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CHAPTER IV

THE EXTENT OF LABOR ORGANIZATION IN 1910 AND 1920

Even the number of wage earners, as defined in the last chapter, would not be considered by some a thoroughly fair base for measuring the achievement in size of an organized labor movement. The final figure there derived includes agricultural employees, whom trade unions have made little effort to organize, and such other groups, like clerical workers, whose adherence to the trade union is of comparatively recent origin. Trade unions, moreover, limit their membership in a great variety of ways. Almost all exclude persons not yet of a specified age; some have standards of skill which prospective members must meet; others impose high initiation fees or require attachment to the industry for a specified period of years; and still others impose restrictions on entry based on the color and sex of the applicants to membership. The extent of trade unionism would naturally appear in its most favorable statistical light, if allowance were made for these various factors and trade union membership were compared only with the residuum of organizable employees. No attempt is, however, here made to deal with such refinements; and comparison is always made between the numbers in trade unions and the numbers of those employees, who are, by common consent, regarded as likely material for organization in trade unions.

Computing the percentage that union membership represents of the total number of wage earners in the United States and of the number in the major and minor divisions of industry involves technical difficulties, which cannot be altogether overcome. The most serious of these is encountered in the attempt to make the statistics of membership conform to the statistics of occupations. Union membership, since many unions are organized along trade or occupational lines, frequently overlaps the industrial classes of the census.

Although nearly all labor organizations have most elaborate official statements of their jurisdictional claims, it is generally impossible, except by arbitrary decision, to split their membership among the various industrial classifications of the census. The carpenters' union, for instance, as has already been pointed out, includes in its membership not only building carpenters but also factory workers employed in the industry, described by the census as "lumber and its manufactures." While it is possible to effect a distribution, in round numbers, of the total membership of this union into the number working on buildings and those in factories, finer estimates are impracticable. The same holds true of other important unions. The difficulty encountered in separating the self-employed from those employed by others, which is a real one in many industries and occupations, has already been discussed.

The detailed materials for computing the percentage organized among the various divisions of industry and among selected occupations and the results of those computations are presented in the Appendix to this volume in Tables V, VI, VII, VIII and IX. The first table of this series shows the membership of every American national and international union in the year 1920. It differs from the first exhaustive table of membership (Table I) in that it contains also the Canadian membership of each American organization which has jurisdiction over workers in Canadian industry. From it are derived the statistics of the membership in the United States alone of the unions included in the table. Since the occupation census gives statistics only for the continental United States, comparison can properly be made only with the United States membership of labor organizations.

Actual comparisons between membership and the number of wage earners in the year 1920 are shown in Table VI. This table was constructed by separating for each industry and subdivision of industry in the census of occupations of 1920 the wage earners from the salaried and employer classes. Next to these figures were placed the statistics of trade union membership in the United States taken from Table V. It will be found that the number of wage earners in certain industries differs substantially from the statistics of Table IV. This is due largely to the fact that the jurisdiction claims of the unions forced the inclusion in Table VI of

several categories of workers who were clearly employed in managerial or supervisory functions and who were, consequently, properly classified in Table IV in the salaried group. The final percentages of organization underestimate somewhat the prevailing extent of organization in 1920 because of the omission of independent local unions, whose membership could not be obtained, and of local unions directly affiliated with the American Federation of Labor, whose membership could not, through the lack of the necessary data, be distributed among the industries of the country. The net effects of these omissions are almost imperceptible and are not likely to change the present results by any more than one per cent.[1]

Similar statistics showing the percentage of organization in 1910 are given in Table VII. This table is reprinted, substantially in its original form, from the article already cited.[2] It has, however, been revised in several important particulars to meet differences between the census of 1910 and that of 1920. It has been pointed out before that the occupation statistics of 1910 were in much more detailed form than those of 1920. It was possible in the earlier census to make finer classifications than could be used in dealing with the later census. For this reason consolidated classifications replaced the more detailed ones in the original table. In some instances apparent improvements in classification dictated modifications in the original 1910 table. Thus coopers were taken from the "hand trades," which are altogether omitted from the revised table, and were put into the lumber and furniture industries. The large category of electric light and power plants, electric supply factories, electricians and electrical engineers, telegraph and tele-

