures the extent to which mobility from one occupation to another surpasses or falls short of "chance"; that is, a value of 1.0 indicates that the observed mobility is equal to that expected on the assumption of statistical independence.

The model of "perfect" mobility, defined by statistical independence of origins and destinations, serves as a baseline for comparison, departures from it being reflected in the mobility ratios. In the case of perfect mobility each destination group has the same distribution of origins as the total population, each origin group has the same distribution of destinations as the total population, and all indices are 1.0. The actual mobility ratios for intergenerational movements, corresponding to Table 2.2, are presented in Table 2.5; those for mobility

6 For previous use of this index, see David V. Glass (Ed.), Social Mobility in Britain, Glencoe: Free Press, 1956, pp. 177-217; and Natalie Rogoff, Recent Trends in Occupational Mobility, Glencoe: Free Press. 1953.

⁵ The indices were not actually computed in this manner, which introduces unnecessary rounding errors, but by deriving the ratio of observed to expected frequency from the raw numbers in Tables J2.1, J2.2, and J2.3 in the Appendix.

⁷ Some questionable assumptions underlying the model of perfect mobility and consequent limitations of the index of association for comparisons between periods or places are discussed in Chapter 3.

from father's to first occupation are presented in Table 2.6; and the intragenerational flow patterns from first to present occupation are shown in Table 2.7. In order to convey a visual impression of the over-all flow of manpower, values greater than 1.0 are underlined.

These three tables bring the main characteristics of the American occupational structure into high relief. First, occupational inheritance is in all cases greater than expected on the assumption of independence; note the consistently high values in the major diagonal. Second, social mobility is nevertheless pervasive, as revealed by the large number of underlined values off the diagonal. Third, upward mobility (to the left of the diagonal) is more prevalent than downward mobility (to the right), and short-distance movements occur more often than long-distance ones.

If occupational inheritance and fixed careers were dominating the stratification system, all excess manpower would be concentrated in the 17 cells in the major diagonal and the values in all other cells would fall short of theoretical expectation. In fact an excess flow of manpower is manifest in 101 cells of the father's-to-1962-occupation matrix, also 101 cells in the father's-to-first-job matrix, and 78 cells in the first-to-1962-job matrix. This indicates much movement among occupational strata. A rough indication of the prevailing direction of mobility is the number of such cells lying on either side of the major diagonal. For the intergenerational flow of manpower, as Table 2.5 shows, the underlined values to the lower left of the diagonal, which indicate disproportionate upward mobility, outnumber by more than three to one (64:20) those to the upper right, which indicate disproportionate downward mobility. Excessive upward movements outnumber excessive downward movements in the intragenerational flow five to two (44:17), as can be seen in Table 2.7. Table 2.6 shows, however, that the excessive flow of manpower from father's to first occupation is hardly more likely to go to higher than to lower occupations (46:38), undoubtedly because career beginnings often entail a temporary drop in status.8

Short-distance movements exceed long-distance ones. Most of the underlined values are concentrated in the area adjacent to the major diagonal, denoting short-distance mobility, and there are few in the areas surrounding the upper right and the lower left corners, which would be evidence of long-distance mobility. The values of the mobility ratios tend to be highest in the diagonal and decrease gradually with movement away from it. In general, the closer two occupations are to

one another in the status hierarchy, the greater is the flow of man-

There are, however, numerous exceptions to this basic tendency for the flow of manpower to occur predominantly between occupations similarly ranked, as revealed by the blank cells in areas that have predominantly underlined values and the underlined values in predominantly blank areas. The majority of these discrepancies in all three tables reflect industrial lines. Hence another distinctive pattern to which the tables call attention is that industrial lines constitute stronger barriers to mobility than do skill levels within an industry. Indeed, the expectation that industrial differences would affect the flow of manpower, partly because industries are concentrated in different geographical areas, was what prompted the decision to subdivide manual occupations by industry.

Finally, exceptional cases that are not covered by any of the above general patterns should be mentioned. Looking first at movements from father's to 1962 occupation (Table 2.5), we note that sons of craftsmen are more likely to move into higher than into lower white-collar occupations. This possibly reflects a reluctance on the part of men reared in the most affluent blue-collar homes to accept the lower income levels of the more menial nonmanual occupations. By and large, sons of manual workers outside manufacturing are more apt to be upwardly mobile than those in manufacturing. Lastly, service occupations contain relatively few sons of farmers.

The flow from father's to first occupation (Table 2.6), which often entails a temporary drop in status, reveals more discontinuities than that from father's to 1962 occupation. Sons of nonmanufacturing operatives and of service workers disproportionately often find first jobs as managers. The unexpectedly large movement of sons of nonmanufacturing laborers to first jobs as self-employed professionals may be due to sampling error resulting from the small number of cases involved-approximately six, possibly even fewer.9 Even with a sample as large as this one, some cells have frequencies too low to assure reliable results. Sons of service workers start their careers in an unusually large variety of occupations, ranging from other laborers to salaried managers. Downward mobility to first job is most marked for those in the highest white-collar groups and for skilled craftsmen, and upward mobility to the first job is most common among both lower nonmanual and lower manual workers. This observation suggests that movements within the white-collar and within the blue-collar class

⁸ These patterns hold also if the cells indicative of horizontal movement are omitted.

⁹ These might be men in such unusual "professions" as boxing.

are more prevalent than movements between these two classes, a notion that will be more systematically explored later in this chapter.

Intragenerational movements (Table 2.7) also reveal a few deviations from the main trends. First, men who start their careers as farmers, in sharp contrast to those starting as farm laborers, do not move in proportionate numbers to any nonfarm occupation, with the sole exception of skilled construction work. Second, proprietors are disproportionately recruited from skilled and semiskilled manual workers (except manufacturing operatives). Third, men who enter the labor force on higher white-collar levels and later move downward drop in excessive numbers down to retail sales, skipping the slightly higher status of clerk. Indeed, whereas men are recruited to clerical work from a wide variety of social origins, few move into clerical work after having started their careers (compare the columns for clerks in the three tables).

SUPPLY AND RECRUITMENT FROM ONE GENERATION TO THE NEXT

38

What is the outflow of manpower supplied by each occupational grouping to others? What is the inflow of manpower recruited from other occupational groups with which each occupation fills its ranks? These are the basic questions posed by a consideration of occupational supply and recruitment. In terms of the intergenerational volume of inflow and outflow these questions are answered by Tables 2.2 and 2.8. Table 2.2 presents the percentages of sons each social origin supplied to the various occupations in 1962. Thus every occupational origin above the level of construction craftsmen sends more than one-fifth of its sons to only two of the 17 occupations, salaried professionals and managers. A major reason is that these two occupational groups have been expanding rapidly while reproducing at a level somewhat lower than the rest of the population. Of the men sampled in 1962, 18 per cent are in these two occupational groupings, whereas only 6.5 per cent of their fathers were.

Table 2.8 shows what proportion of the men in each occupation was recruited from the various occupational origins. It indicates, for example, that every occupational group has recruited more than 10 per cent of its members from sons of farmers. Three evident reasons for this are the large size of the farm category in the past (in 1940 it was still the largest of the 17 occupational groups, accounting for 14.7 per cent of the working force); the rapid decline in the number of farmers in recent decades; and the exceptionally high fertility of farmers.

OLD: FATHER'S OCC. TO OCC. IN 1962, FOR MALES 25 TO

Father's			i			Respo	ndent's	Respondent's Occupation in 1962	in in	962					in 1962		
Occupation	П	2	e.	4	ĸ		C	,	, 	- 1							
Д				ļ	,			0	د	뭐	=	12	13	14	12	16	17
1 Self-Empl.	14.5	3.9	1.5	5 3.8		8.	9 1.1	1.3	~	· c	~	°			1		1
2 Salaried	7.0	9.5	5 4.9	9 5.8	2.1	3.8	2.4	7	-		•			N.	φ.	rů.	9.
3 Managers	2.7	6.7	α	-						°.	7.1	2.1	1.9	1.4	4.	īĠ	e.
4 Salamon Out						4.4	9 7	2,7	2,6	2,2	1,4	1.2	1.0	1.8		67	۴.
z oasesmen, Omer	e –	24.	2.2	2° 	2.6	3 1.7	4,4	8.	1.5	80	Ġ.	1.0	4	-	•		•
b Proprietors	18.5	9.6	16.5	5 13,2	16,3	3 7.1	15.2	3,5	5.2	7	er.	-	٥			4	
6 Clerical	4.9	7.3	4.4	4 5.9	2.3	4.5	2,6	2.9							2.0	1,5	1.6
7 Salesmen, Retail	6	2.3	3.0	4.7	8	α.				1			2,2	1.5	1.3	œ	٠.
Craftsmen								1.4	r.	1.1	7,5	1.1	1.4	.1	1.2		٠.
8 Mfg.	3.8	8.3	6.1	4,3	5.1	5.7	6.3	12.0	<u>ا</u>	ď	9						
9 Other	4.0	7.0	7.4	1.9	6.0	8.0			-	· .	0 1			4.5	8,2	ιŝ	4.
10 Construction	3.0	3,2	4.4	4.1					•	0	ຕໍ່	œ 	٠, 4	3.0	4.1	1.2	1.2
Operatives								n o	5.5	13.7	8,6	3.9	4.6	2,6	4.9	∞.	1.8
11 Mfg.	5.2	6.4	5, 1	6.5	6.1	7.5	7.1	12.9	6	•	ţ						
12 Other	2.8	7.5	4.2	4	4				- (73		6.9	7.1	14.5	6.3	1.2	2.8
13 Service	2,3	er.	. 4						o t	6.6	6.9	10.9	7.1	6.5	6.4	1.2	4,4
Laborers	:	•				ò		4 .	თ ი	4.7	5.1	4.6	8.2	5.4	3,3	œ.	9.
14 Mfg.	•	1.0	1,2	4,	φ.	1.3	œ	2.6	بر 	-	•	ć					
15 Other	1.0	2,0	1.9	e.	2,1	6.0	4		. 4) o	9 1	N (o .	9 9	2.4	9.	φ.
16 Farmers	11,2	10,8	13,3	10,1	24.3	-	-	٠	•	a d	o •		6.2	6.7	9.6	.7	8.8
17 Farm Laborers	es	ĸ	Œ,	Ľ	-			٧.	4.4	30.4	26,6	29.4	22,8	29,5	32.6	82.0	59.7
18 Total ^a		100.0	901	2		7 9	7 .	100.0 100 0 1			4.4	3.7	3.6	3,9	5.6	2.9	14.5
Rolling of the second	1 4 7 1				3	7007	0.001	0.001		100.0	100.0	100.0 100.0	100.0 100.0 100.0	100.01	100.0	200 0 100 0	9

The less occupational inheritance there is in a given stratum, the greater is the outflow of sons supplied by this origin stratum to other occupational destinations. The five occupations with least inheritance, which supply more than 90 per cent of their sons to other destinations, are the two lowest white-collar, the two lowest blue-collar, and the lower of the two farm groups, as Table 2.2 shows. Sons of men in occupations near the bottom of one of the three broad occupational classes have exceptional opportunities for social mobility. The salaried professions, in contrast, exhibit the highest degree of inheritance, and this stratum of origin is, consequently, least likely to supply sons to other occupational destinations. The rapid growth of this prestigeful occupational group undoubtedly helped restrict the outflow of its sons.

The less self-recruitment there is in an occupational grouping, the more it tends to rely on the inflow of manpower recruited from other occupational origins. Variations in recruitment are greater than those in supply. Table 2.8 indicates that the two occupations with the largest inflow of outsiders, recruiting more than 95 per cent of their manpower from other origins, are clerks and retail salesmen, both of which also have a high rate of outflow. Farmers, on the other hand, reveal by far the highest rate of self-recruitment, recruiting less than 20 per cent of their manpower from different occupational origins, whereas no other occupation recruits less than 85 per cent from different origins.

There is a direct relationship between an occupation's rate of outflow or supply to others and its rate of inflow or recruitment from others. The rank correlation is .54.10 This is the same as saying that occupational inheritance and self-recruitment are positively related, which is not inevitable despite the fact that both values depend on the number of men in a given occupational group whose fathers were in the same group. This number, the number of cases in the diagonal of the matrix in Table J2.1 in Appendix J, divided by the row total defines the index of occupational inheritance, or the per cent of the men in an occupational category whose fathers were in the same category. The same number divided by the column total defines the index of self-recruitment, the per cent of fathers whose sons continue in their occupational category. As the two marginals are positively related it follows that the two index values are too, although the latter would be fully determined by the former correlation only if it were 1.00 (actually the rank correlation between the marginals is .62 and

the product moment correlation is .23).¹¹ Some occupations appear to be relatively self-contained and self-sufficient, whereas others supply disproportionate numbers of sons to different occupations and also recruit a disproportionate share of their own manpower from different occupations. What characteristics of occupations are associated with these contrasting tendencies?

