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THE DEVELOPMENT OF TRADE UNIONISM AMONG BRITISH AUTOMOBILE AND AIRCRAFT WORKERS, c. 1914 - 1946

T. J. CLAYDON

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ABSTRACT

This study is concerned with the early development of trade unionism in the British motor and aircraft industries. Its aim is to estimate the course of union membership and organisational density, to identify their main determinants and to analyse the evolving pattern of organisation. The chief emphasis throughout is on the motor industry but considerable attention has been paid to aircraft manufacture because of the existence of close links between the two industries and the possibility of useful comparison between them. Chapter One defines the scope of the study, reviews the theoretical literature on union growth and development in structure and gives a preliminary discussion of its application to this particular area. Chapters Two and Three decribe the main phases in the growth of trade unionism and provide rough quantitative estimates of changes in union strength. Chapter Four applies the analytical framework developed in Chapter One to build up an intuitive model of union growth in the motor and aircraft industries. Chapter Five analyses the developing pattern of organisation in the context of the appropriate literature summarised in Chapter One. It is concluded that the path of union growth in the motor industry was determined by the inter-

play of general movements in the economy which operated on employment, prices and money wages with certain features of the motor industry's development, chiefly its technical and market structure, that of its labour force and the working conditions prevailing within it. The pattern of union organisation in 1946 is seen as the result of trade unions having different initial jurisdictional bases responding to pressures arising out of general economic movements e.g. depression and changes in production techniques in the automobile, aircraft and engineering industries.

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CHAPTER ONE

INTRODUCTION

In the years since the Second World War the motor industry has come to be regarded as one of the strongholds of British trade unionism. Rightly so, for manual workers in the major British motor plants were virtually 100 per cent organised by the mid - 1960s. (1) The major unions represented in automobile plants by the mid - 1960s were the Amalgamated Union of Engineering Workers which was estimated as having between 60 and 70 thousand members in the industry, the Transport and General Workers' Union, with about the same number, the National Union of Vehicle Builders with almost 40 thousand and the National Union of General and Municipal Workers with about 10 thousand. In 1972 the N.U.V.B. amalgamated with the T.G.W.U., enhancing the latter's relative position in the industry. In addition to these major unions a number of others, e.g. the Electrical Trades Union, United Patternmakers' Association, National Union of Sheet Metal Workers, Iron and Steel Trades Confederation and the National Union of Foundry Workers shared between them some 15 to 20 thousand members in the mid - 1960s. (2) The pattern of trade union organisation in the motor industry was somewhat distinctive as all the major unions tended to be

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(1) At this time there was 100 per cent trade union organisation among manual workers at B.M.C., Pressed Steel, Rootes, Standard Triumph, Rover and Jaguar. Ford workers were 99 per cent organised and Vauxhall workers 85 per cent. See H.A. Turner, G. Clack and G. Roberts, Labour Relations in the Motor Industry (1967), p. 195, hereafter referred to as Turner et. al. (1967)

(2) ibid.

represented in the main plants so that according to Turner et. al. "One of the outstanding characteristics of labour organisation in the motor industry is multi - unionism". (1)

Union strength has not always been characteristic of the motor industry. Before the Second World War automobile firms were noted for their low degree of union penetration. Contemporaries such as G.D.H. Cole and John Parker, M.P. for Dagenham, commented upon the low level of trade union organisation in "new" industrial areas, particularly in the South of England, and argued that trade unions had failed to overcome the problems of organising workers in the "new" mass production industries. (2) Subsequently Turner et. al. have suggested that before the war "seldom more than a fifth, and often only a fiftieth, of the mass production operatives were union members - who were sometimes in the minority even amongst skilled groups". (3)

Nevertheless, if trade unionism in the motor industry was weak before 1939 it was slowly extending itself and the pace of growth accelerated during the Second World War. Moreover the pattern of organisation which emerged clearly after 1945 with the growing dominance of the A.E.U. and T.G.W.U. followed at an increasing distance by the N.U.V.B., was already being woven during the inter-war years. Yet hardly any serious attempt has been made to

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(1) ibid p. 198

(2) G.D.H. Cole, British Trade Unionism Today (1939), ch. 8.

(3) op. cit. p. 193.

investigate the early development of automobile trade unionism in Britain. (1) This is an important omission for several reasons. First, an important element in the history of British labour during the inter-war years is the problem which structural crisis in the economy posed for trade unions. The decline of certain staple industries such as cotton textiles and shipbuilding brought long-term unemployment to traditional areas of union strength. At the same time unions found it difficult to compensate for the adverse effects of unemployment on membership by organising workers in more bouyant areas of the economy such as the Midlands and the South-East, where automobile production, electrical engineering and aircraft construction became increasingly important sources of employment. To the extent that failure to organise more widely in these areas was not entirely due to trade unions' indifference, the question arises as to what obstacles prevented more rapid growth of trade unionism in the "new" industrial areas. The early history of trade unionism in the motor and aircraft industries provides a number of insights into this problem.

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(1) The only detailed work on automobile trade unionism in Britain before the war is by R.C. Whiting, "The Working Class in the 'New Industry' Towns Between the Wars : The case of Oxford" (Unpublished D.Phil thesis, Oxford University, 1978). More has been written on the early struggles of trade unions in the American motor industry, for example, J.O. Morris, Conflict Within the A.F.L. (New York, 1958); S. Fine, "The Origins of the United Automobile Workers, 1933-1935 "Journal of Economic History, Vol. XV111, 3 (Sept. 1958); S. Fine, Sit - Down : The General Motors Strike of 1936-7, (Michigan, 1969.)

Secondly, although much has been written about the growth of the so-called "new industries" in Britain between the wars and their role in stimulating technical innovation and industrial growth, (1) little is known about conditions of work, the structure of the labour force and employer-employee relations within them. The motor industry in particular has been seen as a prime example of what have been called, albiet controversially, "new industries". (2) Motor manufacture evolved quite rapidly from a small-scale industry characterised by numerous little firms and low-volume, handicraft production into an industry dominated by a few large firms producing in relatively large quantities by means of increasingly mechanised, sub-divided and sequentially planned mass production methods. The motor industry provides an excellent case study of the process of unionisation within a context of rapid growth of output, employment expansion and rapid technical and organisational change.

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(1) D.H. Aldcroft, The Inter-War Economy : Britain 1919-1939 (1970); D.H. Aldcroft and H.W. Richardson, Economic Recovery in Britain, 1932-9 (1967); H.W. Richardson, "New Industries Between the Wars", Oxford Economic Papers, Vol 13, (1961); B.W.E. Alford, Depression and Recovery? British Economic Growth, 1918-1939 (1972); Niel K. Buxton, "The Role of the 'New' Industries in Britain During the 1930s : A Reinterpretation". Business History Review (1975).

(2) Criticism of the "new industry" concept has come from J. Dowie, "Growth in the Inter-War Period : Some More Arithmetic", Economic History Review, Vol XX1 (1968).

Finally, since the Second World War, worker-management relations in the motor industry have occupied much of the industrial relations "stage", attracting attention from students of trade unionism, industrial sociology and industrial relations. (1) However, the presence of workshop organisation, industrial militancy and multi-unionism, three characteristics frequently held to be linked and to account for the industry's difficulties have their roots in developments before 1945 when the foundations of the existing organisation of trade unionism and industrial relations were laid.

This thesis aims to examine the emergence of trade unionism among manual workers in the motor vehicle and aircraft industries during the first half of the twentieth century. In pursuing this aim three main issues are dealt with; the extent of trade union development in these industries, the nature of the factors encouraging and limiting that development, and the determinants of the distribution of membership among individual unions, i.e. the shape of trade union organisation. It will be argued that trade union organisation in the motor industry was generally weak before the Second World War, more so among less skilled operatives than craftsmen. Limited progress before the war partly reflected general circumstances inhibiting trade union growth in British industry as a whole during the inter-war years but there were also specific constraints operating within the motor and aircraft industries themselves. During the Second World War pressure for

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(1) For example, H.A. Turner et.al. (1967); J.H. Goldthorpe, D. Lockwood et.al., The Affluent Worker : Industrial Attitudes and Behaviour (Cambridge, 1968); Huw Beynon, Working for Ford (1973).

unionisation grew stronger and new circumstances arose which led to the relaxation of constraints on union growth. These developments will be analysed within a framework which uses a number of insights developed by theorists of union growth in Britain and the United States.(1)

The shape of trade union organisation was influenced by many factors, some of which were random (2) but it will be suggested that the most important influences were the effects of technical progress on the balance of skills employed and individual trade unions' reactions to the changes which took place. In this connection use will be made of ideas concerning the determinants of the scope of a trade union's recruitment and its reactions to technical change developed by G.E. Barnett and H.A. Turner.(3)

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(1) The major theoretical works are J. Commons et.al., History of Labor in the United States, Vol. 1 (New York, 1918); S. Perlman, A Theory of the Labor Movement (New York, 1928); L. Wolman, Ebb and Flow in Trade Unionism (New York, 1936); H.B. Davis, "The Theory of Trade Union Growth", Quarterly Journal of Economics Vol. LV (August, 1941); J.T. Dunlop, "The Development of Labor Organisation: A Theoretical Framework", in R.A. Lester and J. Shister, Insights into Labor Issues (New York 1949); J. Shister, "The Logic of Trade Union Growth", Journal of Political Economy, Vol. 61 (1953); I. Bernstein, "The Growth of American Unions", American Economic Review, Vol. XL1V (June, 1954); I. Bernstein, "Union Growth and Structural Cycles", in Proceedings of the Industrial Relations Research Association, Vol. V11 (Dec. 1954); O. Ashenfelter and J.H. Pencavel, "American Trade Union Growth, 1900-1960", Quarterly Journal of Economics, Vol. LXXX111 (August, 1969); G.S. Bain and F. Elsheik, Union Growth and the Business Cycle : An Econometric Analysis (1976).

(2) See H.A. Turner, G. Clack and G. Roberts, Labour Relations in the Motor Industry (1967), p.196.

(3) G.E. Barnett, Chapters on Machinery and Labor (Illinois, 1929, reprinted 1969); H.A. Turner, Trade Union Growth, Structure and Policy (1962).

The first question which arises in connection with this study is how to define its scope. Defining an industry is a difficult task and inevitably involves a degree of arbitrariness. In the case of the motor industry the difficulty is particularly acute since it straddles such a wide variety of activities. To a great extent the motor industry evolved as an assembly industry and the major assembly firms dominate its history. However, a growing proportion of inputs into the manufacturing process came to be supplied by specialist components manufacturers, e.g. body shells by Pressed Steel, Briggs Motor Bodies, Fisher and Ludlow and Mulliners; electrical equipment by J. Lucas and Smith's Ltd. Important items came from firms associated with other industries, e.g. Dunlop and Pilkington Bros. In addition to the manufacture of vehicles there grew up a large network of distributive and servicing enterprises. Now inclusion of all these sectors in this study would lead to lack of focus as well as creating insuperable problems in terms of the quantity and variety of data and its presentation, so some restriction has been necessary. In what follows the "motor industry" refers to the manufacture of engines, chassis and bodies, wheels, and the assembly and finishing of motor vehicles.[1] This group of activities thus excludes the specialist firms manufacturing electrical and hydraulic equipment, windscreens and tyres. The "motor industry" has been defined in this way because the activities which are included were felt to be closely related to each other in that

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(1) The term "motor vehicles" includes motor cars, motor-cycles, military and commercial vehicles.

many firms performed all of these activities themselves and where they did not, very close links existed between assembly businesses and body and wheel manufacturers, e.g. Morris Motors originally had a financial holding in Pressed Steel as did Ford in Briggs Bodies and the Kelsey-Hayes Wheel Company. Also the organising efforts of trade unions were directed mainly at firms engaged in engine, body and wheel manufacture and automobile assembly. Within the "motor industry" so defined, this thesis is concerned with manual workers only, partly for reasons of ease of presentation, but chiefly because trade unionism among clerical, white-collar technical and supervisory staff did not get beyond the embryonic phase before 1945. (1)

While it has been necessary to adopt a somewhat restrictive definition of the motor industry, at the same time it has been found essential to extend the scope of this study to aircraft workers. This is because there existed direct links between the development of trade unionism among automobile and aircraft workers which make it difficult to discuss trade unionism in the motor industry before 1945 without making substantial reference to its development in the aircraft industry. The links were two-fold; first, some firms produced both aeroplanes and motor cars (e.g. Napier, Armstrong-Siddeley and Rolls Royce) and during 1914-1918 and 1938-1945 a larger number of motor firms began work on aircraft contracts, either directly for the government or sub-contracting from specialist aircraft manufacturers.

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(1) See G.S. Bain, The Growth of White Collar Unionism (Oxford, 1970), ch. 9.

Secondly, the same major trade unions were involved in organising both automobile and aircraft workers. Thus progress in one industry could carry over into the other; for example, the relative success of individual unions in organising aircraft workers during 1938-1945 had an important bearing upon their subsequent relative positions in the motor industry as many ex-aircraft workers were absorbed by the motor industry after the war. Therefore although this study is concerned primarily with automobile trade unionism it includes a considerable amount of discussion of the progress of trade union organisation in the aircraft industry.

Once more, a definitional problem arises since aircraft construction, like motor manufacture, straddled a number of occupational and product areas and involved numerous specialist components manufacturers. Hence the same procedure has been followed as that regarding the motor industry; attention is confined to manual workers engaged in the manufacture of aero-engines and air frames and the assembly and finishing of the final product.

The second major problem in analysing the growth of trade unionism in the motor and aircraft industries is that of measurement. In order to assess the strength and progress of trade unionism among automobile and aircraft workers it is necessary to express an estimate of total trade union membership among them as a proportion of those eligible to join unions, i.e. to calculate a "union density" figure. Unfortunately, available data on employment and trade union membership do not permit this to be done with any great accuracy. Most of the employment figures refer to a general category "construction and repair of motor vehicles, cycles and aircraft", making it impossible

to separate employment in these areas. (1) This problem has been circumvented to some extent by using figures based upon the Censuses of Production which enabled an estimate of manual employment in motor vehicle manufacture for the years 1924, 1930, 1935 and 1939 to be made by Political and Economic Planning in 1950. (2) More intractable is the problem of estimating union membership. The Ministry of Labour's statistics included vehicle building membership with that in iron founding, engineering, shipbuilding and other metal working and the records of the major trade unions concerned with the motor and aircraft industries did not include breakdowns of membership by industry. (3) The only possible course therefore, has been to construct rough estimates based upon the total membership of union branches in districts associated with motor and aircraft manufacture. The obvious difficulty here is that branches were usually organised on a residential rather than an occupational basis so that some workers not employed in the relevant industries have been included in the estimates

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(1) See Abstracts of Labour Statistics of the United Kingdom (Cmd 2740) 1926, (Cmd 3831) 1931, (Cmd 4625) 1934, (Cmd 5903) 1939; Department of Employment and Productivity, British Labour Statistics, Historical Abstract (H. M. S. O., 1971); Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain, (1938).

(2) Political and Economic Planning, Motor Vehicles - A Report on the Industry (Jan. 1950).

(3) Abstract of Labour Statistics of the United Kingdom, op. cit.; Ministry of Labour Gazette, 1924-1945. The relevant trade union records are those of the Amalgamated Engineering Union, The National Union of Vehicle Builders, National Union of Sheet Metal Workers, National Union of General and Municipal Workers, Workers' Union and the Transport and General Workers' Union.

while at the same time others who were so employed have been left out because they were members of branches which were not obviously located in motor and aircraft manufacturing districts. Despite these inevitable inaccuracies of measurement however, the estimates of membership and density which have been arrived at correspond quite well with the impressions given by comments in secondary sources and in interviews with trade union officials who were involved in the organisation of the motor and aircraft industries.

Finally it is necessary to construct a framework within which to identify, analyse and gauge the relative importance of the various influences upon union growth and the shape of union organisation in the motor and aircraft industries. With respect to the first question, that of the determinants of union growth, there exists a voluminous literature. Central to nearly all theories of union growth is an emphasis upon the role of changes in prices, money wages and employment in determining changes in union membership levels and/or rates of growth. Early theorists such as J.R. Commons and W.O. Weyforth argued that periods of economic upswing favoured union growth as workers sought to protect their living standards in the face of rising prices. They were aided in their efforts by increasingly tight labour markets and the desire of employers to maintain continuous production which made them less resistant to wage demands.[1] This

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(1) J.R. Commons et.al., History of Labour in the United States Vol. 1 (New York, 1918); W.O. Weyforth, The Organisability of Labour (Baltimore, 1917).

emphasis was contested as a result of experience in the 1920s when prosperity in America coincided with falling trade union membership.[1] However, H.B. Davis pointed out in 1941 that price increases were the main catalyst in union growth rather than general prosperity. In the United States during the 1920s retail prices remained stable while money wages rose considerably. Davis argued that unions were defensive organisations so that in the absence of threats to established standards, workers had little incentive to organise. Hence the prosperous decade of the 1920s in the U.S.A. was not accompanied by union growth. Nevertheless, Davis did not deny completely the existence of a relationship between "prosperity" and union growth. In addition to rising prices a tightening labour market was necessary in order for membership expansion to occur. Generally, these occurred during periods of business prosperity or cyclical upswing, although they could occur as a result of labour market crisis, such as large-scale war.[2]

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(1) L. Wolman, Ebb and Flow in Trade Unionism (New York, 1936) p. 162 - 3.

(2) H.B. Davis, "The Theory of Trade Union Growth", Quarterly Journal of Economics, Vol. LV (August, 1941).

The emphasis upon fluctuations in prices and the demand for labour has remained in the literature. (1) One of the most recent attempts to formalise the nature of the relationship between cyclical economic fluctuations and trade union growth is that by G.S. Bain and F. Elsheik. (2) They advance the hypothesis that variations in the rate of union growth are explained by factors which affect the propensity of workers to join unions and the opportunity for them to do so. In line with earlier theorists and claiming the benefit of empirical support for their proposition they argue that the most significant influences in these respects are retail price changes, changes in money wages and changes in the rate of unemployment. Price increases raise the propensity to unionise as workers seek to defend real incomes. Money wage increases raise the propensity to unionise since unions are to

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(1) The major theorist in dispute with the business-cycle related explanations of union growth was I. Bernstein who argued that workers' decisions to join or not join unions were not influenced by short-run factors. Bernstein claimed to find no empirical support for a major business cycle influence. Instead he explained upsurges of union membership in terms of acute social unrest arising during times of war or acute depression. However, Bernstein's data has been criticised and he has been accused of inconsistency of argument, bringing in business-cycle related factors on an ad hoc basis. I. Bernstein, "The Growth of American Trade Unions", American Economic Review Vol. LX1V (June, 1954); "Union Growth and Structural Cycles", Proceedings of the Industrial Relations Research Association, Vol. V11 (Dec. 1954). For criticisms of Bernstein, see L. Ulman, discussion of "Union Growth and Structural Cycles" in W. Galenson and S. Lipset, Labor and Trade Unionism : An Inter-disciplinary Reader (New York, 1960), p. 94 ; G.S. Bain and F. Elsheik, Union Growth and the Business Cycle : An Econometric Analysis (Oxford 1976), p. 13-20.

(2) ibid.

some extent credited with having obtained them. Falling unemployment enhances opportunities to unionise by reducing employers' opposition to trade unions as the labour market becomes tighter. It also raises the propensity to unionise as it enables unions to make more successful claims, thus attracting workers, and it reduces fears of victimisation on the part of workers.(1) The empirical support for the Bain-Elsheik model appears to be impressive and lends considerable support to arguments which link union growth performance with the phases of the business cycle.(2)

Nevertheless, such an approach has limitations. As its authors point out, the model is concerned to explain short-term changes in the rate of membership growth, not long-run trends in membership levels. The majority of theorists, while keeping the effects of cyclical fluctuations central to their theses, have also included other variables said to operate on the long-run trend of union membership.(3)

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(1) op. cit. ch.4. A somewhat similar model was developed earlier by O. Ashenfelter and J.H. Pencavel, "American Trade Union Growth 1900-1960", Quarterly Journal of Economics, Vol. LXXX111 (August 1969), though no money wage variable was included and a political variable was included to take account of public and legislative opinion concerning trade unions. Bain and Elsheik also included a similar variable when applying their model to the U.S.A.

(2) G.S. Bain and F. Elsheik, op. cit., p. 71-114.

(3) See W.O. Weyforth, op. cit.; J. Shister, op. cit.; H.B. Davis, op. cit.; J.T. Dunlop, "The Development of Labor Organisation : A Theoretical Framework" in R.A. Lester and J. Shister (eds). Insights into Labor Issues (New York 1949).

These include changes in technology, business structure and the pattern of demand for goods and services which may affect the relative bargaining power of unions and employers. Closely related to such changes are changes in the structure of the labour force which, by resulting in a shift to or from highly organised occupations, will affect the long-run trend of membership. In addition, the evolution of the socio-legal environment, i.e. public opinion, the nature of the law and its administration in trade union matters, and government policy, may affect long-run trade union development. Shister and Davis also emphasised the quality of trade union leadership on the grounds that missed opportunities for extending recruitment and introducing innovations in trade union structure and the scope and conduct of collective bargaining mean long-term losses in membership.(1) However, as Bain and Elsheik have pointed out, it seems that while the quality of union leadership may affect the fortunes of individual unions and may have an impact on union growth in certain industries and occupations, at the aggregate level it is probably determined by wider influences. Measured in terms of organisational expansionism, innovations in union structure and collective bargaining, the quality of leadership is highly dependent upon whether the economic environment is favourable to union efforts or not.(2)

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(1) J. Shister, "The Logic of Union Growth", Journal of Political Economy, Vol 61 (1953), p. 432; H.B. Davis, op.cit.

(2) G.S. Bain and F. Elsheik, op.cit. p. 21-2.

The studies referred to above suggest a number of variables which need to be considered in examining the development of trade unionism among automobile and aircraft workers. However these insights require some modification and elaboration. In the first place, theories of union growth have concentrated on union membership in the aggregate whereas this study is concerned with two industries only. This does not mean that aggregate theories are irrelevant however. It is highly improbable that union organisation in any single industry is immune from general circumstances affecting the economy and the labour movement as a whole. Therefore some analysis of influences upon overall union membership and their impact upon motor and aircraft workers is necessary. However, just as trade unionism in all industries is influenced by the general environment, each industry also has its own characteristics which impart some degree of uniqueness to the development of trade union organisation within it. It is thus necessary to develop a second stage of analysis which identifies the specific influences which operated upon the development of trade unionism in the motor and aircraft industries. Here too, the literature offers insights. Changes in the structure of the labour force, technical change and market characteristics are each applicable to single industries as well as to the economy as a whole. The model which will be built up here thus contains two sets of variables; those operating at the aggregate level and those operating in an industry-specific way.

Before listing these variables it is necessary to state the assumptions upon which those included are held to be relevant. Perhaps the most general assumption in the theoretical literature relating to trade unionism is that unions are essentially defensive organisations. Increases in membership occur as a result of workers seeking to protect living standards and working conditions against outside threats. As

shown above, Bain and Elsheik elaborated upon this assumption to build up a model in which the independent variables determined the growth of union membership via their effects upon the propensity of workers to unionise and the opportunity for them to do so. Concentrating on the short run, they argued that inflationary periods were more conducive to growth than deflationary ones as real incomes were threatened and unions were able to take advantage of tighter labour markets to press for higher money wages.(1) However, their model has been criticised on the grounds that no explanation is given of why unions are more effective in defending real wages in inflationary periods than in deflationary periods. In fact, given the well-accepted notion that money wages are "sticky" downwards, it is possible that the opposite might be the case. The alternative hypothesis is that unions are not more effective during inflations than in deflations, but workers mistakenly believe them to be. Why should this be the case? (2)

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(1) op. cit. p. 62-7

(2) This criticism was advanced in a review of Bain and Elsheik, op. cit. by Ray Richardson, "Trade Union Growth", British Journal of Industrial Relations Vol. XV (1977). Richardson also criticised Bain and Elsheik's assumption that price rises caused union membership increases and not vice versa. In reply to this criticism Bain and Elsheik cite the work of D.L. Purdy and G. Zis, "Trade Unions and Wage Inflation in the U.K. : A Reappraisal" in M. Parkin and A.R. Nobay, (eds) Essays in Modern Economics (1973); idem "On the Concept and Measurement of Trade Union Militancy" in D. Laidler and D.L. Purdy, (eds) Inflation and Labour Markets (Manchester, 1974) which indicates that union membership and density are not good indicators of union pushfulness on wages.

This difficulty may be overcome if more explicit acknowledgment is given to the existence of costs as well as benefits of union membership.

One assumption made in this study is that in general, workers join trade unions for defensive reasons. It is also assumed that, first, workers see costs as well as benefits arising from trade union membership; secondly, employers perceive costs and benefits attached to resisting union penetration and finally, unions see costs and benefits arising out of efforts to recruit new members. The progress of trade union organisation thus depends upon the operation of a number of variables which affect each actor's assessment of the relative costs and benefits of the alternatives open to him. Thus workers will tend to join unions more readily in periods of inflation than deflation, not because the benefits of union membership alone are necessarily greater, but because costs are lower in relation to benefits. The financial burden of membership fees and subscriptions will tend to fall in inflationary periods since they are not adjusted upwards fully in line with money incomes. Costs in terms of insecurity (i.e. possible victimisation) fall as the labour market tightens. Employers see the costs of resisting trade unions rise as it becomes harder to hire alternative labour and strikes become more costly in terms of foregone output. Trade unions, aware of the improving climate, are readier to expend resources on organising drives. At the level of the individual industry, the assessments of the various parties are influenced both by internal factors and general economic and social pressures; indeed to some extent the former will be influenced by the latter.

On the basis of these assumptions it is argued here that the progress of union membership in the motor and aircraft industries

was the outcome of the following influences which may be divided into two categories; those operating via their effect on aggregate union membership and those operating at the level of the industries themselves. Aggregate variables comprise: movements in prices and money wages and changes in the demand for labour as measured by the unemployment rate, since these will affect workers' assessments of the costs and benefits of union membership, employers' attitudes towards unions and the willingness of unions to mount recruitment campaigns. In addition, changes in trade union law and government policy on labour issues are included since they too influence the costs and benefits arising from the possible courses of action open to the actors within the industrial relations system. It is, however, suggested that these changes were generally responses to changes in the price and employment variables. Finally, the climate of opinion regarding trade unions, in particular employers' attitudes, is influenced by the competitive pressures operating on the economy.(1)

The industry-specific variables to be included are; first, the structure of the motor and aircraft industries. Following Shister(2) this is defined in terms of the "technical and marketing contours of the industry and the structure of the labour force". "Technical contours" refer to the scale of production and the way it is organised

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(1) The shift of employment away from traditional union strongholds to other areas of employment which unions found harder to organise must have affected the trend of aggregate union growth during the inter-war years. However, change in industrial structure cannot be included as an explanatory variable since it contains the dependent variable itself i.e. the problems of organising automobile workers.

(2) op.cit. p. 417-22.

and carried out. "Marketing contours" consist of the state of demand for the product and the nature and extent of competition within the industry. Changes in industrial structure affect employers' assessments of the need to resist union penetration and the costs of so doing. They also influence the propensity of workers to join unions and unions' assessments of the costs and benefits of recruitment campaigns.

The structure of the labour force is closely related to the technical structure of the industry but it is also influenced by the state of the labour market and the location of plants. One may therefore define structure broadly so as to refer not only to the age, sex and skill composition of the workforce, but also other features such as the proportion of outside immigrants, previous employment history, attitudes, etc. In this connection too, it is useful to consider the degree of proximity of motor workers to groups of unionised workers. Proximity to organised workers may affect workers' assessments of both the costs and benefits of union membership by reducing fears of victimisation if nearby or comparable plants are organised, by enabling unions to gain in appeal to the unorganised if they are able to obtain concessions from management in the unionised sector, by reducing employers' hostility to trade unionism as managers hear of advantageous services performed by trade unions and by reducing the amount of organisational effort required on the part of unions themselves. Finally, growth in the size of the labour force may create problems and opportunities for union organisation. Rapid expansion may strain the organisational machinery of trade unions; at the same time it may encourage unions to divert more expenditure and effort to organising in an industry whose labour force is growing rapidly.

The attitudes of employers towards trade unionism have already been mentioned in relation to changes in industrial structures. However, although employers' attitudes may be largely determined by the state of the labour market, the situation of the industry, etc., some separate mention of employers' attitudes and labour policies appears to be warranted in the case of the motor industry, since several of the leading entrepreneurs in this field, i.e. William Morris, Henry Ford and his British representatives, Charles Bartlett, managing director of Vauxhall Motors from 1929, maintained a resolute, almost principled hostility towards trade unionism for much of the period. While it is true that external circumstances ultimately led to changes in policy, employers' hostility was an additional obstacle to union growth in the motor industry for much of the period.

A third set of influences to be considered is the effect of conditions of work in the motor and aircraft industries in relation to conditions in other local industries since such comparisons may have influenced workers' assessments of the benefits to be gained from union membership. Conditions of work refer to wages, other forms of worker compensation such as paid holidays, social facilities, etc., the intensity of work and the environment in which it is carried out (health, safety, nature of discipline and supervision are subsumed under this heading) and patterns of employment.

Finally, union policies on recruitment are included. To some extent these are affected by other variables such as the state of the labour market generally or the growth of the labour force in a particular industry, but union restrictions on those who are eligible

for membership may affect the progress of organisation when other variables, such as the structure of the labour force, are changing. Reluctance to mount aggressive recruiting campaigns among some motor industry and aircraft workers on the part of union officials also affected the tone of the organisation which did develop. In some important cases the Communist Party took the initiative during the 1930s and imparted something of its own style to trade union organisation in much of the aircraft industry and at Pressed Steel, Ltd. in Oxford.

It will be argued that until the 1920s the motor and aircraft industries were in their infancy and did not begin to develop strong characteristics of their own until after the First World War. Hence such growth of trade unionism as occurred among motor and aircraft workers was until 1920 chiefly the result of the operation of general influences upon trade unionism. For example during the "labour unrest" of 1910-1914, aggregate membership rose

from 2.56 million to over 4 million as a backlog of grievances from previous depressed years and the pressure of rising prices on real wages helped to generate a sense of militancy which was able to find expression in trade union growth and successful demands for wage increases at a time of full employment. (1) During the First World War, rising prices and pressure on established working conditions (e.g. restrictions on labour mobility, suspension of restrictive practices and dilution of labour) encouraged workers to seek trade union protection. To some extent too, unions were credited with obtaining money wage increases and this also attracted new members. (2) Union growth was also aided by acute labour shortage and in addition, partly reflecting the excess demand for labour, institutional innovations made by the government to avoid stoppages arising out of disputes, such as

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(1) See H. Pelling, "The Labour Unrest, 1911-14" in idem Popular Politics and Society in Late Victorian Britain (1968); R.V. Sires, "Labour Unrest in England, 1910-1914". Journal of Economic History, Vol. 15 (1955); S. Meacham, "The Sense of an Impending Clash : English Working Class Unrest Before the First World War." American Historical Review, Vol. 77 (1972).

(2) To take just two examples, the South Wales Miners' Federation in 1915 obtained a new standard rate 50 per cent above the existing rate which had been fixed in 1879. The Amalgamated Society of Engineers in 1917 obtained a 5 shillings per week war bonus. See G.R. Askwith, Industrial Problems and Disputes (1920), p. 392-4; J.B. Jefferys, The Story of the Engineers (1946) p.182. However, in many cases the rank and file observed that trade union officials were dilatory in pushing wage demands and used their authority to prevent workers from taking industrial action to protect real wages. This undoubtedly helped promote the growth of the unofficial shop stewards' movement on Clydeside during and after 1915. See J. Hinton, The First Shop Stewards' Movement (1973) ch.3.

compulsory arbitration, aided the growth of the weaker unions.[1] Rapid membership growth was maintained during the immediate post-war boom as prices and money wages continued to rise and unemployment levels remained low. In this climate, unions such as the Amalgamated Society of Engineers, the Amalgamated Society of Carpenters and Joiners, various unions of coach-makers and the Workers' Union made substantial headway in their areas or organisation, which by this time had come to include automobile and aircraft workers.

During the 1920s and 1930s aggregate and industry-specific variables combined to weaken trade unionism in the motor industry. Automobile trade unionism could not escape from the harsh climate affecting the labour movement in general. The post-war slump, problems of price adjustment consequent upon the desire to return to the gold standard at the pre-war parity with the dollar and the depression of 1929-1932 led to movements in wages, prices and employment which were unconducive to union growth. These same pressures also created attitudes of antagonism towards trade unions on the part of employers and governments which found open expression in the engineering lock-out of 1922, the coal crisis culminating in the 1926 General Strike, the Trades Disputes and Trade Union Act of 1927 and stoppages in the textile industries during 1929-1932. However the weakening of trade unionism in the motor industry was not simply a reflection of these wider pressures. Industry-specific factors ensured that the density of trade unionism among motor workers fell

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(1) See John Lovell, British Trade Unions, 1875-1933 (1977) p. 50.

between 1924 and 1935 by more than it did among engineering workers generally and the eligible labour force as a whole. These same influences also meant that once economic recovery got under way after 1932, the recovery of trade union organisation in the motor industry was, measured in terms of density, weaker than in industry as a whole, remaining lower in 1939 than it had been fifteen years earlier.

By comparison, after the great contraction of production during 1918-1920, union density in the aircraft industry was higher and better maintained than in motors and, indeed, probably engineering generally during the 1920s and early 1930s. However, once the industry began to undergo rapid expansion in the late 1930s union organisation found it increasingly difficult to keep pace with the upsurge of employment. It is possible therefore, that union density may have fallen during 1935-1939. However, it is at this point that certain limitations associated with reliance on density as a measure of the strength of organisation are revealed, since trade unions continued to extend their membership, workshop organisation and bargaining power in the most important establishments.

Despite continued weakness of organisation in the motor industry, it can nevertheless be said that attempts to organise automobile workers on a mass basis resumed during the 1930s. These attempts were aided to some extent by economic recovery and considerably by the circumstances created by the Second World War. The Second World War

led to a rapid drop in unemployment and to the emergence of a general labour shortage by 1942. (1) Wages and prices rose noticeably but by a much smaller proportion than during 1914-1918 as a result of closer government controls and less inflationary methods of war finance. In these circumstances trade union membership rose considerably, reaching just over 8 million by 1944 compared with 6.3 million in 1939. Union growth was also encouraged by pressures for change in established working conditions and practices, creating a demand for union protection. In addition, overall union growth was aided by revival in traditional strongholds as the demand for raw materials and munitions gave a filip to industries such as coal mining, iron and steel, shipbuilding and heavy engineering. Government action, reflecting the tightness of the labour market and the need to maintain, indeed raise production, aided union growth by establishing consultation between various ministries and representatives of employers and organised labour and also encouraged the spread of collective bargaining. As a result of these influences and changes in certain industry-specific variables unionism in the motor industry gathered strength so that by 1946 about 40 per cent of manual workers were organised into trade unions. (2)

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(1) Unemployment fell from 11.6 per cent of the insured workforce in 1939 to 0.7 per cent by 1944. For comment on the labour shortage see M.M. Postan, British War Production (1952), p. 217-27; P. Inman, Labour in the Munitions Industries (1957), p. 1-2.

(2) It is impossible to assess union membership and union density among aircraft workers during the war because the industry became so scattered. However, there can be no doubt that although membership rose rapidly, possibly to a quarter of a million, this growth was outstripped by employment, which reached 1.8 million by 1944. See Central Office of Information, "The United Kingdom Aircraft Industry" (H.M.S.O. 1952).

The first part of this thesis is therefore concerned with describing the efforts made by unions to build organisation in the motor and aircraft industries, estimating the course of union membership and density and explaining in more detail how aggregate and industry-specific influences determined the extent of unionisation. An attempt will also be made to gauge their relative importance.

The second aspect of union organisation in the motor and aircraft industries to be dealt with is the evolving pattern of union organisation, i.e. the distribution of membership between individual unions. By 1945 three unions accounted for the majority of members in the motor and aircraft industries; the A.E.U., T.G.W.U., and N.U.V.B. Of these only the N.U.V.B. could be said to have resembled an industrial union for automobile workers; however, the position of the N.U.V.B. relative to the A.E.U. and T.G.W.U. was declining. In contrast to the United States therefore, there was no union catering specifically for automobile and aircraft workers with sufficient strength to dominate organisation among them. (1) The pattern of trade unionism in the British

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(1) The dominant union in America was the United Automobile Workers' Union affiliated to the C.I.O. Other unions included the International Association of Machinists, International Molders' Union and the Patternmakers' League. The U.A.W's rise to dominance began in 1936 when it was granted autonomy by the American Federation of Labor and merged with a number of other unions which had been set up among automobile workers. The U.A.W. split in 1939 over the actions of the union president and his failure to obtain a recognition agreement from the Ford Motor Company. The majority faction decided to affiliate to the C.I.O. (Congress of Industrial Organisations) and grew to 458,413 members by April, 1941. The remainder, which continued to affiliate to the A.F.L. had only 19,000 members in 1940. See W. Galenson, The C.I.O. Challenge to the A.F.L. (New York, 1960), p. 123-47.

motor and aircraft industries resulted from the establishment of footholds by existing unions for most of which motor and aircraft workers constituted a small minority of total membership.(1)

Such a piecemeal development, resulting in a somewhat untidy pattern of organisation was in fact fairly typical of the development of the trade union movement as a whole. During the early twentieth century more and more consideration was given to the merits of encouraging industrial unionism as a response to the alleged concentration of capital in Britain and the tendency for technical progress to make traditional demarcation lines between crafts and between skilled men and labourers obsolete. The experience of dilution during the First World War and the ability of engineering employers to take advantage of the depression of the early 1920s to attack successfully union restrictions on overtime and the manning of machines gave the industrial unionists' argument greater weight. However, charged by the T.U.C. in 1924 to investigate the possibility of encouraging industrial unionism, the General Council had to admit defeat. Its report, presented to the 1927 Congress stated that no general scheme for industrial unionism was possible owing to the variety of ways in which industries could be defined by unions with a vested interest in perpetuating their own independent existences and because of the further complicating effects of technical change in altering industrial boundaries. The future pattern of trade union organisation would be the outcome of gradual adjustments by individual unions to changing circumstances and amalgamations between unions.(2)

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(1) The exception was the N.U.V.B.

(2) T.U.C. Report, 1927 p. 101

Automobile trade unionism was thus part and parcel of the general evolution of trade union organisation in Britain. The question of how to analyse that evolution remains. The most profound analysis of trade union structure in Britain is that of H.A. Turner.[1] Turner provides an explanation of trade union forms, analyses the pressures for trade union expansion and examines how pressures for growth may lead to changes in form. Rejecting the descriptive categories of craft, general and industrial unionism as unhelpful for the purposes of the analysis of trade union structure, Turner makes a distinction between "closed" and "open" unions, terms drawn from trade unions in the cotton textile industry. "Closed" unions are defined as those which are able to control entry to the trades they represent. "Open" unions are unable to exert such control. Ability to control entry to a trade (e.g. through apprenticeship) means that "closed" unions can exert influence over wages by restricting the supply of labour to a particular trade. Growth of the labour force is controlled by restrictions upon the number of apprenticeships and individual employers are brought into line with the union's demands by the union's refusal to supply the labour of its members on conditions inferior to those laid down by it. The "closed" union will thus try to organise all eligible workers within its trade. However, it will have no inherent interest in expanding its membership further, since its main tactic, restriction of the labour supply, involves restricting its own membership. Because of the need for workers to possess special qualifications in order for entry to an occupation to be controlled effectively and because of the high subscriptions required

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(1) H.A. Turner, Trade Union Growth, Structure and Policy (1962)

from union members to finance out-of-work benefit so that members do not work for less than the rate specified by the union, "closed" unionism, where it exists, does so among craftsmen rather than less-skilled workers.

"Open" unions are unable to restrict entry to the occupations which they represent owing to the absence of special qualifications needed for entry. Thus they have to organise as many workers as possible in their respective industries and influence employers through strength of numbers. To the extent that workers outside the original industry can compete for jobs within it, there is pressure for organisational expansion among them also. Hence "open" unions are inherently expansionist.

Turner argues that the existence of closed and open unions accounts for the shape of British trade unionism, which is one of "open, expansionist unions .... spread around islands of stable, closed unionism ..... organisational vacuums have generally been filled by the nearest union to hand that was under pressure to expand." (1) However, pressures for expansion have affected relatively closed as well as open unions and over time, "closed" unions have in many cases adopted more "open" organisational policies; hence the presence in the motor and aircraft industries of relatively "closed" as well as "open" unions by 1914 and the fact that union growth in the motor industry was accompanied by a progressive opening of some unions such as the A.E.U. and the N.U.V.B.

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(1) H.A. Turner, op. cit., p.242.

Generally, the main forces encouraging individual unions to extend their organisation are; the existence of occupations allied to that in which the union originated, occupational mobility among the union's members, either within or across industries, the existence of competition from other groups of workers and the need to amalgamate with other unions. These forces can induce expansion across industrial boundaries, i.e. horizontal expansion, and vertically within industries. (1) The development of trade unionism in the motor and aircraft industries involved both horizontal and vertical expansion. In the case of the Amalgamated Society of Engineers horizontal, and to some extent, vertical expansion had by 1914 already begun to cause deviation from the "closed" model and the process was to be taken further once the A.S.E. merged with nine other unions of skilled engineers to form the Amalgamated Engineering Union in 1920. (2) In the case of the National Union of Vehicle Builders one can see its formation by amalgamation in 1919 as a response to the emergence of a new branch of vehicle building stemming from the rise of the motor industry. However, in many respects the N.U.V.B. was a comparatively "closed" union in

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(1) ibid. p. 243-52

(2) The A.S.E. itself was formed in 1851 as a result of an amalgamation of related craft unions. The A.S.E. during the mid-nineteenth century was primarily a union of skilled fitters and millwrights. From the 1390s however, organisation was gradually extended to new occupations, e.g. electrical engineers, turners and roll turners - a form of horizontal expansion. Limited attempts at vertical expansion - the organisation of some workers without a craft qualification - were also made, e.g. a machinists' section was opened in 1901 and a section for unskilled workers was opened in 1912. However, the extent of vertical expansion remained limited until the 1930s, well after the formation of the A.E.U. See J.B. Jefferys, The Story of the Engineers, p. 27-31, 166, 191-4.

1919 and its shift to a more open form was much more completely determined by developments in the motor industry than was that of the A.S.E./A.E.U.

The presence of a large number of unions in the motor industry at the beginning of our period was the result of horizontal expansion.(1) In the case of the craft-based unions, the motor and aircraft industries employed many existing skills used in other branches of engineering, metalworking and coachmaking. To a great extent therefore, the extension of organisation to the motor industry resulted from occupational mobility between industries. Insofar as the more "open" unions catering for less-skilled workers were concerned, operatives and labourers were in any case quite mobile between industries. In addition, some unions encouraged such mobility since they saw the growth of the motor industry as helping to reduce unemployment among members.(2)

The extension of organisation to the motor industry in the early twentieth century also reflected the need to protect locally-negotiated

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(1) Unions included by 1914 the A.S.E., Amalgamated Society of Carpenters and Joiners, United Kingdom Society of Coachmakers, London and Provincial Society of Coachmakers, London Society of Tinplate Workers, Tinplate Workers of Birmingham, Wolverhampton and District, United Kingdom Society of Smiths, The Amalgamated Society of Wood-cutting Machinists, the United Patternmakers' Association and the Workers' Union.

(2) This attitude was taken by the London Society of Tinplate Workers before 1914. See London Society of Tinplate Workers, "Report of a Special Committee on Unemployment", 2nd Sept. 1908 (T.U.C. Library at Congress House). The same stance was adopted by the N.U.V.B. in the early 1920s. See N.U.V.B. Quarterly Journal, April - June 1923, General Secretary's Report.

wage rates from competition from unorganised workers. The Workers' Union mounted a general organising drive among all sections of engineering workers during 1911-1913. This was in part the outcome of the union's aim to organise across both industrial and skill boundaries, an aim which was to some extent ideologically motivated, but it was also part of the logic of "open" unionism. The need to protect established wage rates against competition from the unorganised also affected more "closed" unions such as the A.S.E. The ability of the A.S.E. to control entry to the trades which it represented and thereby to exert a measure of unilateral control over working conditions began to be eroded from the 1870s. The growth of engineering, the emergence of more specialised occupations and a tendency for apprenticeship to decline in the larger establishments, together with periods of heavy unemployment amongst members meant that the A.S.E. came increasingly to rely upon collective bargaining over wage rates, concluding district agreements with employers. This development was also encouraged by the growth of employers' associations in engineering, culminating in the formation of the Employers' Federation of Engineering Associations in 1896. (1) Wage rates however, could be undermined if large sections of unorganised workers were allowed to work in some plants at less than the district rate negotiated by the union. There was,

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(1) See J.B. Jeffereys, op.cit. p. 98-9; E. Wigham, The Power to Manage. A History of the Engineering Employers' Federation (1973) ch.2. Collective bargaining in engineering was given a national dimension following the successful employers' lock-out of 1897 and the imposition of the 1898 Terms of Settlement on the engineering unions. Wigham, op.cit. ch.4; A.I. Marsh, Industrial Relations in Engineering (Oxford, 1965) p. 250-5.

therefore, pressure to organise new branches of engineering as they arose.[1]

Amalgamation was a significant force acting upon the structure of trade unionism in the motor and aircraft industries in that the formation of the A.E.U. in 1920 provided the basis for the development of more "open" organisation among engineering workers even though the union remained largely closed to the less-skilled until the 1930s. It also simplified the pattern of engineering trade unionism to some extent. It was amalgamation too, which was responsible for the T.G.W.U. establishing a foothold in the engineering industry following its absorption of the Workers' Union in 1929. This merger gave the T.G.W.U. an organisational base among motor workers upon which it began to build during the mid-thirties.

There were also pressures for horizontal and vertical expansion within the motor and aircraft industries which encouraged some unions, notably the N.U.V.B., to adopt a less exclusive organisational stance. Technical change created competition between groups of workers and this encouraged unions to extend their organisation to those in competition with their existing members. This competition arose within the skilled category and between the skilled and semi-skilled. The main

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(1) Thus in 1926, organising officials of the A.E.U. were concerned at the lack of organisation at the Citroen Motor Company's plant at Slough since "All sorts of rates and bare time for overtime" were said to be paid and the firm was seen as threatening the A.E.U. rate for engineers in the district so long as it was unorganised. A.E.U. Monthly Journal, Feb. 1926, division 23 report and national organiser's report.

instance of competition between different skills was that which followed the replacement of wood by metal in motor body and airframe construction. Metal-workers and their unions hence came to compete with woodworkers. The N.U.V.B., originally a union of woodworkers, tried to meet the new competition by extending its organisation to metalworkers employed in the motor and aircraft industries.

One of the most noticeable features of British trade unionism during the inter-war years however, was the way in which the growth of mass production led to vertical expansion of important unions. Technical change altered the structure of employment in such a way as to compel a number of unions to become progressively less exclusive in their recruitment. While this was a development which was not confined to the motor industry, it was there that the effect was most apparent. Changes in production methods increased vertical mobility within the industry by enabling workers to gain proficiency as they worked on the job without formal training. They also permitted employers to grade labour in a more precise fashion than skilled, semi-skilled and unskilled and to promote individual workers on the basis of demonstrated ability, thus by-passing the traditional route to skilled status. Technical change also led to skilled workers experiencing competition from semi-skilled machine-minders. These changes further undermined the ability of relatively "closed" unions to control the supply of labour in their traditional areas of organisation.

Union reactions to the skill-displacing effects of technical change may take a number of forms.[1] They can seek to prevent innovation taking place, accept lower wages so as to obtain a larger share of the work under the new process, reduce the flow of workers into their trade, seek to spread remaining skilled work among their members, or expand their organisation so as to include those less skilled workers employed on the new process.[2] Important determinants of the precise tactic to be adopted are the speed at which the change takes place and the existing strength of union organisation. Where change is gradual and does not raise serious problems of unemployment for the union's members, the organisation may be content to see its occupation slowly die out and so will not recruit the new workers who are replacing its members; in fact it may become more restrictive as the demand for its skills declines in an attempt to maintain wage rates.[3] The extent of union strength will determine its ability to resist technical change by refusing to allow new processes to be introduced, or insisting that new work be done by its skilled members at skilled rates of pay or by insisting on over-manning on the new process.

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(1) Skill-displacement means that workers cannot command the same rate of pay for their skills as they would have received if the change in production methods had not occurred. Thus skill displacement does not necessarily mean unemployment, although this may also occur. See G.E. Barnett, Chapters on Machinery and Labor, p. 117.

(2) ibid. p. 145-6

(3) H.A. Turner, op. cit. p. 251-2 cites as examples the Lancashire Mule-Spinners' Association and the sawyers' unions in the building industry.

In the motor industry and in aircraft production after 1935 the pace of technical change was too rapid to permit unions to react by becoming more restrictive. Moreover, the general climate of high unemployment during the inter-war years made unions highly conscious of additional threats to the employment of their members, such as technical change. Unions of skilled men did attempt to prevent or at least slow down innovation. However, they were not strong enough for this to be a viable policy even in the relatively short run during the inter-war years. In engineering generally employers reaffirmed their right to introduce new machinery and to hire such men as they sought fit by the successful lock-out of 1922 and the imposition of a new Procedure Agreement to replace the Terms of Settlement of 1898.[1] Depression during the early twenties and thirties and persistent heavy unemployment weakened the bargaining position of unions vis-a-vis employers. In the motor industry organisation among skilled workers, though not negligible, was not strong enough to resist the introduction of new methods during the mid-twenties. The pace of growth and change in the industry, together with the anti-union attitude of major employers meant that unions of skilled men were unable to establish sufficient strength quickly enough to mount effective resistance to mass production.

The tactic of resistance thus gave way swiftly to those of adaption among unions affected by technical change. In some cases union members

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(1) See E. Wigham, op. cit. ch.4, passim and Appendix F.

were instructed to accept work on new processes at less than customary rates in order to retain the job. (1) However, the A.E.U. and the N.U.V.B. were forced during the twenties and thirties to expand vertically, taking into membership semi-skilled production workers, thus adopting more "open" forms of organisation but this process was a gradual one which did not gather pace until the mid-thirties. Increased vertical occupational mobility also encouraged more "open" unions such as the T.G.W.U. to extend recruitment upwards to workers of higher grades of ability and skill. One result of these changes was a growing inter-union rivalry which itself came to act as a spur to organisational expansion and change.

The second part of this study is thus concerned with the analysis of the developing pattern of trade unionism in the motor and aircraft industries, using the framework of "closed" and "open" unionism developed by Turner. Although the questions of growth and structure have been presented separately, in practice they interact. Trade union policies regarding organisation affect both overall growth and the shape of trade union organisation. One is also struck by the possible effect of the collapse of the Workers' Union in the early 1920s upon the subsequent structure of trade unionism in the motor industry and its overall growth before the Second World War. From being a major force among Midlands engineering workers it was reduced to a rump by 1923, at precisely the time that the technical and organisational transformation of the motor industry was really getting under way. Turner has

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(1) The N.U.V.B. instructed its members to accept lower rates for painting vehicles if necessary as paint-spraying machines were introduced. N.U.V.B. Quarterly Journal, April-June 1926, Midlands district report, Midlands area report.

suggested with reference to cotton textiles that "where less skilled workers organise first, this has apparently provided a better basis for trade unionism than has an initial organisation of skilled workers alone." (1) How relevant was the craft unions' dominance of organisation in the motor industry in 1923 to the slow pace of expansion over the next fifteen years? In the concluding section of this study an attempt will be made to explore the interactions between union growth and union structure in the motor and aircraft industries.

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(1) H. A. Turner, op. cit. p. 167.

CHAPTER TWO

EBB AND FLOW IN ORGANISATION, 1914 - 1946 : THE MOTOR INDUSTRY

The extension of trade union organisation to the motor and aircraft industries during the first half of the twentieth century was part of a wider response of trade unions to changes in industrial structure and the distribution of employment. While it is possible to exaggerate the extent of structural change in the British economy between 1900 and 1939 it is clear that significant developments occurred. (1) Certain industries experienced relative or even absolute decline in terms of output and employment. Others, some of which only began to develop at the turn of the century, underwent considerable expansion. The most vulnerable of British industries relied heavily on sales abroad and some, such as cotton textiles and iron and steel, were already feeling the effects of foreign competition before 1914. The war encouraged the creation of over-capacity in others, e.g. shipbuilding, and all of them lost export markets during the 1920s and 1930s. Coal mining, cotton and shipbuilding declined absolutely in terms of output and employment during the inter-war years. Iron and steel production was also hit by loss of export markets but did not experience absolute decline across the board. Pig-iron production dwindled but steel out-

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(1) Deane and Cole argue that there was little change in the relative shares of the major industrial sectors in Gross National Income between 1907 and 1935. See Phyllis Deane and W. A. Cole, British Economic Growth, 1688-1959 (2nd edition, Cambridge, 1969) p.298-9.

-put went through a series of slumps and recoveries between the wars. In all of these cases however, the size of the workforce fell.[1]

At the same time, other industries grew rapidly. Chemicals, light engineering, gas and electricity increased their share of Gross National Income after 1907.[2] The infant motor industry also grew rapidly. Output by volume nearly tripled during 1908-1913. As yet however, motor manufacture was still a small industry and only 34,000 vehicles were produced in 1913. But by 1924 output had risen to 146,000 and in 1937 a peak output of over half a million vehicles was achieved. Employment grew more slowly, although still at a respectable pace, increasing threefold between 1914 and 1939.[3]

The significance of structural change in British manufacturing industry is clearly revealed by changes in the distribution of employment. Textiles, clothing and shipbuilding lost workers; employment in vehicles, metals and machinery expanded at a rate which according to Deane and Cole was approximately twice that of the national workforce as a whole.[4] Changes in the distribution of employment presented problems and opportunities to the British trade union movement.

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(1) S. Glynn and J. Oxborrow, Inter-War Britain : A Social and Economic History (1976) p. 96-100; A.E. Musson, The Growth of British Industry (1978) p. 273-9.

(2) Phyllis Deane and W.A. Cole, op.cit. p. 175-6.

(3) Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938) p. 50, S.B. Saul, "The Motor Industry in Great Britain to 1914"; Business History, Vol. 5 (1962-3) p. 25; Political and Economic Planning, "Motor Vehicles. A Report on The Industry" (1950).

(4) op.cit. p. 146.

Its main strength was in industries in which the labour force was growing more slowly than before or even falling in absolute terms. This limited the possibilities for further expansion. On the other hand the growth of employment in other industries presented new opportunities for recruitment. The extent to which it was possible to sieze these opportunities however, depended upon a variety of circumstances affecting the general environment within which the trade unions worked and individual industries themselves. This chapter aims to describe the organisational efforts made by trade unions among automobile workers and to assess their overall progress in terms of membership, density of organisation and their influence upon working conditions.

The extension of trade union organisation to new groups of workers had, prior to 1914, tended to be a discontinuous process. Breakthroughs were made and then subsequently many, although not all, of the earlier gains were lost, to be made up during the next upsurge. Such breakthroughs had been made during the early 1870s and late 1880s when short-term factors such as movements in real wages and unemployment had provided a favourable basis for expansion. At the same time, growing literacy and economic, social and political awareness among semi-skilled workers and labourers led to trade union organisation developing more widely among them than ever before. Many of these workers were in hitherto weakly organised or unorganised industries such as transport and gas supply. Neglected by established unions of craftsmen, these workers were recruited mainly by "new unions" which were set up to cater for the less skilled

worker during the early 1870s and late 1880s.[1] Depressions during the second half of the 1870s and the early 1890s meant that many of the gains were temporary, but nevertheless, trade unionism did not disappear entirely among less-skilled workers and workers in hitherto unorganised industries.

The next union explosion took place during 1910-1914 as once more prices began to rise faster than money wages, unemployment fell and workers took the opportunity to wipe out sacrifices forced upon them during the depressed years of 1908-1909. Strike incidence rose dramatically, largely due to national stoppages in coal, the docks and on the railways. Trade union membership leapt from just over 2.5 million in 1910 to just over 4 million by 1914. While much of this increase occurred in already well organised industries, the expansion also reinforced the earlier extensions of unionism to neglected groups such as agricultural labourers, railway workers, chemical workers and semi-skilled operatives in mass-production engineering establishments in the midlands.[2]

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(1) In some cases the "new unions" received help from radical members of the craft societies; e.g. Tom Mann, of the Amalgamated Society of Engineers and a member of the Social Democratic Federation, aided Will Thorne in establishing the National Union of Gasworkers and General Labourers in 1889. See H.A. Clegg, A. Fox and A. Thompson, A History of British Trade Unions since 1889, Vol.1 (Oxford, 1964) p. 57-8.

(2) See Richard Hyman, The Workers' Union (Oxford, 1971) ch.3. Many of these groups were only slightly affected by earlier upsurges. ibid. p.191.

It was during the upsurge of 1910-1914 that trade unions first began to consider the organisation of workers in the motor industry. Prior to 1910 unions took little active interest in the infant motor industry although they were represented in some plants. The London Society of Tinplate Workers and the London and Provincial Society of Coppersmiths had members at the Daimler Motor Company by 1907 and the Amalgamated Society of Engineers and the Steam Engine Makers' Society were quite well established at the Phoenix Motor Company at Letchworth. Other unions having members in one or two firms before 1910 were the United Kingdom Society of Smiths, the United Kingdom Society of Coachmakers, the Amalgamated Society of Carpenters and Joiners, the Amalgamated Society of Woodcutting Machinists, and the Workers' Union.(1) However, little mention was made of the motor industry in trade union literature before 1910 and deliberate attempts to organise motor workers or to ensure that trade unionists were hired in preference to non-unionists were rare.(2)

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(1) London Society of Tinplate Workers, "Report of the Committee on Organisation," 1910; Ministry of Labour, Report of an Inquiry into Works Committees (1918) p.71; Amalgamated Society of Engineers Monthly Journal (hereafter referred to as A.S.E. Journal, Jan. 1914.

(2) The exception seems to have been the London Society of Tinplate Workers. This union became concerned about growing unemployment among its members during 1907-1908 and it encouraged its out-of-work members to take jobs in the motor industry. Even in this case however, little was done to build up organisation and in 1908 it was reported that "The Motor Trade has not proved the great boon to our members that we expected....." London Society of Tinplate Workers, "Report of a Special Committee on Unemployment" (2nd Sept. 1908).

From 1910 the picture began to change. Upward movements in prices and falling unemployment encouraged trade unions to extend their activities on behalf of their existing members via demands for improved working conditions, to try to expand their membership and in some cases, such as that of the unions of railway workers, put pressure on employers to grant trade union recognition. These years also saw accelerated growth of the motor industry. Annual output rose from 10,500 to 14,000 during 1908-1910 but by 1913 it stood at 34,000 and approximately 100,000 people were employed in the motor trade.(1)

General and particular circumstances thus combined to encourage greater organisational efforts on the part of trade unions with respect to automobile workers. The London Society of Tinplate Workers was told in 1910 that it should "make every effort to secure effective control in the shops and recognition of our rates and conditions of working" in the motor firms that were "springing up in and around the London district." (2) The Amalgamated Society of Engineers also began to intensify its activities among skilled engineers in the motor plants. By 1914 it had gained members at the Standard Motor Co., Leyland Motors,

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(1) Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938) p. 47; S.B. Saul, "The Motor Industry in Britain to 1914" op. cit. Saul's figure of 100,000 is the only one available for before the First World War. In referring to the "motor trade" it probably gives an exaggerated idea of the number employed in the manufacture of automobiles as that industry has been defined in the introduction to this thesis.

(2) London Society of Tinplate Workers, "Report of the Committee on Organisation", 1910.