[1] The membership of the I. W. W. was, also, omitted from the table because it was made available too late. The office of the I. W. W. reports its membership to have been distributed in 1920 as follows:

Lumber Workers	7,000
Agricultural Workers	6,000
Mine Workers	4,600
General Construction Workers	5,500
Railroad Workers	4,700
House and Building Construction Workers	3,800
Metal and Machinery Workers	4,000
Marine Transport Workers	6,000
Total	41,600

[2] *Quarterly Journal of Economics*, May, 1916, p. 606.

phone linemen, was split into a number of diverse elements and the membership of the electrical workers' union, originally allotted to this comprehensive group, was reapportioned to the new industrial classes. The most radical revisions in the original table were made for the general occupational divisions of "trade," "public service," "professional service," "domestic and personal service," "agriculture, forestry and animal husbandry," "proprietary, supervisory and official" groups, and "clerical" groups. All of these groupings and classifications contained in the original table were completely discarded and were replaced by revised figures for both 1910 and 1920, taken entirely from the census of occupations of 1920. In their present form, Tables VI and VII, showing respectively percentages of labor organization in 1920 and 1910, possess a high degree of comparability.

Compared with the total numbers of wage earners in this country, trade union strength as measured by its membership was relatively twice as great in 1920 as in 1910. The rate of growth during this decade was approximately the same whether membership is compared with the industrial wage-earning population of the country or with the combined industrial and agricultural wage-earning population. The tabulation below shows that, roughly, one-

	Total Wage Earners	Trade Union Membership in U. S.	Per Cent Organized	Total Wage Earners Excluding Agriculture	Trade Union Membership in U. S.	Per Cent Organized
1920...	26,080,689	4,881,200	18.7	23,480,077	4,881,200	20.8
1910...	22,406,714	2,101,502	9.4	19,262,941	2,101,502	10.9

fifth of the wage earners of the country were members of labor organizations; whereas in 1910 something like one-tenth were so organized. In other words in 1920, after 10 years of very substantial growth in numbers, about four-fifths of the general category of wage earners were not members of unions. While these figures are in themselves of considerable interest, their full significance cannot be clear without detailed inquiry into the sources of union strength and weakness. Such inquiry can be conducted only by

discovering the varying magnitude of trade unionism in the great divisions of industry.

It has long been generally appreciated that labor organizations receive their first impetus and make their most striking headway among the so-called manual workers, those who work in factories and mines, on railroads and buildings; and that they have their most retarded development among persons, sometimes described as white-collar workers, who embrace unionism late and slowly. This appears to be universally true. An examination of the extent of labor organization among these two types of employees in 1910 and 1920 shows this to have been the case in the United States as well. While the percentage of total employees who are members of unions is, roughly, 20, all of the important manual labor groups stood far above this level; and in 1910 when the general percentage of organization was approximately 10, the same groups of

TABLE 14. — PER CENT OF WAGE EARNERS ORGANIZED IN MAJOR DIVISIONS OF INDUSTRY
1920 AND 1910

Division of Industry	Per Cent Organized	
	1920	1910
Extraction of Minerals	41.0	27.3
Manufacturing Industries	23.2	11.6
Transportation	37.3	17.1
Building Trades	25.5	16.4
Stationary Engineers	12.4	4.6
Stationary Firemen	19.9	9.6
Trade	1.1	1.0
Professional Service	5.4	4.6
Clerical Occupations	8.3	1.8
Domestic and Personal Service	3.8	2.0
Public Service	7.3	2.5

manual laborers all showed a higher percentage of organization. The total percentage of organization is in both census years considerably reduced by the absence of many large labor organizations in trade, professional service, clerical occupations, domestic and personal service, and public service. Membership in the manual workers' groups represented almost 28 and 15 per cent of the

wage earners in those groups in 1920 and 1910; whereas membership among the non-factory workers was in the same years less than 5 and 2 per cent of all persons engaged in those occupations. Growth, from 1910 to 1920, occurred in all groups, but it was greatest in manufacturing, transportation, clerical occupations, and public service; although the rise in mining and in the building trades was also considerable.