The three occupational groups that manifest most occupational inheritance and self-recruitment are the only three that entail selfemployment-independent professionals, proprietors, and farmers. It seems that proprietorship—of a farm, a business, or a professional practice-discourages sons from leaving the occupation of their fathers and makes it difficult for other men to move into an occupation. Even when proprietorship does not involve actual ownership of an establishment, as in the case of tenant farmers and of independent professionals who only own their equipment and the good will of their clientele, it may produce a stronger occupational investment and commitment than mere employment, and these are transmitted to sons. The fact that the very occupations that rest on proprietorship and that reveal little mobility in or out have either contracted in size or expanded less than the rest in recent decades may well be a factor that has contributed to the large amount of social mobility observable today. This decline in proprietorship may counteract other trends, such as decreasing immigration and lessening differential fertility, that would otherwise have depressed mobility rates.

The five occupations characterized by a high rate of inflow of manpower recruited from other origins in the last generation as well as by
a high rate of outflow of manpower supplied to other destinations in
the present generation are the two lowest white-collar and the three
lowest blue-collar groups—clerical, retail sales, service, and the two
kinds of nonfarm labor. These five occupational strata may be considered distributors of manpower, into which disproportionate numbers move from different origins, and from which disproportionate
numbers of sons move to different destinations. The distributing occupations are channels for upward mobility, into which successful
sons from lower origins tend to move and from which successful sons
tend to move to higher destinations. Simultaneously, they provide a
refuge for the downwardly mobile from higher origins (inasmuch as

¹⁰ Product movement correlation is an insignificant .19, undoubtedly in part due to the extreme deviant values for salaried professionals on supply and for farmers on recruitment.

¹¹ The measures of supply and recruitment are the sum of all nondiagonal frequencies, except the NA value, in the appropriate row or column of Table J2.1, divided by the row and column totals, respectively. Thus, except for the differential assignment of the NA cases, there is a perfect negative correlation between inheritance and supply as well as between self-recruitment and recruitment.

downward mobility into them exceeds theoretical expectations considerably more than does downward mobility into any lower occupations), thereby enabling unsuccessful sons of nonmanual fathers to maintain their white-collar status and unsuccessful sons of manual fathers to find jobs in the urban labor market, respectively. The skidder from a white-collar home, unfamiliar with the working class and possibly threatened by the prospect of becoming part of it, appears to be willing to pay the price of the lesser income offered by the lowest nonmanual occupations to preserve the cherished symbol of the white collar. The skidder from manual homes has probably also little inclination and certainly few qualifications or opportunities to work on a farm.

If occupations are divided into three broad classes, white-collar, blue-collar, and farm, it is evident that a position just above one of the two class boundaries is what tends to make an occupation a distributor in the intergenerational flow of manpower. Proprietorship, on the other hand, has the opposite effect, restricting the inflow and the outflow of manpower. Proprietorship and location in the occupational structure, therefore, are two important characteristics of an occupation that influence the proportionate volume of manpower it supplies to others and recruits from others. This is the case, however, only for the intergenerational flow from father's to 1962 occupation. Neither in the flow from father's to first occupation nor in that from first to 1962 occupation are the volumes of supply and recruitment directly related, which calls attention to the distinctive character of first jobs, a topic to be examined in the next section. But before doing so another aspect of intergenerational movements will be considered.

Whatever the volume of outflow or inflow, it may range from highly dispersed to highly concentrated. The outflow of manpower from a given origin may disperse to supply many different destinations or become concentrated to supply primarily a few. Correspondingly, the inflow of manpower into a given destination may be recruited from a wide base of different origins or largely from a narrow base of a few origins. Whereas the volume of supply and of recruitment depend directly on the number of men whose fathers had the same occupation, the degree of dispersion of supply and of recruitment do not. The first problem is to devise appropriate measures of dispersion of supply and dispersion of recruitment. The basic principle is to compare the distribution of outflow from or inflow into a given category with the distribution for the entire population.

To illustrate the construction of these measures, let us examine the outflow from social origin, defined by father's occupation, to occupa-

tional destination in 1962, presented in Table 2.2. Of all sons of selfemployed professionals, 16.7 per cent entered this same occupation, 31.9 per cent became salaried professionals, 9.9 per cent took jobs as salaried managers, and 9.5 per cent went into nonretail selling. The corresponding percentages for all men (bottom row) are 1.4, 10.2, 7.9, and 3.1. These four occupations are the only ones in which men originating as self-employed professionals are overrepresented, that is, constitute a higher proportion than in the total population. A simple way to summarize this observation is that four of the 17 possible destinations contained disproportionate numbers of men with fathers who were self-employed professionals, which implies that the supply of manpower from this origin is relatively concentrated, excessive numbers going to only three destinations in addition to the selfemployed professions themselves. Applying the same procedure to all categories of origins yields a crude measure of dispersion of supply, and applying this procedure with appropriate changes to the inflow percentages in Table 2.8 yields a crude measure of dispersion of recruitment. The number of underlined entries, whatever their value, in each row of Table 2.5 indicates dispersion of supply, using this rough procedure, and the number of underlined entries in each column indicates dispersion of recruitment.

A more refined index of the degree of concentration—or, inversely, dispersion—which takes the quantitative differences in percentages into account instead of merely dichotomizing them, and which ascribes neither special meaning nor equality to the 17 occupational categories, can be devised simply by summing the differences between the corresponding percentages given above (that is, all the differences of the same sign). Thus the degree of concentration in the destinations to which sons of self-employed professionals move is (16.7-1.4) +(31.9 - 10.2) + (9.9 - 7.9) + (9.5 - 3.1), which equals 45.4. The range of values this measure can assume makes its meaning apparent. If father's occupation exerts no influence and the destination of sons from a given social origin is identical with that of the entire population, the index value is zero. If all men from a given origin were concentrated in a single destination, the index value would be close to 100.0; specifically, as much short of 100.0 as the per cent of the total population in this destination. Hence this index, the index of dissimilarity, measures how much more concentrated the destinations of men from a given origin are than those of all men in the sample, or what proportion of the sons of a given origin would have to change their 1962 occupation for their distribution to equal that of the total population. A high value indicates low dispersion whereas a high value on

the crude measure indicates high dispersion. The corresponding index for inflow shows how concentrated (or dispersed) the origins of men in each occupational destination are.

Two further refinements have been introduced before actually computing the measures. The first is to exclude the men in the same occupational group as their fathers (those in the diagonal) from the analysis, since otherwise the index is again strongly influenced by occupational inheritance or self-recruitment, whereas concern is with the outflow from or the inflow into different occupations. In addition, movements identified as lateral movements earlier in this chapter—mobility between manufacturing and other craftsmen, manufacturing and other operatives, and manufacturing and other laborers—have been excluded by the same blocking procedure, restricting the analysis to vertical mobility.

We have, then, a crude index of dispersion in the flow of manpower based on merely counting the observed values that exceed those expected on the assumption of statistical independence, and a refined measure that takes the precise degree of dispersion or concentration in vertical movements alone into account. These two measures do not behave in parallel fashion at all. The dispersion of supply and the dispersion of recruitment in the intergenerational flow of manpower are inversely related if the crude measures are used (r=-.46), whereas the two are directly related if the refined measures are used (.59). Moreover, the rate of growth of an occupational group between 1940 and 1960 reveals a pronounced positive correlation with the dispersion of its recruitment as indicated by the crude measure (.72), but not with dispersion in recruitment as indicated by the refined measure (.26). 13

In a previous publication by one of the present authors,¹⁴ which relied on the crude measures exclusively, the inverse relationship between dispersion in recruitment and dispersion in supply observed

12 The procedure for computing expected values in such a model of quasi-independence in which the diagonal cells or some others are blocked has been developed by Leo Goodman, "On the Statistical Analysis of Mobility Tables," American Journal of Sociology, 70(1965), 564-585. If we compute an analogous measure of concentration that does not involve the block procedure, it can be shown to be a composite of occupational inheritance (or self-recruitment) and concentration of supply (or recruitment) for those undergoing mobility. Our procedure, therefore, was designed to yield a measure of concentration that is not mathematically dependent on the degree of inheritance or self-recruitment.

13 To measure rate of growth, the distribution of the labor force in 1940 and that in 1960 were percentaged, and the difference between the two corresponding percentages, divided by the 1940 percentage, was taken as the index of rate of growth.

14 Peter M. Blau, "The Flow of Occupational Supply and Recruitment," American Sociological Review, 30(1965), 475-490.

was interpreted as due to the forces that are set in motion by changes in demand for occupational services and that are reflected in changes in the relative size of various occupations. For an occupation to expand in response to an increased demand for its services, it must recruit more outsiders than previously, particularly if its fertility is not very high. Successful recruitment of outsiders requires improvement of working conditions, such as higher incomes or shorter hours than men with the requisite training can otherwise command. Superior economic conditions not only attract men from diverse other origins to an occupational group but also strengthen the attachment of its own sons to it, thus lessening the tendency of sons to move into widely different occupations. The opposite conditions in contracting or less expanding occupational groups weaken the attachments of sons and promote their dispersal to a variety of other occupations. These considerations would explain why the width of the base of recruitment of an occupation is related to its expansion, on the one hand, and to a lack of inclination on the part of its sons to disperse from it, on the other. The problem is, however, that the more refined measures do not yield this relationship.

The refined measures of concentration of supply and concentration of recruitment, the obverse of which indicates dispersion, are presented in Table 2.9. The data show that the outflow of sons of self-employed professionals is most concentrated in respect to occupational destinations in 1962, whereas the sons of operatives outside manufacturing have become most dispersed as adults (column 1). Farm laborers are recruited from the most concentrated social origins, whereas "other" craftsmen and proprietors are recruited from the most widely dispersed origins. Although the polar cases of dispersion in supply and dispersion in recruitment are not identical, the degree of dispersion in supply and in recruitment are directly related for the flow of manpower from father's to 1962 occupation, as previously noted. Indeed, positive correlations between these two factors are also obtained when movements between father's and first occupation (product moment, .77) and those between first and 1962 occupation (.51) are considered.

Why do two sets of measures that presumably refer to the same underlying variables yield opposite results? One possible reason is that the crude measure is not a reliable indication of dispersion. Another possibility, however, is that the two kinds of measure refer to entirely different aspects of dispersion. Thus dispersion of recruitment as defined by the crude measure indicates that an occupation attracts more than its proportionate share of men from many different occupational origins, whereas its operational definition by the

TABLE 2.9. INDEX OF DISSIMILARITY BETWEEN DESTINATION OR ORIGIN DISTRIBUTION OF VERTICALLY MOBILE MEN AND DISTRIBUTION EXPECTED ON THE MODEL OF QUASI-INDEPENDENCE, FOR SPECIFIED ORIGIN OR DESTINATION

	Co	ncentration of Su	pply ^a	Conce	ntration of Recr	ultment ^b
Occ. of Origin or Destination	1 Father's Occ. to 1962 Occ.	2 Father's Occ. to First Job	3 First Job to 1962 Occ.	4 1962 Occ. from Father's Occ.		6 1962 Occ. from First Job
Professionals Self-Empl.	41.4	41.1	61,6	35.5	44.1	51.6
Salaried	22.9	20.4	45.5	23.7	27.9	23.1
Managers	30,1	27.0	39.2	23.1	42.1	31.0
Salesmen, Other	35,5	31.3	38.9	25.7	41.7	28.8
Proprietors	26,9	24.5	32.0	8.8	31.3	15.1
Clerical	24.0	21.0	27.5	9.5	20.4	16,1
Salesmen, Retail	20.7	20,3	25.5	14,8	18,1	17.0
Craftsmen Mfg.	9.9	23.9	14.7	13,5	16.4	20.7
Other	8,2	16.1	15.3	8.2	16.5	14.3
Construction	12.4	15.5	23.2	14.1	9.2	16.0
Operatives Mfg.	12.1	22,0	13,6	15.2	15.7	17.3
Other	7.5	17.3	13.8	15.9	8.2	16.7
Service	8.5	16,9	16,9	10.9	18.4	11.1
Laborers Mfg.	24,7	23.2	23.2	23.5	19.3	24.7
Other	18.8	17.9	14.2	22.8	8.9	20.6
Farmers	16, 2	28,0	18.5	20.9	25,2	52.7
Farm Laborers	27.1	26.4	27,2	49.9	52,1	34.5

*Destination distribution for origin distribution listed in stub.

bOrigin distribution for destination distribution listed in stub.

refined measure indicates that an occupation does not attract disproportionately large numbers from the various other origins. Although both measures reveal increasing dispersion as the origin distribution in a given occupation approaches that of the entire population, the two behave quite differently in response to some other conditions, including the changes in size to which the above interpretation refers. If employment conditions in a growing occupation have widened its appeal, we may surmise that men will be drawn into it in disproportionate numbers from more origins than before, but that the consequent greater competition for these desirable jobs makes it more difficult than it was previously for men from distant origins to move into the occupation. Such a change making an occupation more attractive to those from surrounding origins, and for this very reason less accessible to the rest, would find opposite expression in the two measures. It would be manifest as more dispersed recruitment in the crude measure, because an excess of men is recruited from a larger number of origins than before, while it would be manifest as more concentrated and hence less dispersed recruitment in the refined measure, since the origin distribution departs further than before from the random

expectations based on the population. Parallel considerations apply to the two measures of dispersion of supply. The crude measure is indicative of the width of the recruitment base or the supply sector of an occupation, and these are affected by the superior economic rewards in expanding occupations according to the interpretation advanced. But the refined measure is indicative of the randomness of the origin distribution of the men recruited into an occupation or of the destination distribution of the men it supplies to other occupations, and other forces than those associated with expansion apparently govern how randomly dispersed the flow of manpower into and out of an occupation is.