Ford, and Crossley Motors where it appointed shop stewards and conducted a successful strike against the suspension of a steward during the summer of 1914. (1)

Organisation of the motor industry was not confined to craftsmen. As mentioned above, a feature of the 1910-1914 period was the renewed growth of trade unionism among semi-skilled workers and labourers. This was particularly true of the engineering trades in the Midlands where the growth of small-arms manufacture, electrical equipment and the cycle and motor trades led to the growing employment of semi-skilled machinists. (2) The leading organisation among these workers just before the war was the Workers' Union.

The Workers' Union was established in 1898 with the aim of recruiting all unorganised workers regardless of trade or skill. This ambitious organisational aim stemmed from consciousness of the growing strength of employers' federations and the fact that in a trade union movement dominated by craft unions, only a minority of workers were organised. The victory of the newly-formed Engineering Employers' Federation in the lock-out of 1897 encouraged ideas of the need for greater solidarity within the labour movement in order to forestall attempts by employers to smash trade unions. At the same time, experience of a series of adverse legal judgments on trade union matters led to demands for an organisation aimed at advancing the interests of labour by political as well as industrial means. These

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(1) A.S.E. Journal Jan-August, 1914 passim.

(2) R. Hyman, "The Workers' Union, 1898-1929." (D.Phil thesis, Oxford 1968) p. 176.

events and ideas led to left-wing trade union militants led by T. Mann forming the Workers' Union in the face of disapproval from officials of the amalgamated craft unions, the Social-Democratic Federation and the Independent Labour Party. (1)

The early growth of the Workers' Union was checked by depression and high unemployment during 1902-1904 and 1908-1909. By 1910 it had only five thousand members at the outside and showed little promise of fulfilling the ambitious goals of its founders. From 1910 however, the union's fortunes began to change and it rapidly built up membership among agricultural workers, metal workers in South Wales, general labourers in Yorkshire and less-skilled engineering workers in the Midlands and the South-East of England. By 1914 the Workers' Union had about 143,000 members and was one of the six largest unions in the country. (2)

The growth of Workers' Union membership among semi-skilled engineering workers automatically involved it in the motor industry. Its efforts among motor workers were concentrated in Coventry and to a lesser extent Birmingham and Derby. In Coventry it was closely involved at the Humber and Daimler companies and in 1913 workers in these plants took part in a wider strike of semi-skilled machinists organised by the Workers' Union in support of a demand for an increase of 6d per hour on their basic rate. The strike was successful, leading to the minimum wage for semi-skilled machinists being raised to 26.6d for a 53 hour week, with overtime being paid on the same basis as that for craftsmen. (3)

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(1) Richard Hyman, The Workers' Union, ch.1 passim.

(2) ibid. p. 35-7.

(3) R. Hyman, "The Workers' Union, 1898-1929" p. 181-2.

In Birmingham the Wolseley Motor Company was the main target in the motor industry and in Derby the Workers' Union established a strong organisation at Rolls-Royce, although most of its membership was employed in the workshops of the Midland Railway Company.[1]

By the outbreak of the First World War trade union organisation was developing quite well among motor workers. Craft-based unions such as the societies of Coachmakers and Tinplate Workers and more generally the A.S.E., were beginning to establish themselves among skilled men in the motor industry. Moreover the already quite large proportion of semi-skilled workers in the larger firms was being organised by the Workers' Union. To all appearances the basis for mass trade unionism was being laid.

The First World War created circumstances which encouraged the further growth of trade unionism. The membership of all unions rose by nearly 2.5 million between 1914 and 1918. One of the areas of most rapid expansion was engineering. Membership of the A.S.E. rose from about 174,000 at the end of 1914 to over 320,000 at the end of 1919, on the eve of its amalgamation with nine other unions to form the Amalgamated Engineering Union.[2] The membership of the

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(1) ibid. The growth of the Workers' Union in the Midlands was greatly aided by the outbreak of strikes among unorganised workers which occurred in 1913. The spontaneous nature of these strikes which resulted in large membership gains for the W.U., was commented on by an A.S.E. organiser; "The Workers' Union is not so much directing the strikes as following them, and is making members by the thousand." Quoted in ibid p. 56.

(2) J.B. Jefferys, The Story of the Engineers, p. 292.

Workers' Union in engineering reached about 200,000 during the war, according to Hyman. (1)

The rapid growth of trade unionism in engineering during the war was encouraged by rapidly rising prices and the disappearance of unemployment, factors which aided the growth of trade union membership generally. Retail prices more than doubled during 1914-1918. Average weekly wage rates for skilled engineers rose by only 73 per cent over the same period. During the first two years of the war, when retail prices rose by more than 40 per cent, skilled wage rates increased by a mere 11 per cent. (2) Unskilled engineering workers did better than the craftsmen in terms of relative movements in prices and average weekly wage rates as rates actually rose by more than the cost of living during 1914-1918. Even so, until 1917 rates lagged behind prices. (3) District wage claims became so numerous that there were delays before they were even considered. No significant improvements occurred until it was decided in February, 1917 to suspend district wage negotiations in favour of national claims to be submitted at not less than four-monthly intervals to the Committee on Production. (4)

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(1) R. Hyman, "The Workers' Union, 1898-1929" p. 211.

(2) G.S. Bain and F. Elsheik, op. cit. Appendix E; J.W.F. Rowe, Wages in Practice and Theory (1928) p. 17.

(3) ibid.

(4) This committee was established in February, 1915 to advise the government on ways of expanding labour supply and increasing productivity in the munitions industries. Under the Munitions of War Act of July, 1915, the committee was given powers of arbitration in industrial disputes and strikes and lock-outs were declared illegal. See G.R. Askwith, Industrial Problems and Disputes (1920) p. 386.

The first national award was made in February, 1917. Previous war-time advances were consolidated into a 7s per week advance on basic rates and a further 5s per week war bonus was added. Subsequently four flat rate increases were awarded to all grades in the munitions industries; 3s per week in June, 1917, 5s in October, 3s.6d in June, 1918 and 5s in October. In addition in August, 1917 a 12½ per cent bonus was awarded to fully qualified engineers on time-work. This was later extended to skilled piece-workers and finally, after pressure from the general unions, to other grades in munitions. (1)

As far as the union leadership was concerned members' living standards could only be protected by means of negotiation with employers and the government. At the outbreak of war union leaders had agreed to suspend strikes in progress. Following the upsurge of unofficial strikes among engineering and munitions workers on the Clyde in February, 1915, the government sought to make abandonment of the strike weapon the subject of formal, if voluntary, agreement under the "Treasury Agreement" of March, 1915. Disputes were to go to compulsory arbitration in return for the imposition of a tax on war profits. The agreement was given legal force when the Munitions of War Act was passed in July. Rising prices, the failure of money wages to rise in line - at least before 1917 - and the official abandonment of the strike weapon resulted in an upsurge of unofficial agitation and organisation in the form of a militant engineering shop stewards' movement, appearing first on the Clyde early in 1915 and spreading

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(1) A.S.E. Journal March, July, Nov., 1917; July, Nov., 1918; J.B. Jefferys, op.cit. p. 182; R. Hyman, "The Workers' Union 1898-1929" p. 201; idem, The Workers' Union p. 86 Earnings held up in relation to retail prices far better than basic rates. See Rowe, op.cit. p. 21.

to Sheffield and Coventry during the next two years. Although highly critical of the official leadership and often opposed by it in turn, the growth of the shop stewards' movement among skilled engineers gave a major impetus to the extension of union membership. Unofficial campaigns on wages were also mounted within the Workers' Union, e.g. in Sheffield during 1917-1918. (1)

Trade union organisation efforts in the engineering trades were also greatly stimulated by the dilution of labour. Acute shortages of skilled labour developed at the end of 1914, partly as a result of indiscriminate recruitment to the armed forces. At the outbreak of the war engineering employers had pressed for the suspension of all restrictive practices so as to enable less skilled workers to be employed on work normally done by craftsmen. The skilled unions had rejected this demand but during 1914 the Engineering Employers' Federation succeeded in obtaining the agreement of the A.S.E. to the introduction of women to the Vickers factory at Crayford to operate machines set up by skilled men. (2) The worsening skilled labour shortage led to the government setting up the Committee on Production which argued for the suspension of trade union restrictive practices for the duration of the war "subject to proper safeguards and adjustments to protect the well-being of the workpeople and their trade unions." These principles

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(1) G.R. Askwith, Industrial Problems and Disputes (1920) p. 360-418 passim; Jefferys, op.cit. p. 175-6, 182-5; R. Hyman, The Workers' Union p. 92; James Hinton, The First Shop Stewards' Movement (1973) chs. 3,5 and 8.

(2) Jefferys, op.cit. p. 156; Report of the War Cabinet Committee on Women in Industry Cmd 135 (1919) p. 108 (University of Kent library).

were incorporated in the Shells and Fuses Agreement signed by the engineering unions and the E.E.F. in March, 1915 and the principle of dilution was extended to other war-related industries by the "Treasury Agreement" and the Munitions of War Act. In the Autumn of 1915 the government introduced a general dilution scheme administered by a Central Labour Supply Committee and the Ministry of Munitions. This meant that any employer producing essential war supplies for the government could supplement his skilled workforce with unskilled labour.(1)

It is not possible to measure the full extent of dilution in the engineering industry but it is clear that large numbers were involved. The War Cabinet Committee on Women in Industry reported that 45,000 women were trained by the Ministry of Munitions to perform sheet metal work, acetylene welding and aeroplane construction during 1917-18. Women doubled as a proportion of the labour force in the woodworking trades, from 15 per cent in 1914 to 30 per cent by the end of the war.(2) In government-controlled motor and cycle factories the proportion of women and youths in the labour force

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(1) G.R. Askwith, loc. cit.; G.D.H. Cole, Workshop Organisation (1923, reprinted 1973) p. 48, 61.

(2) Cmd 135 (1919) p. 94.

rose from between 10 and 15 per cent of the total in July, 1914 to over 41 per cent by January, 1918.[1] In addition of course, there was an influx of less skilled adult males to the engineering industries which, although no figures exist, must have been considerable.

The dilution of labour proved to be a major source of conflict in the engineering industry. It was the most common cause of strikes and in 1917 a proposal to extend dilution to private as opposed to government contracts sparked off the greatest strike movement of the war.[2] As far as skilled engineers were concerned, dilution threatened to undermine established conditions by injecting "cheap labour" into their trades. Unions of skilled men were anxious to regulate the process of dilution in order to maintain craft organisation and protect craftsmen's earnings from competition from the less-skilled.[3] As with wages issues, the main way in which the dilution question encouraged the growth of organisation was by stimulating workshop organisation and the shop stewards' movement. Reactions to dilution varied from an

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(1) Monthly Reports on Labour in Controlled Establishments, P.R.O. MUN 5/102/360/102. A government-controlled establishment was one in which wages were subject to regulation by the government under the terms of an amendment to the Munitions of War Act passed in January, 1916 as a result of trade union pressure. The government was empowered to issue directives to firms on munitions work which related to the wages of unskilled and semi-skilled labour. See Jefferys, op.cit. p. 178.

(2) B. Pribicevic, The Shop Stewards' Movement and Workers' Control, 1910-1922 (Oxford 1959) p. 32-6; James Hinton, The First Shop Stewards' Movement ch. 7.

(3) Pribicevic, op.cit. p. 32-3; G.D.H. Cole, Workshop Organisation p. 39-40

unsuccessful attempt by the Clyde Workers' Committee to place dilution under the complete control of the committee to the establishment of union-sanctioned works committees aiming to ensure that dilution was introduced to factories with as little friction as possible. (1)

Unions of skilled men were suspicious of dilution but the leadership realised that total resistance was out of the question. Mass opposition only came in 1917 when the government sought, unsuccessfully, to extend dilution to private work. For the most part union officials were prepared to accept dilution on government munitions work so long as it was guaranteed that dilutees would be dismissed from skilled jobs after the war and that before dilutees were introduced into an establishment there should be adequate consultation with union representatives. This meant that greater attention was given to building up workshop organisation by appointing shop stewards and getting works committees elected. In 1918 a Ministry of Labour committee of inquiry reported that "the problem of dilution has been one of the most potent forces in forwarding the movement towards works committees" and that trade unions saw such committees, composed of shop stewards, as a means of strengthening organisation. (2)

Dilution also encouraged unions of less-skilled workers to extend their membership. Unions of skilled men made no real effort to organise dilutees although they did mount wage demands on their behalf, insisting that after a period of probation dilutees performing skilled work should receive the skilled rate. (3) The field was thus left open for general unions and societies catering especially for women, such as the National Federation of Women Workers which grew from just over 10,000 in 1914 to over 31,000 by 1917. (4)

(1) Hinton, op. cit. ch.4; Cole, op. cit. ch.6.

(2) Ministry of Labour, Report of a Committee of Inquiry into Works Committees (1918) p. 9-12, 37-8. The devolution of responsibility and power to the shop floor did however, create tensions between shop stewards and full-time officials. On Clydeside the A.S.E. wanted negotiations over dilution to be under the direction of the union's district committee rather than left to representatives in individual firms, possibly as a way of controlling the militancy of the munitions workers who, although in a minority among engineering workers on the Clyde, dominated the unofficial movement. In Coventry in April 1917, union officials denounced a strike by workers at the Hotchkiss gun factory in support of a demand for the recognition of their works committee and told employers to ignore the committee. As a result two works committees were set up; one, which was officially recognised by management, was under the strict supervision of trade union officials. The other was an unrecognised committee established by militant workers. See Hinton, op. cit. p. 154-5, 216-7.

(3) H. Pelling, A History of British Trade Unionism p. 153. This demand was conceded by the government in an amendment to the Munitions of War Act in January, 1916.

(4) Ministry of Munitions, Report of the Women's Employment Committee Cmd. 9239 (1919) Appendix V11.

By far the most important organiser of dilutees in engineering during the war was the Workers' Union. It saw the war as providing an opportunity to expand its membership among less-skilled engineering workers and urged members to organise them "as they have never been organised before". In 1915 the Workers' Union leadership stated its belief that women had become a permanent force in the industry and its intention to make the Workers' Union their leading representative.(1) By the end of the war the Workers' Union had about 170,000 members in the Midlands - more than the total membership of the union in 1914 - and there was rapid growth among engineering workers in London and the South-East. Here membership, which had been of little account in 1914, rose to approximately 80,000. The union's female membership rose from 5,000 to 80,000, most of the increase coming during 1916 - 1918.(2) The National Union of General Workers (the National Union of Gasworkers and General Labourers) competed with the W.U. for engineering dilutees - competition between the W.U. and the N.U.G.W. for females is said to have been fierce (3) but the W.U. established by far the greatest presence.

Undoubtedly workers in the motor industry shared in the growth of trade unionism during the First World War. However, automobile production contracted as motor car sales slumped and this was not fully compensated for by the growth of demand for military vehicles.

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(1) Workers' Union, Annual Report 1914, 1915.

(2) R. Hyman, "The Workers' Union, 1898-1929" p. 100,105. idem., The Workers' Union p.87-8.

(3) R. Hyman, "The Workers' Union 1898-1929" p.101.

The Rover Motor Company for example, manufactured four hundred lorries during 1915-1917 but produced only 149 motor cars compared with 1,943 in 1914 and its motor-cycle output dried up completely. Morris Motors, which sold over a thousand vehicles in 1914 sold only 240 cars and chassis in 1918.[1] Other motor firms such as Austin, Crossley and Rolls-Royce became increasingly involved in making aero-engines.[2] Employment nevertheless continued to grow, probably as a result of the greater involvement of motor firms in aircraft work.[3]

In view of the general nature of the problems facing trade unions in the engineering trade during the war and the broadly-based nature of recruitment, it is not surprising that little separate mention was made of the efforts in the motor industry. However, there is sufficient evidence to suggest that trade unions continued to pay attention to the motor firms, especially where they dominated local engineering production. The outstanding example was Austin's Longbridge plant in Birmingham which employed 20,000 workers by 1918. The A.S.E. and

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(1) R.B. Pugh (ed), Victoria History of the Counties of England: Warwickshire Vol. 8 (1969) p. 182; P.L. Cook and R. Cohen, Effects of Mergers (1958) p. 359; P.W.S. Andrews and E. Brunner, The Life of Lord Nuffield (1955) p. 112.

(2) "Memorandum on War Munitions Volunteers" (1918) P.R.O. MUN 3/230; A.S.E. Journal April, 1918, Organising District Delegate's Report (hereafter referred to as O.D.D.'s Report) division 7; Nov. 1918, O.D.D.'s Report, division 8.

(3) Official sources estimated that employment in motor and cycle establishments rose from a little over 100,000 in July, 1914 to approximately 124,000 in January, 1918. Ministry of Munitions, Monthly Report on Labour in Controlled Establishments (July, 1914) P.R.O. MUN 5/101/360/100; ibid. (Jan. 1918) P.R.O. MUN 5/102/360/102.

other unions of skilled men established a works committee there in 1917. Organisation was strong enough to prevent the transfer out of the district of the committee's chairman, Arthur Peacock, whom the men suspected was being victimised in view of the company's refusal to recognise the works committee. The campaign to save Peacock promoted greater interest in trade union membership among the less-skilled workers at the plant and representation on the Longbridge Works Committee was extended to them during the early months of 1918. (1) Thereafter the Longbridge plant attracted the attention of militants within the unofficial movement and the National Administrative Council of Shop Stewards' organisation in Birmingham (the Birmingham Workers' Committee) (2) tried unsuccessfully in June to use the refusal of Austin to recognise the Longbridge Works Committee as the basis for a one-day general strike in Birmingham to secure the wider recognition of works committees and shop stewards in the district. (3)

Elsewhere the A.S.E. put pressure on motor firms to conform to the conditions of work approved by its district committees and employ its members. One example was the McCord Lorry Company at Cricklewood where, following the firm's refusal to employ union men or pay union rates, the A.S.E. instigated a successful embargo on

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(1) Hinton, op. cit. p.227; Roy Church, Herbert Austin. The British Motor Car Industry to 1914 (1979) p.45.

(2) The N.A.C.S.S. was the coordinating body of the wartime shop stewards' movement.

(3) ibid. p. 228; Birmingham Trades Council, Minutes 17 May, 1 June, 5 Oct. 1918; Birmingham Daily Post 14, 17, 21 May, 1918.

labour supply to the company, eventually forcing it to conform to A.S.E. conditions relating to pay and the employment of trade unionists.[1] As in other branches of engineering organisational efforts were encouraged by the need to protect district rates, ensure that wartime bonus awards negotiated with the Committee on Production were being paid, and to protect the interests of skilled men in the face of dilution.

Woodworking unions were also active in their efforts to recruit vehicle builders in the motor industry. The United Kingdom Society of Coachmakers, spurred on by its desire to resist the introduction of payments by results, attempted to mount a joint organising campaign in London with the London and Provincial Coachmakers' Society. However, the small size of these organisations and their limited appeal to workers in the larger establishments due to their exclusive craft outlook meant that they enjoyed little success. The United Kingdom Society entered the war with 12,000 members. By 1919 it still had only 13,682. The London and Provincial's membership remained insignificant, amounting to 1,146 in January, 1914 and 1,603 in 1919.[2]

The Workers' Union continued its efforts among workers in the motor firms of Birmingham, Coventry and Derby. Membership grew at Austin, among workers in motor firms in Coventry and at Rolls-Royce at Derby, especially from 1916 onwards. In addition it

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(1) A.S.E. Journal August 1915, O.D.D.'s Report, division 10.

(2) U.K. Society of Coachmakers, Quarterly Report and Journal Oct. 1914; National Union of Vehicle Builders, A Short History of the N.U.V.B. 1834-1959 (1959) p. 18; London and Provincial Society of Coachmakers, Annual Report 1914.

developed organisation at Foden's Ltd., the commercial vehicle company at Sandbach and during 1915 members at the firm struck successfully for an increase of 3s per week and the right for union officials to meet with managment. A 3s advance was obtained for semi-skilled operatives and labourers at Leyland Motors in January, 1917 and membership increased. (1) However, it appears that the locus of Workers' Union organisation remained firmly seated in the Midlands since although its membership in London and the South-East grew faster than anywhere else during 1914-1918, it consisted overwhelmingly of workers in shell factories, naval yards and the Royal Small-Arms factory at Enfield Lock. No mention was made of motor workers. (2)

The rapid growth of trade union membership did not end with the termination of the war. Conditions during the first eighteen months of peace favoured the continued build-up of trade union organisation throughout industry. Industrial production regained and surpassed pre-war levels as war losses were made up and pent-up consumer demand was released. Unemployment remained at low levels and prices continued to rise rapidly. In these circumstances unions were quick to demand compensating wage increases. In engineering the system of national wage awards developed during the war was continued until 1920 and advances of 5s and 3s.6d per week were awarded to time-

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(1) Workers' Union Annual Report, 1914-1917; Workers' Union Record Jan. 1917.

(2) Workers' Union Annual Report 1914-1918; Workers' Union Record 1914-1918. See also R. Hyman, "The Workers' Union, 1898-1929" p. 110-1.

workers in January and December, 1919. Pieceworkers also benefitted as a result of an agreement in April, 1919 which guaranteed that pieceworkers "of average ability" should earn 33⅓ per cent above basic time rates, excluding war bonuses. Working hours in engineering were reduced at the beginning of 1919 from 53 to 47 for a standard week. (1)

In the motor industry, output recovered quickly, aided by protection from American competition through the McKenna Duties and reached 60,000 vehicles in 1920 compared with the pre-war peak of 34,000. (2) The demand for labour was brisk and in this atmosphere workshop organisation continued to thrive and was in some cases extended to new establishments, for example the Sunbeam Motor Company at Wolverhampton. (3) The bouyancy of trade and the high demand for skilled labour in motor plants also encouraged some of the smaller unions to strengthen their organisation in their branches of the industry. One example is that of the National Society of Brassworkers

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(1) R. Hyman, "The Workers' Union, 1898-1929" p. 206-7

(2) The 1920 output figure is from P.W.S. Andrews and E. Brunner, The Life of Lord Nuffield p. 96. The McKenna Duties were imposed in 1915 to save foreign exchange and shipping space. They were retained after the war and were supplemented in 1921 by the Safeguarding of Industries Act. Imported vehicles were subject to a 33 per cent ad. valorem duty. See W. Ashworth, An Economic History of England, 1870-1939 (1960) p. 270-1, 393; A. Plummer, New British Industries in the Twentieth Century (1937) p. 74.

(3) This firm agreed at the end of 1918 to meet officials of the A.S.E. to discuss the establishment of shop committees. A.S.E. Journal Jan. 1913, O.D.D.'s report, division 9.

and Metal Mechanics which began to step up recruitment among wire wheel makers in Coventry. By 1920 it had made sufficient progress to raise its members' wage rate to the same as that for fitters and turners.(1)

The promise of more effective organisation of automobile workers was held out by the formation by amalgamation of the National Union of Vehicle Builders in 1919 and the Amalgamated Engineering Union in 1920. Both amalgamations were chiefly inspired by the feeling of a need to counterbalance the growing effectiveness of employers' associations by uniting as many societies in their industries as possible, and to avoid demarcation disputes.(2) These amalgamations did, however, have their limitations from the point of view of serving as vehicles for the development of mass trade unionism in engineering and vehicle building. Something of a committment to the extension of

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(1) Brassworkers and Metal Mechanics Quarterly Journal Jan. and Sept. 1920.

(2) The N.U.V.B. was formed by amalgamation of the London and Provincial Society of Coachmakers, the United Kingdom Society of Coachmakers, the Operative Coachmakers' Federal Union in London and the Vicemen's Trade Society in London. National Union of Vehicle Builders, A Short History of the N.U.V.B. 1834-1959 p. 17-18. The A.E.U. grew out of the merger of the A.S.E. with nine other engineering societies in 1920. These were the United Machine Workers' Association, the United Kingdom Society of Amalgamated Smiths and Strikers, the Steam Engine Makers' Society, the East of Scotland Brassfounders' Society, Associated Brassfounders', Turners', Fitters', Finishers' and Coppersmiths' Society, the Amalgamated Instrument Makers' Society, London United Metal Turners', Fitters' and Finishers' Society and the North of England Brass Turners', Fitters' and Finishers' Society. J.B. Jefferys, op.cit. p. 295; See also A.S.E. Journal August, 1919.

organisation beyond the ranks of the skilled was embodied in Rule 1 of the N.U.V.B., which stated that the union "shall be open to all skilled and semi-skilled workers" engaged in the construction and finishing of all types of vehicle bodies, including locomotives, agricultural machinery and aircraft as well as motor cars and coaches. In practice, as will be shown later, the committment to the recruitment of workers other than craftsmen remained virtually non-existent until the end of the 1930s.

The amalgamation in engineering was far from complete. A number of important societies had not joined the amalgamation, e.g. the boilermakers, foundry workers, patternmakers and electricians. Those which had amalgamated were the smaller unions only. The amalgamation was something of a tidying up operation rather than a genuine manifestation of industrial unionism or even a very effective response to the growth of the E.E.F. since it was only those unions which were least viable as independent organisations which amalgamated with the A.S.E. In addition, the A.E.U. did not represent much of a movement towards all-grades organisation. The claim of the Executive Council that the union catered for all skilled and semi-skilled engineering workers was false. Semi-skilled workers were allowed to join that section of the union open to those not qualified or over the age limit for admission to the skilled sections but no real effort was made to recruit them. Women and the operators of automatic and semi-automatic machinery remained excluded until 1926. According to one member of the union therefore, in 1920 the A.E.U.

was "a craft union and still retains the odious features of craft unionism." (1)

The growth of organisational effectiveness was thus clearer in the case of the N.U.V.B. than the A.E.U., since the former brought together a number of relatively small, locally based unions to form a national organisation of some size in order to counteract the emergence of an employers' federation among motor body builders and the growing size of body building and assembly businesses. In its first published report in July, 1919 the Executive Council told members of the weakness of the union outside London and of the steps which were being taken to improve the position. Additional district organisers were appointed for London (effectively the whole of the South of England), Birmingham, Manchester, Scotland and Ireland. Membership in July, 1919 stood at just under 18,500. By April, 1920 it was 25,300 and a number of new branches had been set up in London and the Midlands. (2)

Meanwhile the Workers' Union had continued to build up its membership in Coventry and Birmingham to a total of over 90,000. Its greatest efforts in the motor industry were probably at Austin in

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(1) A.E.U. Rules 1920; Jefferys, op. cit. p. 208; A.E.U. Journal July, 1920. There was some considerable feeling among younger members that policy on membership was too exclusive, and in 1920 the National Committee of the A.E.U. passed a resolution recommending that the executive open membership of the A.E.U. to operators of automatic and semi-automatic machinery. National Committee Report, 1920.

(2) N.U.V.B. Quarterly Report and Journal July, 1919, April, 1920; National Union of Vehicle Builders, A Short History of the N.U.V.B. p. 20-1.

Birmingham, which according to Hyman was an important source of membership, but efforts were obviously made at many other firms, since by 1920 the W.U.'s organisation in the Midlands motor industry had developed powerfully. (1) It also began to recruit more widely among skilled workers following the Restoration of Pre-War Practices Act which relegated many of its members who had progressed to virtually skilled status in terms of earnings, to labourers. (2)

The period from 1910 to 1920 thus saw attempts to build mass union organisation in the engineering industry generally and this had a considerable impact on automobile workers. A significant improvement in the machinery for organising less-skilled workers occurred with the rise of the Workers' Union and a more effective organisation for woodworkers and bodymakers in the motor industry emerged in the form of the N.U.V.B. in 1919. These factors, together with the continued efforts of the A.S.E./A.E.U. and other societies led to the development of what was probably quite a large trade union presence in the motor industry, especially in the Midlands. This position was destroyed however, during the post-war slump of 1921-1922. The index of industrial production for the United Kingdom fell from 90.3 in 1920 to 73.5 in 1921 (1924 = 100) and unemployment rose from 3.9 per cent to 16.9 per cent of the insured workforce, marking the beginning

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(1) R. Hyman, "The Workers' Union, 1898-1929" p. 143, 215-6.

(2) ibid p. 240-7. The W.U. did not seek to compete directly with unions of skilled men; rather it organised skilled workers in plants where there was no craft union presence.

of the mass unemployment which was to persist throughout the inter-war period. (1)

The slump in the motor industry began in October, 1920 and was described later as the most severe to have hit the industry, being worse in its proportionate effects than that of the 1930s and coming so suddenly and unexpectedly while firms were ill-prepared to meet it. (2) The index of vehicle output fell from 70.7 in 1920 to 62.7 in 1921 (1924 = 100), some firms suspended production and workers were laid off in large numbers. (3) Automobile firms were vulnerable at this time since many were small, operating at high levels of costs. Also, some had borrowed heavily during the boom in order to extend their body making capacity and so correct imbalances in their plants caused by the switch to wartime production. (4) The slump in the motor industry was short lived however and output and employment began to climb from 1922 onwards, a growth that was only interrupted during 1929-1932, until a pre-war peak was reached in 1937. (5) Nevertheless, the

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(1) Production figures are taken from K.S. Lomax, "Growth and Productivity in the United Kingdom" Productivity Measurement Review Vol. 38 (1964). Unemployment rates are from Department of Employment and Productivity, British Labour Statistics : Historical Abstract (1971) p. 306.

(2) P.W.S. Andrews and E. Brunner, The Life of Lord Nuffield p. 98.

(3) Output figures are from A.E. Musson, The Growth of British Industry op. cit. p. 277.

(4) British Association, Britain in Recovery (1938) p. 153.

(5) See Appendix 1; Output and Employment in the Vehicle Industry.

depression of 1921-1922 had far-reaching effects upon the development of automobile trade unionism.

The depression was a signal to employers to cut wages and to launch a counter-offensive against labour in order to recover such control over conditions of work in the factories as had been lost during the upsurge of union organisation in the engineering trades in the previous ten years. The first attack was on wages as during 1921 the engineering employers withdrew the percentage bonuses which had been awarded during 1917-1918. Vehicle building employers also forced wage reductions of 2d and 3d per hour upon the N.U.V.B. during 1921-1922 and during the Spring of 1921 the National Employers' Association of Vehicle Builders forced the introduction of payments by results systems to their shops and insisted that the N.U.V.B. should cease to interfere with the hiring and conditions of work of apprentices.(1) The Workers' Union also faced reductions of 6s.3d per week in Birmingham and Coventry at the beginning of 1921 and further reductions were enforced as prices continued to fall during 1921-1923.(2)

The downturn in production and trade and rising unemployment also provided the basis for a clash between employers and unions over the proper extent of managerial control in the engineering industry. Initially the issue in dispute was overtime but it rapidly widened into one of whether managment had the right to sole control over their establishments or whether their decisions should be subject to a trade

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(1) Jefferys, op.cit. p. 219-20; N.U.V.B. Quarterly Journal Jan-March, 1921; A Short History of the N.U.V.B. p. 21.

(2) R. Hyman, "The Workers' Union, 1898-1929" p. 207-9.

union veto. In November, 1921 the Engineering Employer' Federation demanded that the A.E.U. sign a memorandum in which it was declared that unions should not interfere with the rights of employers to manage their own establishments. Managment decisions were to be obeyed and any questions arising from those decisions should be resolved within the established grievance procedure. Meanwhile, pending resolution of these questions, managment's instructions were to be followed. There was also included a specific mention of overtime working in which it was stated that managment had the right to decide when overtime was necessary. This last point was unacceptable to the A.E.U. which, in view of rising unemployment, had begun to campaign for the abolition of systematic overtime and had in fact initiated an embargo on overtime working. However, the A.E.U. leadership, anxious to avoid a confrontation with the E.E.F., agreed to ballot its membership on the terms of the memorandum. Against the advice of the union executive the members rejected it and A.E.U. members were locked out of Federated establishments on 11th March, 1922.

It seems to have been the case that the E.E.F. used the overtime issue as an excuse to wrest authority in the workshops from the engineering unions, since having locked out the A.E.U., the Federation then threatened to lock out fifty other engineering unions with whom it was not in dispute unless they gave a written undertaking to accept the right of managers to exercise their "managerial functions". As a result a number of other unions were locked out on the 2nd May. The determination of the Federation to obtain acceptance of the principle of managerial control was explained in the Federation's report in 1922; "The union representatives made it clear that they are determined that any restrictions they have been able to impose as a result of the abnormal conditions during and since the war in relation to managerial

acts shall be maintained."[1] During the war managerial control over a range of issues such as the manning of machines and the conditions of work of apprentices had been eroded by a combination of government control in munitions and challenges from the shop stewards' movement. Attempts had been made to place stewards within a regulatory framework which defined and limited their functions within the shops by means of shop stewards' recognition agreements in 1917 and 1919.[2] Nevertheless, employers felt that the principle of their right to manage freely, which had been laid down in the 1898 Terms of Settlement following the previous engineering lock-out, had been undermined and they were determined to restore it in full. The result of the 1922 lock-out was a foregone conclusion. Engineering had suffered badly from the slump. A quarter of the A.E.U's members were unemployed and consequently there had occurred a severe drain on its finances. In fact it took three months before the employers' victory was conceded and the principle of the "right to manage" enshrined in the 1922 Managerial Functions Agreement. The 1922 agreement made matters affecting the hiring and dismissal of workers, their disposition within the factory, the organisation of work, overtime and methods of payment subject to managerial decision. Questions arising out of such decisions

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(1) Quoted in E. Wigham, The Power to Manage. A History of the Engineering Employers' Federation op.cit. p. 120. See also p. 110-119; Jefferys op.cit. p. 217-26.

(2) The 1917 agreement was of little effect since it was rejected by the A.S.E. on the grounds that no provision was made for the recognition of works committees. The A.S.E. signed the 1919 agreement which was extended to works committees as well as stewards. See G.D.H. Cole, Workshop Organisation op.cit. p. 72-4.

could be discussed within the procedure for avoiding disputes laid down in the agreement but until that procedure had been exhausted work was to proceed according to managment instructions.[1] The lock-out temporarily exhausted the funds and energy of the engineering unions and employers took advantage of this to press for the wider introduction of payments by results and where possible to introduce new machinery manned by semi-skilled workers.

There exists little detailed information relating to the effects of 1921-1922 upon trade unionism in the motor industry but it is evident that they were serious. Hyman wrote that "the calamitous slump in the motor industry allowed the employers to smash almost irretrievably the previously powerful trade union organisation" in Birmingham and Coventry.[2] It is clear that some federated motor firms used the 1922 lock-out to break trade union organisation. In December, 1922 the A.E.U. reported on the Jowett Motor Company's behaviour after the lock-out at a central conference with employers.[3]

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(1) See A.I. Marsh, Industrial Relations in Engineering (Oxford 1955) p. 264; Wigham, op.cit. Appendix F.

(2) R. Hyman, "The Workers' Union, 1898-1929" p. 216.

(3) The central conference was the final stage of grievance procedure where representatives of the national executives of the trade unions and the E.E.F. came together.

> "..... since the lock-out finished there has not been a single A.E.U. man started at Jowett's. Every man who goes there is asked if he is a member of the Society and he is asked to fill in a form to say whether or not he is a member, and in no single instance has a man who has had to say that he was a society man been started at Jowett's." (1)

The A.E.U.'s position at the Austin Motor Company was also severely weakened until the late 1930s as a result of the slump and the firm's participation in the engineering lock-out. Quite strongly organised up to 1920, by 1923 "only the woodcutting machinists and the vehicle builders possessed anything approaching effective organisation." (2) So far as the N.U.V.B. and other woodworking unions in the motor industry were concerned, 1921-1922 was probably a temporary crisis since they were not drawn into the conflict with the E.E.F. to any great extent. The N.U.V.B. made gains in the motor industry during 1923-1925 as the demand for labour in motor body building rose considerably. A growing proportion of the union's members were employed in automobile work and the union encouraged those of its members who were skilled in railway, tram and other vehicle building to fill the growing number of vacancies in the motor industry, going to the lengths of ordering branch secretaries to stop paying unemployment benefit to

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(1) "Report of a Central Conference Between Representatives of the Engineering and Allied Employers' National Federation and Various Trade Unions" (hereafter referred to as "Engineering Central Conference Report") 7th December, 1922, Bradford reference.

(2) Roy Church, Herbert Austin op.cit. p.148.

out-of-work members where they were satisfied that they were qualified for motor work.[1] Modest increases in membership between 1922 and 1926 were recorded in Birmingham (from 650 to 701), Coventry (from 1,710 to 2,286), Manchester (from 612 to 1,069) and more spectacular growth took place in West London where the Shepherds Bush branch, newly formed in 1923, reached a total membership of 600 by April, 1926.[2]

In contrast, the A.E.U. experienced decreases in membership in major automobile centres. In Birmingham its membership fell from 4,375 in June, 1922 to 3,037 in June, 1925 and in Coventry from 8,971 to 2,879. This suggests that the slump and lock-out had a more adverse effect upon the A.E.U.'s position in the motor industry. In fact it was not until the recovery from the depression of 1929-1932 that the A.E.U. began to make headway once more in the main motor towns.[3]

The overwhelming blow to the development of mass unionism in the motor industry during the 1920s however, was the collapse of the Workers' Union. Membership, which had reached 495,000 in 1920, fell to 140,000 by 1923 - a loss of 70 per cent. There was a temporary halt

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(1) N.U.V.B. The Vehicle Builders, 1834-1972 (1972) p.10; N.U.V.B. Quarterly Journal, April-June, 1923, General Secretary's Report.

(2) N.U.V.B. Quarterly Report and Monthly Journal, Jan., 1922, April,1923, April, 1926, returns from branches.

(3) A.E.U. Journal, June, 1922; June, 1925 branch returns.

to the decline during the mid-1920s but the downward course was resumed after 1926.(1) Other "general" unions experienced heavy membership losses during the early 1920s owing to the particular vulnerability to unemployment of the unskilled, but the Workers' Union experienced the most spectacular decline. The reason for the particular severity of the Workers' Union's experience has been identified as the large concentration of its organisation in agriculture and engineering, sectors in which the impact of the depression was particularly severe.(2) The fall in engineering membership was enormous. In Birmingham and Coventry it plummetted from around 90,000 in 1920 to a little over 15,000 by the end of 1923 as a result of depression and the 1922 lock-out. By 1929 it stood at about 9,000.(3) The decimation of the W.U. in the Midlands effectively broke up trade union organisation among semi-skilled workers in the motor industry, who continued to grow as a proportion of the workforce. In spite of reports in 1923 that the employment situation in Birmingham had begun to improve as a result of renewed growth in the motor and cycle trades and an

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(1) According to Hyman the General Strike sealed the union's fate. Already in a parlous financial situation owing to huge membership losses and heavy outlays in the form of unemployment and dispute benefit, it had to pay out a total of £58,000 in 1926. This put the union seriously into deficit and its finances, like its membership, never recovered. When it amalgamated with the T.G.W.U. in 1929 it was virtually bankrupt. R. Hyman, The Workers' Union p.136.

(2) Output in mechanical engineering - excluding vehicles - fell by a third during 1920-1921. A.E. Musson, op.cit. p.277.

(3) R. Hyman, "The Workers' Union, 1898-1929," p.143.

admonition to district organisers in 1925 to be alert to opportunities for developing membership in the expanding motor industry, the Workers' Union was a spent force by the mid-1920s.[1]

Efforts to organise the motor industry were resumed during the mid-1920s. In 1923 and 1924 visits were made to some motor plants as part of the T.U.C.'s "Back to the Union" campaign.[2] The mid-twenties also saw more specific efforts beginning to be directed at motor plants in the Midlands and Greater London and the South-East. Organising meetings were held for motor workers in Birmingham and Coventry by the N.U.V.B. and A.E.U. and also in Manchester by the N.U.V.B. The Vehicle Builders were successful in developing a position of strength in some important plants such as Austin Motors where by 1926 it was reported that the union was strong in all relevant departments, Crossley Motors, where it established what was effectively a closed shop and Leyland Motors, where it had succeeded in securing the retention of craftsmen in shops to which mass-production

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(1) Workers' Union Record June, 1923; Workers' Union Annual Report 1925.

(2) The T.U.C. mounted a propaganda campaign to call workers back into their unions and encouraged and aided trade unions and trades councils to mount their own campaigns at all levels - workshop, branch, district etc. Enthusiasm for the campaigns varied, largely according to the state of trade and employment in each area. The A.E.U. also said that general campaigns of this kind were more suited to unskilled workers and their unions than the skilled, who were more restrictive in outlook. See A.E.U. Journal July, 1923, O.D.D.'s Report, division 9 and 17.

methods had been introduced.[1] Progress was also made in Coventry where, by 1927-1928 the N.U.V.B. was described as "practically 100 per cent and powerful."[2]

The A.E.U. began to hold organising meetings in Coventry in 1925 and in spite of poor results continued its efforts among motor workers during 1926 and 1927, and during the latter year meetings held at the Hillman, Humber and Armstrong-Siddeley plants were well attended. Even so, by 1930 it appears that the A.E.U. had only succeeded in organising one-tenth of the workers eligible for membership.[3] Efforts were resumed in Birmingham during 1927, concentrating on the Austin works, and continued over the next two years. Meetings of branch officials and shop stewards were held to discuss ways of mounting effective propaganda campaigns, which led to a permanent organising committee being set up.[4]

The A.E.U. and the Vehicle Builders also began to attempt the organisation of motor plants in London and the South-East during the

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(1) N.U.V.B. Monthly Journal Oct. 1923, Midlands District Report; Quarterly Journal April-June, 1923, Liverpool District Report; Quarterly Journal Jan-March, 1924, General Secretary's Report. It is clear that the N.U.V.B. organising effort was not so severely hampered by the events of 1921-1922 as that of the A.E.U. given the earlier recovery of organisation.

(2) Trades Union Congress, "Survey of Trade Union Organisation", 1930-1931. (T.U.C. Library, Congress House).

(3) A.E.U. Journal April, 1925, March, 1926, June, 1927, O.D.D.'s Report, division 18; T.U.C. "Survey of Trade Union Organisation" 1930-1931.

(4) A.E.U. Journal May, 1928, O.D.D.'s Report, division 17; A.E.U. Journal May, 1930, National Organiser's Report.

mid-1920s. The main targets were Daimler in North-West London, Dodge in West London and Citroen on the new trading estate at Slough.[1] So far as the A.E.U. was concerned the growth of the Citroen Company at Slough was the factor that awakened its interest in the motor industry in the South-East. The company, which had set up operations on the new trading estate at Slough, began production in 1926. It was reported as employing 1,000 men and as having plans for further expansion. A.E.U. interest was aroused for two reasons; firstly the considerable scope for recruitment among the quite large labour force and secondly because the firm was seen as threatening the maintenance of the A.E.U's district rate for engineers as long as it was unorganised. "All sorts of rates..... and bare time for overtime" were said to be paid, so it was considered essential to organise workers in the plant and see that district agreements were honoured. Accordingly a national organising official was sent to Slough in February, 1926 to launch a campaign among engineering workers and a Joint Trades Committee was formed with other unions in the area to deal with labour organisation generally. Progress however, was minimal, with membership of the A.E.U. branch in Slough only rising from 95 to 168 between February and July, 1926.[2]

The energies of the N.U.V.B. and the A.E.U. also came to be directed towards the Daimler Motor Company's plant at Hendon in

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(1) N.U.V.B. Quarterly Journal April-June, 1926, London District Report; A.E.U. Journal Feb., 1926, National Organiser's Report and O.D.D.'s Report, divisions 23 and 25.

(2) A.E.U. Journal Feb., 1926 National Organiser's Report, O.D.D.'s Report, division 23; Journal March, April, 1926, National Organiser's Report; Journal July, 1926, branch returns.

North-West London during 1926. The Vehicle Builders mounted a drive for 100 per cent membership and the Engineers appointed shop stewards and got a works committee elected.[1] Elsewhere, work-gate meetings were held at E.N.V. Motors, J.A.P. Motors, Bentley and A.E.C. in West and North-West London during 1928-1930.

Organising efforts failed to take hold in Oxford and Luton, the other two areas in which motor production expanded during the 1920s. In Oxford N.U.V.B. members were not in regular communication with the branch and following an unsuccessful attempt to organise men in the main Morris shop in 1925, the N.U.V.B.'s enthusiasm for organisation waned. In 1926 the Oxford City Trades Council commented on the lack of any sort of trade union activity in the district. The first A.E.U. organiser to be sent to Oxford arrived in 1928 and efforts to recruit motor workers were almost completely unsuccessful.[2]

Although the Vehicle Builders and the Engineers mounted renewed organising efforts among automobile workers during the mid-1920s it appears that they were somewhat sporadic and uncoordinated so that the largest firms were not greatly affected by the campaigns. From 1929

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(1) N.U.V.B. Quarterly Journal April-June, 1926, London District Report; A.E.U. Journal Feb., 1926, O.D.D.'s Report, division 25.

(2) N.U.V.B. Monthly Journal Dec., 1925, General Secretary's Report; Quarterly Journal Jan-March, 1929, London District Report; Trades Council Joint Coordinating Committee minutes 19 Jan., 1926; A.E.U. Journal Nov., 1928, National Organiser's Report; Journal Feb., 1930, O.D.D.'s Report, division 20. No mention whatsoever was made of the Vauxhall Motor Company in Luton in the Journals or minutes of either the Vehicle Builders or the A.E.U. after 1925.

onwards the picture begins to change. It is of course true that efforts continued to be made to organise the smaller firms, especially on the bodymaking side of the industry. The National Union of Vehicle Builders sought to enhance its position among high quality motor manufacturers and specialist, high quality bodymakers as it found its position as a union of skilled men who were chiefly woodworkers undermined elsewhere as mass production methods of body construction using pressed steel panels were adopted by the larger assembly businesses during the 1930s. The union mounted organising efforts with considerable success at firms such as Park Ward Ltd., Park Royal Coachworks Ltd., and Duple Bodies in outer London. It set up shop committees in the first two establishments and achieved 100 per cent organisation there by the mid-1930s. At Duple's it succeeded, after a struggle, in obtaining a measure of recognition from management in 1937.(1) In the Midlands its efforts centred on high-quality manufacturers such as Armstrong-Siddeley, Daimler and Rover where it attempted to rebuild its organisation after suffering from something of a collapse during 1929-1932.(2) However, the central theme in the history of automobile trade unionism from 1929 onwards is the growing concern with the organisation of the large mass production plants; Austin Motors, Ford and related companies at Dagenham and Morris and Pressed Steel in Oxford. Two features stand out in this respect;

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(1) N.U.V.B. Monthly Journal Jan., 1934, June, 1936, April, 1937, London District Report.

(2) N.U.V.B. Coventry branch minutes 7 June, 16 August, 15 Dec., 1932, 19 Dec., 1933, 24 March, 15 Sept., 1936. 19 August, 1, 8, 17 Sept., 1937; N.U.V.B. Monthly Journal April, 1934, Midlands District Report.

the importance of strikes in generating large-scale organisational efforts and the renewed interest in the recruitment of semi-skilled operatives from the mid-1930s.

In 1929 trade unions led by the N.U.V.B. and the A.E.U. made their first serious attempt since the post-war slump to organise one of the major motor plants - Austin at Longbridge. As shown above, trade union organisation among semi-skilled workers and engineers at Austin had been smashed during 1921-1922, leaving only the Wood-cutting Machinists and the Vehicle Builders with any real organisational base. In 1926 however, these unions also suffered a deterioration in their position as a result of the reactions of Austin managment to the General Strike. Although it is argued that members of the E.E.F. did not impose onerous conditions upon men returning to work after the strike, since the engineers' involvement in it had been so brief, there were exceptions.[1] The Austin Company stated that strikers would

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(1) Engineering workers were among the "second wave" to be called out after the first week of the strike. Thus many were only on strike for a day. The view outlined above may be found in G.A. Phillips, The General Strike. The Politics of Industrial Conflict (1976) p.248-9. As far as the E.E.F. in Birmingham is concerned there appear to be conflicting views. M. Morris, The General Strike (1976) p.101 says that "The Birmingham Engineering Employers' Federation agreed to take the men back on the same terms as before". However, R.P. Hastings refers to the Birmingham Daily Post in stating that "The Engineering and Allied Employers' Federation refused to give the engineering unions any assurances upon re-engagement". R.P. Hastings, "Birmingham" in Jeffrey Skelley (ed) 1926 The General Strike p.224. Whatever the view of the Birmingham E.E.A. however, a number of federated firms, including Lanchester and Austin, discriminated against strikers when taking men on.

be taken on "only as conditions allowed and as the company required them." (1) As a result both the Woodcutting Machinists and the Vehicle Builders' organisation suffered as strikers were not rehired.

In February, 1929 however, an incident arose which prompted renewed organisational efforts at Austin. During the late 1920s Austin began a programme of investment in the mechanisation of the assembly of car chassis and bodies. At the same time, closer attention was paid to labour utilisation and a system of grading work by the amount of skill required was developed which provided the basis for determining piece rates. In February, 1929 the firm decided to apply the grading system over a wider area and on a more intensive basis. In doing so a reduction in average wages in the departments affected resulted. This raised a storm of protest and despite advice from the A.E.U. to take no drastic action "in view of the exceptionally weak state of organisation", between 5,000 and 8,000 workers, the great majority of whom were non-unionists, struck in March, occupied the plant and elected its own strike committee. (2) The strike was spontaneous, supported chiefly by unorganised workers and owed nothing to the efforts of the unions or the Communist Party. (3) The company

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(1) R.P. Hastings, ibid.

(2) Roy Church, Herbert Austin op.cit. p.99-101, 150-1; N.U.V.B. Monthly Journal April, 1929, Midland and South-West District Report; A.E.U. Journal Feb. and March, 1929 O.D.D.'s Report, division 17.

(3) See R. Martin, Communism and the British Trade Unions, 1924-1933 (Oxford 1969) p.114-5.

shut the factory and refused to negotiate with anyone but trade union officials and only then after the men had returned to work. Trade unions told their members to go back to work pending negotiations but the vast bulk of the strikers who were outside the unions stayed out, refusing to allow union officials to negotiate on their behalf and insisting that the managment should meet with the strike committee.(1)

In spite of the rejection of union aid by the strikers, union membership showed signs of growing during the dispute. The N.U.V.B. put in considerable organising effort, made 150 new members within a few days and saw the strike as revitalising what had been a moriband state of organisation.(2) A further boost was given to the status of trade unions at Austin when after ten days the strike committee, unable to get a hearing from the managment, asked the unions to form a negotiating committee. The committee consisting of four trade union officials representing the A.E.U., N.U.V.B., and A.S.W.M. together with four shop representatives and a representative of the women in the plant, succeeded in gaining considerable concessions. Rather surprisingly the company agreed not to implement the intensified grading system and to accept the principle of mutual consultation with union representatives in the plant concerning the fixing of piece rates. It also agreed to recognise shop stewards under the terms of the 1919 Engineering Shop Stewards' Agreement, fix minimum rates of pay for

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(1) A. Hutt, The Post-War History of the British Working Class (1937 reprinted Wakefield 1972) p.193-4.

(2) N.U.V.B. Quarterly Journal April, 1929, Midlands and South-West District Report.

semi-skilled men and to increase women's rates.[1] The unions lost no opportunity to contrast the success of their own efforts with the failure of the unofficial strike committee. Further members were gained and a shop stewards' committee was elected. The success at Austin stimulated wider efforts at the organisation of motor workers in the district, the A.E.U. sending a national organiser to help the local District Committee build up membership at Austin and other motor and motor-cycle firms in Birmingham and Wolverhampton, e.g. B.S.A., Sunbeam, Villiers, A.J.S. Motorcycles and Guy Motors.[2]

The improved organisation at Austin was not, however, strong enough to withstand the effects of the depression during 1929-1932. Men were laid off and the A.E.U. alleged that managment was taking advantage of the opportunity to get rid of shop stewards and other active union members. In spite of denials from the firm, allegations of victimisation persisted as stories of dismissals of stewards or their transfer within the firm with the aim of breaking up union organisation appeared in the A.E.U. Monthly Journal. The allegations led to a conference of union officers and the Birmingham Engineering Employers' Association at which the unions were assured that Austin would adhere to the 1919 Shop Stewards' Agreement in which stewards were recognised as legitimate representatives of workers in their shops so long as they acted within the terms of agreed collective bargaining and grievance

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(1) A.E.U. Journal May, 1929, National Organiser's Report, O.D.D.'s Report, division 17; N.U.V.B. Quarterly Journal July-Sept., 1929, Midlands and South-West District Report.

(2) A.E.U. Journal May, 1929, National Organiser's Report.

procedure. Nevertheless, by 1932 the Austin Shop Stewards' Committee had ceased to function and trade unionism at Austin slumped once more.(1)

In spite of the general set-back to organisational efforts engendered by the depression, unions remained prepared to mount recruitment campaigns when opportunities to gain members arose in important firms, even in the depths of the slump. Such an opportunity arose during 1930-1933 when the Ford Motor Company set up and opened its new plant at Dagenham, providing employment for 6,000 workers when production commenced in 1931.(2) In addition, factories were opened by Briggs Bodies and the Kelsey-Hayes Wheel Company in Dagenham. The first move on the part of the unions was made in November, 1930 by the A.E.U. Organising District Delegate in the area, who tried to arrange an interview with the manager of the Ford plant at Dagenham through the firm's head office in London with a view to discussing the employment of A.E.U. members. However, he was prevented from meeting the Dagenham managment, head office putting him off by saying that production was not due to start for some months.(3) Efforts to recruit Ford workers began during 1931-1932, led by the A.E.U. and the Vehicle Builders who together with other

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(1) A.E.U. Journal June, July, August, 1930, O.D.D.'s Report, division 17; Roy Church, op.cit. p.152.

(2) A.E.U. Journal Dec., 1930, O.D.D.'s Report, division 25; Henry Friedman and Sander Meredeen, The Dynamics of Industrial Conflict. Lessons from Ford. (1980) p.22.

(3) A.E.U. Journal Dec., 1930, O.D.D.'s Report, division 25.

trade unions set up a Dagenham Joint Trades Committee to organise meetings and the distribution of handbills. However, little progress was made until 1933 when the company began to implement wage reductions, starting among production line workers. There appears to have been no immediate response to this on the part of the men and no trade union involvement. When the cuts reached the toolroom in March, the toolmakers walked out, precipitating, somewhat to their surprise, a mass strike of around 7,000 workers.(1) The neighbouring body manufacturing company, Briggs Ltd., responded to the Ford strike by locking out its own workers. The strike at Ford lasted three days and ended with the men returning to work after managment had conceded a scheme to upgrade most adult workers, to provide increases of up to 6d per hour for some, to improve sanitary conditions in the factory and to allow men to take complaints about working conditions to the managment.(2) At Briggs Bodies the men refused to return to work when recalled at the end of the Ford dispute and stayed out for a further week, demanding improvements in wages and the provision of dining facilities, demands which were eventually accepted by the managment.(3)

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(1) Jack R. Longworth, retired divisional organiser of the A.E.U. in R.A. Leeson, Strike, A Live History 1887-1971 (1973) p.126; N.U.V.B. Quarterly Journal July-Sept., 1933; A.E.U. Journal April, 1933 O.D.D.'s Report, division 20.

(2) Confederation of Shipbuilding and Engineering Unions, Annual Report 1934.

(3) Friedman and Meredeen, The Dynamics of Industrial Conflict op. cit. p.55; N.U.V.B. Monthly Journal July 1933, Assistant General Secretary's Report.

The strikers at Ford and Briggs were unorganised workers[1] and the strike itself was spontaneous despite the fact that Jack Longworth, an A.E.U. member who had been transferred to Dagenham from the Ford plant at Trafford Park, went to see the A.E.U.'s London District Organiser as soon as the tool-room was given notice of the wage reductions.[2] The strike was described by the Vehicle Builders' Assistant General Secretary as "a revolt of the unorganised against tyranny and oppression."[3] Trade unions were quick to take advantage of the situation however, advising the strikers and attempting to recruit them.[4] The London District Organiser of the A.E.U. reported a new "sense of solidarity and need for organisation" among Ford workers and Jack Longworth recalled that the strike "was a bit of a turning point. Afterwards hundreds joined the union." The strike committee continued in existence as the Ford Workers' Committee and according to Longworth, gave help to other workers in the motor industry.[5]

Membership gains in Dagenham were, however, ephemeral. In April, 1933 there was a two-week shut-down at Ford's and the

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(1) Friedman and Meredeen, op.cit. cite Bob Lovell, the A.E.U. District Secretary from 1943-1955 as saying that the A.E.U. had only 30 members at Ford during the early 1930s.

(2) Longworth in Leeson, op.cit.

(3) N.U.V.B. Monthly Journal July, 1933

(4) Confederation of Shipbuilding and Engineering Unions, Annual Report 1934.

(5) A.E.U. Journal Jan., 1934, O.D.D.'s Report, division 20; Longworth in Leeson, op.cit. p.127.

chairman of the March strike committee was sacked.[1] Membership of the N.U.V.B. and A.E.U. branches in Dagenham and Ilford showed only small increases during 1933-1935, although the A.E.U. did better than the Vehicle Builders.[2] A Communist Party booklet published in 1936 argued that the absence of trade union organisation due to the failure of Ford workers to build upon the strike action of 1933 was maintaining the exploitation of labour and in 1939 Dagenham was referred to as a "black spot" area in terms of trade union organisation.[3]

In spite of these set-backs, which might have been expected given economic conditions generally, the strikes at Ford's and Briggs Bodies marked the beginning of a long-term effort to organise motor workers in Dagenham during the 1930s. At the end of 1933 the A.E.U. tried unsuccessfully to get the Ministry of Labour to give official support to its claim for recognition at Ford's and Briggs Bodies.[4] With the recovery of automobile production during 1933 the A.E.U. also took advantage of the local demand for skilled die and press-tool workers

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(1) A.E.U. Journal Oct., 1933, O.D.D.'s Report, division 20.

(2) Membership of the N.U.V.B.'s Ilford branch rose from 77 in 1933 to 90 in 1935. The union had no Dagenham branch at this time. The A.E.U.'s Ilford branch membership rose from 181 at the end of 1933 to 324 two years later. That of the Dagenham branch increased from 172 to 260. See N.U.V.B. Monthly Journal and Quarterly Financial Report, Dec., 1933, 1935; A.E.U. Journal, Dec., 1933, 1935.

(3) "Men and Motors" (1936); Trades Union Congress Report 1939

(4) A.E.U. Journal Jan., 1934, O.D.D.'s Report, division 20.

to ask such men not to accept work at Briggs Bodies unless they received the union-recognised overtime and nightshift rates and further, albeit unsuccessful, attempts were made to obtain recognition of the unions on the Joint Trades Committee from Ford, Briggs and Kelsey-Hayes during 1934.(1) As yet however, the unions in Dagenham were weak and were unable to capitalise on a strike of unorganised workers at the Kelsey-Hayes plant in August, 1935; the A.E.U. managed to recruit only nineteen new members.(2)

The difficulties of organisation in Dagenham and in other parts of Greater London in which new branches of engineering were developing led to the attention of the T.U.C. being drawn to the problem. At the Margate Conference in 1935 the General Council reported that its organisation committee had considered "the question of Trade Union Organisation in the Greater London Area, particularly with regard to the new industrial areas springing up in the outer belt where there is no Trade Union tradition and very little Trade Union organisation." A conference of representatives of unions had been held in December, 1934 and it had been proposed that local trades councils should be reorganised in such a way as to enable them to take a more active role in aiding union recruitment.(3) The issue was discussed again in the

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(1) Motor vehicle output rose from 232,719 in 1932 to 286,287 in 1933 and 342,499 in 1934. The index of employment in the construction and repair of motor vehicles, cycles and aircraft rose from 103.5 in 1932 to 114.6 in 1933 and 127.9 in 1934. Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938) p.50; A.E.U. Journal Feb., July, Sept., 1934, O.D.D.'s Report, division 20.

(2) A.E.U. Journal Oct., 1935, O.D.D.'s Report, division 20.