Differences in the extent of organization among the industries that comprise these major divisions are quite as striking and as significant as the differences among the major divisions themselves. At the same time that the whole mining group showed an increase in the extent of organization from 27 to 41, coal mines increased their organization from 35 per cent to nearly 51, while trade unionism in copper, gold and other mines actually had a lower percentage of organization in 1920 than in 1910. The strength of the Western Federation of Miners has not been regained by its successor, the Mine, Mill and Smelter Workers' Union. In 1910 the workers in the salt, oil and natural gas industry had no union at all; in 1920 there was a substantial organization with a membership of over 20,000. Such analysis can be pushed even further. Thus the average number of coal miners in the United States in 1920 was 784,621, of which 639,547 were bituminous and 145,074 anthracite miners.[1] It is known that the anthracite miners have a much higher degree of organization than the soft coal miners. Bituminous miners were, therefore, in 1920 probably less than 50 per cent organized.

Extent of organization in manufacturing industries runs the whole gamut from less than 1 per cent of organization in the chemical and allied industries to more than 57 per cent in clothing. The tremendous rise in the percentage of organization in this industry is, in fact, the most striking phenomenon in the whole group of manufacturing industries. The clothing industry was converted from one of the weakly organized industries in 1910 into one of the most strongly organized in 1920. This is attributable, mainly, as was shown in the discussion of the growth of membership in this group, to the rise of the International Ladies' Garment Workers

[1] U. S. Geological Survey, *Mineral Resources of the United States*, Part II. "Coal in 1919, 1920, and 1921," p. 494.

TABLE 15.—PER CENT OF ORGANIZATION AMONG DIVISIONS OF MANUFACTURING INDUSTRIES
1920 AND 1910

Industry	Per Cent Organized	
	1920	1910
Manufacturing Industries	23.2	11.6
Chemical and Allied	0.2	1.4
Clay, Glass and Stone	21.5	20.5
Clothing	57.8	16.9
Food and Kindred Products	19.4	7.6
Iron and Steel	28.1	10.4
Leather	29.4	14.6
Liquor and Beverage	....	67.6
Lumber	18.1	10.3
Metal (except Iron and Steel)	12.9	6.5
Paper and Pulp	7.9	2.6
Printing and Publishing	50.1	34.3
Textile	15.0	3.7
Cigar and Tobacco	29.2	26.9

after their strike in 1910 and to the rapid increase in membership of the Amalgamated Clothing Workers, after their organization in the last months of 1914.

The group of clay, glass and stone industries, although it experienced apparently a very slight gain in this decade really suffered a substantial loss in one of its constituents. Extent of organization in the glass industry fell from 34.2 per cent in 1910 to 27.9 in 1920; at the same time marble and stone yards increased only very slightly from 45.4 to 47.7 per cent, while potteries and brick, tile and terra cotta factories made more substantial gains. The latter were, however, hardly organized in 1910 and even in 1920 had achieved organization of only 9 per cent.

The very large rise in the food group was due almost wholly to an enormous growth in the extent of organization in slaughter and packing houses, or, in other words, in the packing industry. This industry had organization in 1910 of something over 6 per cent; but in 1920 it had grown to nearly 60 per cent. Butter and

cheese factories, candy factories, flour and grain mills, sugar refineries had practically no organization at all, either in 1910 or in 1920. Bakeries were less than one-fifth organized.

Figures for the iron and steel industry appear to contradict current conceptions of the status of labor organization in that industry and are somewhat misleading, although the growth from 1910 to 1920 is a real one. In that portion of the steel industry which manufactures basic iron and steel products, there was very little labor organization in either 1910 or 1920, in spite of the fact that the membership of the Amalgamated Association of Iron, Steel and Tin Workers, the most important union in this branch of the industry, was much larger in 1920 than in 1910. The category of iron and steel industries here presented, however, includes the manufacture of iron and steel products, such as agricultural implements, automobiles, railroad cars, ships and boats, as well as individual occupations such as blacksmiths, boilermakers, pattern makers, iron molders, machinists. In these branches of the industry there was substantial organization in both census years, and marked growth from one to the other; but it is unfortunate that the form of the trade union statistics does not permit the calculation of the percentage organized in each of these branches of the iron and steel industry. The figures for metal, except iron and steel, suffer from much the same defect of representing too conglomerate an industry.