The data in Table 2.9, in which occupations are ranked by their status, reveal a nonmonotonic pattern. The sons of skilled and semiskilled workers tend to disperse widely in their careers. The sons of the higher white-collar strata as well as the sons of the lower unskilled workers and farm workers are more likely to become concentrated in relatively few occupational groups (column 1). Dispersion of recruitment reveals a similar pattern as that of supply, with the intermediate occupational groupings being recruited from less concentrated origins than either those near the top or those near the bottom, except that the lower nonmanual strata as well as the higher and middle manual ones are recruited from dispersed origins (column 4). Roughly the same nonmonotonic pattern is manifest in the data on dispersion of supply from father's to first occupation (column 2) and from first to present occupation (column 3), and also in the corresponding data on dispersion of recruitment (columns 5 and 6). The parallel patterns of these values account for the correlations between dispersion of supply and dispersion of recruitment.

Men in occupations in the middle of the status hierarchy come from more dispersed backgrounds than those in the highest or the lowest occupations, and men originating in these intermediate strata also move to more dispersed occupations in their careers than men originating at either extreme of the occupational hierarchy. This is the case whether origin is defined by father's occupation or by first job and whether destination is defined by first job or by 1962 occupation, that is, for intragenerational mobility as well as for intergenerational mobility of either kind (from father's to first job and from father's to 1962 occupation). The significance of status proximity for careers can help explain this pattern of findings.

The underlying principle of the interpretation suggested is that differences in economic conditions and styles of life between occupational groupings tend to reveal a gradient, being pronounced only

for those far apart in the status hierarchy. The resources, training, education, and value orientations of men with a given occupational background do not differ generally very much from those with a somewhat higher or lower background, but differences between men, say, 10 or more steps apart are considerable in these respects. Moreover, there is much opportunity for social contact among men from different occupational groupings as long as these are not too widely apart in status, in which case there is little social contact. Without social contacts with representatives of an occupational group that stimulate interest in and provide knowledge about careers in it, men are unlikely to move into it. In brief, the assumption is that various conditions make movements to occupations within a given range of a man's origin more likely than movements to those outside this range. It follows from this assumption that intermediate occupational groups are recruited from more diverse origins and supply men to more diverse destinations than extreme groups at either end of the hierarchy. This is what the data show. The reason is that any given range of other occupations above and below a point of reference includes a larger number of different occupations if the point of reference is an intermediate occupation than if it is near the top or near the bottom, because in the latter case part of this range simply does not exist.

THE SIGNIFICANCE OF CAREER BEGINNINGS

The preceding discussion concentrated on intergenerational movements from father's to 1962 occupation with only occasional reference to first jobs; we now turn to an investigation of the significance of these career beginnings. This entails the study of intragenerational movements, but it includes more than that. Data on the first full-time regular job of men can be looked at from two perspectives, since the relationship between social origins and career beginnings can be examined, as can the movements from career beginnings to occupation in 1962. This possibility introduces a time dimension into the analysis of occupational mobility. We can ask how the occupational origins of men starting their careers at various points in the occupational structure affect subsequent careers and deduce the significance of social origins for intragenerational movements.

Let us start by examining the role of career beginnings as intervening links between social origins and subsequent careers; specifically,

is the influence of occupational origins on ultimate achievements mediated by entry into the labor market? It is possible that occupational origins influence the level on which men start their careers and that this starting level affects their subsequent occupational life, but that social origins have no additional direct effect on later careers. To test this hypothesis, indices of association have been computed between father's occupation and 1962 occupation within categories of first job. In effect, this procedure holds entry occupation constant, providing a basis for evaluating the remaining relationship between occupational origins and destination in 1962. If the hypothesis is correct and the entire influence of occupational origins is exerted through the first job, the index should be 1.0 in all cells. Table 2.10 presents the results of applying this procedure.

The data testify that social origins exert a direct effect on later careers in addition to that mediated by career beginnings. To be sure, comparison of the values in Table 2.10 and Table 2.5 reveals that those in Table 2.10 are generally, though not uniformly, closer to unity than those in Table 2.5. This demonstrates that career beginning is an intervening variable in the relationship between occupational origin and occupation in 1962. A good part of the influence of social origins on subsequent occupational life is due to the influence of origins on career beginnings, which in turn affect later careers. The deviations from an index value of 1.0 in Table 2.10, however, parallel those in Table 2.5, with values decreasing with movement away from the major diagonal. This indicates that even after a man has been launched on his career, his occupational origin continues to exert an influence on it.

We now turn to the investigation of the volume of supply in the intragenerational flow of manpower from first to 1962 occupation. The 17 occupations have been divided on the basis of whether the outflow of manpower each supplies to other occupations later in life exceeds or falls short of the average outflow for the total population (which is 80 per cent). Ten first occupations retain a disproportionate share of men and supply comparatively little manpower to other occupations in 1962 (as indicated by a high percentage in the diagonal of Table 2.4). Once men start to work in these occupational groupings, they tend to remain in them. The other seven groupings are disproportionate suppliers which men leave at above average rates in the course of their careers. These occupational groupings are clerical, retail sales, both groups of operatives, both groups of manual laborers, and farm laborers. What distinguishes these occupational groupings from others?

¹⁵ The fact that different time periods are involved for men varying in age from 25 to 64 years should be kept in mind, since the differences are not the same for the various occupational groupings. Differences between age cohorts, which turn out to be usually minor, will be discussed in subsequent chapters.

OLD: RATIOS OCC. GROUPS MALES 25 TO 64 INDEPENDENCE OCC. IN 1962, FOR E ASSUMPTION OF EATHER'S OCC. 'ES EXPECTED ON

111111111111111111111111111111111111111						Respo	ndent,	s Occup	Respondent's Occupation in 1962	n 1962	j						
Occupation	7	23	m	4	ιc	9	7	80	6	10	#	12	13	14	15	16	17
Professionals	2, 1	1.4	6,	2.0	٠.	9.	1:1	44	4.	6.	rč.	4.	ů.	4.	1.0	1,1	1,3
2 Salaried	1.0	1.4	1,2	1,5	2.	1.1	1.2	9	∞.	e.	1.0	1.0	œ	7.	4.	4.	4
3 Managers	1.2	1.3	1.7	1.4	1.1	1,0		o.	œ.	œ	.5	4.	e.	90	e.	۳.	4
4 Salesmen, Other	1,3	1.0	1.7	2,1	1.2	٠.	1,9	9.	1.0	9.	4	9.	4.	٥.	۳,	9	4.
5 Proprietors	1.4	6.	1.6	1.2	1.8	6.	1.8	9.	œ	1.0	۲.	9.	9.	۳.	4.	9.	9.
6 Clerical	1.1	1.4	1.0	1,5	۲.	1.1	œ.	1.0	1.1	ī,	r.	œ.	1,2	9.	9.		٠.
7 Salesmen, Retail	e.	1.0	1.3	2.0	1.5	œ.	1.4	œ.	9.	œ	1.0	80	1.0	٠.	e.	6.	•
Craftsmen 8 Mfg.	∞,	1,4	1.0		æ	٥.	1.1	1.6	6.	σ,	1.0	6.	6.	۲.	٠.	63	2.
9 Other	t-	1.1	1.1	1,1	6	1.1	œ	1.0	1.5	e.	œ.	1.2	œ	٠°,	۲.	4	٠,
10 Construction	œ	.7	e.	∞.	1.1	1.2	ī.	1.3	1.0	2.0	œ.	œ.	1.0	9.	1.1	۳.	9.
Operatives 11 Mfg.	1,0	1.0	۲.	6.	æ	6.	6.	1.3	1.0	۲.	1.4	6.	σ.	1.5	o.	e3.	.7
12 Other	9.	1.2	9.	۰0	o,	1.0	6.	o,	1.2	6.	1.0	1.4	1,0	1,1	1.0	4	1,1
13 Service	. 7	6.	6	1.1	œ	1.3	1.2	1.0	œ.	1:1	1.1	1.0	1.6	1,2	œ	4	27
Laborers 14 Mfg.	0.		œ.	e.	rů.	٠.	4	1.2	x 0	φ.	1.4	1.1	1.5	2.0	1.2	٠.	. 9
15 Other		9.	ī,	0 0	ı.	1.4	1.1	1.0	1.1	1.1	1,2	1.2	1.3	1.4	1.8	۳.	1.0
16 Farmers	80	ŗ-	ac.	9•	1.1	1.0	œ.	æ	1.0	1.1	1.0	1.0	6	1.0	1.0	1.4	1,1
17 Farm Laborers	4.	4.	2.	4	5	6	1.0	o.	5	-	2	6	1 9	-	9	1	c

The clue is provided by the net mobility into and out of first occupations. If the number of men in an occupational grouping in 1962 is subtracted from the number who started their working life in this grouping (see the totals of Table J2.3 in the Appendix), an index of net mobility during these men's working lives is obtained, which may reveal either a net outflow or a net inflow. Similarly, if the number of men who started to work in an occupation is subtracted from the number whose fathers were in this occupation (Table J2.2 in the Appendix), an index of net mobility from father's to first occupation is obtained, which also may show either net outflow or net inflow. With one exception—the rapidly expanding salaried professions, which manifest an inflow in both cases—there is a perfect negative relationship between these two indices. Occupations that more men leave than enter after having started their careers (outflow) exhibit an inflow of manpower from social origins, and those occupations that more men enter than leave after they have begun to work (inflow) reveal an outflow of manpower from social origins. In other words, some occupations have more men starting in them than either the number of men pursuing this line of work later in life or the number with fathers who pursued this line of work, and other occupations constitute career beginnings for fewer men than are found in them at later career stages in either generation.

Seven occupations may be considered distinctive entry occupations or career beginnings, since the number of men who started to work in them exceeds both the number whose fathers and the number who themselves worked in them in later career stages. These are the same seven entry occupations whose disproportionate supply of manpower to other occupational groups later in life was noted above: clerks, retail salemen, both groups of operatives, and all three groups of laborers. It is noteworthy that these distinctive career beginnings consist of the lowest white-collar occupations, the lowest blue-collar ones (except for service), and the lowest farm occupation. More men start their careers in the lowest strata of each of the three occupational classes than remain in them or later move into them. The data pertaining to fathers suggest that in the last generation, too, comparatively few men stayed in these lines of work as adults. These entry occupations dominate the intragenerational flow of manpower, supplying disproportionate numbers to other occupations in later career stages. The importance of distinctive entry occupations for the intragenerational flow of manpower is an important factor differentiating the intragenerational from the intergenerational flow.