(3) Trades Union Congress Report 1935, Report on Organisation.

following year and the T.U.C. sponsored organisation campaigns in Barking, Dagenham and Romford, campaigns which were said to have been relatively successful in terms of recruitment.(1)

Larger-scale better co-ordinated campaigns in Dagenham, together with economic improvement generally and continued expansion in motor output combined to provide better rewards in return for organising efforts after 1935, although trade union members continued to be a very small minority among Dagenham motor workers. During 1936 the A.E.U.'s district organiser succeeded in getting an interview with the managment at Briggs Bodies to discuss the application of union rates and conditions to the factory. A.E.U. organisation among die and tool workers began to improve and advances of between 2d and 4d per hour were conceded by managment.(2) Gradual accretions of membership among skilled workers enabled the A.E.U. to put pressure on Briggs' managment to institute paid holidays in 1938, following a propaganda campaign mounted in Dagenham by the local trades council and the Joint Trades' Committee.(3) Furthermore, at the end of 1938 the A.E.U. was able to mount a three-week ban on overtime involving 500 workers which forced Briggs' managment to agree to abide by the

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(1) Trades Union Congress Report 1936, 1937 Report on Organisation. Membership of the A.E.U.'s Dagenham branch rose from 260 in 1935 to 445 in 1937. At Ilford it grew from 324 to 434. A.E.U. Journal Dec., 1935, 1937.

(2) A.E.U. Journal Oct., Nov., 1936, O.D.D.'s Report, division 20.

(3) A.E.U. Journal June, 1938, O.D.D.'s Report, division 20; Trades Union Congress Report 1939 Report on Organisation.

union's district agreements on working hours, overtime and night-shift rates.[1] Thus a battle to obtain recognition of these rates at Briggs, which had begun five years earlier, was finally won. The victory was only partial, however, since the company continued to withhold formal recognition. Moreover, as far as organisation among motor workers in Dagenham as a whole was concerned, progress was still limited. Ford and Kelsey-Hayes continued to be virtually non-union establishments and where organisation had begun to take root, as at Briggs, it was largely confined to skilled men.[2]

It was a strike of unorganised workers also which stimulated the first large-scale organising efforts among motor workers at Cowley, Oxford during 1934. Trade unions had made only half-hearted efforts there during the 1920s. Renewed activity began during the early 1930s, with the A.E.U. running a campaign among skilled engineers during 1930-1931.[3] More significantly perhaps, the Transport and General Workers' Union started recruitment campaigns among employees of Pressed Steel and Morris Motors during 1933. Although this campaign

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(1) A.E.U. Journal Jan., 1939, O.D.D.'s Report, division 20.

(2) The T.G.W.U. had some interest in the Ford Motor Company, reporting on the state of production at Dagenham in 1932. However, the minutes of the General Council and the Metal and Engineering Trade Group contain no reference to recruitment at the plant before the Second World War. See T.G.W.U. Metal and Engineering Trade Group Committee, minutes 21 Oct., 1932.

(3) A.E.U. Journal Feb., August, Dec., 1930, O.D.D.'s Report, division 20; Feb., June, July, Nov., 1931 O.D.D.'s Report, division 18.

was a purely local affair, run by the union's branch in Oxford, it represents one of the first efforts at the organisation of motor workers by the T.G.W.U. and the revival of serious attempts to organise the growing number of semi-skilled production workers in the motor industry.

The presence of the T.G.W.U. in the engineering industries derived very largely from its absorbtion of the Workers' Union in 1929. Hyman states that the T.G.W.U.'s membership in private engineering firms in 1930 was 24,790 and that this was "almost wholly derived from the Workers' Union. (1) This membership was organised into a provisional Engineering Trade Group in 1930. The Group covered workers employed in engineering factories, foundries, shipyards, carriage and wagon works, railway workshops and in cable, wire and accumulator manufacture. Following ratification of the decision to establish the new group by the 1931 Delegate Conference of the union, the Group was formally constituted as the Metal, Engineering and Chemical Trade Group. (2)

From the middle 1930s onwards the T.G.W.U. followed by the A.E.U. made rapid progress among workers at the Pressed Steel body plant at Cowley. It was here that the revival of mass unionism among motor workers began in 1934. The occasion for the take-off of trade union organisation at Pressed Steel was a strike of unorganised workers in July of that year.

The Pressed Steel body plant began operations just over the road from the Morris factory in Cowley in 1927. Initially Morris had a sizeable shareholding in Pressed Steel and was its sole customer. However, it soon became clear that other contracts were necessary if Pressed Steel was to be a going concern and other motor assembly

(1) R. Hyman, "The Workers' Union, 1898-1929" p. 212.

(2) T.G.W.U. Report for the Year Dec., 1929 - Dec., 1930 Report for the Year Ended Dec., 1931. The T.G.W.U. during the 1920s was divided into both regional and industrial groupings - Area Committees and Trade Groups. The first Trade Groups, established upon the T.G.W.U.'s formation in 1922 were for Docks; Waterways; Administrative, Clerical and Supervisory; Road Transport - Passenger; Road Transport - Commercial; General Workers. In 1923 a Trade Group was added for fishermen and during 1925-26 Groups for coastal seamen and power workers were established. In 1929 the Workers' Union was incorporated as a Trade Group but it was split up, its engineering members forming the basis for the Metal and Engineering Trade Group when it was established in 1931. T.G.W.U. Annual Reports. The Trade Group principle was Bevin's response to the problem of organising a union in which a number of distinct industrial groupings were included. In order for the interests of these groupings to be adequately represented, they had to be granted a measure of autonomy. A dual system of Trade Groups and Area Committees appeared to answer the case. Trade Groups would represent the specific industrial interests of members and Area Committees would coordinate the actions of the Trade Groups along the general lines of T.G.W.U. policy. The idea for Trade Groups apparently stemmed from Bevin's observation of the Trade Department system of the American Federation of Labour which encouraged unions affiliated to the A.F.L. to coordinate their efforts along industrial lines. See T.G.W.U., "The Union, its Work and Problems".

businesses were reluctant to place orders for bodies with what looked like the subsidiary of a major competitor. Because of this, the financial connection between Morris and Pressed Steel was severed, save for the continuation of a debenture holding by Morris, in 1929.[1]

Pressed Steel employed a number of highly skilled workers such as tool fitters, patternmakers and skilled machinists as well as many semi-skilled operatives. A large number of production workers came from outside the district as during the depression of 1929-1932 men from South Wales and the North East of England migrated to Oxford in search of work.[2] Conditions at Pressed Steel were harsh by comparison with Morris Motors and probably most of the large assembly businesses. Pressed steel body manufacture was heavier, noisier, dirtier and more dangerous than assembly work so that in spite of the provision of social and welfare facilities, a basis for the development of grievances existed.[3] The company was prosecuted in 1930 for failing to fence off a power press and according to Whiting there was a

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(1) P.W.S. Andrews and E. Brunner, The Life of Lord Nuffield p. 132-3; D. McEvoy, "From Firm Foundations - A Study of the Trade Union Recognition Strike at Cowley; July 13th to July 24th, 1934". (Unpublished dissertation, Westminster College of Education, Oxford 1972) p. 1-4.

(2) By 1936 there were 4,882 immigrants from other areas working in the motor industry in Oxford. R.C. Whiting, "The Working Class in the 'New Industry' Towns Between the Wars; The Case of Oxford". (D. Phil thesis, Nuffield College, Oxford, 1978) p.63.

(3) Welfare provision was by no means complete, since there were no adequate canteen facilities until 1937. ibid, p.180.

high accident rate in the plant up to 1933 when a Safety First Association was set up.[1] In addition, the system of piecework operated at Pressed Steel contained seeds of conflict since it was a straight piecework system with no guaranteed minimum earnings. These conditions had led to four short strikes during 1929-1931, three of which were over pay and the other over working conditions and discipline. None of the strikes lasted for more than a day but they meant that during 1927-1933 Pressed Steel had the highest strike rate in the motor industry.[2]

It was a dispute over pay which sparked off the strike of July, 1934. Discontent had mounted in the Press Shop over the piece-rates to be paid for work on bodies for the 1935 Morris models. When on Friday, 13th July Press Shop workers on the night shift found that their wages were short, they struck on the following Monday. On the evening of Thursday, 19th July the managment posted lock-out notices. By this time the strike had spread to workers outside the Press Shop and 750 men were reported as being on strike. By 26th July over 1,000 workers were on strike or locked out.[3]

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(1) Oxford Times, 13 Feb., 1930; Whiting, op.cit. p.179

(2) Whiting, op.cit. p.172.

(3) D. McEvoy, op.cit. p.13-19; A.E.U. Oxford branch minutes 23 July, 1934; Letter from A.E.U. Oxford District Committee to Head Office, 28 July, 1934 (A.E.U. Oxford branch minute book); T.G.W.U. Finance and General Purposes Committee, minutes 10th August, 1934.

The strike at Pressed Steel, as at Austin in 1929 and Ford and Briggs in 1933, was spontaneous and virtually all the strikers were non-unionists.[1] However, they were not quiescent as the strikers of 1929-1931 had shown and there was a small nucleus of activism in the plant. The Communist Party attempted during 1933 to infiltrate Pressed Steel and had twenty members in the T.G.W.U. there by the time of the strike. This group published a rank-and-file paper, The Conveyor, for workers at Pressed Steel and urged them to join a trade union.[2] It was for this reason that the strikers turned at first to the Communist Party for assistance. A strike committee was organised by the C.P. and A.B. Lazarus, a C.P. member who had been involved in a similar strike at the Firestone Rubber Company in West London, acted as an outside spokesman for the strikers. As at Austin in 1929, offers of assistance from trade unions - in this case the N.U.V.B. and the United Patternmakers - were refused.[3]

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(1) N.U.V.B. membership in Oxford was recorded as 39 in December, 1933, that of the A.E.U. 68. N.U.V.B. Monthly Journal and Quarterly Financial Report, Dec., 1933; A.E.U. Monthly Journal, Dec., 1933. The United Patternmakers had about 40 members at Pressed Steel on the eve of the strike. McEvoy, op.cit., p.20.

(2) McEvoy, op.cit., p.13-15; Whiting, op.cit., p.252; H. Pelling, A History of British Trade Unionism (2nd edition, 1965) p.204.

(3) A.E.U. Oxford branch minutes 23 July, 1934; Dudley Edwards, "1934. How Trade Unionism Came to Pressed Steel" (Oxford Militant Pamphlet Oct., 1979 p.6-9). The Communist Party slogans were "No-one negotiates but the strike committee" and "No-one on the strike committee but strikers." It was only later that the mistake of excluding trade union officials was recognised as it was necessary "to ensure trade union approval of any agreement arrived at with the managment." Communist Review, Sept., 1934.

Communist Party direction of the strike in its early stages centred around maintaining solidarity, organising pickets and drawing up a list of demands to be presented to the managment. In these efforts it was highly successful since when the employers re-opened the plant on 23 July the men refused to return to work except on the following terms; a minimum rate of 1s.6d per hour and the abolition of piece-work in the production shops, a minimum of 1s.2d per hour for truckers, a production bonus, the right to elect shop committees, recognition of trade unions by managment and a promise that strikers would not be victimised at the end of the strike. The employers agreed to the "no victimisation" clause and said that they had no objection in principle to shop committees. They ignored the other demands however, apart from stating their committment to the principle of the "open shop".(1) The strike committee tried to increase the pressure on the company by obtaining assurances from workers in Dagenham, Birmingham and Coventry that any work transferred from Pressed Steel would be "blacked". In addition, the use of blacklegs was resisted by means of large-scale pickets backed up by a threat from Morris workers - who were themselves unorganised and who did not have any previous history of militancy - to strike if Pressed Steel employed blacklegs.(2)

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(1) McEvoy, op.cit.

(2) Picket lines at Pressed Steel were joined by a number of Oxford undergraduates, a contrast to 1926 and indicative of the effects of the depression and the rise of European Fascism upon the views of the young. Pressed Steel did in fact try to employ blacklegs during 17-19 July, well before the ultimatum from Morris workers. Army volunteers were brought in but some of them joined the picket lines and the rest were withdrawn almost immediately. Edwards, op.cit., McEvoy, op.cit., p.28,31.

On 26 July the strike committee, anxious to bring the strike to a victorious conclusion but unable to get a hearing from the managment, met with officials of the T.G.W.U., A.E.U., the Vehicle Builders and the Patternmakers' Association to draw up a further set of proposals to submit to the company. The new proposals demanded a guaranteed minimum rate of 1s.8d and full union recognition. T.G.W.U. officials approached the Pressed Steel managment via a representative of the Engineering Employers' Federation on 26 July and a meeting was arranged for the following day. At the meeting the company announced its intention of joining the Engineering Employers' Federation, thereby automatically conceding union recognition. It also agreed to the demand for the 1s.8d basic rate and agreed generally to abide by the conditions of work set out in the national engineering agreement. (1)

The involvement of trade unions in the Pressed Steel strike was delayed where, as in the case of the N.U.V.B. and U.P.A., it was not opposed by the strike committee at the outset. T.G.W.U. organisers did not arrive until 18 July and the A.E.U. District Committee only gave its official support to the strike on 27 July, the day before it ended. (2)

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(1) T.G.W.U. Metal, Engineering and Chemical Trade Group minutes (hereafter T.G.W.U. MEC minutes 27 July, 1934 Appendix A. The A.E.U. District Secretary wrote to Bevin on 28 July "Dear Sir and Br., I have been instructed to notify you that the Pressed Steel Co. has today given the D.C. in writing an undertaking to recognise the A.E.U. and meet our officials at a later date. Our members are therefore instructed to resume work on Mon. 30th inst....." (A.E.U. Oxford branch minute book).

(2) A.E.U. Oxford branch minutes 27 July, 1934.

The initial reaction of the A.E.U.'s Oxford branch to the strike was a mixed one. Some members felt that they had been locked out and were unwilling parties to the dispute so long as the A.E.U. had no control over the strike. One member went so far as to try to keep the men in his department at work. Others felt that they had come out in sympathy with the non-unionists and were willing to stay out until the issues of the piece-rates for the 1935 models and the deficiencies in the strikers' pay-packets had been resolved.(1) A vote of the branch was taken on 24 July on whether to return to work or declare a strike on behalf of the union. Members voted for a return to work by 21 votes to 6, recommending at the same time that shop stewards be elected immediately.(2) On the following day however, the branch received a letter from the National Executive Council advising that strike benefit would be paid and instructing local officers to "make preparation for the receipt of proposition forms for those who are eligible for membership." As a result the Oxford District Committee passed a resolution on 27 July that the Oxford branch's decision to return to work be ruled out of order as it had not been submitted to the District Committee for ratification. It was also proposed that

> "This District Committee be convinced that this dispute is for trade union recognition and to support the dispute for that purpose and withdraw all A.E.U. members working at the Pressed Steel Co. except two pattern-makers, to take effect at noon the 28th July, 1934."

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(1) A.E.U. Oxford branch minutes 24 July, 1934.

(2) ibid.

(3) A.E.U. Oxford branch minutes 25, 27 July, 1934. The branch's decision to return to work on 24 July had little practical effect since most of the men were not prepared to cross the picket lines. McEvoy, op.cit. p.30; Communist Review, Sept., 1934.

The A.E.U. was tardy in its involvement with the Pressed Steel strikers but the other unions in the area quickly got hold of the fact that the strike was partly about union recognition and began a recruiting campaign. Each of the unions operating at Pressed Steel enlarged its membership during and immediately after the strike but progress was shared unevenly between them. The Vehicle Builders and the A.E.U. made only a few members during the strike although they did succeed in obtaining seats on the Pressed Steel Works Committee which was set up following the settlement of the dispute.(1) Progress continued to be slow during 1935. In April the N.U.V.B.'s London organiser spoke of the "great problems" of organisation in Oxford and during the year membership of the Oxford branch rose from 39 to only 72.(2) The A.E.U. also experienced difficulties during 1934-1935 despite the appointment of six shop stewards during 1934. By October, only 100 new members were enrolled and these gains were maintained but not added to during 1935.(3)

In contrast the T.G.W.U. made fairly substantial gains among semi-skilled workers. It claimed to have recruited 600 members during the strike and by the end of July its membership at Pressed Steel was over 1,000.(4)

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(1) N.U.V.B. Monthly Journal, July, 1937, London District Report.

(2) N.U.V.B. Monthly Journal, April, 1935, London District Report.

(3) A.E.U. Oxford branch minutes 1 Aug., 27 Sept., 18 Oct., 1934; A.E.U. Journal, Nov., 1934, O.D.D.'s Report, division 18.

(4) T.G.W.U. Finance and General Purposes Committee, minutes 10 Aug., 1934. The Communist Review of Sept., 1934 claimed that 98 per cent of unskilled workers had joined the T.G.W.U. but the union itself recorded a membership of 1,000 and a potential membership of 3,000. See T.G.W.U. MEC minutes, 27 July, 1934, Appendix A; MEC minutes, 20 Oct., 1934.

A new branch was set up for workers in Cowley, shop stewards were appointed in most departments at Pressed Steel and by January, 1935 the T.G.W.U. was claiming 100 per cent membership in most departments. Organisation was strongest among truckers, slingers and crane drivers, press shop workers, machine shop workers, production welders, shearers, assembly floor welders, workers in the fender shop and semi-skilled workers employed in the trim department, where the T.G.W.U. had stolen a march on the Vehicle Builders.(1) However, the T.G.W.U. did have problems of its own. Allegations that the firm was victimising shop stewards were made during 1935. The managment denied this and invited the union to present cases of alleged victimisation to a works conference. Since nothing further was heard of the matter the allegations cannot be taken too seriously. Of greater significance was the problem of getting those who had joined the T.G.W.U. to pay subscriptions. It has been suggested that many of those who joined failed to pay their contributions so that the growth of membership was partly illusory. This problem was aggravated by the attitude of the Communist Party representatives within the factory who tended to play down the need for regular contributions to the union and for regular

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(1) T.G.W.U. MEC minutes 27 July, 1934, Appendix A; MEC minutes 2 Oct., 1934, 2 Jan., 1935 (Area 5 Report). The N.U.V.B. claimed the right to prior organisation in the Trim shops, a claim which extended to semi-skilled workers. This was rejected by the T.G.W.U. See N.U.V.B. Quarterly Journal April-June, 1935, "Report of a Conference with the T. & G.W.U. Regarding Organisation in Mass-Production Establishments"; T.G.W.U. MEC minutes 2 Jan., 1 Feb., 26 April, 1935.

attendance at branch meetings, being more concerned with workshop organisation.(1)

It was shop floor based militancy which was responsible for an up-surge of unofficial strikes during 1936-1938 as a result of which membership of all unions in Pressed Steel received a large boost. The first recorded incident occurred on 24 June, 1936 when men refused to work on a new body for the Standard Motor Company unless there was 100 per cent union membership in the shop. The men were also protesting about what they claimed to have been the arbitrary fixing of piece-prices for the job as rates had been fixed without consulting shop representatives. Two days later, truckers told managment that they would strike unless there was 100 per cent union membership in their shop and an advance in wages of 1½d an hour by mid-day. The management rejected these demands, the truckers stopped work and a strike committee was elected. On 29 June the national secretary of the Metal, Engineering and Chemical Group of the T.G.W.U. met with branch officers and the strike committee and recommended a return to work pending negotiations. The strikers refused and the plant was closed on 1 July. Later that day, having been told that their action was unconstitutional (i.e. in breach of agreed disputes procedure) the men returned to work and a series of meetings was held to discuss the position of truckers, crane drivers and slingers.(2)

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(1) T.G.W.U. MEC minutes 24 April, 1935; Interview with Mr. J. Thomas, ex-Oxford District Secretary of the T.G.W.U. Apparently there were even some shop stewards who were in arrears.

(2) T.G.W.U. MEC minutes 13 July, 1936.

"Wildcat" strikes recurred frequently during 1936-1938, usually as a result of disputes over piece-rates, although early in 1937 the truckers struck again to enforce a closed shop (100 per cent trade unionism). Only one man in the department had refused to join the T.G.W.U. and this resulted in a one-day stoppage with 1,400 to 1,600 workers being laid off. It ended when the recalcitrant individual agreed to join the union. The demand for a closed shop spread to other departments and the T.G.W.U. gained a further 800 members by the end of April. (1)

It has been argued that the rash of unofficial strikes at Pressed Steel stemmed from impatience with the grievance procedure to which Pressed Steel and the unions were parties under the terms of the Engineering Procedure Agreement, that this impatience led to an attitude of ambivalence towards the unions on the part of workers at Pressed Steel, and finally that the strikes themselves yielded few tangible gains to the workforce. (2) The strikes did, however, enhance the position of trade unions and shop stewards at Pressed Steel, even if the real extent of membership gains may have been more limited than

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(1) T.G.W.U. MEC minutes 23 April, 1937. Strikes of this nature were deprecated by full-time officials of the T.G.W.U. and A.E.U. The T.G.W.U. argued that "wildcat" strikes disrupted relations with Pressed Steel managment and the E.E.F. and led to increases in membership which were often more nominal than real, their main effect being to add to administrative costs. ibid. The A.E.U. also condemned the frequency of unofficial disputes, referring to "a growing tendency to involve the union in unofficial disputes..... claimed to be necessary on the grounds of organising activity." A.E.U. Journal May, 1935.

(2) Whiting, op.cit. p. 259-70.

enthusiastic local militants suggested. Membership of the T.G.W.U. grew from 2,000 in 1936 to between 6,000 and 8,000 by the beginning of 1939, reaching virtually 100 per cent organisation at Pressed Steel.(1) By 1939 the N.U.V.B. had improved its organisation at the plant, gaining a strong position among skilled workers in the Trim shop.(2) The A.E.U. opened two new branches during 1936-1937 and its membership rose from 175 in 1935 to 875 at the end of 1938.(3) The A.E.U. also began to extend its membership to semi-skilled workers in the factory, encouraged by a breakaway movement among some T.G.W.U. members who left that union after an unsuccessful one-day unofficial strike in 1938 which aimed to secure the reinstatement of a shop steward who had been dismissed for acting in breach of agreed procedure and to resist an attempt by managment to restrict the power of shop stewards in

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(1) Interview with Mr. J. Thomas; T.G.W.U. MEC minutes 23 April, 1937.

(2) The N.U.V.B.'s progress was confined to skilled men however. It attempted to recruit semi-skilled workers in the Trim shop during 1938-1939 but was successfully resisted by the T.G.W.U. N.U.V.B. Monthly Journal Jan., 1939; Interview with Mr. J. Thomas.

(3) A.E.U. Journal Dec., 1935-1938, Trade Portion.

the plant, which had grown to exceed the functions given to them in the Engineering Procedure Agreement.[1] However, the extension of A.E.U. organisation among less-skilled workers in Oxford was slow in developing and it has been argued that

> "The A.E.U. district organisation's refusal to concern itself with unskilled workers at Oxford..... gave the T. & G.W.U. an initial open field at the Morris Cowley and Pressed Steel works." (2)

It is an outstanding feature of the development of trade unionism at Cowley between the wars that while organisation became powerful at Pressed Steel, very little progress was made at the neighbouring Morris plant in spite of attempts by the A.E.U. and T.G.W.U. to recruit workers in the wake of the successes at Pressed Steel. The A.E.U. extended its efforts to Morris Motors during 1935 but in spite

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(1) During 1936-1938 T.G.W.U. shop stewards had succeeded, by virtue of the fact that two of their number were also branch officials, in gaining direct access to managment. Stewards had also gained an unusual degree of freedom and control, being able to visit other departments and exerting considerable influence over the fixing of piece rates. This was all in breach of engineering procedure and during the 1938 recession managment decided to clamp down and restore normal procedures. In this it was supported by full-time T.G.W.U. officials. The 1938 strike ended with twelve workers, including two stewards, being dismissed. According to Whiting op.cit. p.278, managment had, by 1939, restored its authority "by sacking the most influential steward in the plant and also by getting rid of two more who had been particularly militant." See T.G.W.U. General Executive Council minutes Feb., 1939; Whiting, op.cit. p. 270-8.

(2) H.A. Turner et.al. p.196.

of continued campaigns its membership among Morris workers was negligible in 1939. The T.G.W.U. also mounted a campaign in 1935 but reported that little progress was made. In the following year the Oxford Trades Council set up a further organising campaign but problems arose owing to attempts by the National Union of General and Municipal Workers to recruit at Morris. The secretary of the Trades Council wrote to the Organisation Department of the T.U.C. in March, saying that competition between the T.G.W.U. and the N.U.G.M.W. was "creating confusion amongst the unorganised workers and the consequences are that they do not join up in either union."(1) Trade union organisation at Morris did not get off the ground until 1940.(2)

The reasons for the contrast in performance at Pressed Steel and Morris will be dealt with in detail in chapter 4 but it is worth mentioning here the general points to be considered, which include possible differences in the structure of the labour force (defined in broad terms so as to cover skill composition, proportion of migrants from outside Oxford, previous employment history), differences in working conditions and in managment policies relating to the welfare of the labour force and industrial relations, and the effects of the inter-union competition mentioned above. The only in-depth research which has been done on the labour movement in Oxford during the inter-war years

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(1) A.E.U. Journal May, 1935, O.D.D.'s Report, division 18; T.G.W.U. MEC minutes 26 April, 1935; letter from C. Bowles to T.U.C. Organisation Dept. quoted in Whiting, op. cit. p.290

(2) Interview with Mr. J. Thomas. The N.U.V.B. appears to have made little effort to organise Morris workers before the war, concentrating on Pressed Steel.

argues that these factors were sufficiently different in the two cases to account for success in one and failure in the other.[1] If the Pressed Steel strike failed to launch organisation at Morris, it still retains considerable significance, for it meant that for the first time since 1910-1920 semi-skilled and unskilled workers in a large motor factory were being systematically and successfully recruited into a trade union.

The tide of worker militancy and trade union organisation at Austin, which had flowed in 1929 and ebbed during the depression, rose again in 1936, once again as a result of a turn-out of unorganised workers. As had been the case in 1929, the cause of the strike was a loss of earnings owing to the operation of a payments-by-results system. The dispute originated among skilled men working on the night-shift in the body shop who protested at reductions in the times allowed for jobs on the production of bodies for the new Austin Ten and Austin Twelve bodies. Discontent over the new times welled up during the first two weeks of November, the men claiming that the reductions in times allowed were so severe that they could not earn an acceptable wage. The strike began on the evening of Thursday, 12th November, when 40 night shift workers walked out. Other men came out in sympathy and the strike spread to the day shift, involving 5,000 workers. By the end of the week 9,000 men, nearly half of the entire workforce, were affected.[2]

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(1) Whiting, op.cit. p. 280-92

(2) Birmingham Daily Post, 13 Nov., 1936.

As in 1929, a strike committee composed of non-unionists was formed, only on this occasion the Communist Party provided the organisation of the strike. An attempt was made to extend the strike from the West Works, where it was concentrated, to the remainder of the employees in the South Works but this was frustrated by a heavy police presence protecting the unaffected site.(1) At the same time, having possibly learned a lesson from 1929 and the Pressed Steel Strike, the C.P. members maintained close contact with trade union officials since, being recognised representatives, they provided a channel through which negotiations with managment could be conducted. The response of managment was militant, consisting of a threat to dismiss all strikers who did not return to work. A resumption of work was agreed upon starting on Monday, 16th November, pending discussion of the men's grievances. The managment agreed in negotiations not to implement the reductions in times allowed on body work.(2)

Trade union recruitment at Longbridge grew as a result of the strike as unions eagerly sought to get the men organised. The N.U.V.B. made an unspecified number of new members among bodymakers. The A.E.U.'s members at Austin had not been affected by the stoppage but it took advantage of it to extend recruitment, arguing that other disputes were likely to arise in the future since the A.E.U. found it impossible to come to amicable agreements with the firm because of the

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(1) Roy Church, Herbert Austin op.cit. p.153; Birmingham Daily Post 13 Nov., 1936.

(2) Birmingham Daily Post 16, 17 Nov., 1936.

attitude of managment in negotiations.[1] Progress began to be made, with two new branches being opened in the district and in November, 1937 the National Organiser wrote that "Union organisation and membership is on the upgrade at the Austin factory...."[2] Transport and General Workers' Union organisation at Austin also began to improve as recruitment was stepped up, shop stewards appointed and a new branch opened at Longbridge.[3] Close attention was paid to the plant with the aim of further additions to membership. The T.G.W.U. obtained increases for its members in 1937 and again in 1938, by which time it claimed over 1,000 members.[4] This figure, while representing only a small minority of semi-skilled workers at Austin in 1938 is still quite impressive, for between July, 1937 and July, 1938 the motor industry went into recession. Total vehicle output dropped from 507,749 to 444,877; at Austin 7,000 workers were laid off.[5]

It is evident from the discussion so far that the 1930s saw a resurgence of trade union activity among automobile workers and that this activity was centred on large mass-production plants and increasingly geared to the creation of mass unionism in the motor industry. By 1939 however, this process had still not gone very far. Organisational strength varied widely, even among skilled men. Relative

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(1) ibid 17 Nov., 1936.

(2) A.E.U. Journal Dec., 1936, O.D.D.'s Report, division 14; Nov., 1937, National Organiser's Report.

(3) T.G.W.U. MEC minutes 20 Jan., 1937.

(4) T.G.W.U. MEC minutes 22 July, 1938.

(5) N.U.V.B. Monthly Journal and Quarterly Financial Report, July-Sept., 1938, Midlands District Report.

strength in the "quality" firms in Coventry, such as Daimler, Humber and Riley was balanced by relative weakness at Austin, Morris and Ford. The overwhelming weakness however, was the general lack of organisation among the semi-skilled production workers. In spite of the efforts of the T.G.W.U. at Pressed Steel and somewhat less successfully, Austin, the vast majority of motor workers remained outside trade unions in 1939. Moreover, in important cases trade unions had no status in the eyes of managment. Ford, Morris (Cowley) and Vauxhall, Briggs Bodies and Kelsey-Hayes were all outside the Engineering Employers' Federation and did not recognise trade unions; some of those within it and therefore party to recognition agreements, in practice adopted a hard line, for example, Austin. In the case of nearly all the major concerns mass unionism did not begin to be created until the Second World War. (1)

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(1) In this respect a contrast may be drawn between the effects of the motor strikes in Britain during the mid-1930s and those of a similar strike at General Motors, Michigan, U.S.A. in 1936-7. The General Motors strike, like that at Pressed Steel, began in a plant in which trade union organisation was weak. It also began without union backing and aimed at achieving trade union recognition and, as at Pressed Steel, the Communist Party was active amongst the strikers. The subsequent history of industrial relations at General Motors, like that of Pressed Steel, was stormy. The difference however, lies in the fact that according to S. Fine, Sit Down. The General Motors Strike of 1936-1937 p. 127-31, the success of the General Motors strike was the decisive factor in the subsequent rapid extension of trade unionism in other large plants such as Kelsey-Hayes, where two sit-down strikes "secured the virtual dismantling of the Kelsey-Hayes company union....." ibid p. 131. By the end of the 1930s Ford was the only major producer in the U.S.A. holding out against trade unionism although the open shop was still general.

During 1939-1945 the pressures of war created circumstances favourable to the growth of trade union membership generally. Prices rose, but by a much smaller proportion than during the First World War, owing to the government financing much more of its wartime spending out of taxation rather than borrowing and to more effective rationing. Unemployment fell rapidly, from over 9 per cent of the insured workforce in 1940 to less than 1 per cent during 1943-1944. Growing labour shortages, together with government action to ensure the payment of union-negotiated rates in firms producing for government contracts and to encourage the spread of collective bargaining, enhanced the position of trade unions and enabled average wages to rise by more than the retail price index.(1) The membership of all trade unions in the United Kingdom rose from 6.2 million at the end of 1939 to a wartime peak of 8.1 million by the end of 1943. There was a drop to 7.8 million by the end of 1945 but this was followed by renewed growth from 1946 onwards. The "engineers war" placed huge demands on the metal manufacturing trades and here labour market pressures were particularly acute. Trade union membership in the manufacture of "metals, machines and conveyances" rose more rapidly during 1939-1943 than among any other group except agricultural labourers, growing from 936,000 at the end of 1939 to over 1.6 million by the end of 1943.(2)

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(1) These influences are discussed in detail in chapter 4.

(2) Ministry of Labour Gazette Oct., 1940, Nov., 1945., Nov., 1947.

Motor industry output fell sharply with the outbreak of war, from over 400,000 vehicles a year in 1939 to under 134,000 in 1940. There was a subsequent increase, but wartime production was never more than half the pre-war level and consisted predominantly of military and commercial vehicles.(1) Figures for employment in motor vehicle manufacture are not available but there can be little doubt that the number of workers actually engaged in motor-car, motor-cycle and lorry manufacture fell as output declined. On the other hand, employment in the motor firms almost certainly rose as companies became increasingly involved in munitions and aircraft work. Moreover the underlying trend of employment growth in the motor industry continued after the war; in 1947 employment of manual workers stood at 307,000 compared with 282,000 in 1939.(2)

These conditions encouraged the faster growth of trade union membership in motor firms, especially among semi-skilled production workers, whose numbers were boosted by massive dilution during the first four years of war. Growth of membership was accompanied by the gaining of recognition from those employers who had hitherto withheld it. Thus if the 1930s constituted a turning point in terms of trade union effort, the Second World War saw progress in terms of actual achievement. The process of organisation was far from complete by the end of the war - less than half of the workforce at Morris's Cowley plant were trade unionists - but what had been gained was a sufficiently strong base from which mass unionism in the motor

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(1) See Appendix 1.

(2) Political and Economic Planning, Motor Vehicles - A Report on the Industry (1950) p.16.

industry was able to develop during the late 1940s and 1950s.

Encouraged by falling unemployment and by the growing willingness of the government to consult them on matters of employment and production and to encourage the spread of collective bargaining, trade unions began to press for more complete recognition from private engineering firms during 1940-1942.[1] In addition to formal recognition, trade unions in engineering also sought to extend their influence on matters affecting production within the workshops. As in the First World War this demand was associated with growth in the number of shop stewards and their influence and the emergence of a national shop stewards' movement. A militant, communist-influenced shop stewards' movement had grown up in the aircraft industry shortly before the war, known as the Aircraft Shop Stewards' National Council, which aimed to encourage the spread of trade unionism among aircraft workers and to build up workshop organisation. Opposed to the war until the ending of the Stalin-Hitler Pact, it reconstituted itself as the Engineering and Allied Trades Shop Stewards' National Committee in 1941 and became

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(1) Trade unions were represented on government bodies such as the Central Productivity Advisory Council in 1941 and its successor, the National Production Advisory Council from 1942. The A.E.U. called upon the T.U.C. in 1942 to press the government to make trade union membership and trade union recognition compulsory in establishments working on government contracts. The T.U.C. did not take up this demand although it did present specific cases of non-recognition to the Ministry of Labour. A.E.U. National Committee Report 1942, "Report of the Executive Council", A.E.U. Financial Report, 1943.

the strongest advocate of Joint Production Committees consisting of shop stewards and managment representatives, set up to discuss matters affecting production in individual plants.(1)

Pressure for greater participation in decision making at the workplace was supported by trade union officials who began to press for closer and wider consultation with government and employers at national, district and local level and some within the A.E.U. suggested that the time had come when the benefits of managment-union co-operation in decision making had become so obvious that it was time to review the concept of "managerial functions".(2) The response outside the labour movement was mixed. Some employers, for example the chairman of I.C.I., saw Joint Production Committees as fulfilling a useful function as a bulwark against extremist influence at a time when the concept of "managerial functions" was perhaps inappropriate.(3) The majority however, were initially hostile, their attitude being typified by the reaction of the director of the E.E.F. who, when the issue was raised at a meeting with the A.E.U. in January, 1942, said that he "was not going to be a party to handing over the problems concerning production to shop stewards or anyone else."(4) Government

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(1) Aircraft Shop Stewards' National Council, "Aircraft" (Kingston-upon-Thames 1935); Engineering and Allied Trades Shop Stewards' National Committee, "Arms and the Men" (Oct., 1941); K. Coates and T. Topham, Workers' Control (revised edition, 1970) p.148-88 passim.

(2) A.E.U. Financial Report, Dec., 1943.

(3) P. Inman, Labour in the Munitions Industries (1957) p. 378.

(4) W. Hannington, The Rights of the Engineers (1944) p.88.

departments were more agreeable to the idea. In February, 1942 the Ministry of Supply agreed to set up Joint Production Committees in the Royal Ordnance factories and later in the year the Air Ministry Joint Industrial Council recommended that Joint Production Committees be established, for consultation purposes only, in Air Ministry establishments. These decisions forced the hand of the private employers and in March, 1942 the E.E.F. signed an agreement with the A.E.U., the Foundry Workers and the Confederation of Shipbuilding and Engineering Unions which provided for the establishment of Joint Production Committees in enterprises employing more than 150 workers. The committees were to meet regularly to discuss matters of efficiency, elimination of waste, and safety within the factory but not matters already covered by agreements with trade unions.(1)

As a result of the March agreement, Joint Production Committees began to spread, partly as a result of trade union pressure, partly as a result of the backing given to J.P.C.'s by the Ministry of Aircraft Production. A survey carried out by the A.E.U. in November, 1942 covering 1,000 establishments employing 1.27 million engineering workers, found that J.P.C.'s had been set up in about 57 per cent of the Federated establishments surveyed and in 46.5 per cent of non-Federated establishments. By 1943 the Ministry of Labour knew of almost 4,500 J.P.C.'s operating in private engineering firms.(2)

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(1) Inman, op.cit., p. 378; Hannington, op.cit., p.90-3; A.E.U. Journal April, 1942.

(2) Hannington, op.cit., p. 93-4; Inman, op.cit., p. 380-1.

Trade unions and employers were anxious that representative bodies such as J.P.C.'s and individual union representatives at plant level, i.e. shop stewards, should be subject to union control and that their functions should be strictly defined. In the case of J.P.C.'s the union side was made responsible to the National Advisory Committee on Production for the Engineering Industry via district or regional Production Committees. Ultimate authority over all of these bodies was vested in the National Production Advisory Committee, consisting of representatives of government, employers and unions.(1) The role and responsibilities of shop stewards were already defined by existing agreements but employers did become concerned at the appointment of convenors in the larger plants and refused to recognise convenors until after the war despite repeated requests from the trade unions.(2)

In the motor industry, campaigns for the recognition of trade union officials and shop stewards were closely connected with drives for increased membership in the weakly organised mass-production plants, where the efforts begun during the 1930s were continued in the new circumstances of war production and tight labour markets. Considerable progress was achieved in terms of membership and union recognition, notably at Morris, Ford, Briggs Bodies and Kelsey-Hayes and Vauxhall. In each of these firms some recognition of union

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(1) Inman, op.cit., p.381; A.E.U. Journal March, 1943, O.D.D.'s Report, division 16.

(2) A.E.U. Financial Report 1943; A.E.U. Journal Oct., 1944, General Secretary's Report. In 1945 the Austin Motor Company agreed to meet representatives of the shop stewards in order to discuss "major issues" but this was done independently of the E.E.F. N.U.V.B. Quarterly Journal, Jan.-March, 1945, Birmingham District Report.

officials was obtained by 1944, but battles continued to be fought over the position of shop stewards.

There is relatively little information concerning the development of trade union organisation and the achievement of recognition at Morris Motor's Cowley plant. It appears that trade union membership was weak during 1939-1940 with the A.E.U., N.U.V.B., T.G.W.U. and N.U.G.M.W. each having a very few members. Most of these men were in the firm's Metal Produce Recovery Department, reclaiming aluminium from damaged aircraft. During 1941 this department was closed down and the men transferred to the main plant where they formed a nucleus of organisation. At roughly the same time the Oxford Trades Council mounted a campaign to organise the Morris plant. A delegate was appointed to attend a meeting of the Metal Recovery Department and the Trades Council was to organise a mass meeting of Morris workers on 17 February, 1941.(1) By June the A.E.U.'s membership in Oxford had risen from 832 at the end of 1939 to 1,320. The T.G.W.U. expanded by at least as much although the N.U.V.B. had little success and the General and Municipal Workers made relatively little effort among Morris workers.(2) Thereafter trade unionism at Morris advanced at a gradual, though accelerating pace. The A.E.U. opened four more branches in Oxford between June, 1941 and December, 1943 and its membership rose to 3,444. During the

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(1) Interview with Mr. J. Thomas; Oxford and District Trades Council minutes 23 Jan., 1941

(2) Interview with Mr. Eric Bone, National Officer of the Vehicle Building and Automotive Group of the T.G.W.U., Oxford Trades Council, minutes 19 April, 1942.

same period the membership of the T.G.W.U. reached 4-6,000 and pressure for recognition began to mount. This was conceded without confrontation in September, 1943 when the workforce was balloted to decide whether to continue the Morris Welfare Organisation which had certain features in common with a company union - or whether to admit bona fide trade unions. The vote went in favour of the latter and the company joined the E.E.F. and operated the Federation's agreements and procedures.(1) During 1944-1945 however, the growth of membership was halted and only began to recover in 1946. Thereafter the advance of organisation continued to be slow, for only 50 per cent of Morris workers were organised in 1956.(2)

Trade union organisation developed rapidly among motor workers in Dagenham after 1941, but full trade union recognition was only won gradually. An extra zest was given to union organising efforts at Ford and Briggs Bodies during April, 1941, when disputes arose at both plants. A Ford employee was disciplined for eating a sandwich during working hours and a strike broke out during which shop stewards and a convenor were elected and a shop stewards' committee set up.(3) The dispute at Briggs arose over the dismissal of John MacDougall, a shop steward in the toolroom, on the grounds of defying a foreman. Fears that a stoppage of work was about to take place led to the Ministry of Labour appointing a Court of Inquiry in May. In its evidence the union

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(1) A.E.U. Half-Yearly Reports June, 1941, Dec., 1943; Interview with Mr. J. Thomas.

(2) A.E.U. Half-Yearly Reports Dec., 1943-6; N.U.V.B. Quarterly Journal, 1943-6, Returns of Branches; Interview with Mr. J. Thomas.

(3) The New Propellor 10 Oct., 1941.

side argued that the dispute owed as much to the refusal of the managment to recognise trade unions as it did to the shop steward's dismissal.(1)

These incidents led to modifications in the relations between managment and workers' representatives in both plants. Ford managment's initial reaction to the establishment of shop steward organisation was to ignore it, but eventually, although refusing to recognise the stewards as trade union representatives, it met with the convenors to discuss grievances arising on the shop floor.(2) In the case of Briggs Bodies the Court of Inquiry recommended that the employers meet with the shop stewards to discuss the establishment of negotiating procedures. Friedman and Meredeen(3) argue that the Chairman of the Committee, Sir Charles Doughty, suggested that the firm conform to the 1922 Engineering Procedure Agreement. It is not certain that this was the case, since Sir Charles referred only to "normal procedure", but it is possible. In any case, Briggs' managment was not going to grant full trade union recognition. Yet it felt constrained to take some action as a result of the Inquiry's recommendations. Consequently it agreed to "permit its employees in the Engineering Division to elect representatives to negotiate with the managment." A procedure agreement was drawn up between the managment and the men in

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(1) A.E.U. Journal May, 1941, O.D.D.'s Report, division 20; Report of a Court of Inquiry into an Apprehended Dispute at Briggs Motor Bodies Ltd., Dagenham. Cmd 6384 (1941)

(2) New Propellor 10 Oct., 1941.

(3) H. Friedman and S. Meredeen, The Dynamics of Industrial Conflict, op.cit., p.24.

the engineering division but this was only a sectional agreement; it did not apply to the whole plant and it did not allow full-time union officials to take part in negotiations. Moreover, no provisions were made for failures to agree.(1)

Limited progress had been made, but at the time trade union organisation in Dagenham was still weak. The A.E.U. could only boast of 500 members in Dagenham and 450 in Ilford; the Vehicle Builders had no Dagenham branch and only 129 members in Ilford. No figures are available for the T.G.W.U. although by this time it was active among workers at Briggs Bodies and Ford. However, resentment at what was seen as an evasion of the Court of Inquiry's recommendations by Briggs' managment led to a joint campaign by unions in the district to obtain full recognition throughout the Briggs plant. By September, 1942 additions had been made to membership and it was reported that the managment was becoming readier to deal with stewards.(2) Union officials and shop stewards met company representatives early in 1943 and in March the N.U.V.B.'s London District Organiser reported that Briggs had agreed to recognise the right of workers to be represented by their trade union.(3) This, however, remained confined to the engineering division; a general plant agreement was not signed until 1944. Indeed in March, 1943 the A.E.U. organiser

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(1) Report of a Court of Inquiry into a Dispute at Briggs Bodies Ltd., Dagenham Cmd 131 (1957)

(2) A.E.U. Journal Sept., 1942, O.D.D.'s Report, division 25.

(3) N.U.V.B. Quarterly Journal Jan. -March, 1943.

in Dagenham wrote:

> "Briggs Bodies are experiencing new difficulties arising from the fact that full recognition has not been accorded and registered in terms of an agreement." (1)

Organising efforts continued in Dagenham during 1943 and union membership was extended. The A.E.U. opened three new branches in Dagenham and two in Ilford and its membership rose to 3,177 and 974 in the two districts respectively by December. The T.G.W.U. probably grew at least as rapidly although the Vehicle Builders appear to have made little progress. At the end of 1943 a drive for 100 per cent organisation was launched at Briggs and the T.G.W.U. appealed to all unorganised women - about 5,000 were employed at the firm - to join its ranks.(2) Simultaneously the Dagenham Trades Council asked the T.U.C. to give support and assistance in obtaining union recognition from the Ford Motor Company. The T.U.C. General Council did not see its normal function as directly assisting unions in their efforts to establish themselves in individual plants but it had become concerned with the problems of organising the new industrial areas of outer London during the 1930s and it had sponsored recruitment campaigns in the Dagenham area during the previous few years. Thus at the end of the year, following a meeting between Walter Citrine and

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(1) A.E.U. Journal March, 1943, O.D.D.'s Report, division 25.

(2) T.U.C. Report of the General Council, 1944.

representatives of the unions operating at Ford [1] at which it was decided to make a formal request to the company for recognition, Citrine met with Sir Percival Perry, chairman of Ford in Britain. It was agreed that a joint committee of representatives of the company and the T.U.C. General Council should be set up to discuss the question of union recognition. [2] The committee met on 24th February, 1944 and plans were made to draft a procedure agreement between managment and the unions at Ford. The draft was completed on 29th March and accepted, in the face of strong opposition from shop stewards and local District Committees, by the National Executive Council of the unions operating at Ford on 6th April. A short while before the agreement was concluded a sit-down strike was staged in the main plant. Details of the strike are not clear and it was not referred to in union journals nor, apparently, in communications from the Regional Industrial Relations Officer to the Ministry of Labour. However, the Ford Joint Shop Stewards' Committee subsequently argued that the strike was a crucial factor in gaining recognition. [3] Given that discussions between Citrine and Perry were already under way at the end

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(1) These were the A.E.U., United Patternmakers' Association, National Union of Foundry Workers, N.U.V.B., National Union of Sheet Metal Workers, T.G.W.U., N.U.G.M.W., Association of Engineering and Shipbuilding Draughtsmen, the Amalgamated Society of Woodcutting Machinists and the Wheelwrights' Union.

(2) T.U.C. Report of the General Council, 1944. Strangely, Citrine made no mention of his personal role in establishing the Ford agreement in his autobiography, Two Careers (1967)

(3) Ford Joint Shop Stewards' Committee, "What's Wrong at Ford's?" (1963).

of 1943, the real significance of the strike is difficult to judge. It is possible that it allowed extra pressure to be put on the firm and encouraged a more receptive attitude towards some form of recognition agreement. However, it is likely that the basic terms of recognition had already been determined and that the strike was of little relevance. It is more likely that the strikers were attempting to influence the contents of the agreement since union activists at Ford were far from happy with its terms when it was eventually signed.

Rank-and-file opposition to the 1944 recognition agreement stemmed from the disputes procedure laid down. No provision was made for the recognition of shop stewards; workers with a grievance which could not be resolved by talks with supervisory staff in the plant

had to contact a full-time union official, who was entitled to approach the personnel or the works manager on the operative's behalf. Failing an agreement, the question had to be pursued by the General Secretary of the union concerned and if no agreement was arrived at at this stage, the matter was to be referred to a Joint Negotiating Committee consisting of six managment representatives and not more than six "leading officials of trade unions".(1) Procedure thus related to individual rather than collective grievances. In effect there was no real procedure for dealing with disputes and there was no direct recognition of the right of individual unions to negotiate on behalf of their members collectively. All major issues had to be discussed at the Joint N egotiating Committee. In other words it was an "arms length" agreement, designed to preserve the prerogatives of management in the plant.(2)

The Ford recognition agreement applied automatically to its subsidiaries at Dagenham, Kelsey-Hayes and Linoln Cars but this success merely encouraged further efforts to obtain "full" recognition at these firms, that is, recognition of union officials and shop stewards within the plants, it being argued that in practice shop stewards had

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(1) "Procedure Agreed Between Ford Motor Company Ltd., Dagenham, and Certain Trade Unions Negotiated in Association with the Trades Union Congress." I am indebted to Mr. Edward Sketch of the Ford Motor Company for access to a copy of this agreement.

(2) See Huw Beynon, Working for Ford (1973) p. 45; Turner et.al. p.194.

played a negotiating role for some time.[1] Pressure for union recognition also began to mount at Briggs Bodies during 1944. Two thousand workers gave three weeks notice of a strike in February following the demotion of a supervisor who had joined a trade union. The initial position of the managment was that an employee in authority could not be a trade union member; however, the man was reinstated.[2] Following another dispute which led to a strike of workers in one department during the Summer the company agreed to meet trade union representatives "with a view to arriving at an understanding for trade union recognition."[3] A meeting was held in September and a recognition agreement was signed in October, which set out procedure to be followed by shop stewards and which recognised full-time trade union officials within the plant.[4]

The success at Briggs Bodies led to further pressure being put on the Kelsey-Hayes managment and a series of negotiations was conducted throughout the year from 18th May, 1944 until February, 1945, when a procedure agreement was signed which granted full trade union recognition.[5] These two agreements, which were an advance on the 1944

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(1) Letter to the Regional Industrial Relations Officer, 21 April, 1944. P.R.O. LAB 10/274.

(2) Amalgamated Society of Woodcutting Machinists Quarterly Report March, 1944.

(3) Amalgamated Society of Woodcutting Machinists Quarterly Report Sept., 1944.

(4) A.E.U. Journal Oct., Nov., 1944, O.D.D.'s Report, division 25.

(5) A.E.U. Journal Feb., 1945, O.D.D.'s Report, division 25.

Ford agreement, led to intensified efforts among Ford workers. The 1944 agreement had been introduced for a period of two years, at the end of which it was to be reviewed. In 1946, following a strike of 10,000 workers, it was replaced with a new agreement which granted direct negotiating rights to individual unions and which gave a measure of recognition to shop stewards. The Joint Negotiating Council continued in existence, however, and the shop stewards' role was limited to discussion of day-to-day problems with managment at a Joint Works Committee.(1) There was still no bargaining role for local, as opposed to national trade union officers.(2) Nevertheless, the 1944 and 1946 recognition agreements at Ford gave trade unions increased leverage and further encouraged the extension of membership to the majority of Ford workers.

The other major company at which a breakthrough was made in terms of recognition, if not membership, was Vauxhall Motors. No mention was made of the progress of trade union organisation at Vauxhall during the 1930s and it is difficult to gauge the strength of union membership there in 1939. Such organisation as did exist was dominated by the A.E.U. whose membership in Luton and Bedford doubled from about 1,500 in 1936 to nearly 3,200 by the end of 1939. This membership however, was spread among a number of engineering firms such as Adamant Engineering, which made automobile steering

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(1) Friedman and Meredeen, op. cit. p. 25; Ford Joint Shop Stewards' Committee "What's Wrong at Ford's?"

(2) Turner et.al. p. 215.

equipment, and Electrolux as well as Vauxhall. It is probable that most of the A.E.U.'s membership was in the first two of these firms.[1] During 1941 however, a recruiting campaign was launched which led to growth in the membership of the A.E.U. and the N.U.V.B. Shop stewards were elected and plans were made to request recognition. This was granted by managment in December, 1942, when an agreement was signed with the three unions in the plant; the A.E.U., N.U.V.B. and Electrical Trades Union. The agreement recognised the right of unions to bargain on behalf of their members only and shop stewards were accorded recognised status in the plant. At the same time, managment strongly affirmed the principle of the open shop.[2]

Recognition helped the growth of trade union organisation in the plant, more so in the case of the A.E.U. than that of the N.U.V.B. By December, 1943 the A.E.U. had 4,770 members in Luton and 2,817 in Bedford and it had opened three new branches in each town.[3] Vehicle Builders' membership also grew, from 162 at the end of 1941 to 416 by December, 1943. However, much of this growth had already occurred by the end of 1942, when the recognition agreement was signed.[4]

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(1) A.E.U. Journal April, August, Oct., Nov., 1934, O.D.D.'s Report, division 17; Journal Jan., 1939, National Organiser's Report.

(2) A.E.U. Journal Oct., 1941, National Organiser's Report; Vauxhall Motors Ltd., "Something About Vauxhall" (1947).

(3) A.E.U. Half-Yearly Report Dec., 1943

(4) N.U.V.B. Monthly Journal and Quarterly Financial Report Jan-March, 1943, 1944, Returns of Branches.

Progress slowed down during 1944 while organisation was still far from complete. In April, 1945 the A.E.U.'s National Organiser reported that only 25 per cent of Vauxhall workers were organised. During the following month however, new organising campaigns were mounted and the situation improved to some extent. By May some departments were said to be fully organised and shop stewards were appointed in some previously unorganised shops.(1) Shop stewards' organisation had previously been held in check by the operations of a so-called "Managment Advisory Committee," established in 1942 to act as a forum for discussion between managment and non-union workers. It was alleged that managment provided the M.A.C. with better facilities and more information than it did to the shop stewards; in effect that managment sought to by-pass stewards whenever possible. The facts of the matter are not readily available, but some indication of the managment's attitude is given by its refusal to recognise the shop stewards' committee at Vauxhall until the mid-1960s.(2)

By the end of the war trade unions had improved their position in the motor industry considerably. Breakthroughs in terms of membership and recognition were achieved at hitherto non-union firms and membership and workshop organisation were also extended in firms which were already parties to recognition agreements before the war, e.g. Rootes, Standard and Rover. The impression given by the evidence so far is thus one of ebb and flow in organisation, the patterns of which may be related to fluctuations in the general economic climate

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(1) A.E.U. Journal April, May, 1945, National Organiser's Report.

(2) Ken Weller, "The Truth About Vauxhall", Solidarity Vol.2. No.5 (1965); Turner et.al. p.348.

as reflected in the situation of the motor industry. As yet however, we have no overall quantitative estimate of union strength or weakness, or of the fluctuations in organisation.

Any attempt to make such an estimate is fraught with difficulty. What is required is a record of the density of union membership in the motor industry and the available data do not permit such a record to be constructed with much accuracy. As mentioned above,[1] most of the employment figures produced by the Ministry of Labour and the Society of Motor Manufacturers' and Traders are insufficiently precise, referring to the construction and repair of motor vehicles, cycles and aircraft.[2] There do exist some estimates which seek to identify employment in the motor industry alone, although once more the estimates differ according as to whether repair is included as well as manufacture. Use will be made of these estimates since although they are for single years only, they cover the period under review and give a closer estimate of motor industry employment than the sources referred to above.[3]

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(1) See Chapter 1.

(2) The Ministry of Labour sources are the Abstracts of Labour Statistics of the United Kingdom, Cmd. 2740 (1926); Cmd. 3831 (1931); Cmd. 4625 (1934); Cmd. 5903 (1939); also Department of Employment and Productivity, British Labour Statistics. Historical Abstract, 1886-1968, (H.M.S.O., 1971). The S.M.M.T. source is its yearbook, The Motor Industry of Great Britain.

(3) ibid. Attempts to present more precise estimates were made by Political and Economic Planning, Motor Vehicles - A Report on the Industry (1950); Labour Research, Vol. XX11 No. 6. (June, 1933).

It is impossible to obtain a very meaningful estimate of trade union membership in the motor industry. Unions did not keep records of membership by industry and union branches were organised geographically rather than occupationally. Any calculations based upon branch membership returns, which are the main available source, are therefore subject to large margins of error. Moreover, even branch membership figures are not available for the general unions. In their case it has been necessary to rely on claims made regarding membership in individual plants at certain times. These are an incomplete guide to the extent of the general unions' organisation and at the same time individual assessments of membership may have been exaggerated. The estimates of union density presented here are thus little more than educated guesses and union density estimates during 1910-1920 and 1937-1946 are particularly unreliable, since these were periods of growing activity on the part of general unions, for which systematic records relating to membership in motor manufacturing districts do not exist, so that the element of guesswork is greater. At the same time it is quite likely that the use of branch membership records of unions of skilled men has led to an over-estimate of their membership throughout the period.

In trying to construct estimates of union density a number of employment estimates have been referred to. S.B. Saul suggests that on the eve of the First World War employment in the motor industry was about 100,000. The basis for this estimate is not made clear,

although in view of the already considerable size of some firms, it is probably not too much of an exaggeration.[1] The most useful figures for the inter-war period are those published in the 1935 Census of Production. Average employment of operatives in motor and cycle building and repair was recorded as

148,074	in	1924
167,297	in	1930
194,960	in	1935

[2]

Other employment estimates are similar to or based upon the Census of Production figures. Just before the Census was produced, the periodical Labour Research published employment figures for the motor industry based on Board of Trade data. Total operatives employed in the manufacture (not repair) of motor vehicles and cycles were estimated as being 153,074 in 1924 and 152,912 in 1930.[3] Employment in the repair trade was said to have grown from 13,960 in 1924 to 38,214 in 1930.[4] In 1950 Political and Economic Planning published a survey of the motor industry in which Census of Production material was used to calculate the number of operatives employed in the manufacture of motor vehicles, chassis, bodies and finished components. It was agreed that, after excluding the repair side and cycle

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(1) S.B. Saul, "The Motor Industry of Great Britain to 1914" Business History Vol. 5 (1962-3). Saul pointed out that Daimler already employed 5,000 workers, Wolseley 4,000 and Humber and Sunbeam 2,500-3,000 each.

(2) "Average Employment in Motor and Cycle Building and Repair, 1924-1935" Final Report of the Census of Production Part 11, (H.M.S.O., 1935) p. 387.

(3) Labour Research Vol. XX11 No. 6 (June, 1933) p.122.

(4) ibid.

manufacture the number of operatives "rose from about 100,000 in 1924 to 125,000 in 1930 and 150,000 in 1935." It is estimated that by 1939 the number had grown to 282,000 and to 307,000 by 1947. (1) The lower totals provided by P.E.P. compared to the Census of Production reflect the exclusion of repairs and the cycle industry but no discussion of the basis for the size of the adjustment was given. We can conclude therefore that employment in the motor industry during 1914-1947 fell within the range presented in the Table below.

Table 2 - 1 Manual Employment in the Motor Industry 1914 - 1947

Year	Employment estimates			
1914		100,000 (S. B. Saul)	80,000	(allowing for repairs and the cycle trade and salaried employees)
	(Labour Research)	(Census)		
1924	153,074	148,074	100,000	(P.E.P.)
1930		167,297	125,000	(P.E.P.)
1935		194,960	150,000	(P.E.P.)
1939			282,000	(P.E.P.)
1947			307,000	(P.E.P.)

Source: S. B. Saul op. cit.; Final Report of the Census of Production Part 11 (1935); Political and Economic Planning, op. cit.; Labour Research. loc. cit.

(1) Political and Economic Planning, op. cit. p. 15-16.