The classification of the liquor and beverage industries followed by the census in 1910 and 1920 seems to be so radically different, that there appears to be no sound basis of comparison. In 1910 this was one of the most strongly organized industries in the country. While the brewery workers' union is still in existence, it is now a weak organization, known as the United Brewery, Flour, Cereal and Soft Drink Workers' Union, with little more than 15,000 members in the soft drink industry, 1,000 in the cider, vinegar, yeast and alcohol industries, 800 in the flour and cereal industries, and 150 in the syrup industry.

With few exceptions those parts of the manufacturing industries which were well organized in 1910 had strengthened their organization by 1920. The printing and publishing industry which was a little better than one-third organized in 1910 achieved organization

of more than one-half in 1920. The great basic industries like chemicals, iron and steel, food products, lumber, metals, paper and pulp, and textiles were, after the total growth from 1910 to 1920, even in the most favorable instances less than one-fifth organized. The striking exceptions were, on the one hand, the clothing and packing industries, in which organization attained an entirely new and higher level, and, on the other, the liquor and beverage industries where uncommon, but well-known circumstances, prevailed, that led to disintegration of the union.

Transportation industries show in general a higher level of organization than the manufacturing industries. In fact, the three most substantial elements of this group were all more than 50 per cent organized in 1920 and had more than doubled their percentage of organization since 1910. The most striking change took place in the division of water transportation where the percentage organized rose from less than 30 to more than 85, due very largely to spectacular leaps in membership among longshoremen and seamen.

TABLE 16. — PER CENT OF ORGANIZATION AMONG DIVISIONS OF THE TRANSPORTATION INDUSTRY
1920 AND 1910

Industry	Per Cent Organized	
	1920	1910
All Transportation	37.3	17.1
Water Transportation	85.5	28.9
Steam Railroads	57.5	23.5
Electric and Street Railways	52.9	21.8
Telegraph and Telephone	25.4	10.2
Post	24.8	31.6
Teamsters and Chauffeurs	11.9	7.0
Construction of Streets	8.3	2.4

The very substantial growth of membership among telegraph and telephone workers came from the fact that the railroad telegraphers' membership was in 1920 three times that of 1910; whereas the membership of the commercial telegraphers' union was insignificant in both years. Another important factor in this situation

was the establishment, a few years after 1910, of a union among women telephone operators. The figures for the extent of organization among teamsters and chauffeurs are probably underestimates in both census years because of the great practical difficulties involved in separating this group into the employers and wage earners and in calculating the percentage organized of wage earners alone.

Labor organization in professional service is restricted almost completely to the theatre and to musicians, although there has recently grown up a small union of engineering draftsmen. Among the clerical workers the principal source of growth since 1910 is the rapid spread of organization among the railway clerks. Unionism in domestic and personal service is in 1920 as in 1910 limited to fair organization among barbers and waiters and to exceedingly slim organization among laundry workers.

All of these figures naturally raise interesting questions as to their significance in estimating the relative strength of labor organization in various occupations and industries. High and low percentages of organization are not necessarily synonymous with strength and weakness, and need, in fact, to be interpreted with some reference to the nature of the industry in which the unions operate and to the constitution of the particular union. In general, percentages of organization by industry are misleading unless the fact that the large bulk of American unions are occupational or trade unions is taken into consideration. Because of this highly significant characteristic, union membership in any industry does not represent the membership of a single union claiming jurisdiction over all the employees in that industry, but it is really an aggregate of the memberships of many unions, some limiting their jurisdiction to the workers in a single skilled craft and others admitting a more diversified lot of semi-skilled and unskilled workers. The only outstanding exceptions to this rule are the mining and clothing unions, which are essentially industrial unions.