Having identified the entry occupations that supply a large volume

of manpower to other occupations later, the next question posed is from which first jobs men are most likely to disperse to many different career lines later in life. Specifically, we want to inquire whether the origin composition of an occupational grouping influences the inclination of its members to disperse to other occupations later. The hypothesis may be suggested that the more thoroughly the men entering an occupation are integrated into it, the less likely they are to disperse to other occupational groups in the course of their careers.

Homogeneity of social background is expected to promote social integration. The hypothesis implies, therefore, that the homogeneity in social origins of the men in an entry occupation is inversely related to their tendency to leave it for a large variety of other occupations. The operational definition of homogeneity in background is that any two randomly chosen men in an entry occupation have the same social origin (father's occupation), whatever this origin is.16 The measures of homogeneity corresponding to this definition are presented in the first column of Table 2.11. The dependent variable is measured by the previously discussed crude index of dispersion of supply in movements from first to 1962 occupation.¹⁷ The hypothesis predicts a negative association between the homogeneity of entry occupations and the dispersion of supply of manpower from them. But in fact the product moment correlation is close to zero (-.07), negating the hypothesis. Homogeneity of social origins of the men starting their careers in the same occupational grouping apparently does not discourage them from moving into many different lines of work later in life.

As the original hypothesis is discredited by the data, it must be modified: for integration into an occupation to prevent subsequent dispersal into a variety of different occupations, homogeneity in background is not sufficient, but men must have common social roots in this particular occupational group that precede their own actual entry into it and firmly tie them to it. The percentage of all men in an entry occupation whose fathers were in the same occupation furnishes an index of common social roots. These values, derived from Table J2.2 in the Appendix, are presented in column 2 of Table 2.11.

16 The procedure used to arrive at the index of homogeneity of occupational origins is to sum the probabilities that two men in a given entry occupation are from the same particular occupational background, a sum of 17 probabilities, each produced by squaring the probability that a single man in a given grouping had a father in any specific grouping. Operationally, this is a summation of the squares of the vertically computed percentages, by columns, in Table J2.2.

17 The crude measure of dispersion of supply in movements from first to 1962 occupation is used, because the refined measure with its blocked diagonal is not affected by the proportion remaining in an occupation, which is important here. The correlation is also close to zero (.08) when the refined measure is used.

TABLE 2.11. FIRST OCCUPATIONS: MEASURES OF HOMOGENEITY SELF-RECRUITMENT, NET MOBILITY, AND GROSS MOBILITY, FOR MALES 25 TO 64 YEARS OLD

	1	2	3	4 Per Cent in	5 Per Cent in First	6
Oce.	Homogeneity of Origins	Occupational Self-Recruitment	Not Mobility Father's Occ. to 1962 Occ.	First Job Mobile to First Jobb	Job Mobile from First Job to 1962 Occ.b	Difference Between Columns 4 & 5
Professionals Self-Empl,	11.3	18.9	_		· · · · · · · · · · · · · · · · · · ·	Cordinas 4 & B
Salaried	8.1	12.3	57.6	81.1	46.5	34.6
Managers and	0.1	12.3	49.3	87.7	45.5	42.2
Officials	10.6	8, 2	43,5	91.8	0.4.0	
Salesmen, Others	12.7	16.5	31.8		64.3	27.5
Proprietors	32,1	53.8	37.2	83.5	76.3	7.2
Clerical	7,0	6.5		46,2	63.7	-17.6
Salesmen, Retail	8,2		36.7	93.5	82.4	11.1
Craftsmen	0,2.	4.2	32,8	95.8	94.9	.9
Mfg.	9,5	16.9	24.0	83.1		
Other	8.6	17.1	26.4	82.9	77.5	5.6
Construction	13.2	23, 4	25,6		76.7	4.2
peratives			20,0	76.6	73.8	2.8
Mfg.	9.8	18.3	20.5	81.7	81.2	_
Other	10.3	17.2	24,7	82.8		.5
ervice	8.5	11.4	25.3	88.5	85.0	-2.2
aborers			20.0	00.0	80.2	8.4
Mfg.	10.0	7.7	23.0	92.3	91.8	_
Other	21.0	11.4	27.0	88.6	88,5	.5
armers	71.6	84.5	50.5	15.5	70,0	,1
arm Laborers	48,6	10.0	55.4	90.0	93.0	-54.5 -3.0

The new hypothesis is that the greater solidarity in those occupational groupings in which a large proportion of the men who enter have common social roots lessens the likelihood that men will disperse from these occupations to a large variety of others in the course of their careers. The inverse relationship predicted between the values in column 2 of Table 2.11 and the number of underlined values in each row of Table 2.7 is confirmed, though not strongly, by the data, which reveal a product moment correlation of -.50. The larger the proportion of men starting their careers in an occupation whose background gives them common social roots in it, the less likely men are to leave it later for many different occupations. To be sure, this correlation over occupational groups does not demonstrate that individuals who enter the same occupation as their father's are more likely than others to remain in this occupation. But the correlation observed is of great interest even if it is not a result of such an underlying individual correlation, because in that case it implies that social solidarity, or a similar social mechanism, is the intervening variable that connects the proportion of men with social roots in an entry occupation with the disinclination of other men to disperse from this occupation.

bor NA.

According to the interpretation advanced, cross-generational occupational solidarity restricts the tendency of men who have started their careers in a certain line of work to leave it later for others. Indeed, different manifestations of the underlying variables from those previously used support this interpretation. The proportion of sons from a given origin who enter their father's line of work is another indication of cross-generational solidarity. (This measure of occupational inheritance—the values in the diagonal of Table 2.3—is not significantly related to the measure of self-recruitment employed in the preceding analysis, the product moment correlation being -.24.) The proportion of men entering an occupation who have remained in it until 1962 (the values in the diagonal of Table 2.4) is a measure of the disinclination to leave that is different from the crude dispersion measure previously used. These two factors are highly related; the product moment correlation between the values in the two diagonals is .89. The greater the proportion of sons originating in an occupational group who themselves start careers in it, the greater is the tendency of men once they have entered this occupational group to remain in it. This is also a correlation over occupational groups. Note that the two measures of the dependent variable—the proportion of men who remain in an entry occupation and the degree of dispersion among those who leave it—are based on the behavior of entirely different individuals. The fact that two different correlations yield parallel results strengthens confidence in the conclusion that social mechanisms, not merely personal feelings of attachment, are responsible for the relationship observed. Cross-generational occupational solidarity seems to increase the reluctance of men from all origins to move out of the occupational group they have entered.

Finally, the role played by career beginnings in the intergenerational movements from social origins to 1962 occupations will be examined. The specific question asked for each category of first occupation is how dissimilar its distribution of father's occupations and its distribution of 1962 occupations is. The index of dissimilarity employed to answer this question is based on the same procedure as the refined measures of dispersion. For men with a given first job, the distribution of father's occupations and the distribution of 1962 occupations are reduced to percentages, and the differences between corresponding percentages are calculated. The sum of all positive (or all negative) differences yields the index of dissimilarity, which is presented in column 3 of Table 2.11, and which shows how different the occupational destinations of men starting their careers on a certain level

were from their social origins.¹⁸ In effect, this index of dissimilarity reveals the net intergenerational mobility experienced by men who started their careers in a certain occupational group.

Men who start their working lives in manual jobs experience relatively little intergenerational mobility. At least, the net mobility reflected in the dissimilarity between their fathers' and their 1962 occupations is small, and there is little difference in this respect between the various manual occupations, with the index ranging only from 20.5 to 27.0. Although this low volume of net intergenerational mobility of men who entered the labor force on blue-collar levels does not necessarily mean that few of them moved to levels different from their fathers' or that few of them experienced mobility during their lifetimes, it does show that the occupations in which these men ended up as adults were, in the aggregate, little different from their fathers'. Although these men experience in fact a considerable amount of mobility into and out of first jobs (columns 4 and 5 in Table 2.11), the movements into first jobs in one direction are largely compensated by movements out of first jobs in the opposite direction, with the result that the destination distribution differs little from the origin distribution.

Men who began their careers either in white-collar jobs or on farms experience much more net intergenerational mobility between social origins and 1962 destinations than those who started by working in manual jobs. The distribution of occupations in which these whitecollar and farm entrants end up are very different from those of their fathers, in contrast to the similarity between the two distributions for men whose first job is in one of the blue-collar categories. The interesting phenomenon is that the gross amount of mobility experienced by white-collar and by farm starters, both from origin to first job and between first job and 1962 occupation, is no greater than that experienced by blue-collar starters (see columns 4 and 5 of Table 2.11); but the two segmental movements of the former groups do not largely compensate each other, whereas those of the latter do, so that only the white-collar and farm starters experience much net mobility and arrive at destinations that differ considerably from their origins. The net rates of an occupational group are indicative of the mobility experience of the entire collectivity, while the gross rates are indicative

¹⁸ It is also possible to calculate the dissimilarity between first and 1962 occupation for each social origin, and the dissimilarity between father's and first occupation for each 1962 occupational grouping. These values, which have less substantive meaning, and which do not reveal consistent patterns, are not presented.

of the mobility experience of its individual members. The collectivities of men who start work on various manual levels experience little mobility, notwithstanding much movement on the part of their individual members, in contrast to the collectivities of men starting in white-collar jobs or on farms, which experience much net mobility. Moreover, the higher the status of a white-collar occupation into which men enter, the greater is the net mobility experienced by them as a collectivity, increasing, with a single exception, from 33 per cent for retail sales to 58 per cent for self-employed professions.

Despite the fact that men who start their careers on blue-collar levels experience no less mobility than other men, their movements effect less change in the aggregate from one generation to the next, so that the distribution of occupational positions at which they arrive differs little from that of their fathers. The implication, then, is that the two segmental gross movements of men who enter the labor force in bluecollar occupations merely serve to take these man back to the occupations of their origins, whereas first jobs in white-collar and farming occupations carry men away from their origins. The occupational world of these blue-collar starters seems to be epitomized by the remark the Queen made to Alice: "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!" The large amount of upward mobility of men holding blue-collar first jobs observable in the data must not be misinterpreted. It does not basically alter the occupational situation of blue-collar starters as a class from one generation to the next, since there is much compensating downward mobility. The case of white-collar and farm entrants is fundamentally different, inasmuch as the mobility of individuals in these occupational groups effects a net change of the aggregate positions in each group, and from other data we know that this change is largely an improvement. In the aggregate, the men who enter careers in the highest white-collar strata or in the farm strata are most likely to experience intergenerational mobility, with those entering the lower white-collar strata being intermediate, and with the entrants on bluecollar levels being at the opposite extreme.

In the preceding section we found that the inflow into and the outflow from blue-collar groups is more dispersed than that for either white-collar or farm groups. This finding seems at first to contradict the present one that blue-collar starters experience less net mobility than either white-collar or farm starters, but actually the two findings are by no means incompatible. The very fact that blue-collar starters, who experience no less mobility than other men, exhibit more dis-

persed movements helps to explain why these movements produce less net change in the occupational distributions. The more diverse the movements, the more likely they are to neutralize one another.

First occupations that manifest much net intergenerational mobility may do so primarily as the result of much movement from social origin to first job, or of much movement from first job to 1962 occupation, or of both kinds of movement. The percentage of men in each starting occupation who had moved there from different social origins is presented in column 4 of Table 2.11, and the percentage in each starting occupation who moved to different occupations in 1962 (the complement of the value in the diagonal of Table 2.4) is presented in column 5. The difference between these two percentages in column 6 reveals whether a given group experienced more mobility before it had entered these careers or subsequently in intragenerational movements to 1962 occupation. Most differences for blue-collar starters are small, corresponding to their low rates of net mobility (although small differences do not necessarily reflect low net rates, as they may be a result of many noncompensating movements of both kinds). Of major interest are the differences for white-collar and farm starters, which enable us to explore what the source of the high net mobility of these groups is.