Trade union membership estimates have been constructed from a number of sources. As far as unions of skilled men are concerned, e.g. the A.E.U., N.U.V.B. and National Union of Sheet Metal Workers, it was possible for the years 1911-1924 to use trade union membership figures published in the 18th and 20th Abstracts of Labour Statistics of the United Kingdom to calculate trade union membership in "vehicle building". The 18th Abstract, published in 1926, presented union membership figures for the industrial group comprising iron founding, engineering, shipbuilding and other metalworking for the years 1911-1924. The 20th Abstract, published in 1931 also covered these years but included vehicle building as a separate and additional category within the ironfounding, engineering, etc. group. It was thus possible to calculate the membership of skilled unions in vehicle building until 1924 when the difference in the industrial classification and hence the basis for calculation, disappeared.(1)

From 1924 the membership of unions of skilled men was estimated from branch membership returns. In order to check the correspondence between this method of estimation and the results from official figures, the total estimates for the years 1922 and 1923 were compared using both methods. There was a close degree of correspondence between both sets of results.(2)

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(1) Abstract of Labour Statistics of the United Kingdom Cmd.2740 (1926), Cmd. 131 (1931).

(2) See Appendix 3 Notes on the estimation of trade union membership.

Separate estimates of general unions' membership were necessary for 1911-1924 since at this time the whole membership of general unions was assigned to the category of "general labour." (1) In the absence of other information and given that the Workers' Union took the lead among unskilled and semi-skilled engineering workers during 1910-1920, attention has been confined to the W.U. and estimates of its membership in the motor industry have been derived from Hyman's figures for W.U. membership in the Midlands. (2) They are really guesses at a likely proportion of the total accounted for by motor workers. Given the concentration of membership in Birmingham and Coventry, where motor workers accounted for half the engineering workforce in 1924, it has been assumed that roughly 20 per cent of the W.U.'s engineering membership in the Midlands was in the motor industry. (3) Figures for the membership of the general unions during the 1930s and 1940s are based, in the absence of branch membership returns, upon reports of membership in individual plants which appeared at intervals in the minutes of the Metal and Engineering Trade Group and the General Executive Council of the T.G.W.U. and the Monthly Reports of the N.U.G.M.W. The estimates of total trade union membership in the motor industry are given in Table 1.2.

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(1) See Ministry of Labour Gazette for the 1920s, notes to tables relating to the membership of trade unions.

(2) R. Hyman, "The Workers' Union, 1898-1929.

(3) Report of the Census of Production, 1924 (H.M.S.O. 1931) quoted in ibid p. 213n.

Table 2 - 2. Trade Union Membership in the Motor Industry 1914 - 1946

Years	Membership: Unions of skilled men	General Unions	Total
1913/14	13,000	7,000	20,000
1920	27,000	18,000	45,000
1921	24,125	6,500	30,625
1922	22,600	4,000	26,600
1923	22,500	3,000	25,500
1924	23,400	3,000	26,400
1925	23,650	3,000	26,650
1926	23,000	2,500	25,500
1927	21,900	2,000	23,900
1928	22,300	2,000	24,300
1929	22,800	2,000	24,800
1930	22,400	2,000	24,400
1931	21,450	2,000	23,450
1932	19,396	1,000	20,396
1933	18,500	1,000	19,500
1934	20,900	2,000	22,900
1935	22,800	4,000	26,800
1936	28,500	9,000	37,500
1937	35,500	9,500	45,000
1938	43,000	17,000	60,000
1939	49,000	20,000	69,000
1946	89,000	25,000 (1)	114,000

Source: A.E.U. Monthly Journal, Half-Yearly Report; N.U.V.B. Monthly Journal and Quarterly Financial Report; T.G.W.U. General Executive Council minutes; MEC minutes; N.U.G.M.W. Monthly Report; R. Hyman, "The Workers' Union, 1898-1929".

(1) This is certainly an under-estimate of general union membership.

The membership totals confirm the impression of the course of development given by documentary evidence; rapid growth up to 1920 followed by a collapse and stagnation during the 1920s. The Great Depression led to membership falling again, though by proportionately much less than during 1920-1923. Membership recovered after 1933, growing rapidly to regain the 1920 level in 1937. One can discern signs of the renewal of mass unionism as the membership of the general unions climbed at the end of the 1930s - in fact it is possible that their growth has been understated. After 1937 the A.E.U. also began to recruit semi-skilled workers in the motor industry, reinforcing the movement towards the unionisation of the mass of automobile workers. As yet however, these were signs and portents only. As the density figures below indicate, even by 1939 trade unionism was confined to a small minority of motor workers, most of them skilled.

Table 2 -3. Union Density in the Motor Industry, 1914 - 1946.

Year	Total Membership	Manual Employment (1)	Membership as a % of employment
1914	20,000	80,000	25.0
1924	26,400	100,000	26.4
1930	24,400	125,000	19.5
1935	26,800	150,000	17.9
1939	69,000	282,000	24.5
1946	114,000	307,000	37.1

1. The employment figures used here are S. B. Saul's 1914 estimate, adjusted downwards to exclude cycles, repair work and salaried staff, and P.E.P.'s estimates for 1924 - 1947.

Source: S. B. Saul, op. cit.; Political and Economic Planning, op. cit.; See also Appendix 3.

The outstanding feature of automobile trade unionism before the Second World War was its numerical weakness. Density of union membership fell after 1920 and continued to fall until 1935. Moreover, recovery during the late 1930s was incomplete since not even the 1924 figure was regained until the Second World War. Weakness can also be shown by comparing union density in the motor industry with that in engineering as a whole. It can be argued that trade unionism found it difficult to thrive anywhere in the engineering trades during the inter-war period since the older, better-organised sectors were in decline and the newer presented problems similar to those in the motor industry. Nevertheless, density of trade union membership in engineering remained consistently higher than that in automobiles during the inter-war period as shown below.

Table 2 - 4. Union Density in the Motor Industry and the Rest of Engineering[1], 1924 - 1939

Year	Motor Density %	Engineering Density %
1924	26.4	32.9
1930	19.5	29.6
1935	17.9	28.9
1939	24.5	34.8

1. The Rest of Engineering consists of engineering, vehicle building and repairing, shipbuilding and repairing and other metal working MINUS the P.E.P. figures for employment in motor manufacture. Similarly, the estimates of motor union membership have been deducted from the figures for engineering as a whole.

Source: Department of Employment and Productivity, British Labour Statistics. Historical Abstract 1886-1968; Ministry of Labour Gazette, 1924-1939; as for table 1 - 3.

A crucial factor in the weakening of automobile trade unionism was the decline of the Workers' Union during the 1920s. When organisation began to recover the fact that it did so at a more rapid pace than in the rest of engineering probably reflected the renewed commitment to the organisation of less-skilled workers brought to the motor industry by the T.G.W.U. in the mid-1930s. Finally it is worth noting that trade union weakness was reflected in the large degree of managerial freedom in motor plants. Some of the most important firms refused to recognise the unions in their establishments and imposed their own system of unilateral control before the Second World War, e.g. Ford, Morris, Vauxhall. Even where unions were recognised, for example at Austin, managment was circumscribed only with respect to the conditions of skilled men. Where large firms had been forced to back down and make concessions as during the strikes of 1929-1936, this had resulted from mass rebellion by unorganised workers rather than trade union pressure. Elsewhere firms were able to reduce rates of pay and replace skilled men with semi-skilled workers without meeting much more than token resistance from the minority of unionists in the works.(1) If by the late 1930s skilled men had begun to develop more effective organisation, sometimes strong enough to enforce informal agreements, as at Briggs Bodies in 1939, the plight of the less-skilled worker and his powerlessness to influence his conditions of work

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(1) For example in Coventry firms during 1925, in spite of the fact that production and sales were at a high level, employers were able to cut piece-prices. In 1929 Humber Motors was able to force through a reorganisation of production which involved the displacement of large numbers of skilled men. A.E.U. Journal Feb., 1925, July, 1929, O.D.D.'s Report, division 18.

are illustrated by the following letter to the T.G.W.U. from a group of Briggs workers in 1937:-

> "....The work is such that we are becoming mere appendages of the machine, the machine setting the speed, everyone in these works is panicky and nervous, accidents occur by the dozen..... The normal work day here is from seven (morning) until seven thirty (evening) at straight time, no overtime money is allowed, the wages average about 1 shilling and fourpence an hour..... We work fifty to sixty hours per week, it is a terrible strain, as workers we plead that you use your power in order to make these conditions public property, as we have to be very careful owing to the well oiled espionage system here. We are approaching your organisation first, if this plea fails, desperation will make us look around for others..... for reasons that are obvious, we are very sorry, but we can only sign ourselves,
>
> Twelve Briggs Workers." (1)

In this respect the turning point in the history of automobile trade inionism was the Second World War.

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(1) Quoted in Friedman and Meredeen, op.cit. p.23.

CHAPTER THREE

THE ORGANISATION OF AIRCRAFT WORKERS c. 1914 - 1946

In the Introduction to this thesis it was pointed out that any discussion of the development of labour organisation in the motor industry which does not pay some attention to the evolution of trade unionism among aircraft workers is incomplete. The connections may be illustrated as follows: first, the rapid growth of aircraft production during 1914-1918 ensured that trade unions which were concerned with the building of other mechanically-propelled vehicles extended their activities to aeroplane manufacture. Thus when the National Union of Vehicle Builders was formed by amalgamation in 1919, its jurisdiction extended to the aircraft as well as the automobile and railway rolling stock industries.[1] Secondly, during the renewed expansion of the aircraft industry during the late 1930s a number of large motor companies ran "shadow" aircraft factories in the Midlands and the North-West. The success which trade unions had in organising workers in these establishments had repercussions for the strength of trade unionism within their localities generally. Thus the success achieved by trade unions at the Austin shadow factory in Birmingham strengthened organisation in the Austin motor plant and in the city as a whole during the 1940s. Finally, as will be shown in a later chapter, the relative success experienced by individual unions in organising aircraft

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(1) N.U.V.B. Rules March, 1919 Rule 1, Section 1.

workers helped to influence the pattern of union organisation in the motor industry after the war. The best example of this is the case of the N.U.V.B., which failed to get more than a foot in the door of the aircraft industry during 1935-45. Consequently its relegation to third place in the motor industry, behind the A.E.U. and the T.G.W.U., already a strong possibility by 1937, was rendered a certainty by 1945.

The history of trade unionism in aircraft manufacture can be divided into a number of phases corresponding to stages in the development of the industry itself. Before 1914 aircraft production was in its infancy and trade unions were just beginning to establish a presence.(1) The First World War generated a tremendous expansion in the industry and this growth was accompanied by an extension of trade union membership. It is not clear, however, whether increases in membership kept pace with the growth of employment. While trade unionism was strong in a number of firms, it seems likely that union density in the industry as a whole may have fallen between 1914 and 1918.

With the end of the war the military demand for aeroplanes disappeared and the industry was run down rapidly. As production and employment plummetted during 1919-1923 so did trade union membership. Yet the density of union membership probably rose. From 1924 to 1935 the aircraft industry remained small but nevertheless showed

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(1) A presence which, however, was quite strong in some firms by 1914. (See below p.140-1).

noticeable signs of growth. Once more the increase in numbers employed was accompanied by union membership growth and during this phase membership kept pace with employment. From 1935 the industry began to expand much more rapidly, as did trade union organisation. While it is not clear whether overall density rose, particularly during the war years, there is little doubt that union strength increased in the most important plants.

The course of trade union growth among aircraft workers therefore, diverged at one point from that of its development in the motor industry. The aircraft industry did not benefit from the boom of 1918-1920 but on the other hand the depression of the early twenties did not herald a long-term weakening of the union position, measured in terms of membership density, as it did in the case of automobiles. (1) After 1935 the progress of organisation in each industry took more parallel courses but the aircraft sector remained more strongly unionised. In this chapter it is intended to describe in more detail the phases of union growth among aircraft workers which have been identified above.

Considered in terms of production levels, aircraft manufacture hardly warranted the title of an industry before 1914. Many competing firms existed but output was very low, many businesses producing only one or two aeroplanes during their lifetimes. Before the outbreak of

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(1) There may have been a weakening in the extent of trade union influence on the shop floor however, as the scope for shop stewards' activity was circumscribed.

war the main source of demand was the private flier but the market was extremely limited; as P. Fearon has shown, only eighty privately owned aircraft were registered as airworthy in October, 1913. (1) The military demand for aeroplanes was negligible, the authorities remaining unreceptive to the idea of using aircraft for anything other than very limited military purposes, such as target-spotting for the artillery. (2) Consequently, upon the outbreak of war the total stock of available aircraft in Britain numbered less than three hundred, compared with Germany's 1, 450. (3)

Despite its lack of development, the aircraft industry attracted the interest of certain trade unions during the generally expansive years of 1912-1914. The United Patternmakers' Association claimed a large number of members in aircraft factories and announced its intention of consolidating its position in the industry. Both the Amalgamated Society of Engineers and the Workers' Union recruited among aircraft workers in private and government establishments, e. g. the Bristol Aeroplane Works and the Royal Aircraft Factory at Farnborough. (4) Some establishments were quite strongly organised by 1914. One anonymous firm which made both motor-cars and aeroplanes had recognised trade unions and established a works committee composed

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(1) P. Fearon. "The Formative Years of the British Aircraft Industry, 1913-1924" Business History Review Vol. XL111, 4 (Winter, 1969) p. 476.

(2) ibid. p. 479.

(3) Central Office of Information, "The United Kingdom Aircraft Industry" (1952) (Trades Union Congress Library).

(4) U. P. A. Annual Report, 1914; A. S. E. Journal March, April, 1914; Workers' Union Annual Report, 1912.

of managment and trade union representatives as early as 1908. A disputes procedure was established and trade union officials within the plant were given considerable scope to develop their activities, having the right to move from shop to shop. Unfortunately no information is available concerning total union membership at the company but 26 unions had members there by the outbreak of the war. (1) At the same time trade unions in London began to co-operate with each other in trying to improve organisation and lead wages movements among aircraft workers and this led to the formation of the London District Aircraft Workers' Committee in 1914. (2)

The First World War caused a massive expansion of output and employment in the aircraft industry, especially from 1916. (3) Before the war, Britain had lacked her own aero-engine sector and had relied chiefly on French power units. Moreover, many private firms had

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(1) Report on "An Establishment Making Motor-Cars and Aeroplanes" in Report of a Ministry of Labour Inquiry into Works Committees (1918).

(2) The chief aims of the Committee were to establish a minimum rate of pay for London aircraft workers and to resist the extension of piecework and payments by results. See Allen Hutt, British Trade Unionism. A Short History (6th edition, 1975) p. 73-4 and below, p. 150-4

(3) The number of firms in the aircraft industry rose from 771 in November, 1917 to 1,529 in October, 1918. P. Fearon, "The Formative Years of the British Aircraft Industry, 1913-1924" loc. cit.

been occupied assembling French-designed air frames. However, by 1918 Britain had established a large air frame and engine building capacity based upon British designs. (1) By 1918 the annual output of the industry stood at 26, 685 air frames and 29, 651 engines. (2)

Trade unions were encouraged to intensify their efforts to organise aircraft workers for three reasons; the growth of employment, the desire to protect the position of skilled men in the face of dilution and concern over wages issues. Employment in aircraft production rose rapidly to reach 347, 000 by 1918. (3) The Amalgamated Society of Engineers stepped up its activities at the government-owned factories at Farnborough and Eastleigh, increasing its membership sevenfold and fourfold respectively between 1914 and May, 1919. Membership in Kingston-upon-Thames, home of the Sopwith Aviation Company, rose from one hundred at the beginning of 1914 to 305 by May, 1919 and at Yeovil the A. S. E. expanded from 41 to 277 during 1916-1919 with the growth of Petter's Aircraft Works. New branches of the A. S. E. were established in Crayford and Rochester, partly in order to aid the recruitment of aircraft workers employed by

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(1) A number of sizeable firms owed their existence and growth to the war, e. g. Airco, Boulton and Paul, Westland, Fairey, Bristol and Handley Page. The aero-engine sector was led by Rolls-Royce, Napier and Beardmore. See R. Higham, "Quantity Vs Quality; the Impact of Changing Demand on the British Aircraft Industry, 1900-1960" Business History Review Vol XL11, 4 (Winter, 1968) p. 443-66.

(2) Central Office of Information, "The United Kingdom Aircraft Industry" op. cit.

(3) ibid.

Vickers, Ltd. and Short Bros., Ltd., during 1915. (1) In February, 1918 the A.S.E. opened a new branch in Cheltenham as a result of "the engineering extension in aircraft work". (2) Much of the growth of aircraft production occurred in the South-East of England and it was partly in response to this that the A.S.E. established a new organising division for the South-East at the beginning of 1916. (3) Other unions also took advantage of the industry's growth; the Amalgamated Society of Carpenters and Joiners, especially in London and the South-East, and the Workers' Union in Bristol. (4)

The growing scale of production and the increasing specialisation in particular processes on the part of the rising number of sub-contracting firms permitted a more intensive division of labour and the wider use of machinery than had been possible before 1914. This process was further encouraged by acute shortages of all kinds of skilled labour. Thus it was found that "a large number of processes hitherto regarded as skilled were either semi-skilled or even unskilled" so that little skilled labour came to be required in many aspects of production. Jobs

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(1) A.S.E. Journal 1914-1919. See Table 3-1 below for detailed membership figures.

(2) A.S.E. Journal March, 1918, O.D.D.'s Report, division 13.

(3) A.S.E. Journal Jan., 1916. Figures for the distribution of employment in aircraft manufacture are not available for the war years, but in 1931 Greater London and the South-East accounted for approximately 55 per cent of the total workforce. Political and Economic Planning, The Location of Industry in Britain (1939) p. 280-1.

(4) Workers' Union Record Nov., Dec., 1916; Workers Union Annual Report 1918.

which in the experimental era of production had been the province of craftsmen were by the end of the war "sub-divided and simplified by the provision of jigs". (1)

The progress of dilution in aircraft work, measured in terms of the number of dilutees and the range of operations on which they were employed, was considerable. Despite initial doubts as to the suitability of semi-skilled operatives for aircraft work, employers were quickly won over as the shortage of craftsmen became more acute. As early as 1915 one Leeds firm hired two hundred semi-skilled men and sixty unskilled women to operate automatic machinery which had been installed. The extended employment of women is especially noticeable. By 1917, women were employed in over seventy operations in aircraft construction which, prior to the war, were performed almost exclusively by skilled men. Most of these operations consisted of machine work and simplified assembly work, but hand operations in both metal and wood were also undertaken by women. (2) Estimates based upon returns from aircraft firms to the Labour Supply Department of the Ministry of Munitions indicate that women accounted for about 34 per

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(1) "Notes on Labour Problems in Wartime" P.R.O. MUN 4/3335; Ministry of Munitions Weekly Report, week ending 8 April, 1916 P.R.O. MUN 2/27; Report of the War Cabinet Committee on Women in Industry Cmd 135 (1919) p.114. "Jigs" were essentially patterns made of wood or metal which ensured the accurate drilling, shaping and assembly of components.

(2) "Examples of Success in Diluting Labour by Unskilled Male, Female and Juvenile Labour" 14 Dec., 1915 P.R.O. MUN 5/70/324/11; "Report on the Progress of the Dilution Campaign" P.R.O. MUN 5/70/324/21; "List of Operations Performed by Women in Various Industries" 7 Nov., 1917 P.R.O. MUN 5/70/324/12.

cent of the labour force during 1917. Thus approximately 110,000 women were employed in the construction and repair of aircraft during 1917-1918. Of these, some 23,000 were directly substituted for men on jobs which had existed before the war. (1)

Dilution in the aircraft industry stimulated organising efforts by trade unions in the following ways. Trade unions representing skilled men saw uncontrolled dilution as undermining their ability to protect their members' interests by exercising control over entry to their trades and reserving certain jobs for skilled men. Skilled workers themselves felt threatened by competition from "cheap labour" and turned to trade unions for protection. At the same time, the growing employment of less-skilled workers encouraged organisations such as the Workers' Union to step up activities in the aircraft factories.

Opposition to dilution appears to have been widespread in the aircraft industry although it was strongest among woodworkers, whose resistance was spearheaded by the Amalgamated Society of Carpenters and Joiners. The A.S.C. & J refused to co-operate in the implementation of dilution schemes throughout the war and as late as 1918 it

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(1) Labour Supply Department Weekly Summaries 15 Sept., 1917 to 8 Dec., 1917 P.R.O. MUN 5/71/324/38. These returns are probably not very reliable, being based on returns from a small and varying sample of firms (a maximum of eight). The figure is supported by the Report of the War Cabinet Committee on Women in Industry, p. 94, which stated that by the end of the war 33 per cent of aircraft workers were women. However, the Committee may well have based its estimate on the Labour Supply Department's information.

mounted a series of efforts to prevent the introduction of less-skilled workers at aircraft establishments throughout the country. It opposed the employment of female dilutees in the North-West and in Yorkshire on the grounds that craftsmen were available to do the work and it succeeded in getting women dismissed from sawmills in the West Midlands. In London, aircraft workers at Trollope and Colls threatened to strike if women were employed on assembly work. Dilution went ahead more easily in the South-West, but even there a centre of resistance developed among aircraft workers in Cheltenham. (1)

This kind of resistance was less common among metal workers and engineers, being confined mainly to centre-lathe turners in the engine shops in Yorkshire and the East Midlands. However, sheet metal workers joined with woodworkers in opposing dilution in London and the South-East. (2) Yet despite widespread opposition to dilution and the fact that dilution was the single most common cause of strikes in engineering as a whole during the war, strikes of aircraft workers were rare. During 1917, a year of widespread strikes against the proposed extension of dilution to work on private as well as government

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(1) Ministry of Munitions Weekly Reports week ending 8 April, 1916 P.R.O. MUN 2/27; "Memorandum on the Difficulties of Dilution" 31 August, 1916 P.R.O. MUN 5/70/324/20; Aircraft Dilution Officers' Conference Minutes 3 April, 1918; Ministry of Munitions "Extracts from Printed Weekly Reports Referring to Dilution" week ending 13 July, 1918 P.R.O. MUN 2.

(2) Aircraft dilution officers' conference Minutes 3 April, 1918.

contracts, only two stoppages over dilution in the aircraft industry were recorded by the Ministry of Munitions, both at Rolls-Royce. In March, workers struck over the release of clerks to the army, a move which was seen as a prelude to dilution, and in April a second strike occurred when managment ordered certain operations to be performed by women. (1)

The organisational response of unions of skilled men to dilution was to urge craftsmen to stick to the union, visit aircraft factories as they opened, e.g. the Blackburn Aeroplane Works, and to make greater efforts to organise hitherto non-union firms such as the Saunders Aeroplane Company. (2) In addition, and in line with other branches of war-time engineering, more attention was paid to the establishment of workshop organisation. Simultaneously, the Workers' Union and other labourers' unions such as the Gasworkers' and General Labourers' Union stepped up their organising efforts among less-skilled workers, the Workers' Union for example, declaring its ambition to be to become the leading representative of women engineering workers. (3)

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(1) B. Pribicevic, The Shop Stewards' Movement and Workers' Control, 1910-22 p. 36; Ministry of Munitions Weekly Reports week ending 7 April, 1918 P.R.O. MUN 2/28.

(2) A.S.E. Journal Jan., 1916, July, August, 1918, Oct., Dec., 1914, August, 1915.

(3) See p. 55 above. Unions of skilled men encouraged dilutees to join unions catering for women and less-skilled workers generally. For example, the A.S.E. encouraged female dilutees to join the National Federation of Women Workers. See Report of the Committee on Women in Industry; Appendices, Summaries of Evidence, etc. Cmd 167 (1919) p. 60.

Trade unions were also impelled to organise the aircraft industry as a result of their concern about wages. There existed three problems concerning aircraft workers' wages as far as the unions were concerned. The first was the rapid proliferation of firms, which was seen by unions of skilled men as undermining district rates since new firms, not bound by collective agreements, were free to ignore union-negotiated conditions of employment. Consequently the A.S.E. urged its members to insist that the district rate be paid when accepting aircraft work and redoubled its efforts to organise aircraft shops as they opened.

Secondly, some unions, notably the A.S.E. and the A.S.C. & J., sought to resist the introduction of payments by results to the aircraft industry during the war. The A.S.E. was by 1914 not opposed to all systems of piecework in practice. Piecework had spread throughout engineering during the last quarter of the nineteenth century and the E.E.F. had established the right to introduce payments by results in the 1898 Terms of Settlement. By 1914 about one-third of engineering workers were being paid by results.(1)

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(1) H.A. Clegg, A. Fox and A. Thompson, A History of British Trade Unions Since 1889, Volume 1 1889-1910 (Oxford, 1964) p. 342-3; J.B. Jefferys, The Story of the Engineers, op. cit. p. 154-5.

The A.S.E. was by 1914 however, opposed to certain forms of piecework, notably the Premium Bonus system which was proving attractive to the managment of many new firms appearing in the aircraft industry. (1) The main objection of union officials to the system was that it handed over to managment a considerable amount of control over piecework earnings and "what effect change in manufacture or alteration of design should have upon prices when fixed" since employers were able to alter time allowances and piecework prices if a change in the method or material of construction took place. (2) In nearly every case where aircraft firms tried to introduce Premium Bonus, the A.S.E. resisted on the grounds that it would lose a significant amount of influence over the earnings of its members. (3) The desire to resist Premium Bonus was thus a factor encouraging the A.S.E. to take an active interest in the aircraft industry.

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(1) The Premium Bonus system was devised by James Rowan and was often referred to as the "Rowan system". Its basis was a time allowance for each job. Workers who took longer than the time allowed were paid the normal time rate for the class of work upon which they were employed. Workers who took less than the time allowed to complete the job were paid the time rate plus a bonus which reflected a proportion of the time saved on the job. For the employer the attraction of the scheme was that whatever errors may have been made in fixing times on jobs, workers could never earn more than double the normal time rate. See J.B. Jefferys, op. cit. p. 130. The A.S.E. had agreed to accept Premium Bonus in 1902 but rejected it in 1914.

(2) A.S.E. Journal August, 1917 O.D.D.'s Report, division 10.

(3) ibid.

More fundamental opposition to payments by results came from most of the woodworking unions in aircraft, led by the Amalgamated Society of Carpenters and Joiners. The A.S.C. & J. had a long-established, principled objection to all forms of payments by results, including straight piecework. From 1915 onwards the A.S.C. & J., together with other woodworking unions, came under increasing pressure from employers to accept payments by results for aircraft workers. The A.S.C. & J. did all it could to resist this pressure and succeeded in uniting the majority of woodworking unions in a campaign against payments by results. (1) In 1917, representatives of the Ministry of Munitions and the Air Board appealed to the A.S.C. & J. to relax its policy on payments by results to the extent of allowing P.B.R. to operate in aircraft shops for the duration of the war. The A.S.C. & J. put this proposal to a ballot of the membership, at which it was defeated roundly by 10,673 votes to 4,086. (2) The A.S.C. & J. remained implacably opposed to the extension of payments by results throughout the war and during the post-war years. (3) During 1919, the union became involved in disputes over payments by results at

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(1) "Circular Containing Proposals for Conditions of Employment Affecting All Aircraft Workers in the British Isles", A.S.C. & J. Sept., 1917; T. J. Connelly, The Woodworkers, 1860-1960 (1960) p. 46-7. The campaign was organised through the National Woodworkers' Aircraft Committee from 1916. For more about the N.W.A.C., see below, p. 153-5.

(2) A.S.C. & J. "Circular" Sept. 1917.

(3) However, it did agree in 1917 not to oppose payments by results where it already existed. This was in return for a national wage agreement for aircraft woodworkers, for more about which, see below p. 152-3.

Vickers, Ltd. and Boulton and Paul, Ltd. In the course of the disputes it succeeded in persuading other unions representing aircraft woodworkers to withdraw all of their members from shops carrying out work for either firm. The seriousness with which the A.S.C. & J. pursued its campaign against payments by results is indicated by the expulsion from the union of a number of members in Norwich on the grounds that they had agreed to operate a payments by results system at the Boulton and Paul Works. (1)

Much of the force went out of the payments by results issue with the rapid run-down of aircraft production during 1919-1920. By September, 1919 not more than four hundred A.S.C.C. & J. members were involved in disputes over payments by results and during that month a provisional agreement was reached with the aircraft employers whereby, pending a final settlement, acceptance of payments by results would not be made a condition of employment. (2)

In the case of the aircraft woodworkers, opposition to payments by results became closely linked with action regarding the third wages issue specific to the aircraft industry which gave rise to trade union

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(1) Amalgamated Society of Carpenters, Cabinet-Makers and Joiners Monthly Journal April, August, 1919. The change of name resulted from the absorbtion by the A.S.C. & J. of the Amalgamated Union of Cabinet-Makers in 1918. At the end of 1920 the A.S.C.C. & J. merged with the General Union of Carpenters and Joiners to form the Amalgamated Society of Woodworkers. See also A.S.C.C. & J. General Executive Council Minutes 12 June, 1919.

(2) A.S.C.C. & J. Monthly Journal Sept., 1919.

concern and stimulated organisational efforts. This was the objection to the multiplicity of rates of pay for similar work which existed in the aircraft industry. This situation stemmed from the way in which aircraft production had sucked in firms from a wide variety of woodworking trades, each with their own separate rates of pay. The problem first began to cause concern in London as early as 1914. Allen Hutt wrote that 23 London factories payed eleven different sets of rates, several of which were below the "normal" rate for the class of work being done. The rapid growth of the industry in other parts of the country during 1915-1916 led to a national campaign being mounted in 1916, led by the A.S.C. & J., which aimed at achieving a national minimum rate for aircraft workers which would be equal to the highest existing union-negotiated rate in the woodworking trades generally. (1)

In 1917 a situation arose in which the woodworkers decided to effect a minimal compromise over their objection to payments by results in order to achieve the national minimum rate. When the Ministry of Munitions and the Air Board tried to persuade the unions to accept payments by results for the duration of the war, the woodworkers rejected the proposal but agreed to accept payments by results in shops where it already existed in return for a national wage agreement, to come into effect from 1 November, 1917. (2)

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(1) Allen Hutt, British Trade Unionism. A Short History (6th edition, 1975) p. 73; A.S.C. & J. "Circular" Sept., 1917.

(2) T.J. Connelly, The Woodworkers, op.cit. p. 46.

This counter-proposal was accepted by the government and the woodworkers thus gained a considerable if rather delayed victory in respect of minimum rates at little cost in terms of their position on the payments by results issue. However, employers were in many cases unwilling to implement the 1917 agreement since it meant increasing hourly rates. On 31 January, 1918 therefore, following complaints that employers were not observing the agreement, the woodworkers' unions gave nine days' notice of a national strike unless the government compelled firms to abide by the new terms of employment. After threatening to gaol any strikers, the government ordered employers to implement the November, 1917 agreement without delay. (1)

The rapid growth of the aircraft industry and the nature of the wages issues which emerged during 1914-1916 gave a distinctive character to trade union organisation among aircraft woodworkers. Given the tremendous expansion of production and employment, the rapid proliferation of new firms and the main policy goals of the woodworkers, i.e. the abolition of payments by results and the establishment of a national minimum rate of pay, the need for co-ordinated action quickly became apparent. As the largest of the unions involved it was the A.S.C. & J. which took the lead. The first step - a response to the early emergence of difficulties in London - was the formation of the London District Aircraft Workers' Committee in 1914.

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(1) ibid.

Composed of representatives of all woodworking unions engaged in aircraft production, it sought to promote the unionisation of aircraft workers, to organise opposition to payments by results and to campaign for a separately negotiated pay structure for aircraft workers. The Committee achieved little except for a relatively minor improvement in wage rates in 1916, and as the woodworkers' problems took on a more national dimension, the London District Committee was succeeded by the National Woodworkers' Aircraft Committee. (1) Thus there developed a high degree of co-operation between woodworking unions in the aircraft industry during the First World War which was to re-emerge in the mid-thirties.

The N.W.A.C. was not merely a forum for the exchange of views among national trade union officials. Considerable emphasis was placed upon the development of strong shop-floor organisation and N.W.A.C. representatives actively encouraged the emergence of a shop stewards' organisation in the aircraft industry. In itself this was not unusual, but what distinguished the aircraft shop stewards' movement from that in many other branches of wartime engineering was the extent of common interest and co-operation between shop stewards and national officials. There appears to have been little if anything of a protest element directed against full-time national officials such as occurred in ship-building and much of engineering during the war.

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(1) Allen Hutt, British Trade Unionism. A Short History, op. cit. p. 73; W. Mosses, The History of the United Pattern-Makers' Association (1922) p. 276; S. Higgenbottam, Our Society's History (official history of the Amalgamated Society of Woodworkers, Manchester, 1939) p. 210-2

The most obvious explanation for this is the over-riding importance to both full-time officials and the rank-and-file of the desire to resist payments by results and to obtain a national minimum rate. That these issues were a powerful unifying force is demonstrated by the strike threat of 1918. When Churchill, the Minister of Munitions, suggested that he had the power to stop a strike being called, he was told by the N.W.A.C. that they had already made arrangements with local and shop-floor representatives for a walk-out on 9th February unless employers were ordered to implement the 1917 minimum rates agreement. (1)

The fact that these particular issues did unite representatives of the rank-and-file with the official leadership may be explained in turn by the recent origin of trade union organisation among aircraft workers. Most aircraft workers who joined trade unions during 1914-1918 did so because of the promise of action on payments by results and the structure of hourly pay. Thus there was little time for divergent, antagonistic interests to develop.

Trade union efforts to recruit aircraft workers were therefore stimulated during 1914-1918 by the rapid growth of aircraft production, the threats and opportunities associated with dilution and concern over wages issues. These pressures, occurring as they did within a climate generally conducive to union expansion, must have resulted in

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(1) S. Higgenbottam, Our Society's History, op.cit. p. 211-2.

a significant extension of trade union organisation in the aircraft industry. Unfortunately, accurate estimates of membership are impossible to construct owing to the lack of detailed statistics of union membership in individual industries or occupations. It is therefore necessary to attempt a rough estimate based upon the indirect evidence of trade union voting figures, branch membership returns and branch accounts. These sources indicate that membership in the aircraft industry grew considerably during 1914-1918 but that it probably did not expand as rapidly as employment.

In terms of membership and influence within the aircraft industry the Amalgamated Society of Engineers, the Carpenters and Joiners and the Workers' Union were dominant, although several smaller unions had membership worth recording. There are clear signs of a significant expansion of the A.S.E. among aircraft workers. The extension of the A.S.E.'s activities in this area have already been referred to above. (1) The total membership of the union's branches in sixteen districts associated with aircraft work doubled between 1914 and 1919, from 9,418 to 18,892. Obviously these figures do not constitute estimates of actual A.S.E. membership in the aircraft industry, but the increase is indicative of the kind of progress being made, especially as from Table 3-1 below it can be seen that the bulk of the expansion occurred during 1915-1917, as employment and output in the aircraft industry began to grow really rapidly. One might guess that by the end

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(1) See p. 142-3.

Table 3-1 Amalgamated Society of Engineers, branch membership in sixteen towns, January 1914 - 1917 and May, 1919

Town	1914	1915	1916	1917	1919
Bedford	213	223	288	544	642
Birmingham	2843	3174	3970	4201	3953
Blackburn	871	873	887	921	1053
Bristol	1100	1283	1580	1967	2874
Coventry	2574	---	---	4033	4655
Erith	807	902	1075	1233	1312
Farnborough	85	231	211	384	607
Gloucester	128	134	169	214	353
Kingston-upon-Thames	100	151	210	198	305
Luton	195	206	269	471	559
Eastleigh	104	123	193	204	442
Crayford	-----No	Branch-----	174	393	529
Acton	168	247	330	418	636
Rochester	No Branch	150	156	259	304
Yeovil	27	50	41	---	277
Total:	9418	7966	9840	16073	18892
Total (excluding Coventry)	6844	7966	9840	12040	14237

Source:- A.S.E. Journal Jan., 1914- 1917; May, 1919.

of the war A.S.E. membership in the aircraft industry was in the region of fifteen to twenty-five thousand.

There are no branch membership returns for the A.S.C. & J. during the war years but a rough idea of the union's strength among aircraft workers can be obtained from the number of A.S.C. & J. members who voted on issues relating specifically to the aircraft industry. Thus in 1917, 14,759 members voted on whether or not to accept the introduction of payments by results to aircraft shops for the duration of the war. In July, 1919, 25,502 members voted on whether to strike against payments by results being worked in aircraft factories owned by Vickers and Boulton Paul, Ltd.[1] On this basis it would seem that the A.S.C.C. & J. had between fifteen and twenty five thousand members in aircraft plants by 1919.

Evidence relating to the Worker's Union is virtually non-existent. Nevertheless, Richard Hyman found that the W.U. experienced its most rapid wartime growth in London and the South-East; "Of minor importance in 1914, the area contained over a quarter of the union's membership by 1918....."[2] While the Workers' Union's main areas of strength in the region were the Woolwich Arsenal and the Naval Dockyard at Chatham, and the bulk of its recruits appear to have been

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(1) A.S.C. & J. "Circular....." Sept., 1917; A.S.C.C. & J. Monthly Journal July, 1919.

(2) Richard Hyman, "The Workers' Union, 1898-1929" (D.Phil thesis, Oxford University, 1968) p. 110.

workers in shell factories, it is certain that aircraft workers were also drawn into the W.U. in growing numbers. New branches were set up in Crayford and Farnborough, at Short Bros. in Rochester and at Hendon, where a separate women's branch was organised. (1)

Elsewhere, the Workers' Union extended its membership in the Bristol - Gloucester area and the Midlands. It is evident that the union must have organised a large number of aircraft workers although what that number was is impossible to say with any certainty. Judging by the income from subscriptions to the W.U.'s new branches in Bristol, Coventry, Crayford, Farnborough, Hendon and at Short Bros. in 1918, the membership of these branches (which was not recorded) totalled between 700 and 1, 450. (2) On this basis, given its strength in the Midlands (Hyman estimated its membership in Birmingham and Coventry to have been 91, 500 by December, 1919) (3) it is doubtful whether its membership in the aircraft industry could have been less than ten thousand; indeed it could have been twice as great.

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(1) Workers' Union Annual Report 1918.

(2) ibid. No figures for branch membership were recorded in the Workers' Union Annual Report but branch accounts were printed. Estimates of membership can be obtained by dividing total income from subscriptions by the amount of the subscription. Workers' Union subscriptions ranged from 3d to 6d per week. This gives extreme estimates of 728, assuming that all branch members paid a 6d subscription and 1, 450, assuming they all paid 3d.

(3) Richard Hyman, "The Workers' Union, 1898-1929" op. cit. p. 143.

In addition to the three major societies, a number of other unions established themselves in the aircraft industry during the war. The National Amalgamated Furnishing Trades' Association was drawn into aircraft manufacture as furniture-making shops, e.g. in High Wycombe, Bucks, were converted to aircraft work and the Association formed new branches in Crayford, Farnborough, Hendon and Kingston-upon-Thames. These new branches generally remained fairly small - under 250 members - but membership in the established centre of High Wycombe grew noticeably, from 691 to 1,562 during 1914-1918. In addition, nearly three hundred new members were made in Bristol during 1917-1918. (1)

Other, smaller, societies such as the Amalgamated Society of Wheelwrights, the U.K. Society of Coachmakers and the United Patternmakers' Association, failed to expand their total membership significantly during the war. However, there occurred a shift in the distribution of the Coachmakers' membership away from the Midlands and Manchester to London, which possibly reflected the growing importance of aircraft work. (2)

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(1) National Amalgamated Furnishing Trades' Association Annual Report 1914, 1917, 1918.

(2) Of the total increase in the Coachmakers' membership of 1,800 between October, 1914 and January, 1919, membership growth in North, South and West London accounted for 731. United Kingdom Society of Coachmakers Quarterly Report and Journal Oct., 1914, Jan., 1919.

Taken together, it is possible that the N.A.F.T.A. and the smaller unions of woodworkers and metalworkers (e.g. coppersmiths', sheet metal workers' societies) had a further ten thousand members in aircraft work by 1918. This gives a very wide range of membership estimates; between 50,000 and 80,000 out of a total employment figure of 347,000, or between 14.4 per cent and 23.0 per cent of the workforce by 1918. The paradox of rapid growth of membership coupled with low and possibly falling density may be explained in terms of the rapid growth of employment resulting mainly from the proliferation of small firms rather than the further expansion of large ones, and the growing importance of dilutees, especially women, in the labour force. Large numbers of small firms, many of which were sub-contractors, posed organisational problems which had been recognised when attempts were made to organise automobile workers before the war. (1) That dilution of labour could lead also to dilution of trade union strength was recognised at Rolls-Royce. In 1918 a Ministry of Labour report stated that the Rolls-Royce works at Derby had been highly organised before 1914, with 98 per cent of workers in trade unions. By 1918 however, the proportion had fallen owing to dilution. (2)

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(1) See above, p. 44

(2) Ministry of Labour, Report of an Inquiry into Works Committees (1918) p. 57.

The tendency of union membership and union density to move in opposite directions continued during the immediate post-war years but with the currents reversed. Membership levels plummetted immediately after the war but organisational density rose as employment fell faster than union membership.

The abrupt cessation of military orders at the end of the war caused a collapse of production and employment during 1919-1921. Huge stocks of war surplus aircraft and spares existed and for a time during 1918-1919 the government sought to slow down the rate at which workers were being laid off by ordering aircraft to be dismantled. (1) Nevertheless, with the collapse of the military market and the demand for payments of wartime excess profits tax, many firms went out of business. By 1920 only thirteen firms had any aircraft work at all. (2) While the De Havilland Company was able to exploit and perhaps largely to create the growing enthusiasm for light aviation as a recreation with the production of the D.H. Moth, many other firms were forced to turn to other activities in order to survive. (3) The demand for light aircraft was limited and commercial aviation in Britain operated on too small a scale to sustain the industry. (4) Neither could salvation be found in exports.

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(1) A.S.C.C. & J. Monthly Journal May, 1919

(2) P. Fearon, "The British Airframe Industry and the State, 1918-1935", Econ. Hist. Rev. 2nd series, Vol XXV11, 2 (May, 1974) p. 237.

(3) The Westland Aviation Company made beer barrels and the Gloster Aeroplane Works turned to car bodies and milk churns in addition to its airframe work. ibid.

(4) Britain did not have an international airline until 1924, when Imperial Airways was set up. By 1931 the company still had only 22 aeroplanes. ibid. p. 249

There was a general surplus of aircraft in the U.S.A. and Europe; moreover British aircraft were expensive relative to foreign makes owing to a lack of standardisation in production. (1)

The result was a dramatic reduction in employment from 347,000 in 1918 to 10,002 by 1924. (2) The vast majority of those leaving the industry were workers in other trades such as furniture making, and dilutees. The dismissal of dilutees was insisted on by the unions represented on the N.W.A.C. and by the A.S.E. In June 1919 it was asserted that "the whole of the wood processes in the manufacture of aircraft was the work of the skilled artisan and in no way should be handed over to the dilutee or the handyman or women." The unions sought strict enforcement of the terms of the 1915 agreement on dilution which had stressed that it should be a temporary measure to be abandoned at the end of the war. Hence it was demanded that

> "every dilutee must be discharged from aircraft and craftsmen put onto the work, which work would otherwise have been retained in their hands had no war taken place." (3)

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(1) ibid. p. 244; John B. Rae, "Financial Problems of the American Aircraft Industry, 1906-1960" Business History Review Vol. XXX1X, 1 (Spring, 1965) p. 103.

(2) Census of Production of the United Kingdom (H.M.S.O. 1935) Part 11 p, 409.

(3) Report of a meeting with representatives of the Engineering Employers' Federation at York, 13 June, 1919. N.W.A.C. Minutes reprinted in A.S.C.C. & J. Monthly Journal July, 1919.

District, branch and shop officials were instructed to insist upon dilutees being dismissed immediately any members of N.W.A.C. unions became unemployed and a campaign was launched to clear women out of aircraft factories. (1)

There can be little doubt that whether or not trade union action was particularly effective in determining employers' policy on dismissals, the majority of dilutees absorbed by aircraft production during the war had left it by the early 1920s. To a great extent the industry reverted to handicraft production and became increasingly reliant upon skilled workers. (2)

The reduction of employment did lead to absolute losses of membership and it is evident that the proportionate strength of the A.E.U. in some plants was reduced. This was partly due to the A.E.U.'s confrontation with the Engineering Employers' Federation in 1922, since reports of men leaving the union were received from federated aircraft plants such as Fairey Aviation at Hayes, in 1923. (3) However, the A.E.U.'s organisation in non-federated establishments seems to have been maintained, e.g. at Fairey Aviation,

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(1) A.S.C.C. & J. Monthly Journal Dec., 1919.

(2) One of Hawker's production engineers stated in 1929 that the scope for the application of machinery and specialised labour was narrower than it had been before 1920 owing to the much lower levels of output required. F. Sigrist, "Some Aspects of the Production Problem in Aircraft" Journal of the Royal Aeronautical Society Vol. 33 (1929) p. 225.

(3) A.E.U. Journal Nov., 1923, O.D.D.'s Report, division 25.

Supermarine Aviation and A.V. Roe plants in Southampton, where 100 per cent organisation was reported among fitters in 1925. (1) Moreover, no reports of organisational deterioration were published in the records of the major woodworking unions (i.e. the National Union of Vehicle Builders, the Amalgamated Society of Woodworkers and the Amalgamated Society of Woodcutting Machinists). The admittedly imperfect evidence of branch membership returns suggests that the proportion of trade unionists among aircraft workers probably rose between 1918 and 1924, with at least 5,000 trade unionists being employed in an industry containing 10,000 manual workers. (2) On a reasonably conservative estimate therefore, 50 per cent of aircraft workers were organised in 1924 so that the proportion of trade unionists in the post-war nucleus of aircraft

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(1) A.E.U. Journal Aug., 1925, O.D.D.'s Report, division 23. Fairey's Southampton plant, unlike the Hayes factory, was not affiliated to the E.E.F.

(2) The branch membership figures for the A.E.U., N.U.V.B. and A.S.W. relate to branches in aircraft centres outside Birmingham, Coventry, Wolverhampton and Greater London, i.e. they are for Yeovil, Bristol, Cheltenham, Gloucester, Southampton, Hamble, Eastleigh, Farnborough, Erith, Speke, Dalmuir and Dumbarton. The combined membership of the three unions in these areas was just over 8,000 at the end of 1924. Of course, not all of these members were aircraft workers - only a minority were. But one must take into account the major centres of aircraft production also - the Midlands and Greater London. Allowance also needs to be made for Workers' Union membership and that of other, small, societies. Branch membership figures for Birmingham, Coventry and Wolverhampton are not discussed here because aircraft workers could only have accounted for a tiny proportion of the total membership so that the totals themselves would reveal nothing. It is very hard to allow for W.U. membership in the absence of branch membership returns.

workers was in all probability noticeably higher than it had been among the much larger, more heterogenous labour force in wartime. In contrast to its impact in the motor industry, the collapse of the Workers' Union had no long-term adverse effect upon the development of aircraft unionism during the 1920s and 1930s since the composition of the workforce in the aircraft industry shifted back in favour of craftsmen whereas in automobiles there was a continuous trend towards the employment of semi-skilled operatives. This shift in workforce composition was of prime significance in increasing union density among aircraft workers during the early 1920s.

From 1924 to 1935 trade unions maintained their position in the aircraft industry within a context of uneven growth of output and employment which was heavily reliant on government support. The expansion and rapid contraction of production during 1914-1924 had resulted from shifts in the military demand for aircraft and military requirements continued to exert a dominant influence over the size and structure of the industry. Between 1924 and 1935, aircraft production owed its survival to the concern of governments to preserve the nucleus of an aircraft industry against the possibility of a major war in the future. Thus the bulk of work was on government contracts for military aircraft. (1) However, governments faced the dilemma of wanting to preserve sufficient firms

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(1) See P. Fearon, "The British Airframe Industry and the State, 1918-1935" loc. cit. p. 251.

to ensure the survival of an adequate pool of technical expertise and the basis for rapid expansion of output if necessary while at the same time being unable to make sufficient funds available to provide them all with adequate orders for aeroplanes. In an attempt to solve this problem a privileged group of firms was created which came to be known as the "ring". By 1935, sixteen firms producing airframes were receiving special treatment in the form of orders from the state and a re-distribution of work from financially strong companies such as Bristol, Hawker and Fairey to weaker concerns, e.g. Boulton and Paul, Blackburn and Westland, via sub-contracts. The scheme had a number of serious disadvantages. Ministry officials were conservative in their attitudes towards design so that little progress was made regarding production techniques and aircraft performance as a result of work on government contracts. The advances which were made, e.g. retractable undercarriages and streamlined airframes, were either made by firms outside the "ring" or as a result of private initiatives taken by firms within it. (1)

Government support also enabled weakly-managed, inefficient firms to survive and this created problems when expansion of output came to be required after 1935. (2) Finally, the number of

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(1) ibid. p. 247, 251. In the latter case it could be argued that government orders at least enabled firms to survive and experiment with their own designs.

(2) ibid. p. 248. Blackburn, Boulton and Paul and Westlands were castigated for managerial incompetence by the Air Ministry during the mid-thirties. However, even firms which had managed to survive outside the "ring" for many years, such as Airspeed, found it difficult to make the transition from "one-off" jobs to large-scale production. See Nevil Shute Slide Rule (Pan edition, 1968) p. 202-3.

Air Ministry orders remained low so that the industry was overcrowded, with small firms competing desperately for the few contracts available. Production runs were short and this prevented the development of better production methods; for example, wood and fabric remained in common use since the capital outlay involved in tooling up for production in metal was far higher than that for wood, which continued to be compatible with handicraft techniques.

Nevertheless, if the industry remained small it did grow somewhat. In 1924, 503 aeroplanes were produced; in 1930, 1,456 and in 1935, 1,800.(1) Employment rose from an average of 10,002 operatives in 1924 to 17,595 in 1930 and 29,143 in 1935.(2) Trade union membership kept pace with this expansion, indeed union density may have risen. To a great extent this was due to the improvement of the A.E.U.'s organisation among aircraft workers. During the middle and late twenties the A.E.U. began to rebuild its organisation in major plants in Greater London. The state of membership at Fairey Aviation's plant in Hayes had caused concern in 1923, when it was reported that only 30 per cent of those eligible for membership were in the union.(3) By November, 1925, half of the eligible workers were organised and thereafter, membership of the A.E.U.'s branches in Hayes and Southall gradually began to

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(1) P. Fearon, "The British Airframe Industry and the State" loc. cit. p. 237; P. Inman, Labour in the Munitions Industries (1957) p. 13; Central Office of Information, "The United Kingdom Aircraft Industry" 1952.

(2) Census of Production (1935) Part 11 p. 409.

(3) A.E.U. Journal Nov., 1923, O.D.D.'s Report, division 25.

expand. Membership of the Hayes branch rose from 125 in 1923 to 255 in 1929 and 373 by 1934. The Southall branches' combined membership grew from 252 in 1925 to 356 in 1929 and 415 by the end of 1934. (1) The A.E.U. faced greater problems elsewhere in London, not achieving any substantial increases in membership at the De Havilland Company until 1936. However, some progress was made at Handley Page's plant at Cricklewood during 1934, following the establishment of a special sub-committee to try to improve organisation among aircraft workers in London. (2) Membership of the Cricklewood branch rose from 149 in 1922 to 164 in 1929 then to 240 by the end of 1934, and to 326 by December, 1935. By the end of 1934 one of the A.E.U.'s Organising District Delegates in London was speaking of a general improvement in the organisation of the aircraft industry in London. (3)

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(1) A.E.U. Half-Yearly Report Dec., 1920, June, 1922; Quarterly Report March, 1923, June, 1925, Sept., 1929, "abstract statement"; Journal Dec., 1934.

(2) A.E.U. Journal Nov., 1933, O.D.D.'s Report, division 19. The Sub-Committee was set up in October, 1933 and it also claimed to have been responsible for membership gains at Fairey Aviation during 1933. Journal July, 1934, O.D.D.'s Report, division 20.

(3) A.E.U. Half-Yearly Report June, 1922; Quarterly Report Sept., 1929; Journal Dec., 1934, 1935.

The A.E.U. was able to maintain its strong position in aircraft factories in Southampton despite a temporary set-back occasioned by an upsurge of employers' hostility following the General Strike, when they refused to meet union representatives and took a hard line on the reinstatement of strikers. (1) The union also made gains in Bristol and Gloucester; in Bristol it seems that there was a gradual build-up of membership at the Bristol Aeroplane Company during the mid-twenties which encouraged the re-establishment of shop-floor organisation and culminated in the firm recognising shop stewards in 1929. Increases in membership at the Gloster Aircraft Works in Cheltenham were reported during the mid-twenties and in 1927 the A.E.U. succeeded in getting recognition from the company as well as a 2s (10p.) per week increase for its members. By this time organisation was said to be very good indeed, the Organising District Delegate commenting that "if the industry was organised to the Cheltenham standard a forward move would be inevitable." (2) By 1936 the A.E.U. was the largest representative of aircraft workers, claiming well over 9,000 members. (3)

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(1) A.T. Kidd, History of the Tin-Plate Workers' and Sheet Metal Workers' and Braziers' Societies (1949) p. 268; G.A. Phillips, The General Strike. The Politics of Industrial Conflict (1976) p. 249 n.

(2) A.E.U. Journal Oct., 1927, O.D.D.'s Report, division 20.

(3) A.E.U. National Committee Annual Report 1937, Aircraft Industry Conference Report.

No detailed accounts of organisation among aircraft workers appeared in the records of the major woodworkers' unions before 1935. However, it may be assumed that their membership rose in line with employment, with resistance to payments by results serving to stimulate recruitment. (1) In 1936, the Confederation of Shipbuilding and Engineering Unions, which included the major woodworkers' societies, was told that up to 1935, operatives in the aircraft industry had been well organised and that trade union rates and conditions were generally well observed. (2) However, the best indication of the overall membership position is provided by the results of a survey of organisation in the aircraft industry carried out by the A.E.U. in 1936. The survey was aimed at 34 establishments in 19 districts throughout the country and replies were received from 27 establishments in 16 districts. Most of the major firms were covered, employing between them 23,543 operatives. Among this sample, 14,436 were estimated to have been union members, of which 9,600 were claimed by the A.E.U. If these

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(1) In one of the very few references to aircraft which appeared in woodworkers' unions' records, the General Secretary of the N.U.V.B. reported in 1928 that opposition to the introduction of payments by results had created a climate favourable to recruitment at Short Bros. N.U.V.B. Quarterly Journal April-June, 1928, General Secretary's Report.

(2) C.S.E.U. Annual Report 1936, President's Address.

figures are accurate (and there may have been an element of exaggeration), then 61.3 per cent of this sample of the workforce was organised. While it is possible that replies were not received from some firms because of the lack of union organisation among their workers, so that the sample may have been biased in favour of well-organised plants, most of the major manufacturers were covered and it would be difficult to conclude that trade unionism in the aircraft industry weakened as it did among automobile workers during 1921-1935. (1)

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(1) A. E. U. National Committee Annual Report 1937, Aircraft Industry Conference Report. The main firms covered by the survey included Blackburn Aircraft Co., Bristol Aeroplane Co., Boulton and Paul Ltd., Airspeed, A. V. Roe, De Havilland, Hawker, Gloster (a Hawker subsidiary), Fairey, Handley Page, Armstrong-Whitworth, Short Brothers, Supermarine Aviation and Westland Aviation.

Efforts to maintain and improve trade union organisation during 1921-1935 do not appear to have been the product of co-ordinated action by unions at either national or local level. The National Woodworkers' Aircraft Committee for example, seems to have become defunct after 1920 as the issues of dilution and payments by results became less urgent. It is possible that there was more inter-union contact on the shop floor although shop steward organisation was probably weakened during the 1920s. Never-theless, although there is no direct evidence to support the assertion, shop steward organisation probably survived, although in muted form.[1] Even so, there was no common policy on the organisation of the aircraft industry during the twenties and early thirties. This began to change in 1935 however, as the expansion of the industry opened up new opportunities and presented new problems for trade unions, especially those representing woodworkers.

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(1) Indirect evidence in favour of the survival of workshop organisation exists in the rapid emergence of the Aircraft Shop Stewards' National Council in 1935. It seems reasonable to assume that this grew out of existing workshop organisation. Moreover, the National Minority Movement was strong within the National Amalgamated Furnishing Trades Association in the 1920s and Communists were active in trying to revitalise the aircraft shop stewards' movement in the mid-1930s. See below, p.188-91; also, Roderick Martin, Communism and the British Trade Unions, 1924-1933, A Study of the National Minority Movement (Oxford 1969) p. 51-2; Tom Roberts, "The Importance of the English Aircraft Strike" Communist International (1935) p.617-9.

In the Spring of 1935, the government decided to raise R.A.F. strength to 1,500 front-line aircraft by the end of 1938, a decision which created the need for an extra 492 new aircraft over the next three and a half years. This target was raised in 1936 and in 1938 the government ordered 12,000 aircraft to be produced by the end of 1939.(1) Initially however, the rate of growth of production was slow. Annual output averaged 700 aircraft per year during 1928-1933 and it rose to 1,800 by 1936. In 1937, 2,200 aircraft were built and in 1938, 2,800. No really large increase occurred until 1939, when 8,000 aircraft were manufactured during the course of the year.(2)

The relatively slow growth of output before 1939 was the result of the government's budget constraints on the one hand and supply inelasticities on the other, since delivery targets did not begin to be met until 1939. During 1935-1937, government orders for new aircraft were held in check by the desire to maintain a balanced budget. However, in 1938, growing political tension in Europe encouraged the government to ignore financial constraints and to place an order the size of which (12,000 'planes by the end of 1939) was determined "solely (by) the industry's estimate of what it could produce with the capacity and labour expected to be available to it."(3) Thus it was not until 1938 that orders were forthcoming in sufficient quantity to induce firms to invest in extending their capacity and tooling up for quantity production.

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(1) P. Inman, Labour in the Munitions Industries, op.cit. p.13.

(2) ibid.

(3) ibid.

At the same time, the industry was unable to respond quickly to such growth of demand as did emerge, even before 1938. One reason for this was a reluctance on the part of firms to invest in extra plant and machinery in view of past experience and the excessive amount of competition for orders during the mid-thirties. Another reason was managerial incompetence. Many firms were unable to organise large-scale production when they did receive sizeable orders. Small firms, such as Airspeed and Westland, came in for particularly heavy criticism from the Air Ministry but serious deficiencies in managerial competence were also found at some large companies such as Bristol and Fairey.(1) Finally, employers experienced shortages of suitably skilled labour during 1935 and 1936. This was because firms were trying to expand production on handicraft lines. This required highly skilled operatives with experience of working to a very high degree of accuracy. Many workers from other industries, e.g. shipbuilding, who were hired during 1935-1936, were soon dismissed because of "their absolute inability to come within reasonable distance of doing the work required."(2) It was not until 1938-1939, when firms finally began to organise themselves for mass production, that workers with no previous experience in aircraft work could be usefully employed in large numbers.

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(1) P. Fearon, "The British Airframe Industry and the State, 1914-1935" loc.cit. p. 248. Regarding Airspeed, the firm's managing director, Nevil Shute Norway, remarked himself that "In some cases the earliest members of staff, sometimes considerable shareholders, were proving inadequate in the larger job." Nevil Shute, Slide Rule (Pan edition, 1968) p. 202-3.

(2) P. Inman, op.cit. p. 21-2.

These difficulties led to the government embarking upon a "shadow factory" programme in 1937. The essence of the scheme was that the government would construct aircraft factories which would be managed by firms from outside the industry but in related lines of work, for example, motor manufacture. These firms were to produce aircraft and components designed by the major aircraft producers. Thus "shadow factories" were run by firms such as Austin, Ford and Rootes, Ltd. from the late 1930s until 1945. (1)

Employment in the aircraft industry grew rapidly after 1935, especially during 1938-1939. Estimates of employment in aircraft construction vary but it is possible to say that the number of aircraft workers rose from between 30,000 and 36,000 in 1935 to between 350,000 and 370,000 in 1939. (2) Some of this growth was the result

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(1) ibid. The "shadow factory" programme had in fact been envisaged during the twenties when it was realised that in spite of the operation of the "ring", existing capacity might be inadequate to meet rapidly expanding demand. See P. Fearon, "The British Airframe Industry and the State" loc. cit. p. 243.