The unions of skilled craft workers are, also, the older and stronger organizations and their membership is on the whole less subject to fluctuation. The unions of semi-skilled and unskilled workers are more recently organized, weaker and more sensitive to the strains

imposed by industrial depression. When, accordingly, these diverse classes of workers are combined into one industrial category, the real strength of the skilled unions is, to a degree, concealed in the gross results. This is particularly true of the building trades and steam railroad industry, where the backbone of unionism has for a long time been the relatively few organizations of skilled craftsmen. The following table shows clearly the divergence between the extent of

TABLE 17.—PER CENT OF ORGANIZATION AMONG SELECTED OCCUPATIONS IN THE BUILDING TRADES
1920 AND 1910

Occupation	Per Cent Organized	
	1920	1910
Brick and Stone Masons	50.0	39.1
Carpenters and Joiners	40.5	20.8
Painters, etc	29.1	17.6
Plasterers	46.6	32.0
Plumbers and Gas Fitters	33.5	20.7

organization for the building trades as a whole and among a few skilled crafts. Thus in 1920, when all employees in the building trades were just about one-fourth organized, the bricklayers, carpenters and plasterers were about 50 per cent, and the plumbers more than one-third organized. The same disparities existed in 1910. At that time the whole industry was one-sixth organized, but the bricklayers and plasterers were about one-third organized.

On the steam railroads, likewise, even the very high percentage of organization for the industry as a whole, 56.7 per cent, was exceeded by the percentages of organization for railway conductors, locomotive engineers, and locomotive firemen.[1] Census statistics for the groups of locomotive firemen and enginemen are unfortunately not reliable, because of the confusion in enumeration between stationary and locomotive firemen and engineers. This confusion led to an overestimate in the number of locomotive engineers as compared with the locomotive firemen and probably a gross over-

[1] Tables VIII and IX.

estimate of both groups.[1] Union membership statistics are likewise defective, since the Brotherhood of Locomotive Firemen, which because of its insurance features retains as members firemen who have become engineers and who are, consequently, also members of the engineers' union, was unable to separate its membership into engineers and firemen. The figures as they now stand contain some double counting in the membership of the firemen's union. It is known, however, that both the engineers and firemen were well over 75 per cent organized in 1920. Railway conductors are likewise nearly 100 per cent organized, although the statistics indicate an organization of only 72 per cent, less than in 1910. The discrepancy between 1910 and 1920 is due in large part to the failure of the Brotherhood of Railroad Trainmen to report the number of its members who were railway conductors. In 1910 this number amounted to 13,000; union membership for 1920 is, consequently, understated. Furthermore, the census reports a larger number of railway conductors than does the Interstate Commerce Commission.[2] According to this agency the average number of conductors on class I railroads in the year ending December 31, 1920 was 58,321, whereas the census figure for early January, 1920 is 74,539. It is possible that a portion of this difference may be due to the reporting by the census of electric railway conductors as working on steam railroads.[3]

Another factor that should be taken into account in judging the strength of the labor movement in the United States is the size and infinite variety of the country. The enormous expense of conducting organization campaigns and of maintaining a staff of organizers all over the country, as well as the inherent difficulty of organizing a thin and scattered industrial population has concentrated trade unions, in many industries, in the large industrial cities. There is, moreover, considerable evidence, although the supporting data are not available, that labor organization is much more widespread in certain sections of the country than in others.

[1] The Census of Occupations reports for 1920, 91,345 locomotive firemen and 109,899 locomotive engineers. The Interstate Commerce Commission, however (*Annual Report on Statistics of Railways in the United States*, 1920, pp. ix, xix, xx), reports the average number of locomotive engineers, on class I railroads, in the year ending December 31, 1920, to be 67,887 and the average number of locomotive firemen, 69,935.

[2] *Annual Report on Statistics of Railways in the United States*, 1920, p. 20.

[3] Census of Occupations, 1920, p. 16.

The South as a whole, for example, even in its industrial centers is very thinly organized, if at all; whereas the industrial East would probably show a high percentage of organization. The almost complete absence of trade unions in the textile industry in the South brings down the percentage of organization for the textile industry as a whole, although some of its centers in New England are tolerably well organized. Equally interesting comparisons could be made for other industries and for other sections of the country. But the unions are either unwilling or unable to submit a detailed geographical distribution of their membership.