Whereas men who start their careers on high white-collar levels and those starting on farms have similar high rates of net intergenerational mobility, the kinds of movement producing this result are quite different. Men entering high white-collar occupations have already experienced much movement from social origins, which must entail mostly upward mobility, and experience less movement subsequently in their own careers. Men entering farm occupations, in contrast, have as yet experienced little movement from social origins but experience much movement in their own careers, which must be primarily upward mobility off the farm. (Although the value for farm laborers in column 4 is high and the negative difference in column 6 is small, this is primarily due to the fact that 68.5 per cent of them had farm fathers; if movements between farm and farm labor are excluded, the negative difference in column 6 becomes pronounced.) Men starting careers as proprietors are the only white-collar group who experience more mobility after having started their own careers than before. Men entering on the lowest white-collar levels have already experienced very high rates of mobility from social origins and also experience very high rates of mobility subsequently in their own careers. These movements are partly, though not entirely, compensating, yielding a moderate amount of net mobility. In sum, the high rates of net intergenerational mobility of men starting careers in high white-collar strata are due to much upward mobility from social origins; those of men starting on farms are due to much subsequent movement in their own lifetimes, as are those of men starting as proprietors; the lower rates of men starting on low white-collar levels are associated with much movement of both kinds, which is partly compensating; and the still-lower rates of blue-collar starters are due to a still-greater degree of compensation in their movements.

MOBILITY AND CLASS BOUNDARIES

The direction of movement among occupational groupings is, of course, crucial to an understanding of the occupational structure. It is not enough to know that the men in a certain occupational group experience much mobility, but we also want to know whether this involves primarily upward mobility or downward mobility or both. The foregoing discussion that showed that much gross mobility can be associated with little net mobility, owing to compensating movements, directs attention to the importance of taking the direction of movements into account. As a convenient starting point for the study of the direction of movements among occupational groupings, Tables 2.5, 2.6, and 2.7 will be re-examined here, centering attention more explicitly and systematically than before on the ranking of occupational groupings and the direction of mobility among them.

A distinctive pattern is revealed by the data on intergenerational movements among occupations in Table 2.5. Assume that two coordinates are drawn in the major diagonal. There are 16 such pairs of coordinates that can be drawn. Whereas 14 of these reveal some underlined values, indicating excessive downward mobility, in the upperright field, two of them have no such values indicative of downward mobility in excess of expectation across the boundary. They are the division between retail sales and crafts in manufacturing and that between labor outside manufacturing and farm. Although these two reveal some underlined values in the lower-left field—that is, some cases of disproportionate upward mobility across the boundary—there are no coordinates at all for which this would not be the case.

In short, two distinctive boundaries limiting downward mobility are in evidence, one between blue-collar and white-collar occupations, the other between blue-collar and farm groups. The application of the same procedure to Table 2.6, flow of manpower from occupational origins to first occupations, does not yield similarly clear results, which reflects the tendency of white-collar sons to start their careers on levels below their origins and move up later. However, the two bound-

aries are again in evidence for intragenerational mobility (Table 2.7), although in this case three additional dividing lines would also satisfy the boundary criterion of no disproportionate downward movements.

The American occupational structure appears to be partitioned by two semipermeable class boundaries that limit downward mobility between generations as well as within lifetime careers, though they permit upward mobility. To be sure, many individuals experience downward mobility across these boundaries. Ours is not a caste system in which birth secures permanent status. Thus more than one-quarter of the sons of white-collar workers are in manual or farm occupations, yet this is disproportionately few, for more than three-fifths of the entire labor force are in these occupations. The concern of the present analysis, moreover, is not the success or failure of individuals but the flow of manpower among occupational groups, specifically, the excess of this flow over what would be expected under conditions of independence. There is virtually no such excess flow between any two occupations downward across either boundary, whether we examine movements from one generation to the next or those within lifetime careers. As far as the exchange of manpower among occupations is concerned, therefore, it seems warranted to speak of the two boundaries as one-way screens that permit a proportionate flow only in the upward and not in the downward direction.

The manifest pattern is that two class boundaries restrict downward mobility between occupational groupings, but do not restrict upward mobility, at least not between adjacent classes. Upward mobility between all farm groupings and all white-collar groupings is disproportionately low (see Tables 2.5 and 2.7). The underlying forces producing this pattern, however, are more complicated than simply barriers to downward mobility.

To understand these forces, historical developments in the period to which the data refer must be taken into consideration. The data pertain to men 25 to 64 years old in March 1962. Occupational origins are defined by father's occupation at the time the respondent was 16 years old. Father's occupation, therefore, covers the period between 1913 and 1952, and the period covered by first job is probably slightly longer, particularly because it ends later. These years cover the final phase of the transition from an agricultural to an industrial economy in this country. In 1910, 11,300,000 persons were gainfully employed in agriculture in the United States, which is the peak of agricultural employment in absolute numbers over the entire period for which we have reliable estimates (1820 to the present). Since 1910 there has been a steady decline in agricultural employment, which has become greatly

accelerated since World War II. As the demand for farm workers declined the natural increase of the farm population further and further outstripped replacement needs. Hence movements away from farms greatly exceeded movements to farms.

Demographic and economic conditions resulting from high fertility and rising labor productivity on farms during the preceding half century have produced what is, in effect, a barrier to mobility into farm occupations. There is simply a shortage of farm work, and men originating elsewhere are at a competitive disadvantage for obtaining these farm positions in short supply. More than one in four members of the labor force in 1962 originated on a farm, but only one in 12 was engaged in farm work himself. Men reared off the farm are not so well qualified for farm work as those reared on the farm and, consequently, are disadvantaged in the competition for positions on farms. Most of them, however, probably never experience this handicap, because they have little interest in engaging in such competition. The ideology of an expanding industrial society does not furnish strong incentives for urban workers to move to farms.¹⁹ Furthermore, the expansion of the industrial economy made industrial jobs much more abundant than farm jobs.

These social conditions have created a boundary between the industrial and the agricultural sectors of the labor force, which is manifest in the finding that both intergenerational and intragenerational movements from any nonfarm occupation to either of the two farm groups fall short of what would be expected under conditions of statistical independence. Such a consistent pattern of disproportionately low movements between occupational groups is all that is meant by a class boundary here.

A schematic table may facilitate the analysis of the dynamics of occupational mobility among the three classes. In the table below, men are divided by present occupation and by social origins into three

handrige .		6		
Father's Occ.	W	Son's Oc	C. ₽	T
		2	-	
White-collar	1	2	3	a
Blue-collar	4	5	6	ь
Farm	7	8	9	C
Total	d	\boldsymbol{e}	f	N

¹⁹ Although most of the automobile workers interviewed by Eli Chinoy wished to get out of the factory, for instance, only one-tenth of them expressed interest in farming, and even for most of these the idea to become a farmer seemed to be merely an unrealistic fantasy; Automobile Workers and the American Dream, Garden City: Doubleday, 1955, pp. 82-93.

categories—nonmanual, manual, and farm occupations—yielding a ninefold cross-classification. The marginals of this table are assumed to be fixed, respectively, by the existing occupational distribution and by fertility—specifically, the origins of sons.

The table has four degrees of freedom. It has just been indicated that the values in cells 3 and 6 should be very low, as they are observed to be in the data. The values in these cells can be fixed at an arbitrary low figure or might be assumed to be zero and tolerance of departures from zero might be specified, such as a tolerance of .5.20 In either case, given these two values, that of cell 9 is determinate by subtraction. Two of the four degrees of freedom have thus been accounted for.

The pressures of a declining demand for farm workers and high fertility in these occupations compel many sons of farmers to leave the farm. Having to leave the place for which their skills best equip them—the farm—where do they go? Some manual work requires few skills; other manual work, such as construction, requires skills also used on the farm. The skills required for white-collar work, in contrast, tend to be far removed from those acquired on a farm.²¹ Men reared in an urban environment, even those originating in the working class, have had more opportunities than farm youths for contact with white-collar occupations. Moreover, urban school systems offer training explicitly designed for nonmanual occupations, training less likely to be available in rural schools. Hence farmers and their sons are at a disadvantage in the competition for white-collar jobs. This implies that migrants from the farm will not move into cell 7 but into cell 8.

This prediction, however, is not strongly confirmed by the data.²² To be sure, the indices of association for movements from farm origins to white-collar destinations are lower than those to blue-collar destination, and the ratio of white-collar to blue-collar destinations is less for men with farm origins (.42) than for men with blue-collar origins (.60). But the international data assembled by Lipset and Bendix show that, in all six countries investigated, the ratio of white-collar to blue-collar destinations is greater for men with farm than for those with blue-

²⁰ With this model, applying the .5 criteria, there is one negative case among 30 in the intergenerational table and two exceptions in the intragenerational table, which is a very good fit.

²¹ Although lower white-collar occupations require few specialized skills—fewer than many industrial and farm jobs—the generalized skills in dealing with people they require are peculiarly urban, thus disadvantaging men with farm backgrounds.

²² Applying the criterion that all indices of association in cell 7 should be no more than .5, of the 14 cases, there are six exceptions in Table 2.5, intergenerational mobility, and four exceptions in Table 2.7, intragenerational mobility. This is not a good fit.

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collar origins,²⁸ which contradicts the assumption that men reared on a farm are at a competitive disadvantage compared to those reared in working-class homes in respect to white-collar careers. In other countries, in short, nonfarm men with farm origins are more likely than nonfarm men with blue-collar origins to go into white-collar occupations, whereas the reverse is true in the United States, possibly as a product of both the unusually rapid contraction of employment opportunities on farms in the United States and the disproportionate number of highly disadvantaged Negroes among Americans moving off farms.²⁴ In any case, the original assumption concerning migrants off the farm should be modified to state that their likelihood to become white-collar workers is fairly low but *not* as close to zero as is the likelihood of mobility from urban origins to farm occupations. Besides, the argument may be applicable only to the United States.

To summarize briefly, the oversupply of men reared on farms, their superior experience with and orientation towards farming, and their competitive disadvantage for white-collar work, even if it is not much greater than that of men from blue-collar homes, together explain much of the pattern of mobility observed. A boundary restricting mobility from the two other classes into farm occupations accounts for two of the four degrees of freedom in the table. An upward push on farmers' sons, coupled with a bridle on their movements into nonmanual occupations, accounts for a third degree of freedom. One degree of freedom and four cells in the table—cells 1, 2, 4, and 5 remain unexplained. What accounts for the pattern of preponderant movements between white-collar and blue-collar occupations? Four alternative explanations are possible, depending on which of the four frequencies are theoretically derived, rendering the other three determinate. The interpretation here will focus on the relative values in cells 1 and 2.

White-collar occupations in general enjoy high prestige, inasmuch as many of these occupations require the rarest skills, command the highest salaries, and exercise most authority. However, the prestige claimed by many white-collar occupations produces a halo effect that reflects onto those nonmanual jobs that require little skill and command less income than many blue-collar occupations. Particularly

men reared and socialized in the white-collar class tend to place much significance on nonmanual work and often prefer it to better-paid jobs involving manual labor. White-collar occupations as a whole also have been expanding much more rapidly than blue-collar occupations, increasing their proportion of the total employed labor force 23.5 per cent between 1940 and 1960, whereas blue-collar occupations increased only 8.6 per cent. At the same time, white-collar fertility has remained below that of blue-collar workers. In addition, many blue-collar positions are occupied by men who had moved off the farm. Men originating in white-collar strata have little interest in moving into manual occupations, and there is less need for them in the manual than in the nonmanual class.

These conditions discourage downward mobility from white-collar to blue-collar strata, but of particular importance in this respect is the large spread in status among white-collar occupations and the overlap between them and blue-collar occupations. Some white-collar occupations require much less skill and command considerably less income than many blue-collar occupations. This makes it possible for men with inferior abilities who want to remain in the white-collar class to do so. Men raised in white-collar homes are often strongly identified with the symbols of white-collar status. The unsuccessful ones among them are, therefore, willing to pay a price for being permitted to maintain white-collar status. The existence of relatively unskilled white-collar occupations, such as retail sales and clerical jobs, makes it possible for the unsuccessful sons of white-collar workers to remain in the white-collar class by paying the price of accepting a lower income than they might have been able to obtain in a manual occupation. The unskilled white-collar occupations tend to absorb most of the downwardly mobile from the higher nonmanual strata, which makes these occupations a boundary that creates relative protection against the danger of downward mobility from the white-collar to the blue-collar class.

The argument advanced is that the boundary between nonmanual and manual occupations would make the value in cell 2 particularly low.²⁵ Given this assumption that disproportionately few men move from nonmanual to manual occupations, and the previous assumption that most men originating in farming who cannot stay there move to manual occupations, it follows that the remaining manual occupations must be filled by sons of manual workers. That is, knowl-

²³ Seymour M. Lipset and Reinhard Bendix, Social Mobility in Industrial Society, Berkeley: Univer. of California Press, 1960, pp. 19-21.