(2) These figures refer to all workers, not just manual workers. Central Office of Information, "The United Kingdom Aircraft Industry", op. cit. provides the following figures:

1935	-	35,890
1939	-	355,000

In 1939, the Ministry of Labour estimated that 30,000 were employed in 1935 and 370,000 in 1939. P.R.O. AVIA 10/18.

of the expansion of existing enterprises; the Bristol Aeroplane Company increased its labour force from 8,233 in 1935 to over 17,000 in 1938. A.V. Roe employed 3,750 in 1936 and 7,500 in 1938.[1] However, most of the additions to the workforce were employed in the many new firms which sprang up to do sub-contract work and in the "shadow factories".[2]

The rapid growth of employment and in particular the proliferation of new firms, were seen by trade union officials as presenting a threat to established conditions which required an energetic response in terms of recruitment. According to the Confederation of Shipbuilding and Engineering Unions, the position in relation to organisation and conditions of work in the aircraft industry had been satisfactory up to 1935 as

> "aircraft were mainly constructed under government control, the operatives being well organised and trade union rates and conditions generally observed."[3]

During 1935 however, a number of unions began to feel that their position in the aircraft industry was being undermined. Complaints

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(1) C.H. Barnes, Bristol Aircraft Since 1910 (2nd edition, 1970) p. 34; "Statement on Production and Employment in the Aircraft Industry 10th July, 1938- 31st Dec., 1938" P.R.O. AVIA 10/18.

(2) The number of firms engaged in the construction and repair of aircraft rose from 57 in 1935 to 192 by 1948; Central Office of Information, "The United Kingdom Aircraft Industry", op.cit. P. Inman, Labour in the Munitions Industries, op.cit. p.22. By 1942, Rootes were employing over 10,000 workers at shadow factories at Speke, Austin over 10,000 in Birmingham and Morris 4,630 on repair work at Cowley. "Labour at Main Airframe Contractors" P.R.O. AVIA 10/267.

(3) C.S.E.U. Annual Report 1936, President's Address.

were made that firms were ignoring the government Fair Wages Clause, (1) something which the Federation of Engineering and Shipbuilding Trades ascribed to the entry of new firms into the industry; "the Federation found that in many of these firms operatives were not so well organised and neither were the established rates and conditions being observed". The same view was held by aircraft shop stewards in London, who began to press for militant action to ensure the proper observance of union rates. (2) As a result, efforts were made to improve organisation and an unofficial campaign for a national wage agreement for aircraft workers was mounted by the Aircraft Shop Stewards' Council during 1936-7. (3)

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(1) The Fair Wages Clause dated from 1891, when the House of Commons resolved that workers contracted by the government should be paid what were called "standard rates". In 1909 a new resolution was passed which provided for the payment of trade union rates. D.F. MacDonald, The State and the Trade Unions (2nd edition, 1976) p. 49.

(2) C.S.E.U. Annual Report 1936, President's Address. The Federation of Engineering and Shipbuilding Trades was reconstituted as the Confederation of Shipbuilding and Engineering Unions at the beginning of 1936. On the London shop stewards, see Tom Roberts, "The Importance of the English Aircraft Strike", op.cit. and Amalgamated Society of Woodworkers (A.S.W.) Monthly Journal Oct., 1935.

(3) R. Croucher, "Left-Wing Politics and the Shop Stewards Movement in Engineering, 1935-1946" (Unpublished Ph.D thesis, University of Warwick, 1977) p. 48-55.

From 1937, fears of dilution and its consequences for the position of skilled men encouraged the A.E.U. and the unions affiliated to the C.S.E.U. to pay increasing attention to recruitment and to the establishment of effective workshop organisation. As firms began to tool up for quantity production and automatic machinery was employed more widely, more and more cases of dilution were reported in union journals. Instances at the Blackburn Aircraft Company were referred to, where, by 1939, unskilled operatives had replaced skilled fitters on wing erection work and managment had ceased to acknowledge customary skill differentials outside of the toolroom, all other workers being referred to as "aircraft assemblers". (1) Other examples of dilution were reported from Fairey Aviation, Short and Harland (Belfast), Dobson and Barlow and De Havilland. In addition, the "shadow" factories being run by Ford, Austin and Rootes employed a majority of semi-skilled workers. (2)

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(1) A.E.U. Journal March, June, 1939, O.D.D.'s Report, divisions 8 and 9.

(2) "Statement of Production and Employment in the Aircraft Industry" P.R.O. AVIA 10/18.

Unions of skilled men were adamant in their resistance to dilution up to 1939. In 1936, the A.E.U. instructed its officials to oppose dilution of any kind, and strikes against the displacement of skilled workers occurred at Fairey Aviation's plants in Hayes and Stockport, Dobson and Barlow, the De Havilland Company and a number of other establishments during 1936-1938.[1] The A.E.U., supported by other unions, rejected requests from the government and employers that they accept dilution in order to raise production. In 1938, Walter Citrine suggested setting up a tripartite committee to discuss the issue but, because of the hostility of trade unions to the whole idea of dilution, nothing was done until 1939.[2] Only then did the A.E.U. finally make concessions on dilution by signing an agreement with the E.E.F. on the Temporary Relaxation of Existing Customs as to the Employment of Skilled Men (known as the Temporary Relaxation Agreement) in August. The A.E.U. also agreed to temporary relaxation in non-federated firms on the condition that such agreements conformed to that arrived at with the E.E.F.[3]

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(1) P. Inman, Labour in the Munitions Industries, op.cit. p. 29; A.E.U. Journal Dec., 1937, O.D.D.'s Report, division 9; Journal April, 1938; Labour Research Vol XXV, 4 (April, 1936) p. 90; Vol XXV1, 10 (Oct., 1937) p. 229; Vol XXV11, 3 (March, 1938) p. 67; Vol XXV11, 5 (May, 1938) p. 115.

(2) Labour Research Vol XXV11, 9 (Sept., 1938) p. 212.

(3) A.E.U. Journal Oct., 1939, General Secretary's Report.

The strategy of unions of skilled men, when faced with attempted dilution of aircraft work during the late thirties, was to build up their organisations in order to resist the tendency for less-skilled workers to be hired in the place of craftsmen on a growing number of jobs in the aircraft industry. At the same time however, more semi-skilled and unskilled workers in aircraft factories attracted the attention of the Transport and General Workers' Union and the National Union of General and Municipal Workers. Thus the changing composition of the workforce stimulated recruitment from two directions.

The dilution issue became interlinked with the question of a national wage agreement during 1939, when the A.E.U. decided to approach the Engineering Employers' Federation with a view to establishing "minimum rates for semi-skilled workers on aircraft construction on the basis of 90 per cent of skilled rates". (1) While this was a wide-ranging proposal which might have gained the support of the general unions, it was also integral to the A.E.U.'s attempt to protect the employment and conditions of skilled workers. The A.E.U.'s Executive Committee had been alarmed by the report of its Aircraft Coordinating and Advisory Council (which had been set up in 1937 to discover more about the conditions of work in aircraft firms) to the effect that inroads were being made into the position of craftsmen. It was felt that the establishment of a minimum rate for semi-skilled labour was essential if "cheap labour" was to be prevented from pushing skilled men out of work. (2)

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(1) A.E.U. Finance and General Purposes Committee. Minutes 28th April, 1939.

(2) A.E.U. Financial Report 1939, Executive Council Report.

It was thus in an effort to protect established rates of pay and conditions of work that trade unions began to mount more energetic recruitment campaigns among aircraft workers during the late 1930s. The apparent urgency of the issues at stake and the scale of the task led to the unions operating in the aircraft industry meeting in March, 1935 to discuss the formation of a joint committee to co-ordinate action on the aircraft industry. The function of the proposed committee was "to co-ordinate machinery within the aircraft industry for the purpose of organisation and the maintenance of rates and conditions." (1) The unions attending the meeting included the A.E.U., Boilermakers, Plumbers, the A.S.W., Amalgamated Society of Woodcutting Machinists, N.U.V.B., United Patternmakers' Association and the T.G.W.U. A further meeting was held in June, when the principle of setting up a national committee was accepted by all except the A.E.U. and a sub-committee was appointed to draft a constitution. The new body was to be called the National Aircraft Workers' Committee and it was to establish local committees in districts in which aircraft establishments were located.

However, the N.A.W.C. was weakened by the A.E.U.'s decision not to affiliate to it. Instead, the A.E.U. National Committee instructed the Executive Council to hold a conference of A.E.U. officials in order to establish its own machinery for developing its organisation among aircraft workers. It was considered

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(1) C.S.E.U. Annual Report 1936, President's Address; A.S.W. Monthly Journal Oct., 1935.

"inadvisable" for the A.E.U. to "continue association with other unions on this subject until it was definitely known what the union's future policy would be." (1) This stance was in keeping with the A.E.U.'s refusal to affiliate to the Federation of Engineering and Shipbuilding Trades or its successor, the C.S.E.U. (2) In fact, the A.E.U. saw itself as the leading organisation for aircraft workers and hoped to dominate trade unionism in the industry. Thus in 1936, the Executive Council told the National Committee (3) that

> "It was felt that our rules provided for the enrolment of all aircraft workers and to associate with such a Joint Movement would necessitate control by that body. It was felt that the union had sufficient confidence in its own capacity to control the aircraft industry..... Therefore it was decided not to participate further in or be parties to the Joint Movement." (4)

As a result of these considerations the A.E.U. set up its own National Advisory Committee for the Aircraft Industry in 1937. (5)

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(1) A.E.U. National Committee Annual Report 1935, 1936.

(2) The A.E.U.'s predecessor, the A.S.E., did affiliate to the Federation in 1905 but left in 1918. See J.B. Jefferys, The Story of the Engineers, op.cit. p. 163-4, 191.

(3) Tne National Committee was a delegate body which was constitutionally the governing body within the A.E.U.

(4) A.E.U. National Committee Annual Report 1936.

(5) A.E.U. National Committee Annual Report 1937, Report of the Executive Committee.

Meanwhile, other unions saw joint action as being essential. Lacking the financial and numerical strength of the A.E.U. and in several cases not having very well developed organising machinery geared to the recruitment of large numbers of workers, many societies felt that a considerable advantage was to be gained by co-operation and co-ordination of effort. Nevertheless, initial difficulties had to be overcome. Chief among these was the question of the relationship between the newly formed National Aircraft Workers' Committee and the C.S.E.U. During 1936, the C.S.E.U. had emerged out of the Federation of Engineering and Shipbuilding Trades. The C.S.E.U. was organised on the basis of district and works committees and during 1936 it was decided that aircraft workers should come under the Confederation's Engineering Committee, with a special Aircraft Sub-Committee to be set up if necessary. Immediately there arose the question of relations with the N.A.W.C., which was independent of the Confederation. Ultimately it was decided that matters concerning aircraft workers were to be dealt with by the district committees of the C.S.E.U., these committees acting in co-operation with the local N.A.W.C. organisation. This decision met with some opposition, since earlier in the year the Confederation had warned its district committees against supporting outside bodies. The London District Committee felt that the volte face was unnecessary and argued that "the work of aircraft co-ordination could be just as adequately performed through the Confederation." (1)

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(1) C.S.E.U. Annual Report 1936

Eventually, the London Committee was prevailed upon to help form a London Aircraft Committee attached to the N.A.W.C. The Manchester District Committee however, refused to have anything to do with the N.A.W.C. so long as it remained outside the Confederation.[1] The difficulty was finally resolved in 1937, when it was agreed that the C.S.E.U. should take over the functions of the National Aircraft Workers' Committee in order to avoid duplication of effort, since all but two of the unions involved with the N.A.W.C. were affiliated to the C.S.E.U.[2]

Trade union efforts met with a considerable amount of success among aircraft workers from 1935 onwards. The A.E.U. and the T.G.W.U. achieved 100 per cent membership at Hawker's subsidiary in Gloucester following an unofficial strike in 1935 and in 1936 the A.E.U. imposed a closed shop in certain departments of the Hawker establishment at Brooklands. The engineers were also 100 per cent organised at Rolls-Royce's Derby works.[3] Progress was also made at the De Havilland works in Hatfield and the Bristol Aircraft Company at Filton. Recruitment at the Hatfield plant had by 1936 proceeded to the point at which the A.E.U. considered it worthwhile to open a separate branch for de Havilland workers.

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(1) ibid.

(2) C.S.E.U. Annual Report 1937. The two non-affiliated unions were the National Union of Packing-Case Makers and the National Union of Instrument Makers. Both were invited to join the C.S.E.U. when it took over the functions of the N.A.W.C.

(3) A.E.U. Journal May, 1935, O.D.D.'s Report, division 16; April, 1938, O.D.D.'s Report, division 19; Labour Research Vol XXV11, 5 (May, 1938) p. 115.

Membership grew from an initial fifty to 496 by December, 1937. Most of this increase occurred after March, 1936, when a strike of over a thousand workers succeeded in obtaining recognition of trade unions and shop stewards. (1) Membership gains among workers at the Bristol Aeroplane Company during 1935-1936 led to the A.E.U. relocating its Bristol 9th branch to Filton Road, in closer proximity to the aeroplane works. Membership of the branch rose from 121 in December, 1935 to 418 by the end of 1936. (2)

Less detailed information is available for other unions during 1935-1936, the records of the C.S.E.U. being taken up with discussion of its proper relationship with the N.A.W.C. However, the N.U.V.B. embarked upon a recruiting campaign among aircraft workers in Bristol and Yeovil, where the T.G.W.U. and the A.E.U. were already active. (3) The periodical, Labour Research, felt that progress had been made on a wide front during 1936, stressing the improvement in organisation which had occurred since 1935. (4)

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(1) A.E.U. Journal March, 1936, National Organiser's Report; April, 1936, O.D.D.'s Report, division 20; Labour Research Vol XXV, 4 (April, 1936) p.90.

(2) A.E.U. Journal Feb., 1936, July, 1936, O.D.D.'s Report division 16. See also branch membership returns in Journal Dec., 1935 and 1936.

(3) N.U.V.B. Quarterly Journal April - June, 1936; Oct. - Dec., 1936.

(4) Labour Research Vol XXV, 8 (August, 1936) p.187.

Advances continued to be made during 1937-1939 as the A.E.U. built upon its earlier gains and broke into hitherto non-union plants such as those of Phillips and Powis and Boulton Paul, Ltd., where after gaining recognition, it began to build up organisation.(1) Meanwhile, the C.S.E.U. unions began to make more rapid strides, with 100 per cent membership and closed shops being gained in departments of Fairey Aviation and A.V. Roe in Manchester.(2) The N.U.V.B. made modest gains in Bristol and at Short Bros., Hawker and Westland and achieved a position of some strength at Airspeed, which became the N.U.V.B.'s best organised shop in the aircraft industry.(3)

At the same time, the T.G.W.U. and the N.U.G.M.W. launched an organising drive among shipbuilding and aircraft workers in Southampton which led to a reported gain of 2,300 members. The T.G.W.U. was also able to build up its organisation at the generally well-organised Armstrong-Whitworth Co. in Coventry, where it had 100 per cent membership in the wing-covering section and tried to enforce a closed shop.(4) Gains were also made at the

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(1) A.E.U. Journal March, 1937, O.D.D.'s Report, division 14; Sept., 1937, O.D.D.'s Report, division 18.

(2) C.S.E.U. Annual Report 1937, Manchester District Committee Report.

(3) N.U.V.B. Quarterly Journal Oct. - Dec., 1937.

(4) C.S.E.U. Annual Report 1937, Southampton District Committee Report; T.G.W.U., General Executive Council, Minutes Nov., 1938.

Austin Aero factory in Birmingham, where T.G.W.U. membership was reported to be over a thousand in July, 1938, rising to two thousand by October. (1)

The advance of union organisation was aided and to a great extent, measured, by the development of workshop organisation and activity from 1935. At the same time as the N.A.W.C. was formed, shop stewards in aircraft plants decided to set up an Aircraft Shop Stewards' National Council. The stated aims of the Council were to encourage 100 per cent trade union organisation, to enforce union agreements and, centrally, to press for a separate national minimum wage for all adult aircraft workers of 1s. 4½d (7p.) per hour, with piece-rates to be set so as to allow for average earnings of 33⅓ per cent above basic time rates. (2)

The A.S.S.N.C. had its origins in a movement begun during the mid-thirties by Communist groups in London who had already started to revitalise the shop stewards' movement in the aircraft industry as part of a wider campaign among engineering and metal workers. (3) The decision to establish a National Council stemmed

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(1) T.G.W.U. MEC Minutes 22 July, 1938; Assistant General Secretary's Quarterly Report, Nov., 1938.

(2) Aircraft Shop Stewards' National Council, "Aircraft" (Kingston-upon-Thames, 1935); Tom Roberts, "The Importance of the English Aircraft Strike", op.cit.

(3) ibid; John Mahon, "Communist Metal Workers' Conference in London" International Press Correspondence No. 7 (13 Feb., 1937), reprinted in Ken Coates and Tony Topham, Workers' Control (1970) p. 152-5.

from an unofficial strike at Hawker's factory in Gloucester in March, 1935. The strike centred on the employment of a non-unionist and within four days workers at Hawker's Kingston-upon-Thames plant came out in sympathy. While the immediate issue was one of the employment of a non-unionist, broader grievances concerning the abrogation of union conditions of employment by a growing number of employers led to a conference of all aircraft shop stewards in London being called within a week of the walk-out at Kingston. A week later, the first of two national conferences was held, out of which emerged the A.S.S.N.C. (1)

The A.S.S.N.C. got a cool reception from Transport and General Workers' Union officials and from the A.E.U. It was initially centred on the Hawker factories and the T.G.W.U., which claimed to have a sizeable membership among Hawker workers, worried that the A.S.S.N.C. was an arm of the A.E.U. since the stewards gave their support to a claim submitted by the A.E.U. for a 2d (0.8p) per hour increase for all Hawker workers. The T.G.W.U. feared that the A.S.S.N.C. was supporting the A.E.U. in an attempt to extend A.E.U. authority in Hawker plants at the expense of its own. (2) However, A.E.U. officials also viewed the

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(1) Tom Roberts, "The Importance of the English Aircraft Strike", op.cit.; Labour Research Vol XX1V, 4 (April, 1935).

(2) T.G.W.U. MEC Minutes 25 Oct., 1935.

National Council with suspicion and hostility, describing it as an "undemocratic and predatory body" on account of its Communist Party connections.(1)

There is no doubt that the aircraft shop stewards' movement had changed since the First World War. By 1935, it was becoming dominated by engineering and sheet metal workers and it contained a strong Communist Party element which saw the A.S.S.N.C. as providing a shop-floor base from which to press for more militant trade union action on working conditions and the extension of a greater degree of workers' control over them. The A.S.S.N.C.'s first major campaign was for a national minimum wage for the aircraft industry,(2) launched through its newspaper, the New Propeller. In 1936 it succeeded in getting the A.E.U. National Committee to adopt a resolution in favour of a minimum rate for aircraft workers and demanding that companies made records relating to piece-rates and bonus times available to shop stewards.(3)

At the same time however, the A.S.S.N.C. conducted a ballot of aircraft workers on whether or not to call a national strike to enforce a separate aircraft agreement on the lines described above.

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(1) A.E.U. Journal June, 1937, Editorial. At the time, there was concern within the Trades Union Congress over the activities of the Communist Party and what were alleged to be "front organisations" for the C.P. In 1934 the T.U.C. advised unions to exclude communists from positions of responsibility and in 1936 it published a list of left-wing organisations which were alleged to be trying to disrupt the trade union movement. See T.U.C. Report (1936) p. 225-30.

(2) See above, p. 188.

(3) Labour Research Vol XXV, 8 (August, 1936) p. 187.

The number of votes cast was low (8,785) and there was a substantial minority against strike action (2,527). In addition the results factory by factory were uneven. In view of this, it was decided not to go ahead with the strike call but the suggestion was put forward again in the following year, since no official action had been taken by the A.E.U., the Executive Council having too little information about rates of pay in the industry to be able to confront employers with such a demand.(1) A decision within the A.S.S.N.C. in favour of a national strike was reached in May, 1937, action being scheduled to start on the 25th. This suggestion led to condemnation from the A.E.U. Executive, which disassociated itself from "any action in consequence of the meetings of the unofficial shop stewards council."(2) The strike was in fact averted at the last minute by the opening of negotiations between the E.E.F. and the engineering unions which was announced on 23 May. Once it had called off the strike however, the A.S.S.N.C. lost the initiative. Negotiations dragged on inconclusively and it became clear that the employers remained opposed to a separate aircraft agreement. Yet as long as negotiations continued, any strike threat would only weaken the credibility of the unions and the A.S.S.N.C. As a result the A.S.S.N.C. was forced to reconsider its position. Croucher argues that from seeing itself as a separate, alternative body representing aircraft workers, the A.S.S.N.C. turned by the

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(1) A.E.U. National Committee Annual Report 1938.

(2) The Times 9th April, 1937, quoted in R. Croucher, "Left-Wing Politics and the Shop Stewards' Movement in Engineering 1935-1946" (Unpublished Ph.D. thesis, Warwick University, 1977) p.55.

end of 1937 to the view that an explicit committment to work within the trade union movement was essential and that it needed to identify itself with engineering as a whole. As a result, the demand for a separate aircraft agreement was dropped. Significantly, resolutions in favour of the aircraft agreement, submitted to the A.E.U. National Committee for adoption in 1938, were withdrawn.(1)

In view of these attempts by the A.S.S.N.C. to influence the policy of the A.E.U. and to set itself up as an alternative body for the mobilisation of aircraft workers and in the light of current preoccupations with "disruptive elements" within the T.U.C. it is not surprising that full-time officials viewed it with some hostility. The antagonism of full-time officials was heightened by the activities of the A.S.S.N.C. in supporting unofficial strikes in a number of firms throughout the late thirties.(2) Full-time officials were not convinced of the benefits of organisation arising out of unofficial action. Both the A.E.U. and the T.G.W.U. held that unofficial disputes "claimed to be necessary on the grounds of organising activity", often led to chimerical increases in membership, while adding to the unions' administrative problems and disrupting their relations with employers.(3)

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(1) R. Croucher, op.cit. p. 55-9; A.E.U. National Committee Annual Report 1938.

(2) See Labour Research Vols XXV - XXV111, 1936-1939.

(3) A.E.U. Journal May, 1935; T.G.W.U. MEC Minutes 23 April, 1937.

Nevertheless, the available evidence suggests that advances in membership and the development of aggressive shop-floor organisation went together after 1935. Economic recovery, shortages of skilled aircraft workers and the existence of grievances over pay enabled the A.S.S.N.C. to support workers in unofficial action in a number of plants. Two strikes, one unofficial, were reported in the aircraft industry in 1935. Twelve were reported in 1936, fourteen in 1937 and twelve strikes and one lock-out in 1938. Industrial relations appear to have cooled down in 1939, with only two aircraft strikes being recorded during the year.(1) Of these forty strikes at least 22 were unofficial and at least one other which was officially recognised began unofficially.

The causes of the strikes varied, but most of them arose out of the operation of payments systems, the employment of "dilutees" and the status of trade unions and shop stewards. There were at least fifteen strikes in the last category, thirteen at least occurring during 1936-1938. The first strike over a union status issue occurred at Hawker's Gloucester factory in 1935 as a result of the employment of a non-unionist.(2) In March, 1936, a strike of

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(1) A.E.U. National Committee, Minutes; A.E.U. Journal; A.S.W. Monthly Journal; N.U.V.B. Monthly Journal; T.G.W.U. General Executive Council, Minutes, MEC Minutes; N.U.G.M.W. Monthly Journal; C.S.E.U. Annual Report; Labour Research Vols XX1V-XXV111; Engineering Employers' Federation, "Strike Record" in Broadway House; Ministry of Labour Gazette.

(2) See above, p. 189.

workers at De Havilland's succeeded in obtaining trade union recognition when at the end of the strike the company decided to affiliate to the Engineering Employers' Federation.(1) During June and July, unofficial strikes against the employment of non-unionists occurred at Fairey's plant at Hamble and at A.V. Roe.(2) Those in sympathy with the A.S.S.N.C. felt that action of this kind had done much to improve organisation. Labour Research commented in August that

> "A particularly significant development is the passing of the aircraft industry from a poorly organised to a well organised industry. The many unofficial strikes that have taken place have led to the building up of union organisation" (3)

The reporter probably exaggerated the change in the extent of organisation by downplaying that which existed before 1935. It may have been that more stress was placed upon the growth of organised militancy within the workplace than upon union membership growth. However, insofar as mere membership does not necessarily imply good organisation, the attention paid to the growth of the workshop movement was justified. Moreover, there was an observable

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(1) A.E.U. Journal April, 1936, O.D.D.'s Report, division 20. The unions involved included the A.E.U., National Union of Sheet Metal Workers and the National Union of Brass and Metal Mechanics.

(2) A.E.U. Journal July, August, 1936, O.D.D.'s Report division 18, division 10. At Fairey, managment promised a works conference to discuss the issue and at A.V. Roe the one man outside the union left the firm the day after the strike broke out.

(3) Labour Research Vol XXV, 8 (August, 1936) p. 187.

tendency for shop floor representatives to push for the exclusion of non-unionists from aircraft establishments.

The 1937 strikes were largely accounted for by strikes of engineering apprentices demanding that the A.E.U. be allowed to represent them. The apprentice strikes started on the Clyde in April; there was a lull and then a second upsurge in the Manchester and Salford area which spread to Coventry. Apprentices struck at A.V. Roe and Fairey Aviation in the Manchester area and at Armstrong-Whitworth and Armstrong-Siddeley in Coventry. (1) In addition however, unofficial strikes to enforce closed shops were mounted by members of the A.E.U. and C.S.E.U. unions at Fairey Aviation and A.V. Roe in Manchester. (2)

During 1938 successful unofficial strikes to enforce closed shops were mounted by members of the A.E.U. and T.G.W.U. at De Havilland's factories in Hatfield and Bolton, Short and Harland in Belfast, Hawker's at Brooklands, Rolls-Royce in Derby and the General Aircraft Factory, Feltham, Middlesex. (3) Organisational progress was also reflected in a large unofficial strike at the Austin Aero factory in Birmingham. In August, an unofficial strike of six

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(1) A.E.U. Journal Oct., 1937, O.D.D.'s Report, division 14; R. Croucher, op.cit. p. 75-6. In November, the E.E.F. agreed to recognise the boys' right to be represented by the A.E.U. A.E.U. Journal Nov., 1937. National Organiser's Report.

(2) C.S.E.U. Annual Report 1937, Manchester District Report.

(3) T.G.W.U. MEC Minutes 29 April, 21 Oct., 1938; General Executive Council, Minutes 23 May, 1938; A.E.U. Journal April, May, 1938, O.D.D.'s Report, division 19; Labour Research Vol XXV11, 5 (May, 1938) p. 115.

thousand workers took place in support of a demand that all workers in the plant receive the basic skilled rate for engineering work, i.e. 48s (230p) per week. At the time of the strike only one group of workers - the polishers - were getting the 48s rate and they struck in sympathy with the rest. The strike reflected earlier improvements in trade union membership at the Austin Aero plants. T.G.W.U. membership was claimed to be over one thousand in July and a number of other unions including the A.E.U., Birmingham and Midland Sheet Metal Workers Society and the N.U.V.B. were represented. (1) One official was reported as saying

> "For years it has been the managment alone which has decided rates of pay. Now the unions are strong enough to have something to say. They have a very strong hold at the Austin Aero works." (2)

Stewards at Austin Aero made contact with other plants such as Rover at Acocks Green and appealed for moral and financial support and delegations were sent to Coventry factories also. Promise of a settlement was held out when the E.E.F. met with trade union officials on 5th September, but talks broke down the following day. Immediately the Birmingham Shop Stewards' Council tried to hold a mass meeting in London and turn the strike

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(1) Birmingham Daily Post 30, 31 August, 1938; T.G.W.U. MEC Minutes 22 July, 1938; T.G.W.U. General Executive Council, Assistant General Secretary's Quarterly Report, Nov., 1938.

(2) Birmingham Daily Post 31 August, 1938.

(3) Birmingham Daily Post 2 Sept., 1938.

into a national dispute over pay in the aircraft industry. However, the response was small and the Austin strikers, lacking financial support (the T.G.W.U. alone paid strike benefit, despite refusing to declare the strike official) and under pressure to resume work from full-time union officials, ended the strike on 8th September, pending negotiations. Meanwhile, trade unions had been active among the workers, stressing the need for 100 per cent organisation. By October, 1938 the T.G.W.U. had doubled its membership despite the less than satisfactory end to the dispute from the point of view of the workers involved.(1)

These incidents show that organised workers, through the agency of full-time officials and increasingly, workplace representatives, were able to improve their position in some plants in which they had hitherto been weak, e.g. De Havilland and Austin, and that in others they were able to use their strength to prevent an influx of non-unionists. It is clear that by the outbreak of the war unions were very strong indeed in a number of plants. However, the evidence presented above is fragmentary and in the absence of adequate statistical information relating to employment and overall union membership it is impossible to be confident as to the extent of the improvement in trade union organisation. One contemporary argued that aircraft workers were 90 per cent organised in the major aircraft plants by 1937.(2) It is almost certain that this was

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(1) Birmingham Daily Post 5, 6, 8 Sept., 1938; Birmingham Trades Council, Minutes 3 Sept., 1938; T.G.W.U. Assistant General Secretary's Quarterly Report, Nov., 1938.

(2) J. Mahon, "Communist Metalworkers' Conference in London" op. cit.

an exaggeration, yet trade unions did manage to extend the closed shop during 1936-1938. In addition the A.E.U. made large membership gains in its Birmingham division during 1937, growing by more than 26,000 according to official returns, and the T.G.W.U.'s Metal, Engineering and Chemical Trade Group increased its membership in the South of England (excluding Oxford) by 7,000 between December, 1935 and June, 1938.[1] Certainly, circumstances tended to favour improved organisation, especially up to 1938. The industry was attempting to raise output within an obsolete technical framework, viz. hand production. As mentioned above, this created shortages of skilled labour and also an opportunity for trade unions to find jobs for their unemployed members. It also enhanced the bargaining position of unions vis-a vis employers. Given these circumstances it is likely that unions of skilled men, especially the A.E.U., gained strength among craftsmen. Meanwhile, the general unions, recovering from the effects of the depression, began to exploit new opportunities for recruitment among both skilled and semi-skilled aircraft workers.

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(1) A.E.U. Journal Feb., 1938, O.D.D.'s Report, division 14; T.G.W.U. MEC Minutes 29 Oct., 1937, 21 Oct., 1938.

Nevertheless, one should not over-estimate the progress of trade unionism in the aircraft industry by the end of the thirties. While powerful organisation had been built up in most major firms, the growing proportion of workers employed in "shadow factories" and, more especially, small sub-contracting establishments, continued to present problems to union organisers as the industry became geared to mass production. (1)

The problem was clearly stated in the 1939 Annual Report of the C.S.E.U., where it was argued that the rapid growth of the aircraft industry, especially the proliferation of small sub-contractors, created severe problems of organisation. New aircraft factories were regarded as a menace to the maintenance of organisation in the districts unless trade unions were able to mount united recruitment campaigns. (2) One example of this kind of difficulty was reported from Southampton in 1939. A large number of shipbuilding and aircraft workers had been recruited by the Transport and General Workers' Union and the National Union of General and Municipal Workers during 1937 but by 1939 it was reported that the

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(1) Air Ministry sources indicated that over half of the workers in firms working on Air Ministry contracts were semi-skilled and unskilled. This compares with E.E.F. figures for 1937 which stated that 21.6 per cent of adult workers were paid at less than skilled rates. "Statement of Production and Employment in the Aircraft Industry, 1st July, 1938 - 31st Dec., 1938" P.R.O. AVIA 10/18; Engineering Employers' Federation, "Circular letter to Local Associations; Earnings of Workpeople" (at Broadway House). For detailed discussion of changes in the structure of the workforce, see below, p.350.

(2) C.S.E.U. Annual Report 1939, Mersey District Committee Report.

employers "have matters mainly in their own hands" and that the level of organisation was disappointing owing to the decline of shipbuilding and the arrival of new, American-owned, companies in the aircraft industry.(1) Similarly, unions in Cowes found it difficult to maintain the high degree of organisation that had already been achieved in the face of rapidly expanding employment in new firms.(2)

Other indications that trade union strength was not complete came in the form of information that wage rates and payments systems varied enormously between establishments and that in some Federated firms shop stewards were not being given the recognition to which they were entitled under the terms of the Engineering Procedure Agreement.(3) Moreover, some employers managed sucessfully to resist union demands or to withhold recognition of trade union officials. A strike of engineers at De Havilland's plant at Hatfield and Edgware was defeated in March, 1938 and in September, the managment of Halliwell's aircraft works near Derby refused to negotiate with shop stewards or trade union officials when three hundred workers struck in protest against a new piecework system.(4)

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(1) C.S.E.U. Annual Report, 1937, 1939, Southampton District Committee Report.

(2) C.S.E.U. Annual Report 1938, Cowes District Committee Report.

(3) A.E.U. National Committee Report 1939, Report of the Executive Council; A.E.U. Journal May, 1939, O.D.D.'s Report, division 9.

(4) Labour Research Vol XXV11 3 and 10 (March, Oct., 1938).

Finally, reports of membership gains made by the Transport and General Workers' Union became less frequent during 1939. Membership at Short Brothers, Rochester, said to be "growing daily" in January, was only " being maintained" by July and 100 per cent organisation had yet to be achieved. (1)

It is difficult to construct a quantitative summary of the overall progress of trade unionism in the aircraft industry between 1935 and 1939 in the absence of detailed and comprehensive union membership data. The General and Municipal Workers' Union extended its organisation to aircraft work but kept no accessible records of branch or industry membership. The only indication of the progress of the Transport and General Workers' Union, apart from verbal reports on individual companies, is the membership of the Metal, Engineering and Chemical Trade Group, which rose from just under 50,000 in 1935 to 124, 676 by December, 1939. However, it is not known how much of this increase was accounted for by recruitment in the aircraft industry or how rapidly aircraft membership rose in relation to the total.

An indication of the rate of progress of the most important skilled unions can be obtained from the branch membership returns of the A.E.U. and the N.U.V.B. It must be stressed however, that the figures presented here are not intended as accurate estimates of actual membership levels; merely as indicators of the rate of organisational expansion. The combined membership of the A.E.U.

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(1) T.G.W.U. MEC Minutes 27th Jan., 21 July, 1939.

and the N.U.V.B. in the Midlands and the South-East rose by 116 per cent during 1935-1939 but once "aircraft-relevant" branches have been identified more precisely and comprehensively, the extent of growth can be seen to have been substantially greater than this. "Aircraft-relevant" branches have been taken to include all of those established in Coventry, Birmingham, Wolverhampton and Bristol during and after 1935. Membership of branches already existing in these areas before 1935 has been excluded. This has been done on the assumption that branches set up from 1935 onwards reflected most clearly the trade union response to the expansion of aircraft production.(1) In addition to these new branches, others in parts of Greater London and in the rest of the United Kingdom where aircraft factories were situated have also been included.(2) The combined membership totals in these "aircraft-relevant" branches and the rates of membership growth are presented in Table 3-2

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(1) In Bristol the A.E.U. re-sited its No. 9 branch to Filton during 1936 so as to be better able to cater for aircraft workers and in 1937 the No. 16 branch was set up in the same district. Twelve new branches of the A.E.U. were formed in Coventry during 1935-1939.

(2) e.g. Yeovil, Gloucester, Cheltenham, Erith, Crayford, Dalmuir, Hayes, Kingston-upon-Thames, Hatfield. For a full list, see Appendix 3.

Table 3-2 Combined membership of the A.E.U. and N.U.V.B. "aircraft-relevant" branches, Dec., 1934 - 1939.

Month/ Year	Member-ship (number)	Annual Increase %	% Increase Dec. 1934-1936	% Increase Dec. 1936-1938	% Increase Dec. 1934-1939
Dec. 1934	5,486				
" 1935	7,480	36.3	73.3		
" 1936	9,712	29.8			
" 1937	16,011	64.8		187.0	373.7
" 1938	21,467	34.1			
" 1939	25,991	21.1			

Source: A.E.U. Financial Report Dec., 1935 - 1939; N.U.V.B. Monthly Journal and Quarterly Financial Report Dec., 1935 - 1939.

These figures suggest that the aircraft membership of the skilled unions rose by between four and five times during 1935-1939, the most rapid phase of expansion occurring during 1936-1938. However, they do not show such a rapid rate of increase as do the employment figures from 1935 onwards. The Census of Production estimated that average manual employment in the aircraft industry was 29,143 during 1935. In 1938 the Air Ministry calculated that the size of the manual workforce was around 120,000. Estimates for other years refer to the entire labour force - non manual as well

as manual. P. Inman suggested that 79,000 people worked in the industry by December, 1936 and official estimates for 1939 gave a figure of 370,000.[1] It is however, possible to estimate the size of the manual workforce in 1936 and 1939. The 1938 Air Ministry figures provided separate totals of manual and non-manual employees. Non-manual workers accounted for 15.6 per cent of the total workforce. Assuming that this proportion remained constant throughout 1935-1939, the manual workforce numbered 66,676 by December, 1936 and 312,280 by the end of 1939. The rate of expansion of the manual labour force can thus be shown:-

	1935	-	Dec., 1936	128.8 per cent
Dec.,	1936	-	Dec., 1938	79.6 per cent
Dec.,	1938	-	Dec., 1939	160.2 per cent
	1935	-	Dec., 1939	971.5 per cent.

From this it would appear that unions of skilled men at least were unable to keep pace with the very rapid growth of employment during 1935-6 and during 1939, although in 1937 and 1938 they gained as the rate of employment growth slowed down at the same time as their organising campaigns really began to get under way. Over the period as a whole, the initial impression is that union density may have fallen. It would be dangerous to draw this conclusion too quickly however, as the statistical basis for the membership

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(1) Census of Production (1935) Part 11, p. 409; "Statement of Production and Employment in the Aircraft Industry, 1st July, 1938 - 31st Dec., 1938" P.R.O. AVIA 10/18; P. Inman, Labour in the Munitions Industries, op.cit. p.20; Central Office of Information, "The United Kingdom Aircraft Industry" (1952).

estimates is weak and almost certainly understates the rate of growth of trade union membership in the aircraft industry. This is because of the growing geographical dispersion of the industry which makes it increasingly difficult to identify "aircraft -relevant" branches comprehensively, because the rate of increase of branch membership takes no account of existing members taking aircraft work and because no proper allowance can be made for the general unions. Moreover, because of the nature of these problems, the degree of understatement is probably higher at the end of the period than at the beginning. Finally, given the extent of the change in the structure of the labour force consequent upon the employment of dilutees, any estimate relying solely upon the membership of unions of skilled men will tend to under-estimate density and possibly draw attention away from the existence of powerful organisation among skilled workers. Yet the evidence presented in the previous few pages should caution against assuming too readily that trade union membership kept pace with the growth of employment. Trade unionism had become very strongly established in the major companies, including, increasingly, the "shadow factories" and it was based on more and more powerful workshop organisation. However, there existed a problem area consisting of the many small sub-contracting firms which contributed increasingly to the industry's expansion during 1938-1939.

The challenges facing trade unions during the late 1930s continued to present themselves during the Second World War. Employment in aircraft construction and repair grew rapidly to a peak of 1,820,000 in January, 1944.[1] The amount of sub-contracting work continued to expand and a growing proportion of the labour force was made up of dilutees. In addition, the government imposed new restrictions upon the labour force and upon trade unions; the Undertakings (Restrictions on Engagement) Order of June, 1940 and more effectively, the Essential Work Order of March, 1941, placed restrictions on the freedom of workers to change their employment; the Conditions of Employment and National Arbitration Order (Order 1305) of July, 1940 declared strikes and lock-outs illegal.

In important respects however, the environment became more favourable to the growth of trade unionism. Unemployment gave way to growing labour shortages after 1940 and prices began to rise. Moreover, in order to retain the co-operation of organised labour, the pill of government restrictions had to be sugared with concessions. Thus while Order 1305 outlawed strikes it also helped to enforce union-negotiated terms of employment and encouraged the use

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(1) Central Office of Information, "The United Kingdom Aircraft Industry" (2nd supplement to R. 2457H, "The United Kingdom Aircraft Industry", 1956.)

of collective bargaining machinery. Similarly, the Essential Works Order deprived workers of much of their freedom of movement but also restricted the right of employers to dismiss them.[1] Given these conflicting circumstances and the paucity of quantitative evidence it is impossible to state categorically what happened to the density of union membership in the aircraft industry. It is on balance probable that it fell slightly as a result of changes in work-force composition, but the extent of the drop should not be exaggerated. Membership of "aircraft-relevant" branches of the A.E.U. and N.U.V.B. as defined above grew from 25,991 in December, 1939 to 59,319 in December, 1943. This compares with a five-fold expansion in employment in aircraft production between 1939 and January, 1944. However, the reservations attached to the membership estimates apply even more strongly during the war than to the late 1930s.[2] Moreover, measured in terms of influence over conditions of employment, trade unions were in a generally stronger position in 1945 than they had been in 1939.

The main issues with which aircraft industry unions were concerned during the war were the level and structure of pay, general working conditions such as lighting, ventilation, health and safety (which quickly came to include air raid precautions) and the

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(1) H. Pelling, A History of British Trade Unionism, op. cit. p. 214-6; A. Bullock, The Life and Times of Ernest Bevin Vol 11 (1960) p. 267. A more detailed discussion of these factors is presented in Chapter 4.

(2) See above, p. 204-5.

terms upon which dilutees were admitted to the industry. Individual unions were also anxious to advance their own membership and authority in the face of changes in the structure of the workforce and competition from other unions. Thus continual attention was paid to the maintenance and improvement of organisation and to obtaining collective agreements with companies which had not so far recognised trade unions or which had just begun operations.

Aware that the agreements on wages, conditions and dilution needed policing and that organisation was best built up as a result of activity in the workplace, trade unions encouraged the extension of shop stewards' organisation. The number of shop stewards grew rapidly and more complex forms of workshop organisation became more widespread; e.g. more convenors of shop stewards were elected and shop stewards' combine committees emerged. As in the motor industry and other branches of engineering, demands that representatives of organised labour at all levels be involved in decisions relating to production led to pressure for the establishment of Joint Production Committees in aircraft establishments.(1)

Wartime conditions quickly boosted trade union recruitment in general, the T.U.C. reporting in 1940 that the war had meant that recruiting campaigns had had an "astonishing" degree of success.(2) In the aircraft industry organisational progress was made at a number

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(1) See above, p. 112-4.

(2) Trades Union Congress, "The T.U.C. in Wartime" (1940).

of plants in which trade unionism had been weak. One example was the Scottish Motor Traction plant in Airdrie, a factory which the A.E.U. had been trying to organise for some time. The A.E.U.'s opportunity arose when 43 men were sacked for not working overtime. The circumstances of their dismissal also led to discontent as they were given one hour's notice and a police escort from the premises. Under threat of a stoppage of work the A.E.U. met with the managment and, despite the distrust of the employers, who had insisted upon a senior police officer being present at the meeting, was able to get the 43 men reinstated. Subsequently over a hundred men in the plant joined the union.(1) Soon afterwards, shop stewards were elected and, following a visit from the A.E.U.'s national organiser, the managment agreed to recognise them.(2) The A.E.U. also gained recognition at Windovers, Ltd., which had begun to take on aircraft sub-contracting work. Membership grew rapidly so that by February, 1940 the A.E.U. was able to obtain recognition of its full-time officials and shop stewards.(3) Considerable gains were made in 1941 at Handley Page at Cricklewood, following a strike of four thousand workers arising out of a managment decision to transfer 29 workers to other establishments.(4)

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(1) A.E.U. Journal March, 1940, O.D.D.'s Report, division 4.

(2) A.E.U. Journal Sept., 1940, National Organiser's Report.

(3) A.E.U. Journal Feb., 1940, O.D.D.'s Report, division 20.

(4) A.E.U. Journal Oct., 1941, O.D.D.'s Report, division 25; New Propellor Feb., 1941.

There were also more general signs of growth. A.E.U. membership as a whole more than doubled between December, 1939 and December, 1943 to reach 915, 297. The union's organising official in the Gloucester and Cheltenham area reported an increase of 9, 300 members during 1940 and new branches were set up in Gloucester and Cheltenham themselves in response to the growing recruitment among workers at Gloster Aircraft and V.P. Airscrews.(1) Twenty-eight new branches of the A.E.U. were opened in Coventry after 1939 and membership of all Coventry branches rose from 11, 856 at the end of 1939 to 22, 588 by December, 1943. Of this increase, 8, 425 were accounted for by the growth of branches set up after 1939.(2) Rapid growth was evident in Slough,

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(1) A.E.U. Journal Jan., August, 1941, O.D.D.'s Report, division 16. This claim is not supported by the membership returns of the Gloucester and Cheltenham branches, which registered an increase of only 355 between December, 1939 and June, 1941. According to these returns the biggest gains occurred between June, 1941 and December, 1943 when over 2, 000 members were added. See A.E.U. Half-Yearly Report Dec., 1939, June, 1941, Dec., 1943. However, these returns refer only to the branches in the two towns themselves, not to others in outlying districts which may have grown more rapidly. Also, members may not have been registered by branch officers due to administrative difficulties, especially in the case of members arriving from other parts of the country.

(2) ibid.

Southall, Hayes, Edgware and Bristol, with slower progress in Birmingham and Manchester.[1] A.E.U. membership at Speke, near Liverpool, rose from 138 at the end of 1939 to nearly 1, 500 by December, 1943 as a result of recruitment at the Rootes "shadow" factory.[2]

Other unions also made advances. Membership of the Metal, Engineering and Chemical group of the T.G.W.U. rose from 124, 887 to around 400, 000 during 1940-1942, thus accounting for virtually all the growth in the union's membership during those years.[3] The T.G.W.U. claimed to have a very powerful organisation among engineering workers in the Midlands, having made "many thousands" of members there by the end of 1942. A high membership among craftsmen was claimed by the T.G.W.U. in Coventry, as it was in Bristol, where the union claimed to "practically control the engineering industry."[4] It also began to recruit widely among aircraft workers in the South of England, so

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(1) ibid. Membership increases between December, 1939 and December, 1943 were respectively; from 533 to 3, 3595, 873 to 1, 575; 1, 022 to 2, 454; 514 to 2, 169; 5, 963 to 10, 087; 6, 997 to 9, 885 and 4, 961 to 7, 391.

(2) ibid.

(3) T.G.W.U. MEC Minutes 16 April, 1943. By December, 1942, 274, 219 women were enrolled in the Engineering Trade Group. Total T.G.W.U. membership rose from 694, 474 in December, 1939 to 1, 133, 165 by December, 1942. T.G.W.U. Annual Report 1939, 1942.

(4) T.G.W.U. MEC Minutes Jan., 1942; 29 Jan., 1943.

much so that the Area Committee asked that increased representation be given to the Metal, Engineering and Chemical trade group on the Committee "in order to accord direct representation to the membership employed in the aircraft industry". (1) Smaller organisations such as the N.U.V.B. and other C.S.E.U. unions also claimed successes. The C.S.E.U. reported in 1940 that organisation was good in all aircraft shops in the Reading district and the N.U.V.B. established shop committees in most of the major aircraft and motor firms in the London area by 1943. (2) The National Union of General and Municipal Workers established itself in a number of firms, e.g. Blackburn, Gloster, De Havilland, Folland and Rolls-Royce. (3)

Moreover, organisation began to reach out from established centres to the new "shadow" factories during 1939-1940. In Coventry, it has been argued, "shadow" factories which had been among the worst "black spots" of trade unionism locally were being organised by the end of 1941. Organisation also grew rapidly at Rootes' "shadow" factory at Speke, where the T.G.W.U. claimed 1,200 members in 1940 and at Rolls-Royce's plants in Glasgow, such as Hillington, where the T.G.W.U. claimed over 700 in 1943. (4) When the Bristol

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(1) T.G.W.U. General Executive Council, Minutes 16th Sept., 1943.

(2) C.S.E.U. Annual Report 1940, Reading District Committee Report; N.U.V.B. Quarterly Journal July, 1943, London District Report.

(3) N.U.G.M.W. Monthly Journal Jan., Feb., Sept., Dec., 1940.

(4) R. Croucher, op.cit. p. 206; T.G.W.U. MEC Minutes 26 April, 1940, 14 July, 1943.

Aeroplane Company opened a dispersal factory at Accrington, skilled workers quickly organised around the demand that the payments system operating in Bristol's parent establishment should also apply at Accrington. (1)

Some of the most strongly organised of aircraft workers were skilled men in Coventry and sheet metal workers throughout the country. In Coventry, union strength was reflected in a number of favourable working practices which were established and to some extent in the high piece-work earnings in the city. (2) Thus skilled piece-workers had the right to set aside certain jobs on which earnings were low, to be done when other work was slack or even, in some cases, to be sub-contracted out to small workshops. (3) In addition, Coventry piece-work times were calculculated on a reduced hour basis in Federated plants in Coventry, an "hour" being fifty minutes long. This effectively meant that rates of piece-work bonus in Coventry were one-sixth greater than in Federated establishments in the rest of the country. (4)

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(1) R. Croucher, op.cit. p.89

(2) High piece-work earnings were also of course, a consequence of particularly severe problems of skilled labour shortage which began to manifest themselves as early as 1935.
E. Wigham, The Power to Manage, op.cit. p. 147.
R. Croucher, op.cit. p.204.

(3) R. Croucher, op.cit. p. 228A.

(4) ibid. p. 228A-229.

Coventry workers were also uniquely able to extend arrangements made to ensure that toolmakers, who were paid a time rate, did not earn less than the average skilled piece-worker, to other groups. An acute shortage of toolmakers in Coventry, caused by high piece-work rates drawing men out of the toolrooms to work more lucratively as fitters and machinists, led to a Coventry Toolroom Agreement being signed in January, 1941 by the A.E.U. and the E.E.F. The agreement provided that toolmakers should not earn less than the average for skilled piece-workers in the Coventry district.[1] Within a year of signing the agreement, shop stewards were able to get its provisions extended to cover all workers at Coventry Gauge and Tool, Ltd., and to machine tool fitters at Humber. By 1943 all skilled inspectors in Coventry were in fact covered by the agreement. This represented a considerable

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(1) E. Wigham, op.cit. p.147-8; The Coventry Agreement was a modification of a National Toolmakers' Agreement signed by the A.E.U. and E.E.F. in July, 1940. The National Agreement specified that toolmakers should not earn less than the average for skilled piece-workers in the same establishment as opposed to the district. This did not meet the special problems in Coventry, where the opening of new factories offering high piece-work earnings to attract labour meant that under the National Agreement toolroom workers could earn more in one local establishment than another, and would move from lower-paid to higher-paid establishments. Hence the special provisions of the Coventry Agreement.

gain for these workers since it meant that their earnings were raised to the level of the toolmakers and at the same time they were no longer subjected to the pressures of piece-work. (1) Coventry workers' pay was, moreover, generally high in comparison with the rest of the country, with piece-work bonus earnings averaging more than twice as much as in engineering as a whole, i.e. 100 per cent above basic time rates in Coventry as opposed to 50 per cent nationally in early 1940. Moreover, piece-work bonuses climbed to 300 per cent in some Coventry plants by March, 1942. (2)

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(1) R. Croucher, op.cit. p.229.

(2) P. Inman, Labour in the Munitions Industries, op.cit., p.322, 325. The highest daily earnings recorded by the Ministry of Aircraft Production in March, 1942 were 90s. 4d (452p), excluding overtime, in a Coventry plant. ibid.

There can be little doubt that sheet metal workers were among the best organised craftsmen in the aircraft industry at the outbreak of the war and that their strength grew rather than diminished. The total membership of the National Union of Sheet Metal Workers rose from 24, 642 to 40, 266 during 1944, a peak which was not regained until the 1950s. The much smaller but locally powerful Birmingham and Midland Sheet Metal Workers' Society grew from 5, 602 to 7, 458 during the same period. (1) A more detailed breakdown of membership is impossible to obtain but a much clearer indication of the strength of the sheet metal workers' organisation is obtainable by reference to their outstandingly successful resistance to dilution.

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(1) Returns to the Registrar-General of Friendly Societies, P.R.O. F.S. 12/306; F.S. 12/90. Membership of the N.U.S.M.W. in Coventry did not grow during the war, remaining at between 550 and 600 during the war years. This is explained by the T.U.C. sponsored agreement between the N.U.S.M.W. and the B. & M.S.M.W. which gave the latter "the sole right to sign all agreements as to conditions and practices in the Midland area." The date of the agreement is not certain but it is likely to have been reached during the mid-1920s since the N.U.S.M.W., although attempting to sign separate agreements with Coventry employers, began to hold joint branch meetings with the Birmingham and Midland Society which had traditionally organised the majority of Coventry sheet metal workers, during the early 1920s. See N.U.S.M.W. Coventry branch, Minutes of a combined meeting of the N.U.S.M.W. and Birmingham Society of Sheet Metal Workers and Coppersmiths 9 Jan., 1922; N.U.S.M.W. Coventry branch, Minutes 31 Oct., 1943. Coventry R.O. ACC. 587.

During 1939-1940 dilution agreements were concluded between the E.E.F. and Vehicle Builders' Associations and the major skilled unions, i.e. the A.E.U., N.U.V.B., and the Woodcutting Machinists. These initial agreements provided for the employment of semi-skilled male workers as dilutees on skilled work, subject to safeguards and conditions. During 1940-1941, as labour shortages became more acute, further agreements were concluded by these unions permitting the extended employment of women.(1) The N.U.S.M.W. and the Birmingham Society however, had refused to become parties to the agreement on male dilution signed by the E.E.F. and the A.E.U. in 1939 and had instead obtained a much more restrictive agreement of their own. Whereas the A.E.U. agreement made provision for the payment of less than skilled rates to some dilutees, the sheet metal workers were able to impose the condition that all dilutees in sheet metal-working shops should be paid at skilled rates. Also, the sheet metal workers' unions refused to enter into agreements permitting the employment of women.(2)

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(1) See below, p. 220n, 223-4.

(2) "Memorandum of Agreement between the Engineering and Allied Employers National Federation and the National Union of Sheet Metal Workers and Braziers and the Birmingham and Midland Sheet Metal Workers' Society. Relaxation of Existing Customs," reproduced in A.T. Kidd, History of the Tin-Plate Workers' and Sheet Metal Workers and Braziers' Societies, op.cit. p.288-9.

Early in 1942 however, the Ministry of Labour and the E.E.F. began to press the sheet metal workers' unions for an extension of their agreement so as to allow the employment of women. The unions resisted the suggestion on the grounds that such a move was unnecessary and several indecisive conferences followed. Then on 18 April Ernest Bevin argued for an extension of the agreement in order that materials could be provided for the opening of a "Second Front". In this he was supported by Sir Alexander Ramsay, director of the E.E.F., who said that women could do "a lot of metal work on aircraft when it had been jigged." (1) The unions replied that their rules did not allow their members to work with women and it was claimed that existing provisions for securing greater output were not being used. (2)

The N.U.S.M.W. did, however, hold a special national conference on 8 May, 1942 to consider further the proposed extension of the dilution agreement. It was decided that the union should relax its attitude to the employment of women in view of the demands of the war and open negotiations with the employers. A committee was set up to discover the extent to which women could be employed on sheet metal work. It concluded that certain operations could be made

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(1) A.T. Kidd, op.cit. p.295-6.

(2) ibid.

suitable for women but that "Our trade is conspicuous for the large proportion of work which is still being executed by purely manual processes with the minimum of machine tools."(1) The general view was that

> "minor detail and repetition work on aircraft production could be performed by females but if any attempt is made to absorb women into our shops at less than the existing wage standards, we would have to face either an active rebellion or a sullen acceptance, badly affecting production, or both."

Consequently the N.U.S.M.W. proposed a memorandum of agreement on women's employment whereby women would be confined to aircraft shops, be paid at skilled male rates in all circumstances, that a register of female dilutees should be kept so as to enable them to be replaced as men became available, and that women should only be employed in individual plants as a result of agreement between the employer and union representatives. Following discussions with the E.E.F. the union declared itself willing to allow women to be employed on any war work and to accept lower rates of pay for women during an initial three-month probationary period. These conditions

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(1) ibid. p. 295-7. The Coventry delegate to the conference was mandated to oppose the entry of women. N.U.S.M.W. Coventry branch, Minutes 29 April, 1942. Coventry R.O. ACC. 587.

were still too restrictive for the employers however, who rejected the proposal, insisting that the N.U.S.M.W. become party to the 1940 Extended Employment of Women Agreement with the A.E.U., which imposed fewer limits on female employment. (1)

In the meantime the N.U.S.M.W. was active in restricting dilution in its shops. In the North-West it prevented the firm of Sawer and Purves from employing male dilutees on aircraft work before it had transferred skilled men from the meter department on the grounds that meter work was non-essential. Members at English Electric Ltd., Preston, refused to work with a trainee on the grounds that he was ineligible for N.U.S.M.W. membership. (2)

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(1) A.T. Kidd, op. cit. p.300. The extended Employment of Women Agreement for example, provided a 32 week probationary period during which female dilutees pay was to rise to 75 per cent of the skilled male rate. Only if women were able to perform skilled work without assistance once this probation had ended were they entitled to skilled rates of pay. The N.U.S.M.W. proposal provided for the automatic payment of skilled rates after three months of employment as a dilutee. See "Memorandum of Agreement Between the Engineering and Allied Employers' National Federation and the Amalgamated Engineering Union to Provide for the Temporary Relaxation of Existing Customs for the Period of the War, the Extended Employment of Women in the Engineering Industry" 1 June, 1940, A.E.U. Journal June, 1940.

(2) Letter from Regional Controller of Labour Supply, North-West, to Ministry of Labour, 4 Nov., 1942, P.R.O. LAB 8/340.

Two successful strikes against the employment of women on aircraft work were mounted by members of the sheet metal workers' unions at Motor Panels Ltd., Coventry during 1942-1943. The company, which was making fuel tanks for Spitfire aircraft, requested at a works conference in July, 1942 that the unions allow women to be employed on fuel tank work. The union's representatives refused since no agreement on women had been arrived at nationally. The managment then went ahead with the introduction of women and the sheet metal workers struck. Despite the efforts of a Ministry of Labour Conciliation Officer to get a resumption of work, the men refused to end the strike until the women were dismissed. Finally the firm surrendered, the women were dismissed and work was resumed pending further negotiations. The second strike occurred in February, 1943, when the managment of Motor Panels again introduced women to the fuel tank shop. The stoppage lasted three days and ended when the women were removed. (1)

In the light of the strength of the union's resistance to the employment of women and its restrictive attitude towards dilution generally, one Regional Controller of Labour Supply reported that it would be unwise to press for the introduction of women to sheet metal work. (2) This view was finally adopted by the Ministry and at the

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(1) N.U.S.M.W. Coventry branch, Minutes 16 July, 1942, Coventry R.O. ACC 587; N.U.V.B. Coventry branch Minutes 19, 22 Feb., 1943, Coventry R.O. ACC 587.

(2) Letter from Regional Controller of Labour Supply, North-West, to Ministry of Labour, 4 Nov., 1942, P.R.O. LAB 8/340.

end of 1942 the N.U.S.M.W. was verbally informed that the question of employing women on sheet metal work was no longer urgent. (1) It is fairly clear that the Ministry received a bigger defeat over this issue than it liked to admit. Labour Supply Inspectors and District Manpower Boards argued for the extension of dilution on sheet metal work during 1942 and P. Inman has stated that the active opposition to dilution, and especially female employment, on the part of the N.U.S.M.W. created a generally unsatisfactory position regarding dilution until the end of the war. (2) It seems therefore, that the strength of sheet metal workers' organisation in the aircraft industry enabled it to resist what would otherwise have been a significant measure of dilution, since even the union's own committee appointed to investigate the possible employment of women found "under the quantity manufacturing methods of today..... a considerable amount of semi-skilled sheet metal work, a big proportion of which could be performed by women." (3)

The improvement of trade union organisation in many establishments was reflected in the further growth of shop floor organisation and the power of shop stewards and their committees. This development was in large part the result of the kind of issues which arose in engineering and aircraft production during the war.