Two interesting samples, which throw some light on these phenomena, have been collected for the occupations of bricklaying and printing. In the printing trade the largest source of union membership is the newspaper office; whereas the union is weaker in the book and jobbing trade and probably has a very light membership among compositors in small towns, where there are a considerable number of one-man shops. In 1920, compositors, linotypers and typesetters in the United States were 46.4 per cent organized. The next table shows for 1920 the number of compositors in a list of selected cities, the membership of the Typographical Union in those cities and the percentage of organization. Except where membership was affected by peculiar circumstances,

TABLE 18. — PER CENT OF ORGANIZATION AMONG COMPOSITORS, LINOTYPERS AND TYPESETTERS IN SELECTED CITIES
1920

City	Number of Compositors, Linotypers and Typesetters[a]	Membership of Union[b]	Per Cent Organized
New York	21,429	9,044	42.2
Chicago	10,907	5,119	46.9
Philadelphia	5,708	1,606	28.1
St. Louis	2,205	1,323	60.0
San Francisco	1,457	1,257	86.2
Baltimore	1,886	898	47.6
Cleveland	1,741	1,033	59.3
Boston	2,713	2,098	77.3

[a] Census of Occupations, 1920.

[b] From central office of the International Typographical Union.

the extent of organization was higher than in the whole country. Thus in St. Louis, San Francisco, Cleveland and Boston it was considerably higher. Philadelphia, which has the lowest per cent of organization, is notoriously low in the scale of organization in all industries. Percentages are lowered in New York and Chicago by lack of control over book and job printing establishments in particular and over the small printing shops in general; while in Baltimore the union has not recovered from the weakening effect of the strike for the 44-hour week of a few years ago, in which it lost many members.

Similar data for the bricklaying trade, contained in this next tabulation, is even more convincing on this point. In every large city the percentage of organization was considerably greater than the 50 per cent for the entire United States. Obvious discrepancies

TABLE 19. — PER CENT OF ORGANIZATION AMONG BRICK AND STONE MASONS IN SELECTED CITIES
1920

City	Number of Brick and Stone Masons[a]	Membership of Union[b]	Per Cent Organized
Chicago	5,303	4,229	79.7
Baltimore	1,194	927	77.6
Boston	1,274	1,220	95.8
Cleveland	2,351	1,866	79.4
New York	9,985	5,925	59.3
Philadelphia	3,818	2,188	57.3
Pittsburgh	1,159	1,273	....

[a] Census of Occupations, 1920.

[b] Average monthly membership for year ended June 30, 1920. *First Biennial and 53d Report of the President, Secretary, and Official Auditor*, Bricklayers, Masons and Plasterers' Union, 1920.

in the table, such as the excess in the membership of the union in Pittsburgh over the number of masons in the city, may be due to the fact that the census figures are as of early January while the union statistics are the average for the fiscal year. The appreciably lower percentage of organization in New York City may be explained by the lack of union control over the many small building operations in the outlying areas of the city.

More than three years have elapsed since the taking of the census of occupations of 1920. It is known that in this period trade unions lost heavily in membership. The trend in the size of the working population during the same period is still a matter of speculation. Aggregate statistics of the 1923 census of manufactures are not available at this writing. What evidence there is would seem to indicate a smaller number of employees in manufacturing industries in 1923 than in 1920. The statistics of the Interstate Commerce Commission show fewer persons employed on steam railroads during 1923 than during 1920. How large was the total decline, if any, in the number of employees of the country in these last years cannot be estimated. All things considered, however, it is probable that the extent of organization for all industry was considerably greater in 1923 than in the years immediately before and after the declaration of the World War; that for manufacturing industries it is substantially less in 1923 than in 1920; that in transportation and mining the drop from 1920 to 1923 is not so great as in manufacturing industries; and that in the building trades, the drop in these last years was slight and organization in that industry in 1923 stood little, if at all, below 1920.

Any forecast of the trend of union organization in the future must reckon with two conditions that are comparatively strange in the American industrial situation. The first of these is legislation restricting immigration into the United States. The immigration law of 1924 establishes immigrant quotas which may reduce enormously the flow of immigrant labor into the country. The effect of this restrictive measure has already been noticed as one of the causes of the growth of labor organization in the clothing industry. It may be expected to exert the same kind of influence in other industries as well. The second factor is not so tangible and has to do with the probable influence in the future of the impetus given the movement by large gains made since 1915. Already, even in the cases where heavy losses have been registered since 1920, there is some evidence of the consolidation by labor organizations of at least a portion of their advances. How potent a force this impetus is, it is hazardous to guess; but it is easy to underestimate the influence of intangible social forces of this kind.