²⁴ As far as the earlier data presented by Lipset and Bendix show, the United States does not differ from the other countries in this respect, but, according to the more reliable OCG data, the United States does differ. For some systematic comparison of the OCG findings and those of the earlier United States surveys, see the following chapter.

²⁵ Applying the same criterion previously used, there are 20 exceptions in 56 cases in the intergenerational matrix (Table 2.5) and 13 exceptions in the intragenerational matrix (Table 2.7). The fit is fairly good.

edge of cells 2 and 8 makes cell 5 determinate. All remaining men with manual origins must move up to nonmanual occupations, cell 4. These considerations also determine the frequency in cell 1. All men originating in the white-collar class, except the low proportion permitted by the model to move down, remain in white-collar occupations.

In short, the theoretical interpretation predicts low values in cells 3, 6, 7, and 2. The rest of the pattern of movement can be inferred from these theoretical premises. A theory that would provide a basis for predicting the actual values in these four cells would furnish a complete explanation for the entire pattern of movement among the cells. Such a quantitative model does not presently exist.

These class boundaries do not reveal, however, whether the movements out of and into the various occupational groupings are predominantly upward or downward, which is the question raised at the beginning of this section. To answer this question, we consider only movements between a given occupational group and any higher one, that is, the outflow of men from given origins into any higher destinations, and the inflow of men into given destinations from any higher origins. The observed number of men in each of these categories is divided by the number expected on the assumption of independence when the cells for nonmobile men and lateral movements are blocked. The index obtained, which refers to the excess over expectations in the outflow to higher or the inflow from higher strata, is presented in Table 2.12. The outflow involves upward and the inflow downward mobility, because movements between given occupations and all those above it are considered in either case. The values for outflow into lower and inflow from lower strata are inverse functions of those shown and hence do not furnish any additional information, because the exclusion of the diagonal makes the dichotomous standardized values pertaining to movements in opposite direction complementary.

The first pattern noticeable in Table 2.12 is that the values for both the outflow into and the inflow from higher strata, in all three types of movements, decrease as we go down the status rank order of occupations. The higher the status of an occupational group, the more the flow of manpower between it and higher strata in both directions exceeds the volume expected on the assumption of independence. This finding reflects the preponderance of short-distance over long-distance movements. The higher the rank of an occupation, the shorter is the average distance between it and all higher strata, and the pattern in the table simply indicates that movements entailing such shorter distances occur with disproportionate frequency. To be sure, there are some noteworthy exceptions to the pattern. Thus men

TABLE 2.12. SUPPLY TO AND RECRUITMENT FROM HIGHER RANKING OCCUPATIONAL CATEGORIES, FOR MALES 25 TO 64 YEARS OLD: RATIO OF OBSERVED FREQUENCY TO FREQUENCY EXPECTED ON THE MODEL OF QUASI-INDEPENDENCE

		Supply to Above		Recruitment from Above		
	1	2	3	4	5	- 6
Occ.	Father's Occ. to 1962 Occ.	Father's Occ. to First Job	First Job to 1962 Occ.	Father's Occ. to 1962 Occ.	Father's Occ. to First Job	First Job to 1962 Occ
Professionals Self-Empl.						
Salaried	3.01	2.42	10.62	3.40	4.08	7.00
Managers	2.44	2,39	3, 35	1.77	3.01	7,22 2,64
Salesmen, Other	2.27	2,59	2.38	2.31	2,60	1.80
Proprietors	1,87	2.32	2.17	1.12	2.16	1.48
Clerical	1,59	2, 22	1.73	1.09	1.42	1.47
Salesmen, Retail	1.44	1.70	1.66	1.49	1.59	1.19
Craftsmen Mfg,	1.11	1.03	1.20	.64	1.08	.55
Other	1.10	1.08	1.22	.75	1.16	.60
Construction	1.07	1.05	1.20	.73	.98	.59
peratives Mfg.	,98	1.05	1.04	.73	1.06	.64
Other	.99	1, 15	1.03	-73	1.01	.65
ervice	1.02	1.13	1.02	.85	1,10	.87
aborers Mfg.	1,00	1.08	1.03	.83		
Other	1.01	1.11	1.03	.69	1.04	.88
armers	.97	.67	.92	.83	.98 .91	.81
arm Laborers	1.00	1,00	1.00	1.00	1.00	.37 1,00

originating in the lower manual strata experience somewhat more upward mobility than those originating in the strata above them (columns 1 and 2). The inflow of men from higher origins into sales occupations in 1962 is exceptionally high, indicative of much downward mobility (column 4). Of special interest is the complete reversal of the pattern in the inflow from higher strata into the various blue-collar occupations, whether inflow from social origins (column 4) or from career beginnings (column 6) is considered. Within the blue-collar class, and only there, the standardized rate of downward mobility into an occupation is inversely related to its rank. This means that another force must counteract the preponderance of short-distance movements, which has the opposite effect and produces a direct relationship.

That other force is apparently the restrictive influence of the boundary between the white-collar and the blue-collar class on downward mobility. This class boundary produces a sharp break in the rates of downward mobility into the various occupations, with those into white-collar occupations exceeding and those into blue-collar occupations falling short of the expected values (columns 4 and 6). As there is proportionately little downward mobility across the class boundary,

the inflow from above into the higher blue-collar strata is depressed, effecting a reversal within the blue-collar class of the otherwise observable positive relationship between such inflow and rank.

OCCUPATIONAL STRUCTURE: PATTERNS OF MOVEMENT

The standardized rates of outflow to higher occupations and inflow from them are highly correlated. The product moment correlation is .93 for movements from father's to 1962 occupation (columns 1 and 4), .85 for those from father's to first occupation (columns 2 and 5), and .99 for intragenerational movements from first to 1962 occupation (columns 3 and 6). These positive relationships are merely another reflection of the predominance of short-distance movements, which produces excessive values for all kinds of movements between more highly ranked occupations and the relatively few others above them.

A surprising feature of the outflow values is that the large majority of them reveals an excess of upward mobility. Most of these values are greater than 1.0, the only exceptions being those for farm origins and, in the case of outflow from father's to 1962 occupation, also those for the two groups of operatives (column 1). The outflow of manpower from various origins is predominantly in the upward direction. What is the source of all this upward mobility? It may well be the change in the relative size of different occupational groups, which technological developments have produced in recent decades.

Technological advances have reduced the need for manpower to till the soil and perform menial labor, increasing the human resources available to furnish professional services and manage complex organizations. The two occupational groupings that expanded most between 1940 and 1960 are salaried professionals and managers, and the three that contracted most in proportionate size are farm laborers, farmers, and laborers in manufacturing. The fact that the contracting occupations are near the bottom of the hierarchy and have high fertility, whereas the expanding ones are near the top and have low fertility, creates an upward push in the flow of manpower. But we have seen that short-distance movements prevail over long-distance ones. Few of the displaced farm workers or laborers fill the growing number of professional and managerial positions. What seems to happen is rather that the pressure of displaced manpower at the bottom and the vacuum created by new opportunities at the top start a chain reaction of shortdistance movements throughout the occupational structure.26 This push of supply at the bottom and pull of demand at the top create opportunities for upward mobility from most origins, as the vacancies left by sons moving up can be filled by sons from lower strata. But

26 See on this point also the discussion of migration from rural areas to large cities in Chapter 7.

men who start their working lives in blue-collar jobs are least likely to benefit from these opportunities, as previously indicated.

DIMENSIONS OF SOCIAL DISTANCE

The systematic study of the direction of social mobility poses serious problems. Simple measures do not convey significant information. It is hardly a revelation to ascertain that the proportion upwardly mobile is greater for sons of farm laborers than for sons of salaried professionals, since the former have so many more places they can move up to. More complex measures, like the one used in the last few pages, cannot easily be conceptualized and may therefore result in misleading conclusions. Besides, the impact of ceiling effects limits their usefulness. These problems are the major reason why the analysis in this chapter has largely relied on measures that are independent of direction, making inferences about direction by relating these measures to the rank order of occupations. Another approach of this kind is designed to indicate the social distances between occupational groups and the dimensions underlying it.

Let us examine again the intergenerational movements from father's to 1962 occupation in Table 2.2. For any pair of origins the percentage distributions of destinations differ to a greater or lesser degree. If the two distributions in any two rows of Table 2.2 were identical it would indicate a minimum of dissimilarity or social distance with respect to destinations between the two origin groups. At the opposite extreme, if there were no overlap between the two distributions the two origins would have a maximum distance from one another with respect to their destinations. The empirical cases fall between these two extremes of 0 and 100 per cent distance in regard to destinations. The index of dissimilarity previously encountered (the sum of the positive percentage differences) can represent this distance between origins with respect to destinations, or the distance between destinations with respect to origins. For example, the index of dissimilarity between rows 8 and 9 in Table 2.2 is 15.3, whereas that between rows 4 and 15 is no less than 55.5. There is little social distance, in terms of 1962 occupations, between sons of craftsmen in manufacturing and in "other" industries, but there is much social distance between sons of salesmen outside the retail field and laborers outside manufacturing. The index of dissimilarity between any two social origins in regard to 1962 occupations and between any two 1962 occupations in regard to social origins is presented in Table 2.13.

It should be noted that the calculation of the social distance between occupational groups by the procedure outlined does not in any

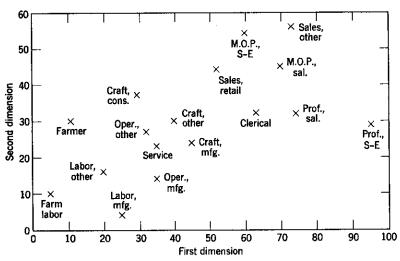
TABLE 2.13. INDEX OF DESIMILARITY FOR MALES 25 TO 64 YEARS OLD. ABOVE DIAGONAL: BETWEEN FATHER'S OCC. GROUPS WITH RESPECT TO 1962 OCC.; BELOW DIAGONAL: BETWEEN 1962 OCC. GROUPS WITH RESPECT TO FATHER'S OCC.	2, 13. D WITH 1	NDEX O	F DISSI	MILARI 962 OCC	TY FOF	INDEX OF DISSIMILARITY FOR MALES 25 TO 64 YEARS OLD. ABOVE DIAGONAL: BETWEEN FATHER'S OCC., I RESPECT TO 1962 OCC.; BELOW DIAGONAL: BETWEEN 1862 OCC. GROUPS WITH RESPECT TO FATHER'S C	S 25 TO GONAL	64 YEA : BETW	RS OLD ÆEN 19	ABOY	Æ DIA(CONAL:	BETW H RESE	EEN FA	THER!	S OCC. IER'S O	; ;	
Occupation	팅	-	21	69	4	2	9	-		اه	2	=	12	13	14	15	16	17
Profee 1 Self	Professionals Self-Empl.	:	22.8	30.3	31.8	38.7	28.8	37.4	44.9	45.7	54.5	53,6	51.0	51.3	60.4	61.3	60.5	66.0
2 Sala	Salaried	24.7	:	17.6	26.9	25.3	14.2	24.9	8.62	29.7	38.8	39.3	36.8	35.0	49.4	45.9	49.6	55.9
3 Managers	ers	18.8	17.2	:	15.3	16.6	14.9	23.4	30.6	30,0	37.3	40.8	37.2	36.2	51.9	48.5	49.7	58.2
4 Salesmen, Other	nen.	22.3	15, 1	13,6	:	16.0	26.5	23.0	36.5	37.2	44.5	46.5	43.0	43.0	56.5	55,5	54.5	63.0
5 Proprietors	letors	32.8	27.0	17.7	25.3	:	26.0	16,5	29.7	28.9	36,1	38.8	34.6	34.8	50.0	47.1	47.0	55.4
6 Clerical	la T	38.7	23.2	21.9	24.3	18.2	:	22,9	24.0	22, 5	30.6	31.8	28.6	26,6	42,5	37.3	43.2	48.6
7 Salesmen Retail	aen, til	31.2	24.3	15.8	21,1	12,9	14.9	:	22.0	21.1	28.9	30.0	26.0	26.0	40.1	38.5	37.5	45.9
Craftsmen 8 Mfg.	men	50.5	33,3	34,1	37.3	24.4	17.2	22,6	:	15.3	20.5	15,3	17.0	16.5	28.5	27.8	31.0	37.6
9 Other	Ħ	47.0	32,5	31,7	34,3	17.4	14,4	21.9	16.7	:	17.8	20.3	11.6	14.2	30.4	23,1	28.9	35,9
10 Con.	Construction 51.4	n 51.4	40.0	37.7	41.0	21.7	22,7	27.4	22.7	17.1	÷	20.3	19.6	18,5	29.4	23.9	29.1	36.6
Operatives 11 Mfg.	tives	52.8	38.3	38.6	41.3	24.3	21.9	24.7	14.5	16.4	18.0	÷	16.8	15.6	14.6	21.0	28.3	30.8
12 Other	er	52.4	38.1	37.5	38.6	23.7	20.5	26.2	20.7	12.4	15.4	12,2	:	14.4	24.5	16.4	22.5	26.6
13 Service	a	50.5	36.4	36.0	38,3	21.4	16.4	23.8	17.9	12.2	18.9	11.3	12.0	:	21.2	15.3	25.9	28.4
Laborers	ers																	
14 Mfg.		57.0	47.3	47.5	48.6	32.1	29.6	32.5	22.6	23.8	21.6	10.4	16.0	17.8	:	19.0	28.5	24.4
15 Other	Ŀ	57.1	46.7	46.3	48.1	29.5	29.7	35,1	28.1	23,3	19.5	19.2	15.8	18.5	18,3	:	24.4	16.2
16 Farmers	. SILS	76.2	76.0	72.6	77.1	0.09	66.3	66.2	63.8	58.4	52.0	55.6	52.8	58.1	53,3	46.7	:	20.4
17 Farm Lab	rm Laborers	72.9	69.4	66.4	70.0	53,4	58.9	58.8	56.5	61,1	44.2	47.4	44.4	49.6	44.0	35.6	22, 2	:

way depend on external information about the relative status of the various occupational groups, since the index of dissimilarity is not affected by the rank order in which the categories are presented. The index does depend, however, on the classification scheme, and a different set of categories would yield different index values. Thus, if the 17 occupational categories were collapsed into a smaller number, the values would become smaller, whereas further subdivision would increase these values.