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(1) A.T. Kidd, op.cit. p.301.

(2) Letter from Regional Controller..... 4 Nov., 1942, loc.cit.; P. Inman, Labour in the Munitions Industries, op.cit. p.62.

(3) Quoted in A.T. Kidd, op.cit. p.304.

As in 1914-1918, workshop organisation was stimulated by issues arising out of the operation of payments systems and dilution. Piece-work bargaining was of great significance in aircraft and motor firms working for the Ministry of Aircraft Production, especially in the Midlands, where considerable tension emerged as piece-work earnings rose rapidly and firms, often under pressure from the government, attempted to reduce piece-times and piece-rates as work began on new aircraft. Thus a number of disputes over piece-work reductions occurred in Coventry during 1941 and 1943 and in Manchester in 1944. (1)

The policing of dilution agreements also heightened the need for workshop organisation. The terms upon which male dilutees were to be employed were determined by the Temporary Relaxation Agreement signed by the E.E.F. and the A.E.U. in August, 1939 and by those signed by the N.U.V.B., the sheet metal workers'unions and the E.E.F. during June, 1940. Females were covered by the Extended Employment of Women Agreement between the E.E.F. and the A.E.U. of June, 1940 and a similar agreement signed by the N.U.V.B., Woodcutting Machinists and the employers' associations for the vehicle building industry in August, 1941. The male dilution

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(1) R. Croucher, op.cit. p.323-4; P. Inman, op.cit. p.326 C.S.E.U. Annual Report, 1943, Coventry District Committee Report; C.S.E.U. Annual Report 1944, Manchester District Committee Report; P.R.O. LAB 10/454 IR/418/3 (1943).

agreements provided for the payment of skilled rates to dilutees in engineering shops and vehicle building shops who were actually substituting for craftsmen; dilutees on sheet metal work were all to be paid at skilled rates, irrespective of the precise nature of their work. In addition, dilutees were to be introduced only when it could be shown that skilled men were not available and that production was suffering as a consequence. All dilutees were to be registered and as skilled labour became available normal manning practices were to be resumed.(1) Women, too, were to be registered and regarded as temporarily employed and minimum rates of pay were specified for female dilutees.(2) Dilution did not account for many strikes in

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(1) 'Temporary Relaxation Agreement', 28 August, 1939 A.E.U. Executive Council Report to the National Committee, 1940; "Memorandum of Agreement Between the Engineering and Allied Employers' National Federation and the National Union of Sheet Metal Workers and Braziers and the Birmingham and Midland Society of Sheet Metal Workers" A.T. Kidd, op. cit. p.288-9; 'Extended Employment of Women Agreement' 1 June, 1940 in A.E.U. Journal June, 1940; "Wartime Agreement Between the United Kingdom Wages Board of Employers for the Vehicle Building Industry, the National Union of Vehicle Builders, Amalgamated Society of Woodcutting Machinists of Great Britain and Ireland on the Employment of Women During the War" 26 August, 1941 in N.U.V.B. Quarterly Journal Oct., 1941; N.U.V.B. Circular 26 August, 1941. Coventry R.O. ACC 635.

(2) See above, p.220n. The N.U.V.B.'s agreement with the vehicle building employers' specified that after a similar probationary period, women capable of performing skilled work unaided should earn at least 80 per cent of the male basic rate. ibid.

the aircraft industry during the war but it did raise problematic issues. The main source of difficulty was the registration of dilutees. Many instances in which managments were accused of breaking dilution agreements by not regis tering semi-skilled workers and women as dilutees can be cited; for example at Fairey Aviation, Rolls-Royce, Armstrong-Whitworth, Humber-Hillman, Westland and Rover during 1940-1941. (1)

Shop stewards also became more concerned with broader aspects of welfare at work. Pressure was mounted for improved Air Raid Precautions during 1940 and other issues included the provision of accommodation for workers transferred from other districts and showing newcomers the "ropes" at work, the provision of transport for nightshift workers, campaigns for better lighting, ventilation and general safety. Increasingly the provision of canteens, nurseries, maternity leave and shopping time occupied the attention of stewards as well as district officials. (2) Questions of discipline and dismissals also loomed quite large, "other working arrangements, rules and discipline" accounting for between 11.2

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(1) A.E.U. Journal Feb., 1940, O.D.D.'s Report, divisions 12 and 14; April, 1940, divisions 14 and 18; August, Sept., Nov., 1941, division 11.

(2) R. Croucher, op.cit., p.98, 145; P. Inman, op.cit., p.261-4. Health and Safety questions accounted for a quarter of the time spent by Joint Production Committees in M.A.P. factories at the height of the war. Report on Joint Production Committees 7 Jan., 1943, P.R.O. AVIA 9/57.

per cent and 16.5 per cent of strikes in engineering and metal-working as a whole during 1941-1944 and for 14 out of 82 strikes of adult engineering workers in Coventry during 1941-1945. (1)

In all of the cases referred to above, the slowness of formal disputes procedure and the reluctance of employers to prosecute workers tended to encourage attempts to settle grievances at domestic level. At the same time, the growing strength of union membership in many plants enhanced the authority of stewards and pressure from the shop floor compelled managments to consult them more frequently and fully. As a result of these pressures the number of shop stewards rose and in some areas such as Coventry the rate at which new stewards were recognised by their union district committees was more rapid than the growth of the workforce. (2) By the end of 1940 shop steward organisation was already well established in some aircraft centres. In Coventry "there was not a single factory without a shop stewards' committee" and there were stewards in every aircraft shop in the Reading district. (3)

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(1) P. Inman, op.cit., p.398; R. Croucher, op.cit., p.105-6.

(2) R. Croucher, op.cit., p.85.

(3) ibid., p. 268; C.S.E.U. Annual Report 1940, Reading District Committee Report.

In the early phases of the war, victimisation of shop stewards was a matter of some concern, especially in the newer aircraft establishments. Thus the Scottish Motor Traction Company at Airdrie dismissed all active trade unionists in its aircraft works during 1939-1940 and shop stewards were dismissed from four major establishments in Coventry during 1940-1941.(1) Other firms, such as De Havilland, took advantage of Order 1305, which declared strikes and lock-outs illegal, to transfer stewards to their newer establishments, allegedly in order to weaken organisation in the parent factories where it was already quite strong.(2) In some cases, for example in the new Standard "shadow" factory, weak organisation meant that little shop-floor resistance to the dismissal of stewards could be mounted and some union district committees, such as that of the A.E.U. in Coventry, were not over-anxious to support shop stewards who were involved in "unofficial movements", specifically the Shop Stewards' National Council.(3) However, allegations of victimisation became less frequent and more reports of firms recognising stewards were received by unions during 1940-1941. During 1940, for example, the A.E.U. Journal published

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(1) A.E.U. Journal March, 1940, O.D.D.'s Report, division 4, National Organiser's Report; April, 1940, O.D.D.'s Report, division 14; R. Croucher, op.cit., p. 197. The plants in question in Coventry were the Standard Shadow Factory, Alvis Aero, Armstrong Siddeley and Nuffield Mechanisation and Aero.

(2) A.E.U. Journal Sept., 1940, O.D.D.'s Report, division 20.

(3) R. Croucher, op.cit., p. 198.

reports of its stewards gaining recognition from Car Bodies Ltd., Coventry, Parnell Aircraft, Tolworth, Surrey and Windovers Ltd.[1]

Pressure to increase output mounted by the Shop Stewards' National Council from 1941 onwards and the existence of increasingly well organised workshops contributed to the enhancement of stewards' status and to the influence of trade unions in aircraft factories. In October, 1941, with the ending of the Hitler-Stalin Pact, the Engineering and Allied Trades Shop Stewards' National Council called a conference to demand action to raise production "not merely by discussing the waste, mismanagment and inefficiency of present methods of control and direction of production but what we can and will do to increase production from our side and in doing so help to effect changes which will go right through industry, even to the top."[2] In a subsequent pamphlet published by the National Council, Joint Production Committees in every factory were demanded, "with the fullest facilities for the shop stewards taking full part and accepting joint responsibility for seeing plans are discussed with all the workers and then carried out."[3] Joint Production Committees were thus regarded by the National Council as a way in which production could be

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(1) A.E.U. Journal Feb., 1940, O.D.D.'s Report, divisions 14 and 20; Jan., 1940, division 19.

(2) Report of a Conference called by the E.& A.T.S.S.N.C. 19th Oct., 1941 (Copy in T.U.C. library).

(3) Arms and the Men, E. & A.T.S.S.N.C., 1941 (Copy in T.U.C. library).

raised by harnessing the energies and initiative of workers on the shop floor, a means whereby workers' representatives, in seeking ways of increasing efficiency, could take a hand in production decisions and also as a base upon which mass organisation could be built in the factories to fight for the recognition of trade unions, shop stewards and J.P.C.s themselves.(1)

In some of the better organised establishments, for example the Hawker factory at Gloucester and De Havilland at Hatfield, Joint Production Committees were already established by October, 1941 and were recognised by the managment.(2) More commonly, there was initial resistance. One North London firm's managment rejected the suggestion that a J.P.C. be set up, saying that it "only wanted one captain on the bridge."(3) Delegates to the October conference spoke of a West London establishment where there was a "constant battle with managment". In this case organisation among the workers was strong enough to force the company to agree to consult stewards on production matters but even so, managment continued to be reluctant to act on suggestions from the shop stewards' committee.(4) At one aircraft establishment in the Midlands however, managment again refused to consider shop stewards when planning production.(5)

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(1) ibid.

(2) Report of A.T.S.S.N.C. Conference, 19 Oct., 1941. (Copy in T.U.C. library).

(3) ibid.

(4) ibid.

(5) ibid.

J.P.C.'s spread only gradually during 1941 but became more widely adopted from March, 1942, following the agreement on J.P.C.'s signed by the E.E.F. and the Engineering Joint Trades Movement.[1] By January, 1943, 900 firms working on contracts for the Ministry of Aircraft Production had recognised J.P.C.'s in their plants and the number rose to 1,360 in January, 1944.[2]

The growing strength of workshop organisation - something which branch membership figures are probably incapable of revealing to a great extent - was also reflected in the growing confidence exhibited by shop stewards in their dealings with managment. This could manifest itself in an apparently trivial way, such as the request made during 1943 that the managment of the Nuffield Mechanisation and Aero establishment in Coventry supply telephones in every shop so as to facilitate communication between stewards, who were not allowed to visit other shops in working hours.[3] It was also revealed in the emergence of demands that firms be compelled by law to recognise shop stewards and trade union officials (a request which also reveals that organisation was still incomplete). This idea was first channelled through the A.E.U. in 1942 by members of the

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(1) See above, p.112

(2) P. Inman, op.cit., p. 380-1.

(3) R. Croucher, op.cit., p. 95. It is perhaps worth noting that the managment of this plant had been accused of victimising a shop steward who was dismissed during 1940. See above, p. 227n.

E. & A.T.S.S.N.C. who sat on the A.E.U. National Committee. The National Committee adopted a resolution calling upon the Trade Union Congress to press the government to make trade union recognition compulsory in all factories working on government contracts and to amend Order 1305 in such a way that trade union membership would be made compulsory.(1) The T.U.C. refused to act on the request on the grounds that voluntarism in industrial relations should be maintained as far as possible; however, Ernest Bevin offered to investigate specific cases of non-recognition and to use the influence of the Ministry of Labour to reach a satisfactory agreement.(2)

A more impressive indicator of this confidence and strength however, was the way in which shop stewards were able, where methods of wage payment permitted, to gain considerable control over piece-work earnings and the organisation of work. The outstanding example is the Armstrong-Whitworth plant in Coventry, where a strong shop stewards' committee was already in existence by 1940. Armstrong-Whitworth introduced a "gang" system of piece-work during the late 1930s when it switched from producing wooden aircraft to metal ones. The "gang" system was pioneered by the Standard Motor Co. in 1922 as a method of wage payment and work organisation. Work-groups, or "gangs", agreed to do a job in a certain time and any time saved on the contract was given to the workers in the form of a

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(1) A.E.U. Financial Report Dec., 1942, Report of the Executive Council to the National Committee, 1942.

(2) A.E.U. Financial Report Dec., 1943, Report of the National Committee to the Executive Council; New Propellor, Jan., 1943.

bonus to be shared between them according to each man's basic rate and the number of hours he had worked. The work was organised by a "ganger", a member of the work-group appointed by the managment, who was also responsible for negotiating the time allowed for the job. This system had the advantage for managment that the work-group was self-disciplining, since slackness by any individual affected the earnings of the group as a whole; moreover, in a slack labour market it ensured that earnings only rose with productivity since managment had authority over the ganger, who in turn could wield it over the work-group. During the late 1930s however, demand for labour in the aircraft industry began to rise and by the outbreak of the war Coventry firms were competing fiercely for workers. At Armstrong-Whitworth, the shop stewards' committee which had emerged as union strength built up in the plant during the late 1930s, was able to push gangers to negotiate better times and higher bonus rates and eventually took the right to appoint gangers away from managment. Thus Armstrong-Whitworth stewards were able to obtain substantial advantages for themselves, especially in terms of the times allowed on jobs, which meant a more leisurely work rate. So successful were they in doing this that a Ministry of Labour official reported indignantly in June, 1941;

> "This shop is the worst scandal I have yet come across. Half the men are doing nothing and the other half are doing women's jobs. Some 1,500 men can easily be replaced....." (1)

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(1) R. Croucher, op.cit., p.217-20; "Joint Report on Armstrong-Whitworth Aircraft at Whitley, Baginton, Coventry" 4 June, 1941, P.R.O. LAB 8/374. From the comment quoted above, it would seem that organisation was also strong enough to resist pressures for dilution.

It can be seen therefore, that as union organisation in the workplace improved, stewards were able increasingly to take advantage of labour shortages and exert more control over working conditions. From October, 1941 onwards though, the ends to which shop stewards' committees connected with the E. & A.T.S.S.N.C. used this power moved away from those of restricting the pace of work and limiting dilution to those of achieving high production and high earnings.(1)

A final indication of the progress of workshop organisation was its growing scale and sophistication in many of the largest aircraft-producing firms. Convenors were elected as the number of stewards and the size of plants grew and during 1943-1944 unsuccessful approaches were made to the E.E.F. regarding the amendment of the 1919 Shop Stewards' Agreement so as to provide for their recognition.(2) Effective means of propaganda and information developed in the form of factory newspapers and news-sheets, e.g. at factories belonging to Daimler, Rootes, Humber, Armstrong-Whitworth, A.V. Roe and Rover.(3) Towards the end of the war too,

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(1) See E. & A.T.S.S.N.C., Joint Production Committees. How to Get the Best Results (1942), extracts reprinted in K. Coates and T. Topham (eds.) Workers' Control, op.cit., p. 172-9, in which it was stated that "It falls upon us to strain every effort to achieve the maximum production so that arms flow in greater quantity....." and that "The shop stewards' committee.... will also secure a guarantee that no matter how high each individual increases his output, there will be no cut in piece-work prices....."

(2) See above, p. 113.

(3) Bert Williams, "Trade Unionism in Birmingham" Birmingham Trades Council Journal No.79, June, 1953; R. Croucher, op.cit., p. 235.

shop stewards' combine committees were set up in several multi-plant aircraft producing companies, e.g. Fairey Aviation, A.V.Roe, Vickers, Armstrong-Siddeley, Napier, Humber, Daimler and Austin during 1944-5. While illustrating the high level of development of shop steward organisation, combine committees played a somewhat defensive role as war production passed its peak, the demand for labour eased and managment posted redundancy notices in some plants and tried to regain control over payments systems and the organisation of work.(1) Whereas the production committees established by stewards had been concerned with pushing up production and earnings and providing a channel of communication between plants, the combine committees quickly became absorbed by the defence of piece-work earnings, resistance to redundancy, and the prevention of reallocation of work between plants when this was seen as involving redundancies or interpreted as part of an attack on workers' organisation and rates of pay. They also acted to co-ordinate strikes in defence of these aims, e.g. at A.V. Roe during March-April, 1945, Daimler during December, 1945 - February, 1946 and Humber during February-March, 1946. All of these strikes were wholly or largely aimed at resisting reductions in piece-work earnings. In each case the strikes achieved a considerable measure

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(1) Redundancy among aircraft workers was considered by the A.E.U. to be presenting problems at the end of 1944. A.E.U. Journal Dec., 1944, General Secretary's Report.

of success, maintaining, at least for a time, wartime piece-work conditions, preventing redundancies and limiting shifts of work between plants.(1)

It is clear that trade unionism continued to expand rapidly among aircraft workers during the war- at least until 1943-1944- and that the powerful position built up by shop stewards in some of the major establishments during the late 1930s was extended to other plants. However, progress was not universal and organisation remained incomplete, especially among female dilutees. A number of firms continued to withhold union recognition until at least 1944 and some managments showed a hostile attitude towards trade union officials and shop stewards once recognition had been finally conceded. Cases in point were Simmonds Aerocessories which was still refusing to recognise the A.E.U. in 1943 and appears to have continued to do so throughout the war; Middlesex Aircraft, which held out against trade unions until 1944 and whose managment continued to display hostility towards unions after recognition had been conceded; C.S. Airscrews, which did not recognise shop stewards until 1945; and many other firms whose managments were reported as being obstructive or as trying to discriminate against trade unionists, e.g. that of an aircraft factory in Castle Bromwich which as late as 1944 was reported as trying to use the Defence of the Realm Act as an excuse to disallow trade union activity.(2) Until 1943 trade unionism was weak among

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(1) R. Croucher, op. cit., p. 239-50, 295-7.

(2) N.U.V.B. Quarterly Journal Jan., 1944; A.E.U. Journal March, 1943, June, 1944, O.D.D.'s Report, division 25; Feb., 1944, Jan., 1945, O.D.D.'s Report, division 17.

female aircraft workers and although more strenuous efforts were made to recruit them during that year they remained to a great extent outside trade unions.(1)

Yet despite the continued existence of areas of union weakness, the impression is one of progress. Even the examples quoted above show managments being forced to give way as time passed. More importantly in the light of the continued weakness of organisation among women and in some of the new sub-contracting concerns, the core of the industry was well organised by the end of the war. The strength of organisation already developed by 1939 in the parent factories of major firms, e.g. De Havilland, Hawker, Armstrong-Whitworth, spread to their subsidiaries and to other companies during the war. Trade union membership in the aircraft industry fell during 1944 and 1945, as did trade union membership generally, but as was the case after the First World War this, so far as aircraft workers were concerned, reflected the exit of dilutees rather than a weakening of permanent organisation.(2)

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(1) The problems of organising women are dealt with in detail in the context of changes in the structure of the labour force, in Chapter 4.

(2) Membership of A.E.U. and N.U.V.B. "aircraft-relevant" branches fell from 59,319 in 1943 to 58,732 in 1944 and 47,312 in 1945, but recovered to 53,933 in 1946. Membership of the T.G.W.U. Metal, Engineering and Chemical Group fell from 1,140,257 in the first quarter of 1944 to 1,041,149 by the third quarter of 1945, a drop of 99,108. A.E.U., N.U.V.B. branch membership returns; T.G.W.U. MEC Minutes 3 Nov., 1944, 30 Oct., 1945. The continued strength of organisation is illustrated by the effectiveness of the combine strikes during 1945-1946 referred to on p.234 above.

The development of trade unionism in the aircraft industry after 1935 had a significant influence upon its extension in the major motor companies. The first point to be noted is that the E. & A.T.S.S.N.C., which strove to extend trade union organisation throughout the engineering sector during the late 1930s and the war years, had its origins in aircraft.(1) Secondly, the major aircraft firms' parent establishments, which were generally more highly unionised than their motor industry counterparts by 1939, constituted a reservoir from which organisational experience and habits of shop-floor militancy trickled into many of the "shadow" factories operated by motor companies as groups of skilled workers moved or were transferred to them in order to provide a nucleus of skilled labour. Frequently they also formed a core of organisational strength and militancy around which more general organisation could be built which eventually penetrated the parent motor establishments themselves. Transferred workers from Armstrong-Whitworth for example, helped to build up organisation at other Coventry plants and in centres further afield, such as Manchester.(2) At Rootes No. 1 "shadow" factory in Coventry during 1939 one gang of workers contained a large proportion of men from other areas, who instilled a spirit of resistance to managment control. The gang refused to do certain jobs and proved so difficult to deal with that it had to be broken up.(3)

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(1) See above, p. 188-9.

(2) R. Croucher, op. cit., p. 220, 277.

(3) R. Croucher, op. cit., p. 195.

Skilled aircraft workers were also at the forefront of the Austin Aero strike of 1938, following which growing attention began to be paid to the organisation of workers at the less strongly unionised motor plant.(1) The process of diffusion of organisation from the main aircraft firms was, moreover, aided by these firms' frequent reluctance to employ their own transferred workers in their own new establishments, hoping to break free from union-imposed restrictions by building up a much more highly diluted workforce in their dispersal factories.(2) Consequently many skilled workers with a background of shop steward activity or active union membership found themselves in plants run by motor companies.(3)

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(1) Birmingham Daily Post 31 August, 2, 5, Sept., 1938; Birmingham Trades Council, Minutes 3 Sept., 1938. For details of the strike, see above, p. 195-7.

(2) This tendency was noted by a Ministry of Labour official, S.J. Egerton-Banks, "Aircraft Factories and Manpower" 9 June, 1941, P.R.O. LAB 8/374.

(3) The older aircraft firms could not escape however, since they, too, needed a nucleus of skilled labour in even the newest plant and in some cases where firms tried to rid their parent plants of militant stewards by transferring them to their dispersal factories they helped sow the seeds of new organisation.

Strong organisation in a major aircraft firm could also be used to defend and promote organisation locally. The Austin and Rover "shadow" factories were centres from which trade union activity radiated outwards to the rest of Birmingham during the war. (1) In Coventry, the Armstrong-Whitworth Shop Stewards' Committee succeeded in obtaining the reinstatement of an A.E.U. convenor named Wilcox, who had been sacked from one of Standard's "shadow" factories in September, 1940. The committee, which was strongly communist influenced, took the initiative in the absence of any immediate action by the A.E.U. District Committee which, possibly for political reasons, had done nothing to resist the dismissal of another Standard convenor at the beginning of the year. After threatening to call a district-wide strike of engineers unless Wilcox was reinstated, a meeting of Coventry stewards was organised through the Armstrong-Whitworth shop stewards' committee to discuss the organisation of the Standard plants, which were said to be only "semi-organised". (2) By the end of 1941 the Standard plants were reported as being 90 per cent organised. (3) Moreover, as combine committees evolved in motor companies producing aeroplanes, such as Daimler, Humber and Austin, so there emerged more effective means of extending and, when necessary, defending, organisation throughout these firms.

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(1) Bert Williams, "Trade Unionism in Birmingham", op. cit.

(2) R. Croucher, op. cit., p. 199-202.

(3) ibid. p. 223.

Finally, success in obtaining recognition in hitherto anti-union aircraft firms could have noticeable "knock-on" effects on progress in motor establishments. There is little doubt for example, that the move towards gaining recognition at Ford's, Dagenham and at associated companies, i.e. Briggs Bodies, Kelsey-Hayes and Lincoln Cars, benefitted from gains on the aircraft side. Ford's resistance to trade union recognition in Britain was first breached at its Old Trafford "shadow" factory in December, 1941 when the A.E.U. obtained the right to negotiate on behalf of its members in certain departments. The agreement was extended to cover other A.E.U. shops during 1942 and to all unions operating there by 1943.[1] Such a precedent must have made it harder for Ford managment to refuse to enter into a recognition agreement when approached by the T.U.C. General Council in February, 1944.[2] A stimulus was also given to organising efforts at Dagenham as a result of the success of trade unionists at London Aeroplanes and Alltools Ltd. in forcing a government inquiry into industrial relations which resulted in the company conceding recognition in 1943.[3] The success of the

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(1) A.E.U. Journal Dec., 1941, Jan., June, 1942, O.D.D.'s Report, division 11; C.S.E.U. Annual Report 1943, Manchester District Committee Report.

(2) See above, p. 119.

(3) "Proceedings of the Committee of Inquiry into London Aeroplanes and Alltools Ltd.," 6 and 7 May, 1943; "Labour Supply Inspector's Report on London Aeroplanes" 22 May, 1943, P.R.O. LAB 10/249.

unions at London Aeroplanes encouraged stewards in neighbouring firms along the Great West Road to mount campaigns pressing for similar inquiries, this message being broadcast by E. & A.T.S.S.N.C. activists from a loudspeaker van during June.(1) The link with the Dagenham campaign existed in the form of a militant shop steward at Lincoln Cars, Ltd., who was described as being "very active along the Great West Road" and as having "leanings towards the unofficial movement".(2) By June, a works committee had been set up at Lincoln Cars, all four workers' representatives being trade unionists. By December, the New Propellor reported that 98 per cent of workers at the plant were organised.(3)

The foregoing description has revealed significant points of difference between the development of trade unionism in the motor and aircraft industries. Organisation tended to be much better maintained among aircraft workers during the 1920s and early 1930s and from the late 1930s the aircraft industry became an osmotic source from which trade union strength on the shop floor was passed to major motor companies. Therefore, when considering the major influences on the progress of unionisation in the motor industry in Chapter Four, attention will be given to the question of why two so-called "new" industries experienced significant differences in unionisation.

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(1) Ministry of Labour Industrial Relations Department to M. A. Bevan, 28 June, 1943, P.R.O. LAB 10/249

(2) ibid.

(3) New Propellor Dec., 1943.

CHAPTER FOUR

THE DETERMINANTS OF UNION GROWTH

I

Having described the general progress of trade unionism among motor and aircraft workers it is now necessary to account for it and to explain why it was so limited in the motor industry until the Second World War. The central problem is that of evaluating the impact of aggregate and industry-specific variables upon the development of union organisation among automobile and aircraft workers. In this context three main questions arise. How can one account for the weakening of trade unionism in the motor industry during 1921-1933 and its severity when compared with aircraft production, engineering generally and even trade unionism as a whole? Secondly, why did the density of organisation in motors remain so low throughout the inter-war period, even during the expansionary years between 1934 and 1939? In this connection it is also important to consider to what extent and why variations in trade union strength existed between motor centres and/or plants. Thirdly, in what ways did the wartime environment stimulate the growth of organisation in the motor industry and enhance its effectiveness? Here one may go further and ask to what extent the war marked a turning-point in the development of automobile unionism.

In attempting to deal with these questions the framework of analysis developed in Chapter One will be used. In addition, comparisons will be made with engineering generally and the aircraft industry in particular in order to demonstrate the importance of the changing characteristics of individual industries as influences upon the development of trade unionism within them. These industry-specific variables could operate so as to reinforce more general pressures or, alternatively, to mitigate them. Our analysis will therefore focus upon the interaction of aggregate and industry-specific variables in determining the course of union growth in the motor and aircraft industries between 1919 and 1939 and during the Second World War. In order to develop fully the question of the significance of the war for trade unionism in the motor industry, the 1939-1945 period will be considered separately at the end of this Chapter.

Reference has already been made to the major influences affecting aggregate union membership which impinged upon the motor industry, i.e. the demand for labour, movements in prices and money wages and shifts in attitudes towards trade unions and the conduct of industrial relations on the part of employers and governments. This was so as to provide a broader

context within which to view the early evolution of trade unionism in the motor and aircraft industries. However, a more detailed consideration of these factors is necessary in order to assess their importance relative to industry-specific variables and identify the ways in which they interacted with them.

The inter-war years in Britain are now generally recognised as having been ones of greater economic progress than was once thought. Attention has been drawn to rising real incomes, the increased production of new commodities, to technical progress and widespread improvements in industrial productivity. It has been argued that measured in terms of Gross Domestic Product and industrial production, British economic growth during the inter-war years compared favourably with 1870-1914 and with the growth rates achieved by other major economies.(1)

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(1) K.S. Lomax, "Growth and Productivity in the United Kingdom", Productivity Measurement Review, Vol. XXXVll (1964); D. H. Aldcroft, "Economic Growth in Britain in the Inter-War Years: A Reassessment", Econ. Hist. Rev. Vol. XX (1967); H. W. Richardson, Economic Recovery in Britain, 1932-9 (1967); D. H. Aldcroft, The Inter-War Economy: Britain, 1919-1939 (1970). There is however, some discussion as to whether the inter-war period as a whole was one of quite impressive dynamism, or whether growth was concentrated in the upswing of the 1930s. For the former view, see D. H. Aldcroft, "Economic Progress in Britain in the 1920s", Scottish Journal of Political Economy, Vol. Xlll (1966). For the latter, R. C. O. Matthews, "Some Aspects of Post-War Growth in the

When considering the cycle as opposed to the trend, it is clear that Britain experienced nothing like the catastrophic slump in output and employment which occurred in Germany and the U.S.A. between 1929 and 1933 and that her recovery from the depression began earlier than it did elsewhere and was stronger than in the United States or France.(1)

At the same time however, it is possible to err on the side of optimism when considering the British economy during the inter-war years. Her rates of growth during 1924-1937 (the conventional bench-mark years for the period) compare less favourably with the pre-war years if account is taken of a break in growth trends occurring at the end of the 1890s and the effect of the poor performance of the 1900s in dragging down the growth rate for 1870-1914 as a whole.(2)

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(1) cont.
British Economy in Relation to Historical Experience", Transactions of the Manchester Statistical Society (1964); H. W. Richardson, "The Basis of Economic Recovery in the 1930s: A Review and a New Interpretation", Econ. Hist. Rev. Vol. XV (1962); idem, "Over-commitment in Britain before 1930", Oxford Economic Papers Vol. XVII (1965).

(1) D. H. Aldcroft, The Inter-War Economy, op.cit., p. 41-2.

(2) R.C.O. Matthews, "Some Aspects of Postwar Growth in the British Economy..", op.cit.; J. A. Dowie, "Growth in the Inter-War Period: Some More Arithmetic", Econ.Hist.Rev. Vol. XXI (1968).

B. W. E. Alford has argued that problems in weighting individual industries together with improvements in the quality of information during the 1920s and 1930s may have resulted in a tendency to underestimate the pre-1914 growth rate and to exaggerate the dynamism of the inter-war years.(1) Alford has also shown that the use of different data, namely expenditure rather than income data, gives different growth rates for both G.D.P. and Net National Income, with expenditure calculations showing noticeably lower rates of growth during 1924-1937 than income calculations.(2) As far as international comparisons are concerned, the statistical basis for these is so weak that they must be viewed with extreme caution. Finally, all historians of the period recognise that the persistence of heavy unemployment, material insecurity and even distress for a large minority of the population throughout the period detracted from the record of economic growth. Thus there is still much to

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(1) B. W. E. Alford, Depression and Recovery? British Economic Growth 1918-1939 (1972) p.21-4.

(2) ibid p.25-26.

be said for the view which sees the economic history of Britain during 1919-1939 as being dominated by the post-war boom and slump, the problems of adjustment to changed world market conditions during the 1920s, the depression of 1929-1932 and a subsequent recovery which was of dubious strength and completeness.(1)

The course of aggregate union membership reflected these gloomier features of the inter-war years. The period from 1920-1933 was one in which aggregate membership and density fell, tumbling during 1921-2 and then drifting downwards until 1929. There were signs of a slight recovery in 1929 but this was cut short by the depression and the rate of decline accelerated during 1930-1932, although the reduction was by no means so severe as it had been ten years earlier. If one looks at the data on unemployment, prices and money wages for the period and at the climate of industrial relations during the early 1920s, the roots of these difficulties are readily apparent.

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(1) Further force is given to this view when one considers the way in which recovery was suddenly halted during 1937-8, the failure of British domestic exports to regain the 1913 level and the reliance of many of the "new industries" upon protection from foreign competition. ibid, p.59-61; A. E. Kahn, Great Britain in the World Economy (1946) p. 108, 113.

The movement of each of these variables was very much determined by Britain's position in the international economy during the 1920s. The post-war boom collapsed into deep depression as consumer demand slackened, business expectations were revised sharply downwards and the government imposed "tight money" during 1920. A further deflationary impulse to the economy was imparted as a result of the swingeing cuts in public expenditure which were imposed following the recommendations of the Geddes Committee on National Expenditure in 1922.(1)

From 1922-1929 Britain experienced growth in industrial production and net national income per head, and the levels of 1920 were surpassed before the end of the decade. Nevertheless, Britain's growth is reckoned to have been slow by international standards owing to the difficulties which her major export industries were experiencing under much more difficult world market conditions than had operated before 1914. World trade expanded very slowly during the 1920s and this, together with shifts in patterns of world supply and demand which

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(1) S. Pollard, The Development of the British Economy, 1914-1967 (1969) p.214-5; Sean Glynn and John Oxborrow, Inter-War Britain: a Social and Economic History, op.cit., p.127; Susan Howson, "The Origins of Dear Money, 1919-20", Econ Hist. Rev. Vol. XXVII (Feb. 1974).

were to the disadvantage of nineteenth-century staple products, made it harder for Britain to sell the products of her staple industries. Moreover, Britain's share of world exports tended to fall owing to the difficulty she had in achieving price-competitiveness. Many firms were burdened with obsolescent plant, over-capitalisation and high wage costs as a result of the increase in money wages and the hours reductions of 1919-20. From 1925 the position of exporters was aggravated by the over-valuation of sterling.(1)

As a result of these difficulties and employers' responses to them, unemployment soared from 2.6 per cent of the insured workforce in June, 1920 to 22.4 per cent twelve months later, and then settled down to a level which only fell below 10 per cent in one year

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(1) A. E. Kahn, Great Britain in the World Economy, op.cit. chs.4 and 5; Sean Glynn and John Oxborrow, op.cit. chs.2 and 3. There is some discussion as to the severity of the impact of the return to gold at the pre-war parity upon British export performance. R.S. Sayers argues that a lower exchange rate would have been countered by France and Belgium so as to maintain the artificial advantages they gained by their devaluation of 1926 and that in any case Germany's resurgence as a competitor after 1924 was as much of a problem as the effects of the over-valuation of sterling vis-a-vis the French and Belgian franc. R. S. Sayers, "The Return to Gold" in L. S. Pressnell (ed.) Studies in the Industrial Revolution (1960).

- 1927.[1] Much of this core of unemployment represented the 'shake-out" element in the lay-offs of 1921-2 as firms sought to raise productivity in the face of falling prices and intensified competition. As far as trade unions were concerned, the impact of heavy unemployment on membership was worsened by its concentration in the export industries, which had become the main stronghold of unionism. At the same time too, technical innovations in production in some industries were tending to reduce the extent of reliance upon skilled labour, another factor which was seen as weakening organisation.[2]

The effects of depression and the problem of foreign competition were also reflected in movements of money wages. Widespread wage-cuts were pushed through

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(1) Department of Employment and Productivity, British Labour Statistics 1886-1968: Historical Abstract (H.M. S.O. 1971) Table 160.

(2) While unemployment among the insured workforce hovered between 10 and 11 per cent during 1923-1929, it was never less than 19.4 per cent in iron and steel processing and 24.5 per cent in shipbuilding and repairing. Neither did it fall below 24.5 per cent in docks and harbours. Cotton textiles and, from 1927, coal-mining, also experienced unemployment which was significantly higher than average. ibid Table 164. Technological unemployment was not only seen as displacing the skilled worker. There was a general fear of techological unemployment during the inter-war years. Thus Ministry of Labour officials noted that "there is a growing public opinion that much unemployment is the result of mechanisation." "Enquiry by Parliamentary Secretary Regarding the Effect of the Introduction of Machinery on the Displacement of Labour", notes of a meeting held on 20 Feb, 1934, P.R.O. LAB 17/3.

during the early twenties, the index of basic weekly wage rates for all manual workers falling from 56.8 in December, 1920 to 35.9 in December, 1923.(1) Most of the reduction - over half - had occurred by the end of 1921. There followed a slight revival during 1923-6 before a further decline set in which lasted until 1933.

Money wage reductions were accompanied by falling prices. The Cost of Living Index peaked at 276 in November, 1920 and then dropped to 199 by December, 1921. Prices then fell more gradually until May, 1924 and thereafter fluctuated around a very slightly downward trend until 1930 when the drop became more pronounced, the index moving from 166 in January, 1930 to 141 by August, 1932.(2)

The effect of money wage and price movements upon real living standards was generally positive. Contemporaries argued that the proportion of families living in poverty during the mid-1920s was only just over half of what it had been in 1913 and that much of

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(1) Department of Employment and Productivity, op.cit. Table 13. Jan. 1956 = 100.

(2) ibid. Table 89. July, 1914 = 100.

the current distress was the result of unemployment.[1]

However, real weekly wage indices compiled by Bowley and Pigou indicate that a sharp increase occurred during 1920-1921 but that real wages fell to just below the 1914 level by the end of 1923.[2] On the other hand, Dowie, modifying these data to take account of reductions in working hours, presents an hourly real wage index which shows that although real wages fell during 1921-3 they remained significantly higher than in 1914.[3] Data on prices and "money wage earnings" produced by Bain and Elsheik show a real wage pattern similar to Dowie's hourly index and a fairly steadily rising trend during 1924-1938[4].

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(1) A. L. Bowley and M. Hogg, Has Poverty Diminished? (1925) p.16, cited in Sean Glynn and John Oxborrow, op.cit. p.38.

(2) These data are presented in J. A. Dowie, "1919-20 is in Need of Attention", Econ.Hist.Rev. Vol. XXVIII (1975).

(3) ibid.

(4) G. S. Bain and F. Elsheik, Union Growth and the Business Cycle, op.cit. Appendix E. The "money wage earnings" series is taken by them from A. L. Bowley, Wages and Income in the United Kingdom since 1860 (Cambridge, 1937) and idem "Index Numbers of Wage Rates and the Cost of Living", Journal of the Royal Statistical Society, Series A, CXV (1952).

It can be seen that the movements in unemployment, prices and money wages are consistent with the course of aggregate trade union membership during the 1920s. Rapidly rising unemployment during 1921-2 raised the costs of union membership and at the same time strengthened the bargaining position of employers, as revealed in the wage reductions forced through during 1921-3. Money wages fell by more than prices and in this context pressure on real wages, rather than encouraging union membership as a defensive response, operated so as to diminish the potential benefits of union membership in the eyes of workers since trade unions were unable to prevent money wages falling faster than the cost of living. The slight revival in membership which occurred during 1924 is predictable given the diminution of unemployment during 1922-4 and the slight upward movement in retail prices and money wages during 1923-4.(1) The revival was limited however, as continued heavy unemployment, generally steady or slightly falling money wages and prices provided little incentive for workers to join unions or for unions to go out and seek members.(2)

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(1) See Department of Employment and Productivity, op.cit. Tables 13, 89, 160, 196.

(2) This last point is strengthened by the generally unenthusiastic response by unions to the T.U.C.-sponsored "Back to the Union" campaigns begun in 1923. The A.E.U.'s National Organiser reported that enthusiasm for the campaigns varied with the state of employment, being greatest where it was least required. Skilled unions especially were less than wholehearted in their support for the campaigns, given their somewhat restrictive attitudes towards membership. A.E.U. Journal Sept., 1923 National Organiser's Report.

Developments in industrial relations superimposed themselves on this picture so as to reinforce its main outlines. The determination of employers to reduce labour costs and to redefine their relationships with trade unions combined with resistance from organised labour to produce widespread confrontation in industrial relations during the early 1920s. Conflict rose dramatically after the war, with an unprecedented number of working days being lost through stoppages in 1921, the year in which the bulk of wage reductions was concentrated. Thereafter, the extent of conflict subsided somewhat but working days lost through industrial disputes remained high in historic terms and severe defeats were inflicted upon unions in engineering and boilermaking.(1) Moreover, tension built up in the coal industry during 1925 when the resumption of German coal production ended the temporary relief which had been given to British producers by the French occupation of the Ruhr during 1923-4. Battle was delayed by the granting of a government subsidy to the

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(1) 85,870,000 days were lost due to industrial disputes recorded by the Ministry of Labour during 1921. The total then fell continuously until 1925 when it stood at 7,950,000. This figure was still high relative to those of the years up to 1910. H. Pelling, A History of British Trade Unionism, op.cit. p. 261-2.

coal-owners in July, 1925, following the threat of sympathetic action in support of the miners' refusal to countenance the wage reductions and longer hours proposed by the Mining Association. The General Strike of 1926 was thus the climax of an industrial relations crisis which developed out of the problems of adjustment to changed market conditions in the early 1920s.(1)

The defeat of 1926 reinforced the adverse pressures on trade union membership, turning stagnation into decline during 1926 and 1927. Moreover, among the unions involved in the strike, it was generally those which had suffered least during 1921-5 which experienced the heaviest membership losses during the next two years.(2)

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(1) Pressure on wages continued to be seen as a threat outside the coal industry in 1925, e.g. in engineering, woollen textiles and on the railways. Despite the fact that there were relatively few changes in wage rates during 1925 and increases outnumbered reductions, there was a fear of a general attack on wages which encouraged support for the M.F.G.B. during 1925 and 1926. G. A. Phillips, The General Strike, op.cit. p.54.

(2) ibid., p.281-5; H. A. Clegg, "Some Consequences of the General Strike", Transactions of the Manchester Statistical Society (Jan., 1954).

This was partly due to a hardening of employer's attitudes in private road transport, printing, the railways, and in local authorities under Conservative control.(1) However, if anything, the climate of industrial relations improved during 1926-9, for despite the passage of the Trades Disputes Act in 1927, which is generally held to have been of marginal significance in the conduct of industrial relations, "most industrialists were eventually satisfied with largely token concessions from the unions."(2) Much of the membership loss therefore resulted from the unemployment generated by the continuation of the coal strike; some of it from disillusionment among the rank-and-file and some as a result of employers' aggression.

In the aftermath of the General Strike, the incidence of stoppages of work fell dramatically, reflecting the exhaustion of finance and energy within the trade union movement and the fact that the bulk of

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(1) G. A. Phillips, op.cit. p.244-50.

(2) ibid p. 250, 278-9.

wage adjustment had already been completed. During 1929-1932 there was a resurgence of conflict centring on textiles which echoed that which had occurred in other staple industries during the early 1920s as embattled firms sought to reduce costs by cutting wages. However, the conflict of 1929-1932 never reached the proportions of ten years before, owing mainly to the much more limited nature of wage reductions. Thus the industrial relations climate reflected the intensity of competitive pressures in important sections of the British economy during 1919-1932 and operated so as to reinforce the impact of underlying economic forces upon trade union membership.(1)

Circumstances became more favourable to union growth after 1932. Unemployment fell continuously until 1938. The Cost of Living Index, which had dropped considerably during 1930-1932, levelled out during 1933-4 and then began to rise slightly until 1938.

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(1) It should be pointed out however, that in many respects trade union strength was quite well maintained during this period. There was relatively little reduction in the extent of trade union recognition and in well-established centres of union organisation, trade union authority on the shop floor was well preserved. John Lovell, British Trade Unions 1875-1933, op.cit. p.59.

Money wages, which had fallen by much less than prices during the depression, assumed a course parallel to that of the Cost of Living from 1933-8. Consequently real wages after an initial increase, remained fairly steady, with a small improvement over the period as a whole.(1) Industrial relations were also more relaxed than they had been in the 1920s. The depression itself had not resulted in a repetition of the widespread confrontation of the early twenties since "Improvement in the terms of trade, price inelasticities of demand for many industrial commodities and increases in the rate of manufacturing productivity all played a part in permitting employers to forego large wage reductions.."(2) These factors, together with the effect of sterling devaluation, the move to protection and the growth of home demand in easing some of the pressures of foreign competition, contributed to the relative industrial

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(1) Department of Employment and Productivity, op.cit. Tables 13, 89 and 160; G. S. Bain and F. Elsheik, op.cit. Appendix E.

(2) G. A. Phillips, op.cit. p.287. At the same time, memories of the early 1920s were probably important in persuading trade union leaders that national strikes in resistance to such wage reductions as did occur were likelt to be costly and possibly futile.

peace after 1932. Although the number of stoppages remained quite high, the number of working days lost as a result was lower than at any time since the 1890s.(1) In this more favourable climate the status of trade union officials showed signs of being enhanced. Knighthoods were awarded to Arthur Pugh and Walter Citrine and more practically, trade unions came to be consulted more on industrial matters as the government began to involve itself in an ad hoc fashion with the reorganisation of industry, e.g., cotton textiles and fishing. The growing threat of war also led to the General Council of the T.U.C. becoming involved in discussions concerning Air Raid Precautions and the mobilisation of labour during 1938-9.(2)

In these conditions, trade union membership and density began to recover from the trough which was

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(1) H. Pelling, op.cit. p.261-3. 11,920,000 working days were officially recorded as having been lost as a result of industrial disputes during 1933-9, a lower total than for any preceding seven-year period since records began to be kept in 1893.

(2) H. Pelling, op.cit. p.208; A. Bullock, The Life and Times of Ernest Bevin (1960) Vol.1, p.545, 600 - 601.

reached during 1933. From then on, falling unemployment meant that lapsed members rejoined as they found work and other workers began to reassess the costs and benefits of membership as they found employment and collective action on work issues became relevant to them. In addition, trade unions became more willing to embark on recruitment drives. The fact that money wages rose slightly faster than prices during 1933-7 also encouraged union growth, since although it is unlikely that the price movements were sufficient to generate a threat effect and push workers into organisation in defence of real wages, rising money wages may have been credited to union activity. At the same time, higher real wages reduced the financial burden of union dues.(1)

Nevertheless, the extent of the recovery of union membership and density was limited. The rate of membership growth slowed down during 1938-9 as a result of the recession during the previous year and although by the end of 1939 membership levels were considerably

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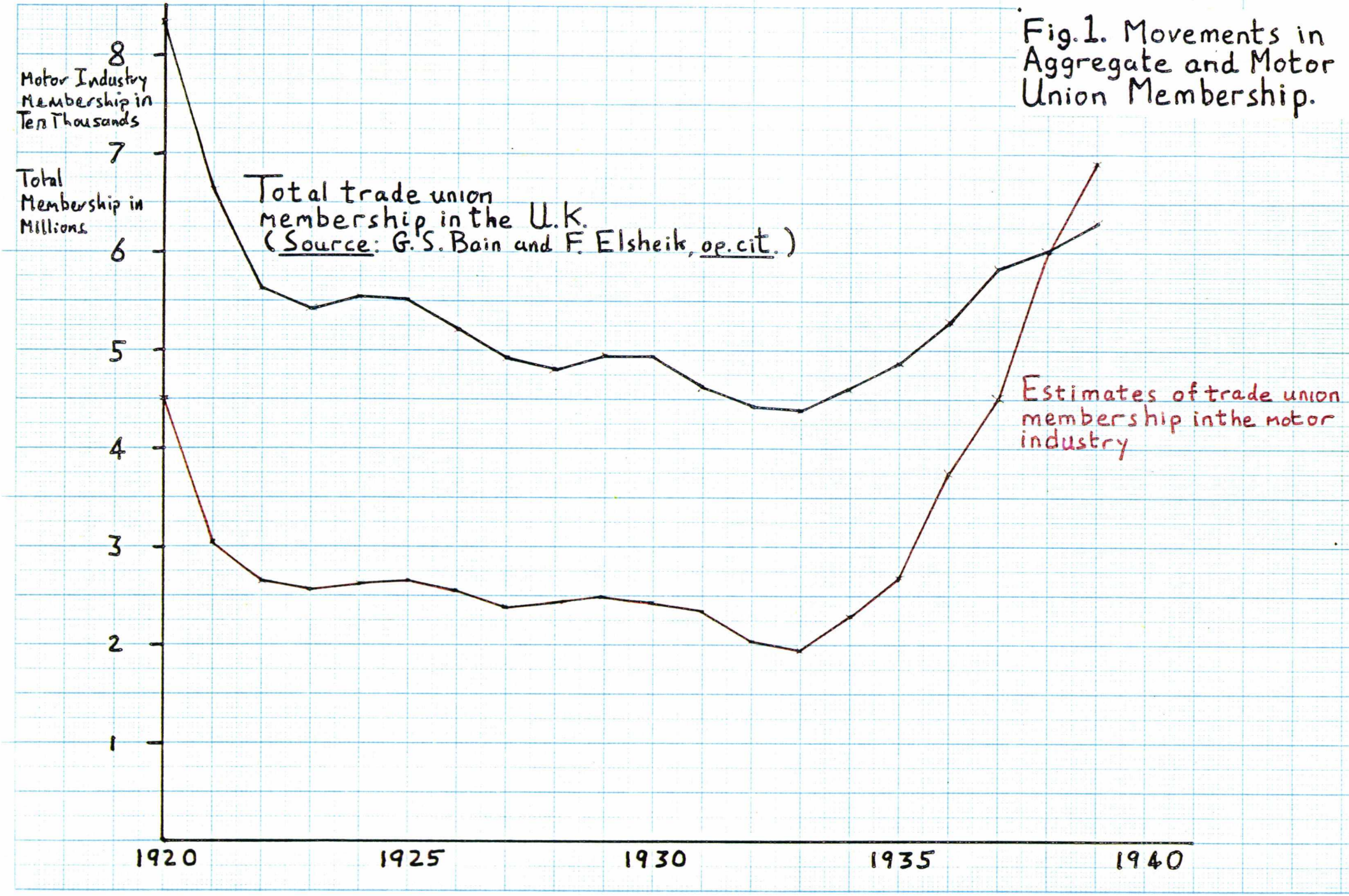
(1) See G. S. Bain and F. Elsheik op.cit. p. 62-5.

Fig. 1. Movements in Aggregate and Motor Union Membership.



above those of the mid-twenties (although nowhere near the 1920 peak) density was only just above the ratios of 1923-5. The persistence of heavy unemployment, its concentration in traditional areas of union strength and the relatively small movements in prices and money wages are no doubt the main explanations for this.

There is a good case for arguing that the movements of union membership and density among motor workers were largely determined by the aggregate variables discussed above, since their course followed that of trade unionism in general and changes in wages and unemployment in the motor industry tended to mirror those in the economy as a whole. Neither, as was shown in Chapter Two, were industrial relations in the motor industry completely insulated from the wider conflicts of the 1920s. The patterns of movements in union membership and density among motor workers and the eligible labour force as a whole are shown in Figure 1 and Table 4.1 below.

From Figure 1 it can be seen that for most of the period there was a close correspondence between the course of aggregate and motor industry membership. Slight deviations from the aggregate curve shown by

motor industry membership during 1925, 1928 and 1930 - 1932 are quite possibly accounted for by errors in the membership estimates. However, it is possible that the early recovery of motor industry membership during 1928 reflected the relatively marginal involvement of motor workers in the General Strike. It is also true that unemployment among insured workers in motors, cycles and aircraft remained constant during 1927-1928, whereas it rose among the insured workforce as a whole. If, however, one allows for a one-year lag in the effects of unemployment on union membership, there is no reason why the divergence should have resulted from differential movements in unemployment since it was falling across the board during 1926-1927; indeed more rapidly among workers generally than among motor workers.(1) The rather more severe impact of the depression on motor industry

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(1) No unemployment figures are available for motor workers alone, thus it is necessary to use the data relating to insured workers employed in the construction and repair of motor vehicles, cycles and aircraft available in Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938). The case for a one-year lag in the effects of unemployment levels on union membership levels in Britain is presented and tested in G. S. Bain and F. Elsheik, op.cit. p.66, 73-4, 105.

membership than on the aggregate may, however, be explained partly in terms of different rates of change of unemployment since unemployment rose much more sharply in the motor, cycles and aircraft group during 1930-1931 than among insured workers generally, thus possibly accounting for the rather rapid drop in motor industry membership during 1932.(1) However, important differences in the motor and aggregate membership curves really emerge after 1933 and more especially, 1935. The comparatively rapid expansion of motor industry membership though, was not unique. It was in fact very much in line with membership in engineering as a whole and as such reflected the direction of much of Britain's recovery during the 1930s and the impact of rearmament.

Broad similarities in the course of membership were parallelled to some extent by movements in density. As shown in Table 4.1, aggregate and motor union density fell from 1920-1933 and then recovered, although it failed to regain the 1920 ratio.

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(1) See below, Table 4.2.

Table 4.1. Comparative union density, 1920-1939

Year	Aggregate union membership as a percentage of all eligible workers	Motor union membership as a percentage of eligible motor workers
1920	45.2	approximately 40.0
1924	30.6	26.4
1930	25.4	19.5
1933	22.6	-
1935	24.8	17.9
1939	31.6	24.5

Source: G. S. Bain and F. Elsheik, op.cit. Appendix E; for motor industry estimates, see above, p.129-33 and Appendix 3.

It is extremely unlikely that these similarities were coincidental. As shown below, movements in unemployment, wage rates and earnings in motor manufacture followed very much the same course as those in engineering generally and the rest of the economy.

Table 4.2. Movements in Employment, Wages and Earnings, 1920-39

Year	Average Unemployment among insured workers (%)			Wage Rates			
	Total	General Engineering	Motors, Cycles & Aircraft	All manual index [1] (1956=100) December of each year.	Fitters & Turners [2]	Skilled Vehicle Builders [3]	Adult Motor Workers [4] (Average Earnings)
1920	3.9			56.8	84s.11¼d	-	-
1921	16.9			44.1	-	-	-
1922	14.3			36.4	-	-	-
1923	11.7	20.5	9.7	35.9	-	-	-
1924	10.3	16.9	8.9	37.0	56 6	-	63s. 0d
1925	11.3	13.3	7.1	37.1	56 6	-	63 0
1926	12.5	15.1	8.2	37.3	56 6	70 .6d	-
1927	9.7	11.8	8.1	36.6	58 1	-	-
1928	10.8	9.8	8.1	36.3	58 9	70 6	62 1 *
1929	10.4	9.9	7.1	36.1	58 9	-	-
1930	16.1	14.2	12.1	35.0	59 1	-	-
1931	21.3	27.0	19.3	35.1	59 1	70 6	61 8
1932	22.1	29.1	22.4	34.6	59 1	-	-
1933	19.9	27.4	17.6	34.5	59 1	66 6	-
1934	16.7	18.4	10.8	34.6	59 1	-	-
1935	15.5	13.6	9.0	35.2	60 9	-	78 5
1936	13.1	9.6	6.9	36.2	64 1	68 6	-
1937	10.8	5.8	5.0	37.6	67 2		-
1938	12.9	7.0	7.2	38.1	67 2		-
1939	10.5	6.6	4.4	39.8	-		-

* both sexes. Average earnings of all motor workers rose during 1924-8.

1. Index of basic weekly rates, all manual workers, all industries and services.
2. Average of rates in sixteen large towns.
3. Time rates of wages for skilled vehicle builders.
4. Average weekly earnings of adult males in larger establishments

SOURCES: Department of Employment and Productivity, British Labour Statistics 1886-1968: Historical Abstract, op.cit. Tables 9, 13, 160, 164; 18th Abstract of Labour Statistics of the United Kingdom, Cmd.. 2740 (1926) p.104; 21st Abstract..Cmd. 4625 (1934) p.74-5; 22nd Abstract...Cmd.5556(1937) p.72-3; Ministry of Labour Gazette Sept.,1926; Nov.1929, Jun., 1933; April, 1937.

Although unemployment rates among motor, cycle and aircraft workers were generally lower than the national average, the pattern of movement was the same. However, the vulnerability of the motor industry to cyclical unemployment - a feature shared by the rest of engineering - is shown by the comparatively large increases in unemployment during 1929-32 and 1937-8. With respect to wage rates, basic engineering rates applied in many motor firms which were members of the Engineering Employers' Federation. After falling substantially during the early 1920s, basic rates for fitters and turners were not subject to the same fluctuations as the average rates for all manual workers; indeed they remained immune to the effects of the depression of 1929-32. Earnings however, reflected the changing state of the labour market more clearly, falling between 1928 and 1931 and rising strongly thereafter.(1) Earnings of motor workers followed a

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(1) Average male weekly earnings in engineering (excluding shipbuilding) were 53s. in 1924, 56s. in 1928, 51s.8d. in 1931 and 75s. in 1938. The 1938 figure however, is for a different employment category - metal, engineering and shipbuilding. Department of Employment and Productivity, op.cit. Tables 39 and 40.

similar pattern. The time-rates of skilled vehicle builders remained steadier than engineering rates and others generally during 1926-31 but followed the general pattern thereafter.

As in engineering generally, 1920-2 saw the crucial shift in the employers' stance in relation to trade unionism in the motor industry.(1) In comparison the effects of the General Strike, while noticeable, were relatively mild. Partly as a result of the events of the early 1920s, the General Strike was an irrelevance in some motor plants since unionism was either weak or non-existent. In Oxford, for example, Morris workers remained at their jobs throughout the "nine days".(2) More broadly, engineering unions were so briefly involved that in most cases employers were ready to desist from retaliatory action. Motor firms, moreover, were probably anxious to avoid further disruption in their relations with employees in view of the growth of demand during the mid-twenties, total output of motor vehicles rising by 35 per cent during 1924-6. In such circumstances most firms were anxious to hold on to skilled

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(1) See above, p.65-70.

(2) R. C. Whiting, "The Working Class in the 'New Industry' Towns Between the Wars: The Case of Oxford", op.cit. p.139.

men and, indeed, experienced semi-skilled operatives. Nevertheless, individual employers did take a hard line after the strike and this must have had some impact upon existing membership levels and on the potential for organisational progress during the late 1920s.(1) Subsequently, employers may have taken a more relaxed attitude towards trade unionism, especially in those areas in which they generally had experience of dealing with it; however, as will be shown below, employer's hostility towards trade unionism in the motor industry remained sufficiently strong and widespread to act as an additional obstacle to its progress during much of the inter-war period.

There can be little doubt that the direction and timing of movements in trade union membership and density among motor workers reflected wide forces acting

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(1) The main example was Austin. See above, p.78-9 and below, p.311-2.

upon trade unionism as a whole. Nevertheless, the progress of motor industry unionism retains distinctive features which need to be explained. These features relate chiefly to union density. Why was the reduction in union density in the motor industry so severe during 1920-1933 when compared with that in the rest of engineering and the labour force as a whole? How can the failure of density to regain the levels of even the mid-1920s be accounted for? For a full explanation of this relative -indeed in some respects absolute- failure, it is necessary to look more closely at the circumstances of the motor industry and the tactics employed by the unions involved in it.

Such an examination benefits from a comparative study of the aircraft industry. Industry-specific influences on the progress of union organisation were even more important here than in motors, since the course of union growth in aircraft was rather unusual. Membership levels shared in the general collapse of the early 1920s but growth had already ceased in 1919 owing to the termination of military orders and the beginning of the run-down of the industry. Yet density of organisation probably rose during these years, as shown in Chapter Three: from the mid-1920s membership grew and

density was maintained at a comparatively high level until 1935. While it was not clear whether overall membership kept pace with employment expansion throughout 1935-9 there is no doubt that union strength and influence were extended in many of the larger, older-established firms. Identification of the influences operating on trade unionism within the aircraft industry will not only enable its somewhat divergent development during the 1920s and early 1930s to be explained but will also help to isolate the main factors retarding progress in the motor industry.

II

In the Introduction to this study it was argued that the following features of individual industries were likely to be important in determining the progress of union organisation: changes in the structure of the industry, accompanying changes in workforce composition and size, employers' attitudes towards labour issues, and working conditions. It was also argued that in the context of changes in the structure of the labour force, union policies relating to recruitment required consideration. In the following sections, each of these variables will be examined and the interaction between them explored.