The measure of social distance, inasmuch as it is independent of the rank order of occupations based on average income and education, provides an independent check for validating this rank order. The general pattern is that the magnitude of the values increases with movement away from the diagonal in either direction. The further apart two occupational groups are in income and educational status, the more distance there is generally between them in terms of either origin composition or occupational prospects of sons. Numerous exceptions to this basic pattern can be noted, however. To mention only a few conspicuous ones: the 1962 occupations of the sons of laborers outside manufacturing are not as dissimilar as might be expected from those of the sons of the various white-collar strata and of craftsmen (column 15); the origin composition of craftsmen in manufacturing reveals an unexpectedly great distance from that of all white-collar groups (row 8), whereas the origins of service workers exhibit unexpectedly little distance from that of the white-collar groups (row 13). The occurrence of such exceptions invites systematic analysis to ascertain the factors other than status that influence social distance between occupational groupings.

The "Guttman-Lingoes Smallest Space Analysis I" provides a technique suited for this purpose, although it is still in the experimental stage and not all its properties are fully known.27 The triangular matrix of distance measures (one half of Table 2.13 at a time) is used as input in a computer program employing this technique, the output of which defines underlying dimensions of distance. In our case two dimensions appeared to be sufficient. The results of the analysis of distances between social origins with respect to 1962 occupations are presented in Figure 2.1. The scale on the two coordinates is arbitrary, provided that their relative values are preserved. The distance on a straight line between any two occupations can be ascertained. These

²⁷ Louis Guttman, "A General Nonmetric Technique for Finding the Smallest Euclidean Space for a Configuration of Points," Psychometrika (1966, in press); J. C. Lingoes, "An IBM 7090 Program for Guttman-Lingoes Smallest Space Analysis -I," Behavioral Science, 10(1965), 183-184.



OCCUPATIONAL STRUCTURE: PATTERNS OF MOVEMENT

Figure 2.1. Two-dimensional Guttman-Lingoes solution for distances between fathers' occupations with respect to 1962 occupations (outflow).

distances supplied by the model can then be compared with the observed distances, and the relationship between the two indicates the goodness of fit of the model. The measure used to determine the fit of the derived model is called the coefficient of alienation, which approaches zero as the solution improves. Laumann and Guttman accepted as adequate a three-dimensional solution with a coefficient of alienation of .13, after finding that the coefficient for the best twodimensional space was .26.28 For our model in Figure 2.1, the coefficient of alienation is .07, an appreciable improvement over the onedimensional solution with a coefficient of .15. It is highly questionable whether additional dimensions would be meaningful. Rotation is permissible, as the orientation of the axes as well as the scale of distances is arbitrary.

A physical analogy may help the reader not familiar with this type of procedure, which resembles factor analysis. Let us represent the 17 occupations by 17 objects and the differences between them by wires of varying length. Every occupation is tied by a wire of a specified length to each one of the 16 others, so that 136 wires connect the 17 objects. The task the computer program performs is analogous to placing the 17 objects into positions that make all the wires taut. If

this can be done by stretching the objects along a straight line, a onedimensional solution is found. If there is too much slack in the wires, spreading them out on a table might make them all taut, which would correspond to a two-dimensional solution. Excessive slack in two dimensions might require distributing the objects in a three-dimensional space to straighten out all the wires, and although the physical analogy breaks down at this point, introducing further dimensions may be necessary to make all wires taut. The coefficient of alienation would indicate the amount of looseness of the wires remaining with a given solution. In our case, two-dimensional solutions seemed to be adequate.

The first dimension in Figure 2.1 evidently represents the socioeconomic status of occupations. When occupational origins are classified in terms of the potential mobility of sons into various occupational destinations, the ordering of the similarity among them corresponds closely to their status rank order when status is defined by average income and education. There are only four inversions to a perfectly monotonic relationship between position on the horizontal dimension and socioeconomic status. "Other" salesmen and service workers have unexpectedly high positions on the first dimensions, reflecting high mobility potentials, and proprietors (MOP, S-E) and craftsmen in construction have unexpectedly low ones. We might suspect that these inversions are due to distortions introduced when the status ranking based on information from the present population is applied to the generation of fathers. Perhaps proprietors and construction craftsmen did not occupy so high a status a generation ago as they do today. Since the fathers do not include any very young men, it may well be that fathers classified as other salesmen or as service workers contain disproportionately few men in such low-status jobs as newsboy or bootblack, thus raising the average status of these groups of fathers. If this interpretation in terms of generational differences is correct, the same deviations should not be observable when men are classified by their own occupational status rather than that of their fathers. We shall return to this question. What should be re-emphasized here is that the first dimension reproduces rather accurately the status rank order of occupations, which itself is not entirely unambiguous, as has been noted.29

The two class boundaries are clearly manifest in the distances between social origins with respect to their destinations presented in Figure 2.1. It should be noted that interpretation of the diagram is

²⁸ Edward O. Laumann and Louis Guttman, "The Relative Associational Contiguity of Occupations in an Urban Setting," American Sociological Review, 31 (1966), 169-178.

²⁹ See also, Robert W. Hodge, "The Status Consistency of Occupational Groups," American Sociological Review, 27(1962), 336-343.

not restricted to the two orthogonal dimensions but may include any configurations of positions in the two-dimensional space. A line drawn obliquely to the horizontal axis separates white-collar from blue-collar occupations, with appreciable distance between the two. Another line, at an acute angle from the first one and having the opposite orientation to the horizontal axis, separates blue-collar from farm occupations. There is considerable distance between the destinations of men originating in different occupational classes, revealing variations in mobility potential between origin classes. The class boundaries are not unrelated to the status hierarchy, but neither are they merely direct expressions of it. Rather, they constitute dimensions of social distance that are oblique to the status dimension, a fact that corresponds exactly to the accepted notion that social class is generally associated with socioeconomic status but has additional distinguishing features. Thus the style of life of a class depends on income and education without being exclusively determined by them. The acute angle between the two dividing lines implies that somewhat though not entirely different factors are responsible for the social distance at the two boundaries, which is plausible given the geographical separation of farm workers and the influence of socioeconomic factors in both cases.

The figure reveals self-employed professionals to be an occupational group isolated by considerable social distance from any other. The lowest index of dissimilarity for this origin group with respect to destinations is 22.8 (row 1, Table 2.13), whereas every other occupational origin except farmers has a minimum distance to at least one other occupational origin that is no larger than 20. The separation of self-employed professions from the rest is along the horizontal dimension indicative of socioeconomic status, which corresponds to the great difference in average income between this and any other occupational group (see Table 2.1). The self-employed professionals as a whole constitute a distinct economic elite in our society, whereas the business elite, which is undoubtedly more affluent as well as more powerful, comprises only a small segment of managers and is, therefore, not observable in our data.

The meaning of the second dimension is not easily discernible, but Figure 2.1 provides a few clues for speculating about it. The three origin groups of workers in manufacturing are set apart from the manual groups outside manufacturing along a line roughly parallel to the second dimension, though at a slight angle to it. The other three groups set apart in the same direction from the rest are the two professional categories and clerks. At the opposite extreme along this line are farmers, construction craftsmen, and proprietors, followed by the two groups of salesmen.

A possible interpretation of the distinction between these two extremes is in terms of the principles that govern the organization of work and the acquisition of skills necessary to perform it. On the one hand, work may be organized on the basis of rational principles explicitly formulated; the performance of individuals is expected to conform to these universalistic standards. Such conformance is brought about either by placing individuals into circumscribed roles in complex structures that are organized in accordance with rational principles or by training them to acquire abstract rational standards of performance. The former is the case for workers in large manufacturing concerns and for clerks in bureaucracies, and the latter for professionals. On the other hand, general principles for dealing with the diverse, idiosyncratic problems encountered at work may not have been formulated, and individuals must acquire the so-called intuitive knowledge required for dealing with these problems through apprenticeship and trial and error.30 This description, we claim, applies fairly well to running a farm or a business in a competitive economy, selling, and the construction industry. The conclusion these speculations suggest is that whether the work of men is organized in terms of universalistic rational principles or rests on particularistic skills acquired through apprenticeship influences the orientations toward work that they transmit to their sons, and hence the social distance between the sons' occupational destinations.

Applying the same procedure to the inflow into own occupation, instead of the outflow from father's occupation, yields the twodimensional solution for distances between 1962 occupational groups with respect to their social origins presented in Figure 2.2. Although the two figures are based on the same data, the asymmetry between outflow and inflow produces differences between them. (The values on which Figure 2.2 is based are shown in the lower left half of Table 2.13.) The coefficient of alienation for this solution is .08, only a slight improvement over the coefficient of .10 for the one-dimensional solution. The unimportance of the second dimension is indicated by the relatively low degree of dispersion of the various occupations on this dimension.

The first dimension approximates again fairly closely the socioeconomic rank order of occupational groups. Indeed, when the same procedure is applied to the outflow and the inflow of movements

³⁰ See on this distinction Eugene Litwak, "Models of Bureaucracy Which Permit Conflict," American Journal of Sociology, 67(1961), 177-184.

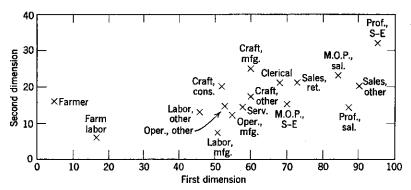


Figure 2.2. Two-dimensional Guttman-Lingoes solution for distance between 1962 occupations with respect to fathers' occupations (inflow).

from father's to first and those from first to 1962 occupation, the first dimension in all four cases, as well as in the original two, represents the status hierarchy.31 Evidently socioeconomic status is a fundamental dimension of the social distance between occupational groups. The groups whose position on the first dimension in Figure 2.2 deviates from their status rank are largely the ones that also occupy deviant positions in Figure 2.1. The position of "other" salesmen and service workers is once more too high, and that of proprietors and craftsmen in construction is once more too low. The finding that the pattern of deviations in this analysis of 1962 occupations parallels that of the analysis of father's occupations discredits the interpretation of these deviations in terms of generational differences. A possible alternative interpretation is that nonretail salesmen and service workers have more social contact with and more resemblance to higher strata than their income and education would lead us to expect, whereas construction craftsmen with their strong unions, and proprietors, many of whom are former manual workers, have higher incomes than most men in their social circles, and these departures of social associations from economic levels are reflected on the distance dimension. Whether or not this interpretation of the few exceptions is correct, it is clear that the degree of dissimilarity in social origins between occupations corresponds quite closely to the status differences between them, just as the dissimilarity in destinations between origin groups does.