The changing structure of the motor industry was of great importance in determining how far trade unionism was able to establish itself. In using the term "industrial structure", what is being referred to are, in Shister's words, the "technical and marketing contours" of the industry.(1) In other words, it is necessary to look at the development of business organisation and competition in relation to demand and at the scale and organisation of the actual

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(1) J. Shister, "The Logic of Union Growth" op.cit.

process of production. Changes in these characteristics also influenced in a very direct way the structure of the labour force and, more indirectly, employers' attitudes and working conditions. Our starting point then, is the evolution of the motor industry's "marketing contours".

The motor industry in Britain before the First World War was characterised by small-scale production carried on by a large number of firms. It is true that the size of firms varied; for example, while Hillman produced only 63 cars during 1913, Humber claimed to have an annual production capacity of 4,000 in 1910.(1) Nevertheless, even the largest firms were producing small outputs in relation to their American counterparts and in comparison with what they themselves were

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(1) The variation in firm size has been attributed to the incompletely developed components sector of the industry before 1914. Small firms were able to survive because components manufacturers could supply them with parts but could not produce in large enough quantities to meet the needs of the larger motor companies. Thus in 1914 Crouch Cars made practically the whole car and Rover did everything except pressed steel frames and big drop-forgings. W. B. Stephens (ed). A History of the County of Warwick Vol 8 (1969, Victoria History of the Counties of England, General Editor R. B. Pugh) p.181. The considerable luxury element in the demand for cars also encouraged the survival of small firms.

to achieve later.[1] Most British firms were engaged in luxury car production, the market for cheap four-wheeled automobiles being met largely by the Ford Motor Company which exported its cars directly to Britain until 1911, when it established a plant for the assembly of imported parts at Trafford Park, Manchester. British firms produced nothing comparable to the Ford Model T before 1912, catering for the lower end of the market with motor-cycles and three-wheelers. In 1912, Singer and Rover began to produce smaller cars of 12 horsepower, as did Morris in 1913. However, these vehicles remained considerably more expensive than Ford cars in the same range, retailing at £165 for two-seater models compared with £135 for an equivalent Ford.[2]

The First World War helped to provide the basis for a shift towards the production of cheaper cars on a large scale, but this change did not come about automatically. Firms working on government contracts

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(1) Ford in Detroit produced three times as many cars as the entire British industry in 1913. Humber-Hillman's output in 1939 was 52,000 cars. ibid. p. 184-5; Kenneth Richardson, The British Motor Industry 1896-1939. A Social and Economic History (1977) p.67

(2) Kenneth Richardson, op.cit. p.63-77.

for military vehicles expanded their operations and developed innovations in production. However, it was the combined effects of the post-war boom and slump which pushed the motor industry decisively in the direction of concentration and larger-scale production. The motor industry shared in the post-war boom of 1918-20 as pent-up demand was released and a speculative boom in motor companies developed.(1) Certain aspects of the boom, however, weakened the structure of the motor industry and made it vulnerable to the collapse of demand when it came in the second half of 1920.

Since its beginnings the motor industry had been characterised by a high birth and mortality rate among companies. Twenty-two new motor firms were set up in Coventry alone during 1901-5, many of which collapsed during the 1907 depression. Fourteen more were established during 1906-14. Of these thirty-six companies, only ten survived until after the war, the most common cause of failure being insufficient working

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(1) P. S. Bagwell, The Transport Revolution from 1770 (1974) p.210.

capital.[1] This pattern was repeated during 1919-20. According to Andrews and Brunner, forty-six firms entered the industry during the boom, most of them failing to survive until the end of the twenties.[2]

In addition to the influx of small, financially weak enterprises during the boom, the industry experienced rising costs. A number of existing firms had committed themselves to large capital expenditures during the war and others such as Daimler and Rover added to their capacity immediately after it. In many cases these expansions were financed by watering down capital and by borrowing. Moreover, the motor industry shared in the general inflation of costs during 1919-20 as wage rates and prices of inputs rose. British car prices increased and in spite of the protection afforded by a $33\frac{1}{3}$ per cent ad valorem duty, the level of costs in Britain made it increasingly difficult to compete with American imports. In any case, Ford's assembly

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(1) W. B. Stephens (ed.), A History of the County of Warwick, op.cit. p.180.

(2) P.W.S. Andrews and E. Brunner, The Life of Lord Nuffield, op.cit. p.96

plant in Manchester meant that he escaped the full effects of protection since import duty was not imposed on parts until 1926.(1)

The slump hit the motor industry during late 1920. Not only were most of the new entrants wiped out but long-established firms such as Austin and Morris were shaken to their foundations.(2) The depression did much to weed out smaller firms but the long run pressure for concentration in the motor industry arose out of the larger companies' search for markets during the 1920s. The market for large, luxurious cars was limited and had been affected by motor taxation which discriminated against large engines.(3) A wider range of income groups had to be tapped in order to achieve long-run sales expansion. Some firms, such as Morris and Singer, had produced small cars, i.e. 10-12 h.p., during 1912-14

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(1) ibid p.98; Kenneth Richardson, op.cit. p.78

(2) Austin went to the verge of bankruptcy in 1921 and Morris incurred heavy losses. Both firms were saved by outside loans. K. Richardson, op.cit. p.82-3; P.W.S. Andrews and E. Brunner, op.cit. p.105-6.

(3) Motor taxation, introduced in 1910, was levied according to engine horsepower.

in response to the challenge from Ford and their ouput of this class of vehicle was stepped up during the 1920s. Austin revitalised his company by producing the first "baby car", the Austin Seven, in 1922. Morris and Singer then developed their own "baby" models, the "Minor" and the "Junior" in 1929 and 1928.

The results of these efforts were outstanding. Austin and Morris quickly outstripped Ford as the leading producers of light cars in Britain and by 1925 Morris accounted for 41 per cent of the total private car output of the United Kingdom.(1) By 1929 Morris, Austin and Singer accounted for 75 per cent of motor-car output in the U.K. and the total number of car assembly firms in the industry had fallen from 88 in 1921 to 31.(2) Much of this reduction was accounted for

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(1) Morris' seizure of industry leadership so soon after suffering losses during the slump was the result of an aggressive price-cutting policy which he adopted during 1921 in order to maintain production. Prices were reduced by amounts ranging from £25 to £100, which meant nearly 20 per cent reductions on some models. Morris was in a more favourable position to do this than many other producers since already the Morris plant was an assembly business, buying in parts from outside. Morris' cost structure was therefore more flexible than many other firms', since he was able to obtain price reductions from suppliers on the basis of large orders. See P.W.S.Andrews and E. Brunner, op.cit. p.102-3, 112.

(2) G. Maxcy and A. Silbertson, The Motor Industry (1959) p.159; A. Plummer, New British Industries in the Twentieth Century (1937) p.95.

by the failure of firms during the 1920s as a result of fierce price competition initiated by the "Big Three". Some firms went out of business completely, e.g. Crouch, Cluley, Emms. Others, in financial difficulties, merged, e.g. Humber and Hillman in 1928, or were taken over by one of the "Big Three", e.g. Morris bought Wolseley, a Vickers subsidiary in 1927.(1)

The absorbtion of small firms by large ones and the amalgamation of larger enterprises continued during the 1930s. The depression of 1929-32 squeezed a number of well-known companies. Lanchester was bought by Daimler in 1931 and Bentley by Rolls Royce in the same year. Rootes took over Humber-Hillman and the Commer Company in 1932. At the same time however, the grip of the "Big Three" was loosened during the 1930s as a number of companies reorganised output and production and began to expand their sales. In this they were aided by rapid market growth after 1933, the number of new vehicle registrations, which had

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(1) W.B. Stephens, op.cit. p. 180-3. According to A.E. Kahn, Great Britain in the World Economy, op.cit. p.111, the index of U.K. automobile prices fell from 132.8 in 1913 to 100 in 1924 and 75 in 1929.

levelled off in the late 1920s, rising from 182,046 in 1933 to 326,793 by 1937.(1) While much of this must have been due to cost and price reductions, it was also a function of rising real incomes during the 1930s. The Standard Motor Company reorganised production during 1929-30, buying in more parts and launching a new range of small models, and grew to become one of the six largest motor companies in the U.K. by 1939. Rootes used the opportunity provided by its take-over of Humber-Hillman and Commer to standardise tools and products throughout its plants. Ford increased its share of the market after opening its Dagenham plant in 1931. Vauxhall also began to challenge the leaders from 1929 when, following the appointment of Charles Bartlett as managing director, it switched from low-volume, high quality cars to middle range cars and commercial vehicles. In doing this, Bartlett was acting in the interests of General Motors, who had taken over Vauxhall during 1925-8 and

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(1) Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1935, 1938). New registrations during 1927-1932 were; 161,603; 161,493; 169,355; 156,460; 144,212; 145,874.

wished to build up a profitable operation in Britain.(1)

Meanwhile, Singer, one of the "Big Three" during the 1920s, experienced grave financial difficulties during 1931-2 and had to curtail its operations before getting back on its feet and joining the "shadow" factory scheme in 1937.(2) Morris also lost ground during the depression as the pattern of demand shifted towards smaller cars. Morris' main line was the 12 h.p. Cowley and his small "Minor", introduced at the end of 1929, was not yet established in the market. As a result Morris' share fell until 1934, when the firm's position was improved by the introduction of the Morris Eight.(3) Consequently, by 1939, six firms

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(1)W.B. Stephens, op.cit. p.184-5; G. T. Bloomfield, "The Locational Evolution of an Automotive Firm: Rolls-Royce of Derby "East Midlands Geographer" Vol.6 (June 1977) p.320; Len Holden, "Industrial Relations at Vauxhall Motors, 1920-1950". Paper presented at King's College Research Centre, Cambridge, 27 April, 1981; Vauxhall Motors Ltd., Something About Vauxhall, 6th edition, 1971, p.15.

(2)F. W. Carr, "Engineering Workers and the Rise of Labour in Coventry, 1914-1939" (Unpublished Ph.D thesis, University of Warwick, 1978) p.430-1.

(3)D.G.Rhys, The Motor Industry. An Economic Survey, op.cit. p.304. The percentage of home sales accounted for by 11 and 12 horse-power cars fell from 27 per cent in 1927 to 15 per cent in 1933 and did not rise above 17 per cent during 1934-8. The proportion accounted for by 9 and 10 horsepower models, however, rose from 7 per cent in 1927 to 34 per cent in 1933 and never fell below 30 per cent during the next five years. P.W.S. Andrews and E. Brunner, op.cit. p.187.

accounted for 90 per cent of total car output; Morris, Austin, Ford, Rootes, Standard and Vauxhall. In addition, Morris, Ford and Vauxhall shared between them 70 per cent of commercial vehicle production.(1)

The growth of oligopoly was accompanied by fierce competition among the major companies, especially during the 1930s when the dominance of Austin and Morris came to be challenged. The im pact of strong market rivalry, coupled with cost-reducing technical innovation, upon price was spectacular, as shown in A. E. Kahn's automobile price index presented below.

TABLE 4.3. AUTOMOBILE PRICES IN THE UNITED KINGDOM[1]

Year	Price Index	Real Price Index[2]
1913	76.0	132.8
1924	100.0	100.0
1929	75.0	80.0
1931	60.8	72.1
1932	59.6	72.4
1933	61.4	76.8
1934	51.8	64.3
1935	49.8	60.9
1936	49.0	58.3
1937	50.5	57.2

1. From A. E. Kahn, Great Britain in the World Economy (1946) p.111. Includes private cars only.
2. Allowing for changes in relative prices as indicated by movements in the Cost of Living Index.

(1) G. Maxcy and A. Silbertson, op.cit. p.15; A. E. Musson, The Growth of British Industry, op.cit. p.348.

As can be seen, quite dramatic price reductions were achieved during 1924-9, when "real prices" fell by 20 per cent, and even more so between 1933 and 1936, when they were cut by 25 per cent. As well as cutting prices, firms also began to compete by making annual model changes during the 1930s which incorporated stylistic innovations, improvements in performance, comfort and instrumentation.(1) In addition, firms began to offer a wider range of models in their attempts to increase market shares. The number of models in production at any one time therefore, rose dramatically from 46 during 1929-30 to 136 by 1939.(2)

An essential accompaniment to the developments in market structure outlined above was technical change.

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(1) A. Plummer, New British Industries in the Twentieth Century, op.cit. p.95; P.W.S. Andrews and E. Brunner, op.cit. p.189; D. G. Rhys, The Motor Industry. An Economic Survey, op.cit. p.17.

(2) A. E. Musson, op.cit. p.348. Such a development was not so much at odds with the demands of standardisation as might at first appear, since a variety of bodies could be fitted to identical chassis and engines. However, Morris did abandon the annual model change in 1935 so as to get longer production runs following the introduction of mechanical conveyors at Cowley in the previous year. A. Plummer, loc.cit.; D. G. Rhys, loc.cit.

Mass sales of automobiles of good quality at increasingly low prices would have been impossible without a dramatic shift away from pre-1914 methods of production. The impact of technical change upon the industry's development can be seen in the rapid reductions in price referred to above and in significant increases in labour productivity. Thus, between 1924 and 1935 the "real" price of private cars fell by nearly 40 per cent; during the same period, total motor vehicle output rose by 175 per cent while manual employment grew by approximately 50 per cent.(1)

The manufacture of standardised products in large quantities - "mass production" - involved the adoption of a number of new production methods. These may be divided into three broad categories; the sub-division of processes into a number of relatively simple tasks, the application of machinery, and the introduction of new materials and techniques with which to use them. Before discussing these aspects of technical change in more detail however, it is important to note that innovations in production did not occur independently of market competition and that

(1)Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938) p.47; Political and Economic Planning, Motor Vehicles - A Report on the Industry, op.cit. See also Table 2.1 above.

changes in one set of processes often resulted from or led to improvements in others. Thus the need to produce cars with ever-better performance in order to protect and advance firm's market positions encouraged efforts to obtain greater accuracy in machining engine parts. As maximum speeds increased, pressures arose to modify body construction so as to withstand them. Thus wooden body frames were replaced by metal ones and wood and fabric body coverings were replaced by metal panels. The development of cellulose paint, coupled with the desire to achieve a more durable finish which would not flake off at high speeds, required better-finished steel for body panels. Once produced, this steel was found to have sufficient tensile strength and malleability to permit pressed steel body sections to be produced.(1) Use of pressed steel body sections permitted a greater variety of body shapes to be achieved and so contributed to the fashion element inherent in the model-price competition of the 1930s. On the shop floor, the sub-division of work and the

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(1) J. C. Arrowsmith, "Pressings for Automobiles". Proceedings of the Incorporated Institution of Automobile Engineers Vol XXV (March, 1931) p.379.

introduction of new machinery were often closely intertwined and the use of new materials of construction often involved the application of machinery in place of manual dexterity, and/or the reorganisation of work.

In describing the main developments in production methods in the motor industry, great use has been made of two sources; the Proceedings of the Incorporated Institution of Automobile Engineers and the Proceedings of the Institution of Mechanical Engineers.(1) In the absence of direct access to the records of motor firms, these constitute an invaluable mine of technical information since production engineers and managers from a number of motor companies presented papers which described production processes and innovations within their plants.(2)

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(1) Hereafter referred to as I.A.E. Proceedings and I.M.E. Proceedings.

(2) Included are papers by people from Austin, Morris Engines, Rolls-Royce, Vauxhall and Pressed Steel.

Automobile manufacture was from the beginning very much centred on assembly processes. Many of the smaller firms were purely assembly concerns, buying in all their components from outside specialists. It was the larger concerns which brought together the manufacture of components and their assembly since they were unable to obtain parts in sufficient quantities from outside suppliers before 1914. Even when the components industry had developed more fully, the largest firms were still forced to produce their own major parts. Thus during the 1920s Morris, who had tried to develop his motor business as an assembly concern as far as possible, was forced to purchase the capacity of three of his major suppliers as he feared that unless he did so, they would be unable to meet his demands for parts. Consequently he bought Osberton Radiators, Hollick and Pratt, body makers, and the Hotchkiss engine plant during 1922-3.(1)

The major motor companies thus combined the two aspects of motor manufacture; the production of basic

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(1) W. B. Stephens, op.cit. p.181; P.W.S. Andrews and E. Brunner, op.cit. p.124-9

components on the one hand and their assembly on the other.(1)

At the same time it is useful to make a distinction between "engineering processes", i.e. the manufacture and assembly of engines, transmissions, wheels and chassis, and bodymaking and finishing processes. One can therefore see the motor industry as having three main facets; the engineering side, the bodymaking side and final assembly. In the largest firms these three facets were brought together in one enterprise; to a great extent, however, they remained separated. Significant developments in production techniques occurred in each of these areas during the 1920s and 1930s.

The engineering side of the motor industry was the first to be substantially affected by technical progress as it began to incorporate general advances in engineering machinery which were being developed during the 1890s and 1900s. Growing specialisation became a feature of many engineering firms during the

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(1) Assembly may itself be split into sub-assembly, i.e. where individual parts were assembled into basic components, e.g. engines, transmissions, bodies, etc., and final assembly, where these elements were combined to produce the finished car.

1890s as individual companies standardised their activities, producing a narrow range of output in comparatively large quantities. A number of such firms began producing components for the motor industry, e.g. piston-rings, crank-shafts and valves. Such components were finished to a high degree of accuracy and were ready for immediate assembly.(1)

This trend was encouraged by the development of equipment which, although requiring a heavier capital outlay than older techniques, gave lower unit costs at high levels of output. Significant innovations in engineering machinery were made which enabled it to operate faster and more accurately so that it could be used in later stages of the production of a finished article than hitherto. The most important developments were capstan and turret lathes, vertical, horizontal and universal milling machines, grinding machines, vertical boring machines and radial drills. In addition, the development of "high-speed steels" enabled drills, cutters and reamers to be made which could operate at much higher temperatures - and consequently higher

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(1) A.S.E. Journal, March, 1900.

speeds - than before.[1] The chief effects of the introduction of this new equipment were to make it easier to achieve a given standard of accuracy than before, and to speed up the production process. Capstan and turret lathes to a great extent replaced centre-lathes on repetition work and as improvements were made in their design they were used on increasingly high quality jobs. Automatic attachments made them faster and increasingly easy to operate. Milling machines, equipped with a variety of specialised cutters, took over some of the work previously done by hand by skilled fitters, and grinding machines replaced the turner, working by hand with emery pads or with inaccurate and cumbersome machinery. In the most technically progressive establishments, vertical boring machines and radial drillers greatly accelerated the rate at which cylinders and similar items could be turned out. Thus whereas cylinders for motor engines were at first cast separately and then machined individually on a single-spindle horizontal driller, by the 1900s, with engines of two or more cylinders, blocks were being bored by two or four-spindle vertical boring machines. In fact multi-spindle

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(1) J. B. Jefferys, The Story of the Engineers, op.cit. p.122; H. Brackenbury, "High Speed Tools", I.M.A. Proceedings July, 1910.

vertical drillers were developed uniquely for the motor industry.(1)

Such innovations as these were not in very wide use before 1914 since many firms had production runs which were too short to warrant investment in specialised equipment. The First World War, however, encouraged the wider diffusion of new techniques as firms working on government contracts increased their scale of production and skilled labour shortages made them more aware of the opportunities offered by the extended use of machinery.(2) The need to extend the market for motor vehicles during the 1920s and the example of the American motor industry encouraged the further diffusion of advanced mechanical processes among British automobile firms. Not only were pre-1914 advances incorporated more widely but further refinements upon these basic innovations were adopted by and sometimes developed within the major motor companies during the inter-war years. The most important of these refinements were the development of increasingly

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(1)J. B. Jefferys, op.cit.p.122; H. Kerr-Thomas, "The Effect of the Automobile in the Midlands", I.M.E. Proceedings Vol. 11 (June, 1927).

(2)L. H. Pomeroy, "Automobile Engineering and the War", I.A.E. Proceedings Vol. 1X (Oct., 1914).

specialised versions of milling machines and boring machines, the more automatic operation of machines and the development of multi-operation machines, at first consisting of a number of machines and tools being placed in close sequence.(1)

The leading innovator among British motor engine manufacturers during the 1920s was probably the firm of William Morris. In 1923 Morris purchased the factory of his erstwhile supplier, Hotchkiss and with the expertise of his production engineer, Frank Woollard, more than doubled weekly output within a year. Within a further year the rate had doubled again, reaching 1,200 engines per week in 1925.(2) By this time the Morris Engines plant was equipped with automatic machinery for clutch and flywheel production; the piece for the flywheel was put into a jig which moved through a number of stages - rough drilling, roughing, contouring. Only one hand process was required here - that of pushing the clutch pins through the driving hole into the driving plate. In addition, special grinding machines were used to put splines on gear shafts and to grind and bore magneto pinions. An automatic machine

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(1) F.G. Woollard, "Some Notes on British Methods of Continuous Production", I.A.E. Proceedings Vol.XlX (Feb., 1925).

P.W.S. Andrews and E. Brunner, op.cit. p.128; Kenneth Richardson, op.cit. p.102-3.

for producing gear-box casings was also being developed in the works. At the heart of the engine plant however, was the multiple-operation machine developed within the works to process cylinder blocks. The machine was described in detail by Frank Woollard, production engineer at the plant, in a paper presented to the Institute of Automobile Engineers in 1925. It consisted of a linked series of jigs, fixtures and tools which held and shaped the engine-block cutting. It was capable of performing some 53 operations and soon afterwards was developed so as to do all the work on cylinder blocks "from the casting to the finished job." The major functions performed by this early transfer machine were: setting, milling, drilling, reaming, rotary milling, roughing and finishing, rough boring, drilling and tapping, finish boring and burnishing. It was this development which underlay the rapid growth of output from the engine plant.(1)

Specialist and automatic machinery was also developed in other motor firms. E. Beaumont of Rolls-

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(1) F. G. Woollard, "Some Notes on British Methods of Continuous Production", loc.cit. See also J. C. Crowther, Discoveries and Inventions of the Twentieth Century (1966) p. 80-82.

Royce described the use of Broaching Machines at the firm's works in Derby whereby long, small holes of constant diameter could be drilled into engine blocks by semi-skilled workers.(1) One firm in the Midlands had developed a multiple drilling machine with "three or four separate multiple heads, each operating twenty or thirty drills" and also used machines to produce shafts, cams and valves so that they were integral with the camshaft instead of having to be produced individually. Machines were also used which eliminated the need to scrape crankshafts by hand to get a proper fit.(2) By 1930, despite the existence of anumber of practical problems associated with fully automatic machinery, many such machines, e.g. Bar-Automatic Lathes, automatic drilling, milling and gear-cutting machines, were in common use and automatic grinders were beginning to be developed.(3) In automobile foundry work, the development of machine-

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(1) E. Beaumont, "Broaching and Broaching Machines", I.A.E. Proceedings Vol. XXl (April, 1927).

(2) H. Kerr-Thomas, "The Automobile Engineer", I.A.E. Proceedings Vol. XX (Oct., 1925).

H. C. Armitage, "Machine Tools from the Manufacturing User's Point of View", I.A.E. Proceedings Vol.XXV (Dec., 1930).

moulding during the 1930s speeded up production and reduced the amount of skill required by the moulder.[1] As a result of these innovations, much larger outputs than before could be achieved, and at considerably lower unit costs because of the time saved on jobs which to a great extent reflected the elimination of many lengthy hand operations.

As well as raising output, increasingly sophisticated machine processes meant that parts could be made accurately to a set standard without the need for hand finishing. The increased flow of components and the greater accuracy achieved in their production led to significant changes in the assembly processes on the engineering side. Much greater attention than hitherto had to be paid to the organisation of assembly so as to match the pace of work in the assembly shops with the flow of parts from the machine-shops. However, the increased accuracy in the machining of components simplified assembly greatly. An American motor engineer had observed in 1911 that "If you get accurate machine work supplemented by proper, modern grinding methods, there is not much need for hand work in the assembly room."[2] By the mid-1920s

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(1) E. Player, "Automobile Foundry Work", I.A.E. Proceedings Vol XXX (Feb.1936).

(2) H. F. Donaldson, discussion of a paper by H.E.Coffin, "American Tendencies in Motor-Car Engineering" I.A.E. Proceedings Vol. V1 (1911-12)

this was becoming true of the larger British plants so that it could be said that

> "the most perfect-running engine, gearbox or axle is no longer that which has been most carefully fitted by a skilled erector, but one of which the components have been finished by the most accurate machine work." (1)

Engineering assembly therefore, became increasingly routinised, specialised and repetitive. By 1927 Austin had installed assembly lines for engines and gearboxes in his Longbridge plant, with components being delivered to the assembly line by overhead conveyors.(2) By the mid-1930s the engine assembly line was in use not only at Morris, Austin and Ford, but also Standard, Vauxhall and many others.

The body-making side of the industry also began to experience fundamental changes in production methods during the 1920s. Body-making consisted of four main sets of operations for most of the period; the making of body frames, the manufacture and fitting of body panels, painting and trimming and upholstery. Originally

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(1) H. Kerr-Thomas, "The Automobile Engineer", loc.cit.

(2) "Notices of Works, Austin, Longbridge", I.M.E. Proceedings Vol 11 (June, 1927).

automobile bodies were built in the same way as coach and carriage bodies. A wood frame was built, covered with wooden panels and then painted with many coats of filler, primer, colour and varnish. Even before 1914 however, it was found that as the speed of vehicles increased, the paint flaked off wooden body panels since they were insufficiently rigid. Consequently sheet metal panels were affixed to wooden frames and this remained the most widespread method of construction well into the 1920s.(1)

This change in materials did little to change the basic nature of body manufacture which continued to

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(1) J. C. Arrowsmith, "Pressings for Automobiles", I.A.E. Proceedings Vol.XXV (March,1931). This method did have its own disadvantages since movement occurred in the wooden frames and this could distort the body. An alternative method of construction was utilised in the "Weyman" body. Here the frame was covered with fabric. This was cheap but produced a poor finish compared with metal panelling. T. D. Carpenter, "Modern Chassis-Frame Design and Body Mounting", I.A.E. Proceedings Vol XX (Feb., 1926).

be dominated by hand processes before 1914. Body frames were built as a whole by skilled craftsmen and required much skilled fitting and erecting work to ensure proper assembly of the frame's sections. Similarly metal panel work required the skills of sheet metal working craftsmen, especially where curved contours were required, e.g. on wings and mudguards, and in cutting out, beating and fitting.(1) However, the First World War encouraged some manufacturers to experiment with the use of templates in the manufacture of parts for frames and panels and with jigs in the assembly of body frames. This tendency was further encouraged during the 1920s when motor-car production grew considerably and bottle-necks threatened to develop on the body-making side. Thus in 1923 the National Union of Vehicle Builders drew attention to the fact that in many body shops work was organised "on the mass production system, sectionalised

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(1)E. Beaumont, "The Development and Production of Automobile Body Panels" I.A.E. Proceedings Vol XXXI (Feb. 1937). Presumably the same E. Beaumont as had been employed by Rolls-Royce during the 1920s. By this time, however, he was in Vauxhall's inspection department.

and built up from jigs and templates".[1]

More fundamental changes began to be made during the late 1920s although they did not become widespread until after the depression. These changes centred on the growing use of pressed steel to replace wood in the manufacture of body frames and as a substitute for hand-made body panels. This development was encouraged by the need to produce bodies in larger volumes, by the shortage of skilled sheet metal workers, which was an increasingly serious constraint on production; and in some cases, such as that of Vauxhall, by the need to economise in the use of floor-space.[2] Technical difficulties prevented the wide use of pressed steel in body construction before the 1930s although some French manufacturers had experimented with pressed steel frames and body panels before the First World War.[3]

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(1) N.U.V.B. Monthly Journal April, 1923, General Secretary's Report.

(2) E. Beaumont, "The Development and Production of Automobile Body Panels", loc.cit.

(3) L. A. Legros, "The Use of Pressed Steel in Automobile Construction", I.A.E. Proceedings Vol.V (1910-11).

Welding techniques were insufficiently developed to provide joints which could stand up to great stress and welding itself was a skilled operation. As far as panels were concerned, pressings for a long time were limited in that only small panels could be produced, with the attendant problem of a lot of welding being required in assembly. In addition, pressed steel bodies contained defects which made them unattractive to customers until the mid-1930s. Pressings could only achieve limited contours owing to the quality of the steels and pressing equipment used, and often wrinkles appeared in the panels, which made them unsightly. Early "all steel" bodies were also noisy as difficulties in assembly built in squeaks and rattles to disconcert the motorist. For these reasons, despite the establishment of Pressed Steel Ltd. in 1926 and experiments in the use of pressed steel bodies by Vauxhall during the late 1920s, the 'composite' body (i.e. wooden frame with metal panels) remained widespread and did not begin to be ousted until the mid-1930s.[1]

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(1) ibid.; J. C. Arrowsmith, "Pressings for Automobiles", op.cit.; E. Beaumont, op.cit.; G. L. Kelley, "Modern Steel Motor Car Body Building", I.A.E. Proceedings Vol. XXIX (Nov. 1934). This author was employed by Pressed Steel Ltd.

During the early 1930s however, a number of improvements were made which encouraged the much wider adoption of the "all-steel" body comprising steel body frame and pressed steel body sections. Better steels, having greater malleability and tensile strength eradicated the wrinkling problem and enabled larger panels and better contours to be produced. Progress in these directions was also aided by improved pressing machinery; especially better dies, the actual pressing tools which gave panels their shape. Originally dies had to be cast as near to size and shape as possible and then finished by hand - a slow, skilled and costly process, but during the 1930s the finishing of dies was mechanised as a result of the introduction of the Keller Automatic Machine.(1) Consequently, by 1934 it was possible to produce a single side-panel which incorporated "a trunk side, scuttle side, dash-pan side and all door and window openings, formed in one piece of steel."(2)

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(1) G. L. Kelley, op.cit.; E. Beaumont, op.cit.

(2) G. L. Kelley, op.cit.

The assembly of pressed steel bodies was also made easier as a result of improvements in welding techniques which provided stronger welds as electric welding was developed. Welding machines, such as flash-welding and semi-automatic welding equipment helped to reduce the skill involved in these operations, speed them up and reduce labour costs. The use of assembly jigs, by making accurate assembly easier, had the same effect.(1)

The outcome of these developments was the spread of "all-metal" bodies during the 1930s. Whereas their use during the late 1920s had been confined to some commercial vehicles, by the mid-1930s steel bodies predominated in commercial vehicle work and were becoming increasingly acceptable for a wider range of private motor-cars. Thus the N.U.V.B. Quarterly Journal carried a report in 1934 to the effect that "there was scarcely a passenger-carrying vehicle... not of metal construction" at the Commercial Motor Show.(2) By 1936, the London body-making firm of Park Ward had turned to all-metal bodies and a number of metal pressing shops grew up in the Midlands, with pressed steel frames and panels beginning to supersede wood and composite

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(1) ibid.

(2) N.U.V.B. Quarterly Journal Jan-March, 1934, General Secretary's Report.

construction in the mass production establishments.[1] By 1938, it is apparent that new methods of body construction were marking inroads into the quality end of the market since in that year Mulliners, an old-established firm producing high quality coachwork, closed its Northampton factory owing to declining orders which it blamed on the substitution of pressed steel bodies for the traditional product. This tendency was probably accentuated by the effects of the recession in encouraging purchasers to "trade down", and a number of other coachbuilding firms were reported to be in difficulties.[2] The response of some of these firms was ultimately to take up new methods themselves.[3]

Technical change also occurred in the painting and finishing sections of the body-making side of the industry. Sewing-machines were used increasingly in

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(1) N.U.V.B. Quarterly Journal April-June, 1936, London District Report; Jan-March, 1937, Midlands District Report.

(2) N.U.V.B. Quarterly Journal Jan-March, 1938, Midlands District Report.

(3) The Amalgamated Society of Woodcutting Machinists reported in 1938 that new methods were being extended to "the better class car where the coachbuilt body held its own until recently." A.S.W.M. Quarterly Report March, 1938, Birmingham District Report.

upholstery work during the middle and late twenties, attracting a growing number of female workers.(1) The most spectacular change however, occurred in the paint shops. The traditional method of painting motor bodies had derived from coach-painting. Bodies were primed and filled (to even out minor dents, scratches and joint-markings) and then numerous coats of paint and varnish were applied by hand. Up to forty separate coats were required for top quality work and it was claimed that it took forty days to complete a first-class job.(2) This technique persisted with few changes until the mid-1920s. Although details of time-saving processes were published in the Motor Body Building Handbook in 1924, they all involved a number of colour coats and varnish applied after bodies had been primed and filled.(3)

During the mid-1920s however, a new process was introduced which rapidly ousted the craft of painting and varnishing by hand. Instead, once bodies had been

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(1) N.U.V.B. Quarterly Journal, April-June, 1929, National Conference Report.

(2) C. E. Pratt, "Cellulose Finish for Motor Cars", I.A.E. Proceedings Vol.XXl (March, 1927).

(3) Motor Body Building Handbook (1924) p.27-30.

filled and primed, they were painted with cellulose enamel, which could be sprayed on. The process was developed in the United States and was first used there on a manufacturing scale in 1923. It spread rapidly so that a year later all General Motors' cars were finished in cellulose enamel.(1) The advantages of the new method were that it could give a better, more durable finish than paint and varnish and that it saved time and factory floor space. It was also argued that a man could be trained to operate a spray-gun in a few weeks, in contrast to the lengthy apprenticeship required for a skilled varnish finisher. In spite of early teething troubles, chiefly an "orange-peel" effect that resulted in some cases, the cellulose process spread rapidly in Britain from 1924 onwards and by 1927 it was in general use throughout the country.(2) The speed and completeness of the transition from old to new methods was underlined by a member of the Institution of Automobile Engineers when, addressing the Institution in 1931, he spoke of:

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(1) W. Fletcher-Starkey, "Nitro-Cellulose Enamels", I.A.E. Proceedings Vol.XXI (March, 1927).

(2) Motor Body Building Handbook (1927) p.xxxv,2; N.U.V.B. Monthly Journal Feb, 1924, "London Letter"; C. E. Pratt, "Cellulose Finish for Motor-Cars", op.cit.; N.U.V.B. Monthly Journal April,1927, General Secretary's Report.

> "The revolution which took place a few years ago, when paints and varnish were rapidly and surely swept aside in favour of the much more durable cellulose lacquers...."(1)

The cellulose process also created new requirements such as the need for polishing after the last coat had hardened. Mechanical buffing tools were introduced in some establishments. These were either rotary buffers mounted on a flexible drive shaft and powered by compressed air, the polisher applying the head of the buffer to the body, or stationary buffers to which panels were taken and applied. However, these methods had disadvantages in that uneven pressure applied by the polisher resulted in an uneven gloss. Thus mechanical methods required more care and skill than hand-polishing, which was foolproof in this respect. Consequently hand-polishing grew as an unskilled occupation, employing a growing number of women.(2)

Final assembly was a stage of motor manufacture at which repetition work of a semi-skilled nature had been quite common before the First World War. In Coventry, for example, the proportion of semi-skilled operatives among general engineering workers as a whole

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(1) J. C. Arrowsmith, "Pressings for Automobiles", op.cit.

(2) W. Fletcher-Starkey, "The Process of Cellulose Finishing", I.A.E. Proceedings Vol.XX (Oct., 1925).

was significantly higher than it was nationally.[1] Smaller firms especially, were almost entirely assembly businesses, putting together components bought from outside suppliers. The improvements being made in engineering processes facilitated assembly and these became more widespread during the 1920s and 1930s as the scale of production grew. Increasingly standardised parts and the wider use of jigs and templates reduced much of the need for skilled fitting work in final assembly.

These advances also contributed to the further division of labour in assembly work brought about by the introduction of the production line. Morris introduced a primitive assembly line in 1913. Andrews and Brunner describe the organisation of production as follows:

> "A batch of chassis were laid out on the floor in a row, and the engines were then lifted into position on the chassis; when they had been fixed, the axles, wheels, and so on followed."

However, the chassis did not move; rather, the workers "moved along the line according to the special tasks assigned them."[2]

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(1) James Hinton, The First Shop Stewards' Movement, op.cit. p.218. Hinton's figures are 55 per cent in Coventry compared with 18 per cent nationally in 1911.

(2) P.W.S.Andrews and E. Brunner, op.cit. p.87-8.

In 1918 the system was refined, so that the chassis, as soon as they were fitted with wheels, were moved from point to point along the line, the men remaining at fixed stations. As yet, however, there was no mechanical conveyor belt and chassis were pushed from stage to stage. The mechanical conveyor was not introduced to the final assembly shop at Morris' Cowley works until 1934, when production of the Morris Eight began. When this finally occurred,

> "the whole process of assembly was mechanised, with the chassis being slowly carried forward by a moving chain, and the parts were mostly delivered to the appropriate section by overhead conveyor from the stores or from sub-assembly departments." (1)

In this, Morris was following other manufacturers such as Austin and Ford. Austin introduced mechanical conveyors throughout his Longbridge plant when it was extended during 1925-7. By 1927 assembled units were being transferred from the machine shop and the carriage shop to final assembly by mechanical conveyor. Ford built mechanical assembly tracks at their Dagenham works as it was being constructed during the late 1920s.(2)

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(1) ibid. p.197

(2) Z.E.Lambert and R. J. Wyatt, Lord Austin - The Man (1968) p.142-5; "Notices of Works, Austin, Longbridge." I.M.E. Proceedings Vol.11 (June, 1927); Huw Beynon, Working for Ford, op.cit. p.43; H. Friedman and S. Meredeen, The Dynamics of Industrial Conflict. Lessons from Ford, op.cit. p.22.

Not only Morris, Austin and Ford, but other firms, such as Arrol-Johnstone, Belsize Motors, Jowett, Leyland, Vauxhall and Standard adopted mass-production methods of assembly during the 1920s and 1930s.(1)

These changes in the business and technical structure of the industry had important effects upon trade union organisation. First of all, the union collapse during the early 1920s can be explained in terms of the crisis which the slump generated in even the largest firms, the subsequent need to extend the market in order to achieve recovery and further growth, and the accompanying changes in technology and business structure which began to occur during 1921-5. Heavy

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(1) N.U.V.B. Monthly Journal Feb., March, 1924; Jan., April, 1925; Feb, 1926, District Reports; N.U.V.B. Quarterly Journal July-Sept., 1927 Manchester District Report, Coventry Branch Report; W. B. Stephens, A History of the County of Warwick. op.cit. p. 184-5.

unemployment in the industry did much to weaken membership and organisation, especially among semi-skilled workers. It also helped to weaken the resistance of unions of skilled men to management initiatives as demonstrated by the 1922 engineering lock-out. The lock-out itself provides a backdrop for events in the motor industry, since what lay at its root was conflict over the proper area of managerial freedom and control.

By 1921, the major motor companies had, as a result of the slump, become acutely aware of their high costs of production in relation to American companies, especially Ford, and of the restricted sales available if vehicles continued to be produced on existing lines.(1) The revival of 1922-5 thus saw the surviving companies attempting to cut costs and produce cheaper cars so as to tap a wider market. Fierce price competition developed among the leading

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(1) In 1926, the Society of Motor Manufacturers and Traders estimated the nobody earning less than £450 per annum could afford to purchase and maintain a motor-car. This restricted the home market to an estimated 835,000. Cited in Kenneth Richardson, op.cit. p. 103-4.

producers and in this context it became imperative to develop new techniques of production as described above. By their very nature, these methods required that management should exercise a greater degree of control over the quality and pace of work, and much of their advantage lay in their ability to speed up production and dispense with a great deal of skilled labour. Unions of skilled men, with their insistence on the observance of increasingly artificial distinctions between crafts and levels of skill, on the implementation of customary rules relating to the allocation and performance of work, stood in antithesis to the desires of the major motor companies. In addition, the fact that they had grown in strength and extended the frontiers of their control during 1914-20 led many employers to see union resistance to technical progress and managerial freedom as a threat to the survival of their firms. Hence motor companies took advantage of the slump to dismiss trade unionists, and those which were members of the Engineering Employers' Federation took a hard line during the 1922 lock-out. It is therefore no coincidence that Austin was specifically mentioned as discriminating against trade unionists during 1922-3, since it was at precisely this time that the company was desperately

trying to save itself by developing the cheap, mass-produced Austin Seven.(1) Part of the collapse of organisation during the early 1920s must consequently be seen as the outcome of a victorious battle by management to establish its freedom to introduce modern methods of production.

Continuing developments in market structure and technology influenced the progress of trade unionism throughout the period. In the general economic context of the 1920s and the early 1930s the growing domination of the industry by a few large firms contributed to a further weakening of organisation. Large, technically progressive firms were better able to preempt trade unionism by paying high wages and providing welfare, social and recreational facilities. The dominance of a few large firms made blacklists more effective and the threat of victimisation more serious. In the last resort, large firms were better able to withstand strikes. The intense price competition which made cost-reducing innovation and greater intensity of work essential encouraged many firms to resist union penetration and recognition. At

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(1) See above, p.70.

the same time, large companies required considerable organising efforts on the part of unions. These they were unwilling to exert, given the constraints on their finances and the need to focus attention on the maintenance of existing areas of organisation and influence.

These constraints may however, have become looser during the mid-1930s. In an atmosphere of improvement- albeit limited- in the general economic climate, and given the quite considerable drop in unemployment in the motor industry, as well as an expansion of the labour force, unions began to see large motor firms as potentially rewarding areas in which to recruit. In these circumstances too, large size may have encouraged union efforts, since there existed possible economies of scale in organisation. The A.E.U. and the T.G.W.U. in particular began to step up their efforts in the Midlands during the mid-1930s and joint campaigns to organise motor workers at Dagenham began to be made in earnest.[1] While the resources of large firms

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(1) A.E.U. membership in Coventry rose from 2,347 in 1933 to 4,714 in 1936. By 1939, it was 11,735. A.E.U. Journal Dec., 1933-9, Trade Portion. The T.G.W.U. began to make inroads among mass production workers to the extent that its relations with the N.U.V.B. became strained. N.U.V.B. Quarterly Journal April-June, 1935, "Report of a Conference with the T. & G.W.U. Regarding the Organisation of Mass Production Shops"; T.G.W.U. General Executive Council Minutes 18 May, 1939; also see above, p.86-8.

continued to enable them to resist union penetration, their armour was pierced in a number of places by 1939. Part of the explanation for this lies in the evolution of competition in the industry; specifically, the introduction of the annual model change at the beginning of the 1930s. Firms became vulnerable to stoppages when launching new models, since any prolonged stoppage would have an adverse effect upon their impact on the market and hence upon the firm's market share over the next year. If it had been necessary to plan such strikes, it is doubtful if they would have occurred in view of the weakness of organisation in most plants. However, the chances of stoppages occurring spontaneously were high at times when new models were being introduced, since managements often used a model change as an excuse to lower piece-rates. Three examples serve to illustrate this argument; the 1934 Pressed Steel strike and strikes at Pressed Steel and Austin in 1936.(1)

The 1934 Pressed Steel strike began as a spontaneous walk-out of unorganised workers and resulted in the company conceding union recognition. It occurred

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(1) Details of these strikes are given in Chapter Two.

as a result of a dispute over the piece-prices allowed on the bodies for the Morris Eight, which was being launched in an attempt by Morris to regain the ground he had lost during 1929-33.(1)

The relatively brief duration of the strike and the granting of union recognition point to pressure being put on the firm to resume production as quickly as possible.(2) In June, 1936, Pressed Steel workers engaged in producing a new body for the Standard Motor Company struck over what was claimed to be the arbitrary fixing of piece-prices and refused to return to work unless there was 100 per cent union membership in the shop.(3) The 1936 Austin strike, which began among predominantly unorganised workers and led to extensions of union membership at Longbridge, also arose out of grievances concerning piece-prices on new bodies.(4) The fact that these strikes all began among

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(1) See above, p.281

(2) This was alleged to have been exerted by Morris. Oxford Mail 24 July, 1934.

(3) T.G.W.U. M.E.C. minutes, 13 July, 1936, Area 5 Report.

(4) Birmingham Daily Post, 13 Nov., 1936.

body-makers also supports our argument since "new models" were usually new bodies built on to standard chassis and engines. Thus new competitive pressures made some firms more vulnerable to stoppages and created a climate in which more effective pressure for the extension of organisation and the recognition of union-negotiated working conditions could be mounted on the shop floor. In the more expansionary environment of the mid-thirties such efforts were also likely to gain at least partial support from full-time officials.(1)

A further observation may be made in the light of this discussion. An observed phenomenon during the 1930s was that while trade unions began to make progress in areas in which they had been very weak, e.g. Oxford and Dagenham, these advances were for a long time confined to specialist body plants. The most obvious local contrast was that between Pressed Steel and Morris at Cowley; yet, as shown above, skilled workers at Briggs Bodies in Dagenham managed to develop sufficient

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(1) Their support for workshop movements was often equivocal however, since full-time officials were sometimes suspicious of shop-floor militants and looked with disfavour on unofficial and unconstitutional strike action, as illustrated by T.G.W.U. reactions to militancy at Pressed Steel. See above, p.100 n.

organisation to force concessions from the management well in advance of any significant change at Ford.(1) Some attempts to explain this phenomenon have been made in the Oxford case. Studies by McEvoy and Whiting(2) have focussed upon contrasts in the composition of the workforces at Pressed Steel and Morris and upon differences in these firms' policies on industrial relations and welfare provision for employees. While accepting the relevance of these factors, it seems that another influence must also be considered, namely the vulnerability of specialist body firms to pressure arising out of strikes, given the importance of the annual model change during the 1930s.(3)

The new body was the vital element in most annual model changes. Unless assembly firms could rely upon prompt delivery of new bodies the introduction of the new model was delayed and their market shares were likely to suffer. However, in the event of a strike at a major body manufacturer, it was not easy to divert production

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(1) See above, p.87-8.

(2) D. McEvoy, op.cit. p.4-6, 13-15; R. Whiting, op.cit. p.63, 179-80.

(3) Passing reference is made to this in R. Whiting, op.cit. p. 98, 249.

to other suppliers. With the more extensive use of pressed steel bodies during the mid-thirties, new body designs increasingly required the making of special dies and tools for the pressings. Other factories, even if they had the capacity available, would not be tooled up for the job. Thus body manufacturers found themselves under great pressure to make what settlements they could in order to resume production if they were to obtain future contracts.(1)

This argument appears to go a long way to explain the more rapid progress made by trade unions in body plants than in neighbouring assembly shops. Nevertheless, the remains the question of why shop floor pressure was mounted more frequently and effectively in body-making than in other components divisions. Here, other factors such as differences in workforce composition are relevant and will be discussed below. However, a point made above may be borne in mind, i.e. that changes in body design were more frequent than alterations to other components and that such changes were often accompanied by revisions of piece-rates which gave rise

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(1) As in the case of Pressed Steel in 1934. Oxford Mail, 24 July, 1934.

to grievances and raised the likelihood of strikes occurring.

The argument so far has shown that changes in the market structure of the motor industry were reinforced by technical progress and that these factors acted so as to accentuate the influence of aggregate variables on the progress of union membership. They intensified the impact of the post-war slump and reinforced the tendency to stagnation and decline during the period up to 1933. From the mid-thirties however, new elements in the market structure of the motor industry combined with the effects of a general economic upswing to encourage a partial recovery of organisation and its extension to new territory. However, in spite of this revival, trade unionism remained weak when compared with other sectors of engineering and with the early 1920s. Therefore, other factors which retarded unionisation of the motor industry must be considered. One of the most fundamental of these was the change in the structure of the labour force brought about by technical change.

III

The outstanding development as far as the labour force structure was concerned was the rapid growth of semi-skilled workers in relation to other groups. In this the motor industry was not unique: rather, it presented an intensified image of changes occurring more widely in manufacturing industry. Before describing this process and analysing its effects upon the development of trade unionism in the motor industry, some discussion of the concept of skill is required.

There is considerable difficulty involved in defining skill. Ideally a "skilled man" was synonymous with a craftsman; he was a versatile worker with a high level of technical ability who had served a lengthy apprenticeship in order to learn all the necessary aspects of his trade. However, at quite an early stage in industrial development some crafts began to dwindle as the all-round ability of their members was replaced by the more specialised skills of others. A good example of this occurred in engineering during the 1820s and 1830s when the more specialised occupations of fitter and turner replaced the general millwright's craft as the typical engineering skills.(1)

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(1) Keith Burgess, The Origins of British Industrial Relations. The Nineteenth Century Experience (1975) p. 12-13.

In other occupations long, formal apprenticeships ceased to be necessary in order for workers to acquire necessary expertise; indeed this began to be true of a number of engineering jobs during the 1880s.(1) Yet workers in many such occupations were able to maintain their status as craftsmen and continued to be paid at skilled rates. Therefore, what constituted skill ceased to be capable of purely technical definition, if indeed it ever had been.

It will be argued here that the concept of skill contains two elements. The first is an "objective" feature, a technical requirement of a certain job which may be attained as a result of natural endowment and/or training which makes skill a scarce commodity. The second is a "socially defined" element which is generated by rules regarding the limits of a body of skill, its content, its financial reward and the means by which it may be acquired. Technical change may progressively reduce the technical requirements of certain occupations and so diminish the "objective" element of skill in them. Where this occurs, maintenance of their status becomes increasingly dependent upon the continued acceptance of the socially defined element of skill i.e. upon the preservation of established work rules, custom and practice. This requires the

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(1) ibid p. 33,47. By 1886 engineering firms were dispensing with formal apprenticeships and the length and content of the revised training periods varied considerably between firms.

co-operation of the parties involved or else the ability of one party to enforce these rules against the wishes of others. Given the interest of employers in taking advantage of technical change to reduce costs of production, including labour costs, it may be assumed that they will try to redefine certain jobs in terms of lower levels of skill as their technical requirements are lowered. Workers in these occupations and their unions, however, will tend to see their interests as best served, at least in the short run, by the enforcement of a social definition of skill in their jobs which is increasingly at variance with the work's objective skill content. Since the most important reward for skill is a high wage rate, successful enforcement of such a definition by unions tends to result in the criterion by which a man is judged to be skilled being whether he is receiving a rate of pay which reflects the objective skill content of the job before it was lowered by technical change. The definition of a job as skilled or unskilled very much depends therefore upon the relative bargaining strengths of unions and employers.(1)

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(1) A good example of this was the maintenance of a standard skilled rate of pay for engineering fitters. According to J.W.F. Rowe, Wages in Practice and Theory (1928) p. 102-3, no objective basis for a standard rate existed by the mid-1920s since growing specialisation meant that the technical requirements of different jobs done by fitters varied widely. He concluded that "Trade union pressure and that alone has maintained a standard rate for fitters as such."

Following from this, the term "skilled worker" as used in the following sections will refer not just to one whose job required formal apprentice training but will also be used in the wider sense of a man or woman in receipt of a skilled rate of pay as mutually agreed between unions and employers. This has a positive virtue in that certain trade unions limited their membership, not purely on the basis of the possession of a clearly defined level of technical ability but according to whether the "district rate" was being earned.

Because of the existence of socially defined as well as objective elements of skill, rapid technical change generates conflict between employers and unions, the argument being conducted in terms of each side appealing to different elements contained within the concept of skill. Conflict of this kind occurred in the engineering industry during the 1890s and resurged during the 1920s. G.D.H. Cole wrote that before 1914 technical change in engineering was gradual, so that the tension existing between traditional methods of classifying work and the actual technique of production did not force radical changes by either employers or trade unions.(1) Nevertheless changes did occur as engineering employers, faced with

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(1) G.D.H. Cole, Trade Unionism in Munitions, (Oxford 1923) p. 39-40.

growing foreign competition and the development of machine tools, sought successfully, by imposing a lock-out in 1897, to force trade unions to accept the right of management to

> "appoint the men they consider suitable... to select, train and employ those whom they consider best adapted to the various operations carried on in their workshops, and ... pay them according to their ability as workmen." (1)

In addition, the apprenticeship system began to be abandoned by a growing number of firms. These developments reflected the impact of new production techniques involving the wider use of machine tools and the associated emergence of a group of workers who could be trained "on the job" to perform the more specialised, simpler tasks which were being created by mechanisation in the place of skilled hand work.

The First World War saw the spread of new methods and the extensive dilution of labour. The artificiality of many customary definitions of skilled work was laid bare. However, employers were not able to initiate changes in production on their own terms. Trade unions had co-operated in implementing dilution but had also taken advantage of wartime labour shortages to exert considerable influence over the way in which it was carried out and to insist that pre-war practices be restored with the end of the conflict.

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(1) "Terms of Settlement, 1898", reprinted in A.I. Marsh, Industrial Relations in Engineering, op.cit. Appendix C.

By the end of the war engineering employers saw the increased power of shop stewards, supported by elements of government control of wages, as a gross infringement of the prerogatives they had fought to establish during the 1890s. The post-war slump gave them the opportunity to reassert their freedom to manage, an effort which reached its successful climax in the lock-out of 1922. The subsequent "Managerial Functions Agreement" reasserted the provisions of the 1898 "Terms of Settlement" regarding the selection, training and payment of workmen and these principles were reiterated at intervals during later years.(1) Insistence upon the freedom of management to initiate changes in production and in the structure of the labour force was seen by employers as being vital during the inter-war years. Continuing changes in technology and the growing specialisation and routinisation of jobs meant that the need for all-round skill of a high standard was reduced in many cases. At the same time the effects of the slump of 1920-21, the 1922 lock-out and persistently heavy unemployment thereafter upon trade union strength meant that employers were well placed to challenge the socially defined elements of skill which many unions sought to defend.

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(1) A.I. March, op.cit. p. 74-7; "Proceedings at a special Conference between the Engineering and Allied Employers' National Federation and Various Trade Unions" 14,22 May, 5 June,1925. p.15-16; 30 Jan.,1931 p. 25-32.

The work which was most profoundly affected by technical change was that of fitters and turners. As machine processes became increasingly accurate and the use of jigs more widespread in shaping, drilling and assembly work, the need for the skill of a craftsman fitter began to disappear so far as these operations were concerned. Much of the work of the craftsman fitter was taken over during the 1920s and 1930s by machine operators and semi-skilled assemblers. Moreover, by the end of the 1930s "even in the toolrooms, where perhaps the fitter has to exhibit the highest degree of skill, specialisation is on the increase..."(1) The turner, as a consequence of the replacement of the centre-lathe with the bar-automatic machine and the introduction of planing machines and improved grinding machinery, "ceased to be the all-round workman that he used to be... there has been an increasing tendency towards a diminution in the part played by individual craftsmanship ..."(2)

This tendency to deskill jobs was by no means universal or complete in engineering. Pattern makers, smiths and other toolroom workers who were engaged in producing

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(1) M.L. Yates, Wages and Labour Conditions in British Engineering (1937) p.22.

(2) J.W.F. Rowe, Wages in Practice and Theory, op.cit. p. 98-9.

original shapes for components and making tools, dies and jigs found that the demands upon their skills grew. Such machinery as was introduced permitted higher rates of output by doing away with some heavy manual tasks but did not obviate the need for a high degree of all-round skill. Moreover, even where machines could be operated by semi-skilled workers, they had to be set up, i.e. prepared and adjusted for a certain job, by craftsmen.(1) Even in occupations such as those of the fitter and turner the transition from craftsman to machine-minder was not total. A lot of fitting work continued to require a high level of skill and while the use of machine-tools encouraged the growth of semi-skilled processes it also made large demands on the most highly skilled engineering workers.(2) What emerged during the period from 1900-1939 was a much more precisely graduated hierarchy of manual and technical ability than had hitherto been recognised. At the top were the "super-craftsmen" who continued to serve apprenticeships, had an all-round knowledge of their trade and who were employed on special work, e.g. building prototypes, making patterns and originals of complex tools and dies. Beneath them came workers who were skilled over a narrower range

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(1) ibid. p.92-9; H.C. Armitage, "Machine Tools from the Manufacturing User's Point of View", I.A.E. Proceedings Vol. XXV (Dec. 1930)

(2) M.L. Yates, op.cit. p.30; New Survey Vol. II p.7.

of processes, and beneath them operatives who were capable of doing repetition work with the aid of machines, some without supervision, some with it.(1) This was the outcome of a diminution of the objective elements of skill in a number of processes and the ability of employers to exert greater control over its social definition.

These developments fed directly into the motor industry and were magnified by it. As in engineering as a whole, signs that certain areas of work were being "deskilled" as a result of technical change were apparent before 1914. The growing scale of production in some firms had encouraged the use of special jigs and tools with a resultant drop in "the amount of responsibility left to the individual worker in respect of what may be termed shop knowledge..." Here, the situation in which workers had to have sufficient all-round understanding of their work to enable them to interpret "the imperfect instruction of not very reliable drawings" gave way to one in which the provision of "positive and detailed information" was essential.(2) Similar changes were beginning to take place in the larger body shops in 1912. In that year a

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(1) New Survey Vol. II p.11.

(2) P. Martin, "Works Organisation", I.A.E. Proceedings Vol. I (1906-7); "Presidential Address - The Influence of Detail on the Development of the Automobile", I.A.E. Proceedings Vol. VI (1911-12).

conference of unions in the coachmaking trades was told that

> "The development of large shops is tending to throw out of competition the smaller shops which formerly dominated the condition of our industry in London and ... the use of machinery is eliminating much of the skill which was required in the production of our work." (1)

Nevertheless, this tendency was limited before 1914. The small scale of the British motor industry and its concentration upon the production of luxury vehicles meant that the labour force was predominantly skilled. Skill was important on the engineering side of the industry since in most cases short production runs did not warrant heavy expenditure on fixed capital equipment such as special dies and tools.(2) Also since the components section of the industry was undeveloped for much of the period, the larger firms had to carry a lot of skilled labour to manufacture their own parts.(3) Consequently, skilled, fitters, turners,

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(1) "Report of a Conference Representing all the Trade Unions in the Coach-Making Industry, London, 25 Jan.1912" (T.U.C. Library)

(2) Some of those involved with the motor industry continued to be sceptical of the benefits of capital-intensive production well after the First World War. One such individual argued as late as 1931 that the small, changing British market required flexibility, "small overhead charges, a minimum of invested capital and no depreciation." H.C. Armitage, "Machine Tools from the Manufacturing User's Point of View," I.A.E. Proceedings Vol. XXV (Dec. 1930).

(3) See above p. 273n.

moulders and millwrights, as well as patternmakers, were required to operate non-automatic machinery and to finish jobs by hand. The dominance of craft was especially strong on the bodymaking side of the industry, which with a few exceptions was largely engaged in producing custom-built bodies to individual specifications. Here the workshops "were virtually divided into a number of independent republics of craftsmen", i.e. coachmakers, wheelwrights, sheet metal workers, coppersmiths, brass finishers, upholsterers and coach-trimmers, painters and varnishers.(1)

The First World War, however, saw a significant shift in the composition of the workforce in the motor industry. No precise measurements of this change are possible owing to incomplete information, but an indication of its nature and extent can be given. The main development was a noticeable increase in the proportion of semi-skilled workers, mainly as a result of the greatly extended employment of women, which was a consequence of shortages of skilled labour and the need for dilution.

It has been estimated that before 1914 some 60 per cent of all engineering workers were skilled.(2) It is

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(1) Kenneth Richardson, The British Motor Industry 1886-1939, op.cit. p.45.

(2) B. Pribicevic, The Shop Steward's Movement and Workers' Control op.cit. p.26.

unlikely that the structure of the labour force in the motor industry differed very much from this; it is likely, if anything, that it had a rather higher proportion of skilled workers.(1) Official estimates obtained from monthly employment returns from controlled motor and cycle establishments during 1917 show that by that time between 38.1 per cent and 44.2 per cent of workers were skilled. Skilled workers were almost exclusively male; between 49.6 per cent and 61.0 per cent of males were skilled compared with between 8.1 per cent and 9.6 per cent of females. Consequently, much of the overall shift in the balance between skilled and other grades resulted from the wider employment of women who rose dramatically as a proportion of the motor and cyle labour force, from 8.7 per cent in July 1914 to 30.4 per cent in October 1917.(2)

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(1) Contrary to what might instinctively be imagined and what is implicit in some labour histories e.g. James Hinton, op.cit., the motor industry has tended to have a slightly higher proportion of skilled workers than the rest of the metal manufacturing trades and, indeed, the rest of manufacturing generally. Thus H.A. Turner et.al. Labour Relations in the Motor Industry, op.cit. p.32, showed that even in 1963 29.1 per cent of motor industry workers were classed as skilled compared with 28.7 per cent in the Metals group as a whole and 21.3 per cent in the rest of manufacturing. The distinctive feature of the motor industry is not the absence of skilled workers but the preponderence of semi-skilled and low ratio of unskilled compared with other groups. The growth of this group however, was more rapid in motors than elsewhere during 1919-39.