The class boundaries are manifest in Figure 2.2, but in a form that

differs from that in Figure 2.1. First, they are much less oblique to the first dimension, thus representing essentially differences in hierarchical status. Second, the distance separating white-collar from bluecollar occupations has narrowed, whereas that separating blue-collar from farm occupations has widened. The dissimilarity in social composition between white-collar and blue-collar strata today is hardly greater than that between strata differing in status within each class, but the origin composition of farm workers is very dissimilar to that of any other occupational group. As before, self-employed professionals occupy an isolated position at the high end of the scale, being considerably dissimilar in composition from the next-highest occupational groups. In sum, most of the differences in background composition between 1962 occupations are along the status continuum, with the self-employed professionals and the two farm groups located at opposite extremes and separated by appreciable distances from the 14 intermediate groups.

The second dimension in Figure 2.2 not only discriminates little between occupations but also fails to reproduce the pattern of relative positions observed on the second dimension in Figure 2.1. A scatter plot of the 17 values on the two first dimensions reveals a strong positive relationship, whereas one of the values on the second dimensions reveals scarcely any relationship. Moreover, no common properties of the occupations similarly located along the second dimension in Figure 2.2 are readily discernible. These characteristics of the second dimension make it doubtful that it reveals significant forces affecting occupational mobility.32 Whether this tentative conclusion that the second dimension in Figure 2.2 has little substantive significance invalidates the interpretation of the second dimension in Figure 2.1 advanced earlier is an open question. On the one hand, confidence in the interpretation is weakened by the fact that the results it implies are not replicated by the inflow values. On the other hand, the considerable differences in outflow values along the second dimension call for some explanation, even if it has to remain speculative, and it is not impossible, given the asymmetry between outflow and inflow, that similar work experiences of fathers induce sons to move into similar occupations without being reflected in the total origin compositions of the various occupations.

³¹ These four solutions—outflow and inflow from father's to first and from first to 1962 occupation—are not presented, since they reveal little beyond the fact that the location of occupations along the first dimension, though not along the second, is similar in all cases.

³² It is of interest in this connection that Laumann and Guttman (op. cit., p. 177) were similarly unable to offer convincing interpretations of the second and third dimensions for the solution for Laumann's data on associational contiguity of occupations, while the first dimension clearly approximated prestige rather closely. Their only tentative interpretation of another dimension conforms to ours of the second dimension in Figure 2.1.

CONCLUSIONS

The focus of this chapter has been on the relations among occupational groups in the American occupational structure as defined by the flow of manpower among these groups. The analysis has centered on various aspects of two major relational characteristics of occupational groupings, the outflow of manpower from one supplying others, and the inflow of manpower into one recruited from others. This emphasis on occupational groups as units of analysis and the structure of relations among them is distinct from the concern of much of the rest of the book with the socioeconomic status of individuals and the factors influencing occupational achievement. The occupational structure viewed in over-all perspective here provides the framework for the processes of mobility to be examined in greater detail later.

The analysis of intergenerational movements reveals that the volume of supply and of recruitment are directly related. At one extreme are self-contained occupations, which neither supply to other career lines in the next generation nor recruit from others in the last a proportionate share of men. These are the three occupations resting on selfemployment: independent professionals, proprietors, and farmers. At the other extreme are five occupations that serve as distributors of manpower, which supply disproportionate numbers of men to other occupations in the next generation and recruit disproportionate numbers from the last. These are the five occupations located just above the two class boundaries: the two lowest white-collar and the three lowest manual groups.

To study the degree of dispersion in the flow of manpower, a crude and a refined measure were used, since the refined measure turned out not simply to be an improvement on the crude one but to reflect a different aspect of dispersion. The crude measure is indicative of the width of the recruitment base of an occupation, from how many different origins it recruits a disproportionately large share of manpower, or the width of the supply sector of an origin, to how many different destinations it supplies a disproportionately large share of manpower. The refined measure, on the other hand, refers to the degree of variation in the origins from which the men in an occupation are recruited or the degree of variation in the destinations to which sons are supplied from an origin. Using the crude measure, the dispersion of recruitment and supply are inversely related for intergenerational mobility. Occupations that recruit from a wide base in the last generation supply only to a narrow sector in the next, and those recruiting from narrower bases supply more broadly. This has been interpreted as an indirect result of changes in demand for oc-

cupational services that are reflected in the expansion or contraction of occupational groupings. For increasing demand to effect an occupation's expansion requires recruitment of outsiders, which in turn depends on economic conditions that attract men from diverse origins. Indeed, effective demand is positively associated with the recruitment of members from a wide variety of origins. Superior employment conditions, however, are not only attractive to outsiders but also to the occupational group's own sons, reducing their tendency to leave it for a variety of other occupations. The superior economic conditions in expanding occupations broaden their appeal, thus encouraging disproportionate numbers from other origins to move into these occupations and disproportionately few of their own sons to disperse to various others.

In contrast to this inverse relationship between the width of the recruitment base and of the supply sector of an occupation, the degree of variation in recruitment and in supply, as indicated by the refined measure, are directly related. This positive relationship is a result of the fact that both dispersion in recruitment and dispersion in supply reveal a nonmonotonic relationship with the status rank order of occupations. The highest white-collar strata and the lowest strata of unskilled workers and farm workers are less varied in social origin than the intermediate occupational groups, and men from the highest and lowest origins also move into less varied destinations than those originating in the intermediate ranks of occupations. This result is partly an indirect manifestation of the prevalence of short-distance movements. If most men tend to move relatively short distances, those in the highest and lowest positions of the status hierarchy are less likely to come from or move into as many different occupations than those in intermediate positions, because part of the range from which or into which the former would be likely to move just does not exist. But the greater dispersion of the intermediate, blue-collar levels also has another implication.

There is a large amount of upward mobility in the American occupational structure. Upward movements far exceed downward movements, whether raw numbers, percentages, or departures from standardized expectations are considered. An important source of this extensive upward mobility is the fact that some of the occupational groups near the top of the hierarchy have expanded most rapidly, whereas some of those near the bottom have contracted most in relative size during recent decades. Because few sons of men at the bottom move all the way to the top, the oversupply of men at the bottom and the demand for manpower at the top have repercussions throughout

procedures confirm the conclusion that the two class boundaries restrict downward mobility. The lowest occupations in each class serve as distinctive entry occupations, from which disproportionate numbers move but into which relatively few men move later in life. In brief, the conventional division of the structure into middle class, working class, and agricultural class is reflected in the flow of manpower between occupations.

The underlying dynamics producing these class boundaries may well have its source in the decline of farm workers in the last half-century, which, together with the high fertility of farmers, has resulted in an oversupply of farmers' sons. These men are better qualified for and more interested in the relatively few available farm jobs than are sons of either blue-collar or white-collar workers. Therefore, there is little mobility either from nonmanual or from manual origins to farm occupations, and most farm jobs are occupied by sons of farmers.³³ The excess farmers' sons must move off the land. Because they are less qualified for white-collar jobs than men reared in cities, most of them cannot compete effectively for white-collar positions, and thus move into manual work. These conditions account for three of the four degrees of freedom in the 3 × 3 mobility table and explain the data in 5 of the 9 cells, leaving 4 cells and one degree of freedom to be explained.

Sons of white-collar workers seem to be disinclined by their upbringing to move into manual work and prefer to remain in the white-collar class, even at the cost of a lower income than they might obtain elsewhere. Men of blue-collar background are presumably not so willing to sacrifice economic advantages for white-collar status, or possibly are less able to do so. The existence of nonmanual jobs requiring little skill and commanding meager salaries, like sales clerk or file clerk, provides failures from higher white-collar origins with opportunities to remain in their parental class, with its status symbols that are so meaningful to them. Hence there are relatively few movements from white-collar origins to blue-collar destinations. This assumption, which the data fairly well support, uses up the last degree of freedom in the mobility table, and the rest can be mathematically deduced. Most sons of white-collar origins remain in white-collar occupational groupings, since few move downward. Sons of bluecollar workers fill the blue-collar positions not filled by sons of farmers, allowing-indeed, requiring-the remaining number raised in blue-

the occupational structures, with the upward movements of sons from one stratum opening up opportunities for upward movements to the sons of the strata below. Sons from all occupational origins participate in this predominant upward movement. Men who enter the labor force on blue-collar levels, however, benefit least from the prevailing intergenerational upward mobility, whereas the highest white-collar strata as well as farm workers benefit most from it. Although bluecollar entrants are as likely to experience some mobility as other men. the finding that there is more dispersion in their movements implies that many of these moves are likely to be in opposite directions. As a result, the movements of men starting careers on blue-collar levels effect little change in their ultimate occupational distributions compared to those of their fathers, whereas the movements of men starting on higher white-collar and farm levels achieve considerable improvements in their positions over those of their fathers. The men who most benefit from the expansion of the highest white-collar strata are those who move into them from other social origins, and the men who most benefit from the contraction of the farm strata are those who start to work there and then move out. Men who start their working lives in manual jobs suffer most relative deprivation in the expanding economy, notwithstanding their rising wage rates.

Cross-generational occupational solidarity encourages the men who have entered careers in a certain line of work to remain in it. If disproportionate numbers of the men who start to work in an occupational group have roots in it that solidify social integration, there is little tendency to leave it later, during the course of a career, for diverse other occupations. Two findings support this hypothesis. The degree of occupational inheritance of entry occupations is highly associated with the degree of career stability from first entry to 1962. Besides, the greater the proportion of men entering the labor force in their fathers' occupational group, the lower is the degree of dispersion from this entry occupation to others subsequently (using the crude measure).

The patterns of mobility reveal the existence of two class boundaries, which divide the American occupational structure into three classes—white-collar, blue-collar, and farm. Each boundary limits both intergenerational and intragenerational downward mobility between any two occupations on either side of it to levels below theoretical expectation but permits upward mobility in excess of chance. No other possible division among occupations sets such clear-cut limits on downward movements between occupational groupings. Different

³³ Less than 3 per cent of men with other origins worked on farms in 1962.

collar homes to move up into the expanding white-collar class. These dynamic forces find expression in an occupational structure divided by two class boundaries.

When the social distances between occupational origins with respect to their destinations, or between occupational destinations with respect to their origins, are calculated, the major underlying dimension is socioeconomic status. The location of occupations along this dimension closely approximates their rank order based on average income and education, with self-employed professionals and the two farm groups, respectively, occupying somewhat isolated positions at opposite extremes. Since the calculation of distance does not depend on the rank order, the finding confirms the validity of this ordering. The exceptions suggest that salesmen outside the retail field and service workers are closer to higher strata and that proprietors and construction craftsmen are closer to lower strata than their economic educational level indicates. The class boundaries are in evidence on the distance charts, being somewhat oblique to the status dimension, which accords with the accepted assumption that social class is not synonymous with broad differences in socioeconomic status though clearly related to them. Although the second dimension does not reveal a consistent pattern for all data, that for the outflow data has stimulated us to speculate that whether the work of men is organized in terms of rational universalistic principles or not may influence the orientation they transmit to their sons and consequent similarities in the sons' occupational destinations.

CHAPTER 3

The Occupational Structure: II Historical Trends

It is a commonplace observation that the redistribution of the working force over categories of industry or occupation, occurring in the course of economic development, instigates both intergenerational and intragenerational mobility. Yet it turns out to be very difficult indeed to say just how this happens. The source of the difficulty is that the "generation" concept as applied in mobility studies is not commensurate with the "cohort" concept, which is central to the analysis of change in occupational structure.

The case for the cohort approach has been well stated by Jaffe and Carleton:1

Each age cohort has its own historical pattern of occupational change which will influence its 1960 occupational distribution. The occupational composition of men aged 55 to 59 years in 1960, for example, will be different from that of men aged 45 to 49 in 1960, not only because of the differences in age, but also because the two cohorts have had different occupational histories. These differences in occupational history can be traced back to the period in which they first entered the working force. Men aged 55 to 59 years in 1960 for the most part entered the working force in the period around World War I. The cohort ten years younger in 1960 entered the working force during the boom of the later 1920s and the early part of the depression of the 1930s. Having entered at different periods, they were confronted by varying types of job opportunities and thus entered various occupations. Once having entered

¹ A. J. Jaffe and R. O. Carleton, Occupational Mobility in the United States: 1930-1960, New York: King's Crown Press, 1954, p. 3. See also, Norman B. Ryder, "The Cohort as a Concept in the Study of Social Change," American Sociological Review, 30(1965), 843-861.