(2) Controlled establishments were those working on government contracts and thus subject to a measure of wage control through the Fair Wages Clause and from 1916 an amendment to the Munitions of War Act. The estimates referred

By January 1918, 19,025 women in those firms replying to the government questionnaire were employed on jobs formerly done by men in the same works.(1) This owed much to the division of jobs into their more complex elements, which continued to be performed by craftsmen, and the simpler tasks, which were done by women. Even so, it transpired that a good many jobs previously regarded as skilled could be performed by women after a training period lasting only from six to thirteen weeks.(2)

This shift in workforce composition was, however, temporary. The return to peacetime activity was accompanied by the restoration of pre-war practices relating to

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(2) continued/..
to are imperfect, since they relied upon responses from individual firms and these varied greatly in number month by month. Moreover, it is likely that the figures overstate the extent of dilution on actual motor manufacture since many motor firms working for the government produced munitions as well as or instead of vehicles and the scope for dilution was greater on the former than the latter. Monthly Reports on Labour in Controlled Establishments. P.R.O. MUN 5/102/360/102.

(1) ibid. From 1918 figures were based on replies from firms rather than establishments.

(2) Report of the War Cabinet Committee on Women in Industry. Cmd. 135 (1919) p.85.

the grading and allocation of work. By 1924 females accounted for only 13 per cent of operatives employed in the construction of motor vehicles, cycles and aircraft.(1) It is impossible to be exact about the skill composition of the workforce as a whole immediately after the war, since the necessary data are lacking, but there can be little doubt that the proportion of skilled workers rose, probably to the pre-war level, during 1919-20. A study by M.L. Yates has presented figures which indicate that 50 per cent of all workers in Federated engineering firms were skilled in 1921. No comparable figures are available for the motor industry in that year but later information on skill composition derived from E.E.F. wage data indicates that the proportion of skilled operatives in the motor industry in 1920 was at least as high as in engineering as a whole.(2) Thus during 1919-20 at least 50 per cent and more likely 60 per cent or more of automobile workers were skilled.

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(1) Labour Research Vol. XXII, 6 (June 1933) p.122.

(2) M.L. Yates, Wages and Labour Conditions in British Engineering, op.cit. p.32; Engineering and Allied Employers' Federation, "Circular Letters to Local Associations: Earnings of Workpeople" in Broadway House.

The period from 1920 to 1933 however, saw a radical change in the skill composition of the automobile workforce as the proportions of skilled and semi-skilled were reversed. This shift represented an acceleration of the trend which had begun before the war in that it occurred among adult males. In contrast to the experience of 1914-18, there was no increase in the proportion of women, girls and boys employed in the motor industry. The share of the manual workforce accounted for by these groups remained constant at 24 per cent during 1924-1930.(1) This change in the structure of the labour force resulted, as did that in engineering generally, from the effects of technical progress on the technical requirements of jobs and the control over the social definition of skill which employers succeeded in obtaining during the 1920s. It was accompanied by the atrophy of apprenticeship and the formal establishment of semi-skilled rates of pay.

As shown above, the slump and the engineering lock-out provided the initial basis for the establishment of managerial control over what should or should not constitute a skilled job. The crisis of the early 1920s

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(1) A slight increase in the share accounted for by women and girls was offset by a reduction in that of males under eighteen years of age. Labour Research Vol XXII, 6 (June, 1933) p. 122. Figures refer to manual workers in the manufacture of vehicles, cycles and aircraft.

forced employers to seek to introduce new methods and redefine jobs at a lower grade of skill as a result of changes in their technical requirements brought about by innovation. At the same time the ability of unions to resist this attack was weakened by heavy unemployment and falling membership.

Signs of change appeared quickly. In 1921 Morris claimed that he had so specialised engine assembly work that it was now semi-skilled.(1) New methods of gearbox assembly at Austin led to more semi-skilled adults and youths being employed on this work.(2) Further reports of semi-skilled workers being employed on engine assembly were received from Standard Motors during 1924 and Austin and Humber during 1928-29.(3) By the 1930s semi-skilled workers were not only being employed in engine assembly; they were also working in departments which had hitherto

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(1) A.E.U. Coventry District Committee, minutes 21 June, 1921.

(2) A.E.U. Journal Feb., 1921, O.D.D.'s Report, division 17.

(3) A.E.U. Journal Dec., 1924, O.D.D.'s Report, division 18; "Report of a Central Conference at York between the A.E.U. and the Engineering and Allied Employers' National Federation, 13 July, 1928"; A.E.U. Journal July, 1929, O.D.D.'s Report, divisions 18 and 19.

been the exclusive province of the skilled man, such as the moulding shops in automobile foundries and the tool room.(1) Moreover, the replacement of the centre lathe with capstan, turret and during the 1930s, the bar-automatic lathe, reduced the proportion of skilled machine work. By 1934 there was "not a single centre lathe" at Rover and "all the work formerly turned is now done on machines operated either by semi-skilled or unskilled men." This was said to have been generally true of the motor industry in the Midlands by the mid-1930s.(2)

A growing proportion of workers on the body-making side of the industry was also semi-skilled. The larger plants began hiring semi-skilled labour in 1920 to perform repetition work under the supervision of skilled men and to operate machinery.(3) The de-skilling of body-making jobs really got under way during the mid-1920s however, as a result of growing demand and a shortage of skilled men. Austin tried to extend the employment of semi-skilled labour during 1924 and

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(1) A.E.U. Journal Sept., 1932, O.D.D.'s Report, division 14; E. Player, "Automobile Foundry Work", I.A.E. Proceedings Vol XXX (Feb., 1936.

(2) A.E.U. Journal March, 1934, General Secretary's Report.

(3) E.E.F.,Thirty Years of Industrial Conciliation (1927) Appendix F; N.U.V.B. Monthly Journal July, 1920, Midlands District Report.

similar efforts were made by the managements of Belsize Motors, Leyland Motors, Jowett and Harper, Sons and Bean during 1924-5.(1) These cases illustrate the argument presented above concerning the nature of conflict between employers and unions over claims to skilled status. In the face of the above attempts by employers to redefine jobs in terms of a lower level of skill as a result of changes in their technical requirements, the N.U.V.B. mounted strikes against the changes, asserting "the right of skilled men to all work hitherto classed as skilled."(2) The strike at Harper and Bean was a failure, the shop eventually becoming closed to N.U.V.B. members after it had been "blacked" by the union. The outcomes of the disputes at Belsize and Jowett are not known, but success was gained at Leyland, where the management dropped their demands and at Austin, where it was finally agreed that semi-skilled workers should not be employed beyond the limits set down in the 1920 agreement with the E.E.F.(3) The N.U.V.B.'s success at Austin sheds some light upon the hard attitude taken by the firm after the General Strike, when it managed to

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(1) N.U.V.B. Monthly Journal Feb., 1924, General Secretary's Report; May, 1924, Jan., March, 1925, Manchester District Report.

(2) N.U.V.B. Monthly Journal May, 1924, March, 1925, Manchester District Report.

(3) See below, p. 341 ; ibid.; N.U.V.B. Monthly Journal Feb., 1924, General Secretary's Report; Jan., July, 1925, Midlands District Report.

break the N.U.V.B.'s organisation. It would appear that here was an echo of the battle for control over new processes waged by Austin against the A.E.U. in 1922. Faced with the need to expand output and reduce costs on the one hand and skilled labour shortages on the other, the pressure on Austin to extend the employment of semi-skilled workers in his body shops was considerable. Thwarted in 1924, he took advantage of the aftermath of the General Strike to weaken the body-makers' organisation and redefine the skill content of jobs so as to bring them more closely into line with their new technical requirements.(1)

Austin followed up this victory in 1932, when he embarked upon what was termed a policy of "increased machine efficiency" designed to extend still further the range of semi-skilled processes on body work. The N.U.V.B. was warned that any attempt to force the firm into conformity with national and district agreements would only lead to an intensification of the process. Significantly, there were no reports of active resistance by the union.(2)

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(1) See above, p. 78-9.

(2) N.U.V.B. Quarterly Journal July - Sept., 1932, Midlands and South-West Area Report.

More generally, employers continued to push for further economies in the use of skilled labour. In 1931 it was alleged that

> "... by the now highly developed mass methods, production can be secured with less than one-third of the skilled labour force required a few years ago ..." (1)

Increasingly, once jigs and experimental bodies had been made, semi-skilled workers were substituted for craftsmen, especially as pressed steel bodies came into wider use.(2) In addition, the development of the cellulose spray led to semi-skilled workers making inroads into the paint shops during the 1930s. By 1935 N.U.V.B. officials in the Midlands were reporting that only trimming and finishing work remained the province of craftsmen in body shops at Wolseley Motors (by this time a Morris subsidiary) and that similar developments were occurring at Daimler, Rover and Standard.(3)

These changes were accompanied by the decline of apprenticeship in the motor industry. Mechanisation

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(1) N.U.V.B. Quarterly Journal July-Sept., 1931, Assistant General Secretary's Report.

(2) N.U.V.B. Quarterly Journal Oct.-Dec., 1931, General Secretary's Report; Jan.- March, 1936, General Secretary's Report; E. Beaumont, "The Development and Production of Automobile Body Panels", I.A.E.Proceedings Vol. XXXI (Feb., 1937).

(3) N.U.V.B. Quarterly Journal April-June, 1935, Midlands District Report.

and specialisation of work reduced the need for formal training. More and more workers underwent periods of "learnership" during which they gained experience of a specialised task. Increasingly too, promotion was gained by being upgraded on "a ladder of progressively complex processes". In this way the freedom of management to define the skill content of jobs was further enhanced since with the decline of apprenticeship the ability of unions to control the content of jobs and the conditions of entry to them was vitiated.(1) By 1931 apprentices were being advised not to go into mass-production firms since no proper training opportunities were provided there. The situation was summed up in a paper presented to the Institution of Automobile Engineers:

> "The old rigid code of apprenticeship has been relaxed ... nowadays the term'apprentice' is applied indiscriminately to young men in the workshops whether bound for a period of years or not, with practically no regard for the quality of instruction received." (2)

At the same time, employers were able to gain greater influence over the structure of pay and to

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(1) Gertrude Williams, Recruitment to the Skilled Trades (1957) p. 11-13; H. Llewellyn-Smith, ed., The New Survey of London Life and Labour Vol. II (1931) p. 10-11.

(2) B.G. Robbins, "The Training of Young Automobile Engineers", I.A.E. Proceedings Vol XXVI (1931-2).

establish separate semi-skilled rates for certain occupations or even in some cases such as Austin, to grade and price each job according to how much skill was required.(1) Individual firms such as Morris and Austin refused to pay A.E.U. district rates for engine and gear-box assembly work as early as 1921 on the grounds that it had been specialised to the extent that it was semi-skilled.(2) During 1928-9 Austin and Humber both reduced rates for certain engineering jobs as a result of technical and organisational change within their plants.(3)

More wide-ranging changes were made on the body-making side of the industry in 1920 when the E.E.F. concluded an agreement with the N.U.V.B. which allowed the management of mass-production shops to introduce a separate semi-skilled rate for reptition work and machine operations other than skilled machining.(4) At the end of the twenties many smaller body plants and general

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(1) Austin had established this type of wage structure in his body shops by 1929. N.U.V.B. Quarterly Journal April-June, 1929, Midlands District Report.

(2) A.E.U. Coventry District Committee minutes 21 June, 1921; A.E.U. Journal Feb., 1921, O.D.D.'s Report, division 17.

(3) A.E.U. Journal July, 1929, O.D.D.'s Report, division 18; "Report of a Central Conference at York between the A.E.U. and the E.& A.E.N.F. 13 July, 1928".

(4) E.E.F. Thirty Years of Industrial Conciliation, op.cit. Appendix F.

vehicle building shops attempted to extend the agreement to their own concerns to replace their existing agreements with the vehicle building unions which recognised only one grade of skill - that of the craftsman.(1) These attempts were successfully resisted by the N.U.V.B. although by 1930 it was reported that firms in the Midlands were trying to pay lower rates for some jobs on the grounds that technical change had reduced the amount of skill required.(2)

Thus technical progress, together with the weakened position of unions in the motor industry after 1920 enabled employers to redefine a growing number of jobs in terms of lower levels of skill and to modify training programmes and the structure of wages in the light of this redefinition. As in engineering generally, there were limits to how far this process could go. A number of occupations, e.g. pattern-making and most toolroom work, retained their skilled status since their technical requirements tended, if anything, to be raised and because trade union organisation was strongest among

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(1) These efforts were made during 1929-30 by the U.K. Wages Board of Employers for the Vehicle Building Industry.

(2) N.U.V.B. Quarterly Journal Jan.-March, 1930, Midlands District Report.

such groups. This was as true of the larger companies as of the smaller concerns.(1) The general trend however, was towards the wider employment of semi-skilled labour relative to other grades, as shown in Table 4.4 below.

The most widely used figures relating to the skill composition of the engineering workforce between the wars are those presented by M. L. Yates in 1937.(2) These show the proportion of skilled workers in the total employed by Federated engineering firms to have fallen from 50 per cent in 1921 to 32 per cent by 1932, whilst the proportion of semi-skilled rose from 20 per cent to 57 per cent during the same period. However, although Yates cited the Engineering Employers' Federation as being the source of his data he gave no information about the way in which they were compiled or how his skill

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(1) Thus Austin advertised for versatile, skilled men in 1928, "Report of a Central Conference at York ... 13 July, 1928". A number of jobs remained classified as skilled by employers. The E.E.F. produced a list of occupations for which five year apprenticeships were required in 1947. Twenty-five occupations were listed which included as well as patternmakers and toolmakers; fitters, machinists, machine tool setters, press tool setters, turners, roll turners, sheet metal and panel beaters and welders. E. & A.E.N.F., "Recruitment and Training of Juveniles for the Engineering Industry" Section 7, reprinted in Gertrude Williams, op.cit.

(2) M.L.Yates, Wages and Labour Conditions in British Engineering, op.cit. p. 32. They have been reproduced in J.B.Jefferys, The Story of the Engineers, op.cit. p. 207 and B. Pribicevic, The Shop Stewards' Movement and Workers' Control, op.cit.

categories were determined. Also, for the purposes of this study the usefulness of Yates' figures is further reduced by the fact that they refer to engineering in general. Fortunately it has been possible to construct separate figures for the motor industry based on wage data in the archives of the Engineering Employers' Federation. From 1927 the E.E.F. issued circulars to member firms which contained information on wage rates paid to different occupations and the number of workers in each of these occupations in various sections of engineering. This has made it possible to categorise occupations and to arrive at a quantitative description of changes in the structure of the motor industry work-force. Since two separate sectors - "Motors" and "Vehicle Building" - were referred to in the circulars, two sets of figures are presented in the table below. They do not refer to proportions of the total labour force since they concern adult male workers only. However,women and juveniles appear to have accounted for a constant 24 per cent of the labour force during 1924-1930 at least, so their exclusion does not impart any bias to the trend exhibited in Table 4.4.

It is immediately apparent that there occurred a very significant shift in favour of semi-skilled workers in both categories of employment. It is notice-

Table 4.4 Changes in the Skill Composition of the Labour Force in the Motor Industry, 1927-1937.

Year	"Motors"			"Vehicle Building"		
	Percentage of adult male workers accounted for by:			Percentage of adult male workers accounted for by:		
	Skilled[1]	Semi-skilled	Un-skilled	Skilled	Semi-skilled	Un-skilled
1927	55.1	34.9	10.0	-	-	-
1933	46.0	46.7	7.2	61.0	28.9	10.0
1934	42.4	48.5	8.7	54.8	33.3	11.6
1935	42.1	49.3	8.5	54.5	33.5	11.8
1937	39.9	51.4	8.6	47.7	46.3	10.0

Source: E.& A.E.N.F. "Circular Letters to Local Associations: Earnings of Workpeople (Males over 21) October each Year" E.E.F. archive, Broadway House. For detailed discussion of the method of calculation, see Appendix 4.

(1) The proportion of skilled workers is slightly understated relative to the semi-skilled since all machinemen have been put into the semi-skilled category. Some of these were earning the fitters' rate or above and so would have been defined as skilled. However, the data do not permit this group to be separated from those getting less than the fitters' rate for the years 1927 and 1933. The proportion of such workers remained fairly constant during 1934-7 so the later trend is not affected. However, the extent of the fall in the proportion of skilled during 1927-33 may have been slightly underestimated.

able that the major change came rather later in "Vehicle Building" than in "Motors". Assuming that the former category relates largely to body-making, this doubtless reflects the impact of pressed steel body construction during the mid-thirties. What is not apparent from the table but may be seen in Appendix 4 is that the group of semi-skilled workers which expanded most rapidly was a miscellaneous category of "others, semi-skilled". This group rose from 19.8 per cent of the total among "Vehicle Builders" in 1935 to 31 per cent by 1937, reflecting the growing importance of assemblers and machine operators relative to older occupations.

Translating the proportions into totals, using the "Motors" data, it may be estimated that the number of skilled workers rose from 42-47,000 in 1924 to about 48,000 by 1935. The number of semi-skilled jumped from 30-35,000 to around 74,000.(1) This factor operated so as to dilute trade unionism in the motor industry considerably, since the semi-skilled were so much more weakly organised than the skilled. Using the union membership estimates from Table 2.2 it can be calculated

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(1) These figures are obtained by applying the proportions in Table 4.4 to the P.E.P. figures for manual employment presented in Table 2.1. Allowance has been made for the inclusion of women and juveniles in the total.

that between 50 per cent and 56 per cent of skilled workers were organised in 1924 and around 48 per cent in 1935. By 1937 the figure was probably about 58 per cent.(1) In sharp contrast, less than 10 per cent of semi-skilled and unskilled motor workers were organised in 1924, and by 1935 the proportion had fallen to 5 per cent.

These results, when considered in conjunction with the discussion in Section II of this chapter, indicate that technical progress, via its effects upon the structure of the motor industry and upon the skill composition of the labour force, was of crucial significance in determining the special features of the development of trade unionism among motor workers referred to at the beginning of the chapter. It encouraged industrial concentration and a growth in the size of plants and a rapid increase in the proportion of semi-skilled labour. In so doing it was a major factor in the severe weakening of union density in the motor industry during 1920-33

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(1) These are probably generous estimates. See Appendix 3.

and goes a long way to explain why density remained comparatively low throughout the 1930s.

This conclusion may be emphasised by means of comparison with the aircraft industry, which was characterised by much more stable, strong trade union organisation throughout the period. The aircraft industry,like motors, became more concentrated after the First World War as many firms were forced out of the industry by the collapse of military demand. During the 1920s and 1930s the industry became dominated by a relatively small number of firms.(1) Unlike the motor industry however, concentration resulted almost entirely from a shrinkage of the market. There was no strong impulse for technical

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(1) At the heart of the industry was Hawker-Siddeley, which by the mid-'thirties had controlling interests in Armstrong-Siddeley Motors, Armstrong-Whitworth Aircraft, Hawker Aircraft, Gloster Aircraft, A.V.Roe and a couple of smaller companies. It was also connected with Saunders-Roe via A.V.Roe. The major independent firms were Vickers, De Havilland, Bristol, Napier and Rolls-Royce. Together these firms dominated the "ring" arrangement set up by the government during the 1920s. Each of these establishments, whether Hawker subsidiaries or independents were however, of no more than medium size. Further concentration was prevented by the government's "ring" policy which was designed to keep a number of producers afloat which would otherwise have sunk with little trace. See R. Croucher, "Left-Wing Politics and the Shop Steward's Movement in Engineering...", op.cit. p. 17; A. Plummer, New British Industries in the Twentieth Century, op.cit. p. 97-8. Also see above, p. 167 .

change in order to expand output, encouraging the emergence of a few large, dominant companies. Consequently there was no great struggle by employers to gain more complete control over the organisation and allocation of work in order to impose its own definitions of skill upon the workforce. In fact the return to low output levels after the war narrowed the scope for technical innovation of this kind.(1) This is not to say that no change in methods of production or in labour force structure occurred. Some progress was made in the use of jigs in aircraft assembly and from 1924 metal was used more widely in construction.(2) By the end of the 1920s, although the industry could by no means be regarded as based on mass production, it was observed

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(1) A representative from Hawker-Siddeley said in 1929 that the scope for the use of mass production methods was less than it had been during 1917-18. F. Sigrist, "Some Aspects of the Production Problem in Aircraft", Journal of the Royal Aeronautical Society Vol 33 (1929); see also M. de Woitine, "The Metal Construction of Aeroplanes", Institute of Aeronautical Engineers Minutes Vol XIX (1925) and W. H. Sayers, "The Production of Aircraft on a War Scale", The Aeroplane 20 May, 1925, for examples of how low production restricted the development of production methods in aircraft.

(2) W. J. Hoff, "A Short History of the Development of Airplane Structures", American Scientist Vol XXXIV (1946) p. 233; C. H. Barnes, Bristol Aircraft Since 1910 (2nd edition, 1970),p. 33.

that some firms were employing "cheap labour" on jig and repetition work.(1) This was reflected in the composition of the workforce as revealed by the E.E.F. wage data. There was a noticeable increase in the proportion of semi-skilled workers during 1927-34; however, the semi-skilled never accounted for more than 35.5 per cent of male adult workers before 1937 and the upward trend was halted and indeed reversed slightly during 1936 and 1937.(2) Skilled workers were 67.3 per cent of all adult males in the aircraft industry in 1927 and never fell below 57 per cent in the following decade.

One may therefore argue that in the motor industry the comparatively large drop in the proportion of skilled workers, among whom unionisation was by no means negligible, accounts for the overall weakness of organisation before the Second World War.(3) But although being of central

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(1) A.E.U. Journal Feb., 1929, O.D.D.'s Report, division 20: A.E.U. National Committee Report, 1929; N.U.V.B. Quarterly Journal July-Sept., 1929.

(2) The proportion of semi-skilled rose from 22.3 per cent in 1927 to 35.5 per cent in 1934 and then fell back to 33 per cent by 1937. This drop was due to the efforts of companies to meet increased orders on the basis of existing techniques which depended heavily on skilled labour. See above, p. 175 .

(3) The level of unionisation among skilled motor workers has probably been overestimated somewhat owing to deficiencies in the data. Nevertheless, if only half were organised in 1937 this would not have compared too badly with a traditionally strongly organised occupation such as mining, where 60 per cent were unionised

importance, this observation begs the question of why semi-skilled workers were almost completely unorganised before the war. Even by 1937 fewer than 10 per cent of semi-skilled and unskilled workers were in trade unions, despite the progress made in some plants by T.G.W.U. It also fails to explain why trade unionism was very weak among skilled workers in some major plants such as those of Morris, Vauxhall, Ford, and indeed, Austin for so much of the period. In order to resolve these issues a number of other variables must be considered. These are; the attitudes of trade union members and officials towards recruitment, workforce characteristics other than skill composition, working conditions in the industry and employers' policies on industrial relations.

IV

Perhaps the most obvious explanation for the absence of trade union organisation among semi-skilled motor workers during the 1920s and early 1930s is that unions made no attempt to recruit them. The collapse of

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(3) continued/..
in that year. This figure is calculated from union membership totals and numbers of insured employees presented in Ministry of Labour Gazette Oct., 1937 p. 404; Department of Employment and Productivity, British Labour Statistics 1886-1968. Historical Abstract, op. cit. Table III.

the Workers' Union in the early 1920s meant the disappearance from the motor industry of unions geared specifically to the organisation of the semi-skilled. It was not until after the T.G.W.U. had established a foothold in engineering as a result of its absorbtion of the Workers' Union in 1929 that this gap began once more to be filled. Thus from 1923-1933 the organisation of semi-skilled motor workers depended upon their recruitment by unions which were traditionally concerned with the interests of skilled men, i.e. the A.E.U., the N.U.V.B. and the National Union of Sheet Metal Workers. However, although these societies began to adopt official policies more favourable to wider recruitment during the 1920s and 1930s, their local officials made little serious effort to organise outside the ranks of the skilled before 1939.

In the case of the engineers the A.S.E. had made amendments to its rules so as to permit the organisation of machinists and unskilled workers before the First World War. However, little in the way of new membership resulted from these changes because of opposition from branch officials and the rank-and-file. So emphatic was the dislike of the unskilled section that it was closed in 1917, five years after it had been opened.(1)

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(1) J.B.Jefferys, The Story of the Engineers, op.cit.p.156.

The formation of the A.E.U. in 1920 was seen by some as a step towards a more industrial form of organisation. The new Executive Committee claimed that the union catered for all male workers by virtue of the rule which allowed semi-skilled and unskilled men to join Section 3, i.e. that membership section open to workers not qualified or over the age limit (40 years of age) for admission to the skilled sections - sections 1 and 2. Yet those most representative of semi-skilled motor workers, that is assemblers and operators of automatic and semi-automatic machinery, remained excluded.(1) In 1926 the A.E.U. Executive decided to amend its rules further so as to permit the organisation of these workers by the union. Consequently two new membership sections - Sections 5 and 5a - were established, open to any male engineering workers over sixteen years of age.(2)

Among the bodymakers' unions the N.U.V.B. was in principle open to semi-skilled workers from its inception in 1919. Rule 1 on membership stated that the union was open

> "to all skilled and semi-skilled workers employed as; bodymakers, carriage- makers,

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(1) A.E.U. National Committee Report 1920.

(2) A.E.U. Journal June, July, 1926, General Secretary's Report. Section 5 membership carried unemployment benefit. Section 5a members were only entitled to strike pay.

> wheelers, wheelwrights (or cartwrights), finishers, erectors, trimmers, smiths, coach-fitters, hammermen, painters (including semi-skilled painters capable of taking a job to ground colour) in the coach, motor, railway coach and locomotive, wheelwright, wagon, aircraft and agricultural implement making industries, carriage and wagon lifters and such class of mechanics employed in the vehicle trade as the country may from time to time decide". (1)

However, this provision merely recognised an existing state of affairs as a number of semi-skilled workers who had been temporarily upgraded during the war had found their way into one of the various coachmaking societies which amalgamated to form the N.U.V.B.(2) The collapse of the post-war boom and heavy unemployment among less-skilled workers led to many of these men dropping out of the N.U.V.B. This fact caused little concern at any level within the union. A report from the Midlands noted a decline in membership locally but this was dismissed as being merely confined to semi-skilled workers.(3) As a result, the N.U.V.B. became increasingly craft domina ed during the early 1920s. At the end of 1931 however it was decided to open an Industrial Section to cater for "all working within the trade,

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(1) N.U.V.B. Rule-book 1919, p.6.

(2) N.U.V.B. Quarterly Report and Monthly Journal Oct.-Dec., 1921, Midlands District Report.

(3) N.U.V.B. Monthly Journal June, 1922, Midlands District Report.

irrespective of age of sex".(1)

Again on the body-making side, the National Union of Sheet Metal Workers, which excluded all but craftsmen from membership (with the exception of welders) during the 1920s, established an Auxiliary Section in 1930. This was intended to be open to all male workers employed preparing parts or completing articles made by sheet metal workers.(2)

Detailed discussion of the reasons for these changes in official union policy is not necessary at this point in the argument. All that is required is an assessment of their effect in stimulating efforts to organise less-skilled workers.(3) There can be no doubt that very few semi-skilled or unskilled workers entered the A.E.U. before 1926. Recruits to Section 3 accounted for 19 per cent of total admissions to the union during 1920-5 but by no means all of these were less-skilled workers. Fitters, turners and other skilled men who were too old to join other membership sections entered Section

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(1) N.U.V.B. Quarterly Journal Jan.-March, 1932.

(2) A.T.Kidd, A History of the Tin-Plate Workers' and Sheet Metal Workers' and Braziers' Societies, op.cit. p. 274.

(3) The process by which these unions began to adopt a more open recruitment policy is looked at in detail in Chapter 5.

3 in larger numbers than semi-skilled and unskilled men. On a generous estimate just under 1,000 men who can be classed as semi-skilled and unskilled were admitted to the A.E.U. during 1920-5.(1) Thus one progressive A.E.U. member wrote to the Journal saying that "The A.E.U. is a craft union and still retains the odious features of craft unionism ..."(2) The feeling of the majority of members was probably summed up more accurately however, in an article written in the Journal during 1926 which argued that the unskilled were not attracted to trade unionism in any great degree and that to attempt to organise them was futile.(3)

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(1) A.E.U. Financial Reports 1921-6, Analysis of Membership. The figure is that number of recruits who were classified under the occupational group labelled "others". This group may have included skilled men. Machinists rose as a proportion of total recruits but they have not been included in the semi-skilled category since machinists in most districts had, in order to be admitted to the union, to be earning the full district rate. This, of course, excluded those whose jobs had been effectively deskilled along the lines referred to above, p. 321-3, 326.

(2) A.E.U. Journal July, 1920.

(3) J.D.Lawrence, "Reflections on Suggestions for the New Rule Book", A.E.U. Journal April, 1926. Such opinions appear to have been shared abroad. J. Mitchell, President of the United Metal Workers' Union in the U.S.A., expressed the same sentiment in harsher words, referring to the unskilled as "poor wretches ... professional idlers ... permanently below the level of trade unionism". Quoted in J.O. Morris, Conflict Within the A.F.L. (New York, 1958) p. 35.

There are no signs that the establishment of Sections 5 and 5a in 1926 unleashed any great zeal to organise semi-skilled and unskilled workers. A number of branches refused to admit candidates to either section and this problem became so widespread that the Executive Council had to issue a circular to all branches in November, 1927 asking them to obey union rules and help to increase membership.(1) Most A.E.U. officials and rank-and-file members continued to see the union's main function as the protection of the interests of craftsmen, largely against encroachment by less-skilled workers. Thus as late as 1938 more progressive elements within the union bemoaned the "sad lack of organisation" among semi-skilled workers and demanded further special action to recruit them.(2)

This reluctance to recruit outside the ranks of skilled labour is well illustrated by the A.E.U.'s membership statistics. The Financial Reports of the

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(1) A.E.U. Journal Nov., 1927, General Secretary's Report.

(2) A.E.U. National Committee Report 1938, Resolutions from Divisions 19 and 20. A recent study of the labour movement among engineering workers argued that the A.E.U. became "trapped within its craft outlook" and was therefore "slow to shed exclusive attitudes in the revival of unionism in the 1930s" because the collapse of workplace power in 1922 isolated the union from the workshops. F.W.Carr, "Engineering Workers and the Rise of Labour, 1914-1939",(Unpublished Ph.D. thesis, University of Warwick, 1978) p.237. This seems to be a strange

union provide a record of the number of recruits to each of its membership sections and break down recruitment to each section into occupational groups. Membership of Sections 5 and 5a rose much more rapidly than that of the skilled sections during 1927-38; from 8,794 to 133,999 compared with an increase in the combined membership of Sections 1 and 2 from 167,715 to 183,571. This led the union's historian to argue that during the 1930s the A.E.U. became an industrial union, recruiting mainly among less-skilled workers in the newer branches of engineering.(1) However, a closer examination of recruitment to Sections 5 and 5a shows that this was not the case. In the first place, the membership of these sections was heterogeneous and included many skilled men, such as patternmakers, fitters and millwrights, turners and roll-turners, smiths and strikers, draughtsmen and other skilled workers. Fitters and millwrights were the largest group recruited to sections 5 and 5a, followed by machinists and turners. Given that in so many cases machinists were not admitted to the union unless they received the full district rate, one cannot assume that this group was predominantly semi-

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(2) continued/..
explanation for a conservatism which was much more manifest at branch level and among the rank-and-file than it was among the full-time national officials.

(1) J.B.Jefferys, The Story of the Engineers, op.cit. p. 207-14.

skilled or even that it became more so, at least before 1935. The only occupational group listed in the Financial Report which was unambiguously in the less-skilled category was that described as "others unskilled". As shown below in Table 4.5, there was no tendency for this group to grow in relation to total recruitment until after 1935 and then they remained a small proportion of total admissions until the outbreak of war.(1) However, it is probable that the figures understate the extent to which the A.E.U. began to organise less-skilled workers after 1935. It was at about this time that the union began to relax its condition that machinists, etc. had to be earning the district rate to qualify for membership.(2) In addition, by the end of the 1930s the T.G.W.U. began to receive reports that the A.E.U. was "beginning to encroach on our preserves in respect of semi-skilled workers" in the Midlands, and relations between the two unions deteriorated rapidly as a result of competition for members.(3) Moreover, the proportion

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(1) From the proportions given in Table 4.5, the A.E.U. recruited 9,462 such workers in 1939. The rate at which inroads were made into this group by the A.E.U. was thus very slow.

(2) For example, 300 workers from Daimler in Coventry were enrolled in 1935 in spite of earning a basic rate which was less than the minimum insisted on by the A.E.U. District Committee, i.e. 48s. A.E.U. Coventry District Committee Minutes 7, 23 May, 1935.

(3) T.G.W.U. M.E.C. Minutes 29 April, 1938, Area 5 Report.

of Section 5 and 5a members in total branch membership became noticeably higher in the Midlands and London and the South-East than in the country as a whole during the late 1930s.(1) Nevertheless, it is clear that the A.E.U. did very little to organise semi-skilled and unskilled workers before 1935 and that the broadening of recruitment had only just begun to get under way by 1939.

The same conclusions can be drawn with respect to the N.U.V.B. and the N.U.S.M.W. Semi-skilled entrants to the N.U.V.B. never exceeded 11 per cent of total admissions in any quarter-year between 1927 and 1930 and rarely accounted for more than 7 per cent. Moreover, as shown below, there was no upward trend and the absolute numbers were extremely low.

The decision to establish an Industrial Section in 1931 was widely unpopular within the union. Several branches, including Coventry and Manchester, wrote letters to the union journal expressing criticism and the Joint Committee for the Liverpool and Manchester districts

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(1) By 1939 53.2 per cent of A.E.U. members in Dagenham were in Sections 5 and 5a, 63.9 per cent in Oxford and 49.2 per cent in Coventry. The average for the country as a whole was 38.2 per cent.

Table 4.5 Percentage occupational distribution of entrants to Sections 5 and 5a of the A.E.U.[1]

Year ending	Fitters and Millwrights	Turners and roll turners	Machinists	Others skilled	Others unskilled	Welders
Dec 1926	39.3	15.7	27.8	6.2	0.0	-
27	42.6	14.6	21.6	3.2	5.6	-
28	41.7	12.2	23.4	4.4	6.2	-
29	45.5	10.5	24.3	4.1	3.6	-
30	42.5	12.4	20.5	6.5	4.4	-
31	48.5	11.5	17.4	3.3	5.1	-
32	53.1	13.3	14.9	3.6	4.1	-
33	47.3	14.7	19.0	3.3	5.1	-
34	43.8	15.8	23.0	3.6	4.4	-
35	40.1	14.2	24.6	5.4	4.4	-
36	38.5	11.3	26.5	6.2	7.3	1.7
37	34.8	10.8	27.3	5.8	9.8	1.8
38	34.1	8.3	26.9	9.1	10.8	1.4
39	32.3	8.6	22.3	16.0	10.8	1.6

Source: A.E.U. Financial Report, years ending Dec. 1926-39.

(1) These groups never accounted for less than 85 per cent of total recruitment to sections 5 and 5a.

Table 4.6 Recruitment to the N.U.V.B.

1927-1930

Quarter ending	Total new entrants	Semi-skilled entrants	Semi-skilled as a percentage of total recruits
March 1927	370	23	6.2
June "	550	41	7.4
Sept. "	528	57	10.8
Dec. "	474	28	6.0
March 1928	537	13	2.4
June "	723	60	8.4
Sept. "	674	39	5.8
Dec. "	542	38	7.2
March 1929	860	53	6.2
June "	998	114	10.1
Sept. "	639	36	5.8
Dec. "	565	19	3.4
March 1930	768	34	6.0
June "	688	38	5.8
Sept. "	355	28	8.0
Dec. "	533	14	2.6

Source: N.U.V.B. Quarterly Journal Jan.-March, 1927 to Oct.-Dec., 1930.

demanded a ballot of the membership with a view to the abolition of the Industrial Section on the grounds that it was "working to the detriment of the society and that the women's section had not justified its existence".(1) Many branches maintained a negative attitude towards the recruitment of semi-skilled workers throughout the 1930s.(2) Despite this, the Industrial Section accounted for a large proportion of the total recruits to the N.U.V.B. during 1932-36. This was because, like Sections 5 and 5a of the A.E.U., it attracted a large number of skilled men since a lower subscription was required than for the skilled membership section.(3) Unfortunately no occupational breakdown of admissions to the N.U.V.B. was kept but the outcome of the following statement by Halliwell, the General Secretary, in 1937 gives an indication of the extent to which skilled men chose to join the Industrial Section up to 1937.

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(1) N.U.V.B. Quarterly Journal April-June, 1932, April-June, 1933.

(2) Personal information from Mr. Eric Bone, former N.U.V.B. official and recently National Secretary of the Vehicle and Automotive Group of the T.G.W.U. The Manchester branch for example, remained opposed to the Industrial Section in 1935, having, with others, protested against the Executive Council's decision not to ballot the membership on the question of abolishing it. N.U.V.B. Executive Council Minutes 7 Sept., 1935.

(3) Industrial Section members did not get unemployment benefit; however, in view of their coverage by the National Insurance scheme, many skilled workers were willing to forego this and pay lower dues. This may in itself have been a source of annoyance to branch officials.

> "The Industrial Section was created to enable us to organise a new type of labour which within recent years has been introduced into the motor industry. It was never the intention of the 1931 Delegate Meeting that craftsmen should be allowed in this section. The 1936 Delegate Meeting has decided that applicants who are eligible to join one of the other benefit sections cannot be allowed membership in the Industrial Section". (1)

During 1937 recruitment to the Industrial Section tumbled, as shown in Table 4.7.

Table 4.7 Recruitment to the adult membership sections of the N.U.V.B. during 1932-1939

Year ending	Total recruits (No)	Percentage of total recruits entering full benefit sections	Percentage of total recruits entering the Industrial Section	Percentage categorised as "semi-skilled"
Dec. 1932	1,015	27.8	47.1	0.9
" 1933	1,484	26.6	56.7	-
" 1934	3,438	44.1	40.5	-
" 1935	4,697	36.7	27.1	-
" 1936	4.708	46.8	33.9	-
" 1937	4,273	55.7	12.7	7.8
" 1938	3,430	50.0	9.6	8.2
" 1939	3,405	48.9	17.1	7.3

N.B. The percentages do not add up to 100 because of the exclusion of the apprentices' section

Source: N.U.V.B. Quarterly Journal Jan.-March, 1933-40.

(1) N.U.V.B. Quarterly Journal Jan.-March, 1937, General Secretary's Report.

Interpretation of the data is complicated by the resumption of a separate record of "semi-skilled" entrants to the union in 1937 since it is not clear in what way they were distinct from recruits to the Industrial Section.. According to one source however, from 1937 the membership of the Industrial Section consisted of unskilled workers, presumably polishers in the body shops.(1) In this case semi-skilled and unskilled recruits never accounted for more than 20 per cent of total entrants, the absolute numbers were very low and there was no sign of a strong movement in favour of less skilled workers before 1939.

As was the case with the A.E.U., there is some evidence to suggest that Industrial Section membership was more important in the Midlands, London and the South-East than in the rest of the country. However this was not a uniform feature of all branches in these areas and there were some surprising exceptions. The Coventry branch was notable for the low proportion of Industrial

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(1) This is the view of Mr. Stan Wyatt, Curator of the Transport and General Workers' Union Automotive Group Museum in Coventry and ex-N.U.V.B. member.

Section members as were Manchester, Preston and Luton. The Leyland branch had no Industrial Section members at all. There was a slight increase in Birmingham, from 401 in December, 1933 to 540 in December, 1939. It thus appears that even in the major motor centres the N.U.V.B. made little effort to extend its organisation to less-skilled workers.(1)

The Auxiliary Section established by the N.U.S.M.W. turned out to be a completely empty gesture. Virtually no attempt was made to extend membership beyond the ranks of the skilled, with the exception of welders, who had in any case been permitted to enter the union during the 1920s. Skilled members were at best luke-warm in their attitude to the recruitment of less-skilled workers.(2) The Coventry branch resolved to call a meeting of its Executive Committee to discuss the question of "auxiliary workers" in March, 1930 but no further mention of this was made until May, when it was decided at an ordinary branch meeting to put off the discussion until a future date.(3) No further reference

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(1) N.U.V.B. Quarterly Journals Jan.-March, 1933-40.

(2) A.T.Kidd, A History of the Tin-Plate Workers' and Sheet Metal Workers' and Braziers' Societies, op.cit. p. 275.

(3) N.U.S.M.W. Coventry branch Minutes 13 May, 1930.

was made to the issue until 1937, when the branch proposed that membership of the Auxiliary Section be confined to welders only, a proposal which was designed to preserve the situation which had obtained during the 1920s.(1) National officials, realising that the Auxiliary Section had failed to broaden the union's ranks, attempted to set up a new section specifically for semi-skilled workers in 1937 but failed in the face of internal opposition.(2)

It is thus obvious that within the major unions operating in the motor industry during the 1920s and the early 1930s there was little commitment at district and branch level to the recruitment of semi-skilled workers. They only began to be brought back into trade unionism after 1933 as the T.G.W.U. and, right at the end of the 1930s, the A.E.U. began to take a more active interest. However, to what extent was this lack of commitment an important factor in its own right in explaining the absence of organisation among the semi-skilled. In the first place the absence of a major organising effort

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(1) ibid. 11 August, 1937.

(2) A.T. Kidd, op.cit. p. 275.

among semi-skilled motor workers before 1933 was hardly independent of the general state of the environment in which trade unions were operating. Given the existence of heavy unemployment, its concentration among less-skilled workers and the natural concern of unions to concentrate their efforts on maintaining existing organisation, neglect of semi-skilled motor workers is not surprising. Secondly, even in the rather more favourable economic circumstances obtaining from 1933 onwards, the majority of semi-skilled automobile workers and, indeed, many skilled operatives remained unorganised, frequently despite considerable efforts to recruit them. There is some evidence to suggest that if the A.E.U. had been readier to drop its insistence that men had to be earning the district rate in order to qualify for admission it could have made more progress among piece-workers, since pieceworkers, although on high earnings, were often on low basic rates. Certainly once the minimum earnings qualification was reduced from 48 shillings to 38s. 3d, rising to 40s. 6 d for experienced men in October, 1935, A.E.U. membership in Coventry began to expand noticeably.(1) However, while this would have perhaps encouraged better organis-

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(1) Membership rose more rapidly after 1936 than it had during the previous two years. The figures for Coventry were:-

1934	- 2,689	1936	- 4,714	1938	- 8,300
1935	- 3,541	1937	- 6,128	1939	- 11,735

A.E.U. Journal Dec., 1934-9.

ation of skilled pieceworkers at an earlier stage, it is not clear how far it would have encouraged the less-skilled to be brought into the A.E.U. Also, there is the problem of separating the effects of the change in A.E.U. rules from those of general economic recovery and, in Coventry, the emergence of shortages of skilled labour during the late 1930s. Thus while it is probable that earlier efforts to recruit the less-skilled might have yielded some improvement in their organisation, it is unlikely that the impact would have been more than marginal.(1)

This is not to say, as did the most conservative craftsmen, that less-skilled workers were generally unorganisable. There is sufficient evidence to show that this was not so; e.g. the rapid growth of the Workers' Union during 1910-20 and the establishment of strong organisation at Pressed Steel Ltd. during the mid-thirties. What it does mean however, is that for most of the period the general climate was unfavourable to the advance of trade unionism, especially among less-

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(1) The main effect might have been to enhance the A.E.U.'s position relative to the T.G.W.U. rather than to add greatly to overall organisation.

skilled workers, and that certain features of the motor industry made the existing obstacles greater. These features are examined in turn in the next section of this chapter.

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The remaining influences upon unionisation in the motor industry which need to be discussed are; the characteristics of the workforce (other than the distribution of skills amongst them), conditions of work and the labour policies of employers. In following on from the preceding section it is appropriate to begin by examining workforce characteristics.

Central to this discussion is the fact that the motor industry was located primarily in the newer manufacturing areas in the country, i.e. the West Midlands, Greater London and the South-East of England. The West Midlands was the chief centre, accounting for 45.3 per cent of total production in 1930. Greater London's share was 21.5 per cent while that of the rest of England - mainly Oxford, Luton and the Manchester area - was 17.7 per cent. During the 1930s the share of the Midlands fell slightly - to 44.8 per cent by 1935, while that of Greater London and the rest of England rose

to 26.2 per cent and 19.6 per cent respectively.(1) This reflected the movement of Ford's to Dagenham and its subsequent growth, and the expansion of Vauxhall's at Luton.

These areas were not ones of traditional union strength and workers in many plants were thus isolated from the mainstream of organisation. This lack of proximity to organised workers was seen by contemporaries as creating problems for trade unionism. John Parker, M.P. for Dagenham, spoke of the difficulty of organising in "new areas" owing to the ignorance and indifference of workers regarding trade unionism. Trade union organisers spoke of widespread apathy and criticism of trade unions among workers in towns such as Coventry during 1920s and it was argued that even trade union members, finding themselves isolated, became indifferent and let their membership lapse.(2)

The low propensity of motor workers to join trade unions before the war may thus be partially explained

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(1) Political and Economic Planning, The Location of Industry in Britain (1939), p. 280-81.

(2) John Parker, M.P., "Trade Union Difficulties in New Areas" in G.D.H.Cole, British Trade Unionism Today (1939); A.E.U. Journal August, 1924, National Organiser's Report; Journal Oct., 1927, Editorial; "Problems of Organisation in Greater London", London Trades Council, Annual Report (1935); London Trade Council Minutes, Oct., 1935.

in terms of the development of working-class communities in areas such as Coventry, Oxford, Luton and Dagenham. An important common feature of these areas was the embryonic nature of their industrial development at the beginning of the twentieth century. Coventry was the most advanced of the centres in this respect as light engineering, e.g. the manufacture of bicycles and sewing machines, began to develop towards the end of the nineteenth century.(1) However, Coventry retained close links with its rural surroundings. One recent study described the town during the 1920s as "an isolated industrial centre which served as a magnet for workers from Warwickshire, Leicestershire and Northamptonshire".(2)

The other motor centres did not even have Coventry's industrial base at the beginning of the century and engineering was largely absent before the arrival of the motor firms. Dagenham was a rural village which was developed as a housing estate by the London County Council to accommodate families displaced by slum clearance programmes in the Inner London boroughs during

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(1) G.C.Allen, The Industrial Development of Birmingham and the Black Country (1929) p. 296.

(2) F.W.Carr, op.cit. p. 234.

the 1920s and until the arrival of Ford in the 1930s most of these workers were employed in the docks and miscellaneous occupations in East London.(1) In Luton, employment was dominated by the hat-making trade which still accounted for over 40 per cent of insured workers in the town in 1923 and in Oxford the chief employees were the colleges and the University Press.(2)

There was thus little basis for the widespread development of trade unionism in Dagenham, Luton or Oxford by the 1920s. While it is true that London dockers had a tradition of trade unionism, this was in many cases fairly recent and dockers' organisation was susceptible to fluctuations in the state of trade. There would seem to have been little basis for the translation of union loyalties from the docks to the Dagenham motor plants during the early 1930s. The predominance of the hat-making industry in Luton with its emphasis on female employment also provided little foundation for union growth before the First World War. The establishment

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(1) H. Friedman and S.Meredeen, The Dynamics of Industrial Conflict. Lessons from Ford., op.cit. p.54.

(2) M.P.Fogarty, Prospects of the Industrial Areas of Great Britain (Nuffield College Social Reconstruction Survey, 1945) p. 394; R.C.Whiting, "The Working Class in the 'New Industry' Towns Between the Wars ...", op. cit. p. 20-21. Whiting states that only 3.9 per cent of the occupied population of Oxford was employed in metal or engineering work in 1911.

of munitions work in Luton during the war was again reliant upon women workers. There was a brief upsurge of labour activity; a major strike of munitions workers occurred and in 1919 demonstrators set fire to the town hall in protest at the council's refusal to extend invitations to its civic banquet, celebrating the signing of the peace treaty, to ex-servicemen.(1) However, this sporadic activity lacked a proper base and with the return to peace what was referred to as a "turnip patch" mentality asserted itself.(2)

Trade unionism in Oxford was confined to printers, who were exclusive in their attitudes towards trade unionism. Agricultural workers in the surrounding villages did also have a history of organisation, union upsurges occurring during 1870-2, 1890-3 and 1918-20. Agricultural trade unionism was, however highly susceptible to the effects of depression and continuous organisation was never maintained.(3) Consequently

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(1) Len Holden, "Industrial Relations at Vauxhall Motors, 1920-1950". (Paper presented at King's College, Cambridge, 27 April, 1981).

(2) Rising unemployment had only a modest effect in encouraging this attitude since from 1927 unemployment in Bedfordshire never rose above 5 per cent of the insured workforce except during the depression when it reached 11.2 per cent in 1932, and 1938 when it was 6.4 per cent. M.P.Fogarty, op.cit. between p. 18 and 19.

(3) The collapse of the Workers' Union after 1920 was a great blow to trade unionism among farm workers, as it had led recruitment among them during the post-war boom. R.Hyman, The Workers'Union,op.cit.p.99-103,147-9.

there was no effective trade union machinery through which to develop organisation among semi-skilled car workers in Oxford; despite concern and local campaigning by the Trades Council during the 1920s, there was not a single resident full-time union organiser in the city.(1)

The situation was somehwat different in Coventry. The Amalgamated Society of Engineers and the Workers' Union had developed considerable organisation and influence by 1914 and the First World War saw the emergence of widespread workshop organisation.(2) Nevertheless, the difference was to a large extent one of degree. Many of those who joined trade unions, especially the Workers' Union, during the upsurge of 1910-20 were from the countryside around Coventry and were new to industrial employment and trade unionism.(3)

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(1) Oxford Trades Council Annual Report (1928-9)

(2) Coventry Trades Council Annual Report (1914); R. Hyman, "The Workers' Union, 1898-1929", op.cit. p. 181-2; James Hinton, The First Shop Stewards' Movement, op.cit. ch.8

(3) Although agricultural labourers in Warwickshire had been among the first to be organised into the Agricultural Labourers' Union during 1870-72, the same argument applies as in the case of Oxford.

The Black Country strikes of 1913, during which the Workers' Union developed a large membership among unskilled and semi-skilled workers in the Midlands, involved in Coventry an element of conflict over problems of adaptation to industrial work as well as reflecting more general grievances concerning prices and money wages. The relative modernity of engineering in Coventry, with its routine processes and externally determined pace of work, and the growing phenomenon of "speed-up" encouraged spontaneous protest.(1) On this basis it has been argued that once the effects of the First World War and the post-war boom had passed, Coventry engineering workers did not have "the background in industrial work that would serve to strengthen trade unions" once the climate became more

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(1) The Black Country strikes centred around wage demands and were of a largely spontaneous nature, according to R. Hyman, The Workers' Union, op.cit. ch.3. Yet wage demands appear to have been advanced by the W.U. once it had taken charge of the strikes. Thus their specific causes are hard to determine. But see P. N. Stearns, Lives of Labour. Work in a Maturing Industrial Society (1975) p.1-13, 301-27 for a general discussion of tensions and protest arising out of adaptation to modern industrial work in the years 1870-1914.

hostile.[1]

Because of these factors, considerable stress has been placed upon the role of immigrants from older industrial centres in developing trade unionism in the motor towns during the 1930s.[2] During the inter-war years Coventry, Oxford, Luton and Dagenham all experienced rapid population growth as a result of immigration from other parts of the country. During 1931-9, Coventry's population rose by 62,451, of which 42,148 were incomers.[3] The population of the Oxford-Banbury district rose by nearly 19,000 during 1921-31. Of this increase, 14,041 were added by immigration. By 1936, 35 per cent of all insured workers in Oxford and 43 per cent of all insured adult males came from outside the immediate district.[4] Luton and Dagenham also grew rapidly. The number of insured workers in Luton doubled between 1923 and 1937, from 23,040 to 45,620. Again, immigration played a major part; during the 1930s, additions to Luton's total population due to net

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(1) F.W. Carr, op.cit. p.234

(2) See R. Croucher, "Left-Wing Politics and the Shop Stewards' Movement in Engineering 1935-1946", op.cit. p.282; R.C. Whiting, op.cit. p.251.

(3) R. Croucher, op.cit. p.194.

(4) R.C. Whiting, op.cit. p.20; Ruth Fasnacht, A History of the City of Oxford (Oxford 1954); M.P. Fogarty, op.cit. p.398.

immigration were at the rate of over 2 per cent per year.[1] Dagenham was essentially an artificial creation, its population growing from 9,000 in 1921 to 90,000 in 1931 as Londoners were transferred to the 20,000 local authority dwellings built there during the decade.[2]

It is probably true that immigrants did help to develop trade unionism in the motor towns. However, their contribution was not immediate and cannot be seen simply in terms of workers from the depressed industrial areas of South Wales, Scotland and the North of England transferring their habits of industrial militancy and union organisation to the Midlands and the South-East. In spite of immigration during the 1920s and early 1930s, trade unionism did not begin to revive among motor workers until the mid-thirties. A detailed look at the composition of immigrants to the 'new industry' towns and their integration into the local working-class communities is necessary.

First of all, many immigrants to Coventry, Oxford and Luton were not from trade union strongholds but from other parts of the country, and often from the neighbouring rural areas. Thus most of the immigrants to Luton were from London, Bedfordshire and Cambridgeshire. The main

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(1) M.P. Fogarty, op.cit. p.18.

(2) H. Friedman and S. Meredeen, op.cit. p.54.

source of migrants to Oxford was the South-West of England which accounted for 37 per cent of the total. London and the South-East were also well represented, accounting for just under 20 per cent. Less than a quarter were from the depressed industrial regions.(1) Many of the immigrants to Coventry during the 1930s were from neighbouring rural areas.(2)

While a higher percentage of workers from depressed areas than from others went into the motor industry and other branches of engineering, they were not always the largest immigrant group in the factories.(3) At Morris Motors and Pressed Steel, for example, the majority were from the South-West of England and outlying rural areas round Oxford. The majority at Ford and Brigg's Bodies were from East London. Often, such workers were docile and unorganised when they arrived in the motor plants.

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(1) R.M. Titmuss, Report on Luton (1945); R.C. Whiting, op.cit. p.62; M.P. Fogarty, op.cit. p.398.

(2) A.E.U. Coventry District Committee Minutes 12 March 1935.

(3) 80 per cent of immigrants to Coventry who were from mining areas went into engineering compared with 50 per cent from other areas. In Oxford, between 50 and 57 per cent of those from the North of England and Scotland and 47.4 per cent from Wales went into the motor industry. The average for all immigrants was 44 per cent. R. Croucher, op.cit. p.195; Ministry of Labour, Report on Unemployment P.R.O. PIN 7/172, cited in R.C.Whiting, op.cit. p.64.

In Coventry an A.E.U. member employed at Daimler Motors spoke of workers who had come from the surrounding rural areas as being willing to accept anything in the way of conditions and a machine-tool worker at Humber Motors said that even once in the union they were like "a lot of paralysed rabbits".(1) But neither were trade unionists in Coventry any more impressed with immigrants from older industrial areas. Organisation at the Rover works was reported in 1930 to be

> "Very poor, very much cheap labour, including Welshmen from depressed areas, most of them have come to Coventry on their own initiative. Men like a lot of lambs and chargehands with no guts." (2)

Similarly unfavourable reports came from two other motor plants in Coventry. At Humber, it was said that Welsh immigrants from mining areas "showed little understanding of trade unions" and at Standard Motors it was alleged that the recent influx of Welsh and Scottish workers was the main reason for poor organisation.(3) In Dagenham too, immigration was associated with "an influx of non-unionists" in 1932.(4)

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(1) R.C. Whiting, op.cit. p.62; A.E.U. Coventry District Committee Minutes 23 Jan. 1933, 12 March 1935.

(2) A.E.U. District Committee Minutes 25 Feb. 1930.

(3) F.W. Carr, op.cit. p.434-5.

(4) A.E.U. Journal Oct. 1932, London District Report.

While local trade union organisers over-simplified the issue regarding poor organisation, it is clear that immigrants, even from depressed industrial centres in South Wales and to the North of England, were not immediately capable of reinforcing trade union organisation and industrial militancy in their new surroundings. Part of the reason for this may have been that many immigrants were young workers.(1) Thus, although coming from industrial areas with trade union traditions, they themselves had little or no experience of either, since many had never found employment in their home districts. This was also part of a wider problem as seen by a number of contemporaries - that of organising young people generally. It was argued that there existed a generation gap between trade unionists and younger workers, especially in new industrial areas, which made it harder to attract them into membership.(2)

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(1) R. Croucher, op.cit. p.195.

(2) T.U.C. Report 1934; John Parker M.P. "Trade Union Difficulties in the New Areas", op.cit. Yet this was not solely a function of age but also of technical progress which had led to the decline of apprenticeship, thus making it harder for unions to get youngsters into their ranks.

What was probably more important was the dislocating effect of migration upon those who undertook it. Social contacts and cohesion had to be re-established among immigrants, who were faced with the added problem of integrating with the established community, which frequently displayed an initial hostility as immigrants arrived in large numbers.(1) Thus although most Welsh migrants to Oxford were from Maesteg it was some years before they developed social and industrial cohesion and organisation.(2) A further barrier to the development of an organisational vanguard from among immigrant workers was the fact that they were an unstable population. Many migrants returned home in the same year in which they arrived at their new location - $33^{1}/3$ per cent of migrants to Oxford coming from depressed areas returned home during 1936-37.(3)

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(1) As shown indirectly by the comments of A.E.U. members in Coventry. Also, Arthur Exell, himself a Welsh migrant to the Oxford Motor industry, recalled that "The Oxford people didn't want the Welsh, because the Welsh were undercutting the English." The use of cheap Welsh labour was prominent in the building trade: "When the Florence Park housing estate was being built in 1933-34 it was built by Welshmen brought here by a developer who was also a Welshman called Moss.These men worked for a shilling an hour. When I went to live on the estate the hatred there against the Welsh was terrible." Arthur Exell, "Morris Motors in the 1930s. Part II: Politics and Trade Unionism", History Work shop. (Spring 1979) p.45-65.

(2) R.C. Whiting, op.cit. p. 80-82.

(3) ibid.

In this,general economic factors were important. Given the existence of significant levels of unemployment throughout the country, migration to a 'new industry' town did not guarantee a job. Most of those returning to their homes did so because of lack of work.(1) However, problems of social adjustment were probably important too. Housing problems may have added to those of "finding one's feet" in some cases; many workers who migrated to Luton had to put up with poor lodgings.(2)

Immigrant workers, even those from the coalfields and metal and shipbuilding districts, were therefore not uniformly militant or experienced in trade union matters. However, they did contain among themselves individuals who were, and these people played a part in the development of labour organisation which was greatly out of proportion to their numbers. Examples include Ernie Roberts and Sammy Kahn in Coventry. Roberts arrived as a young Welsh immigrant and by the late 1930s was a leading activist at Rootes; Kahn arrived from Scotland during the 1930s and led the 1937 engineering apprentices' strike.(3)

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(1) In the motor industry seasonal unemployment was considerable, leading to patterns of seasonal migration between South Wales and Oxford. See below, p.396-8.

(2) Len Holden, op.cit.

(3) F. Carr, op.cit. p.435.

In Oxford, immigrant workers dominated the Pressed Steel strike committee in 1934. While they accounted for just a little over a quarter of the labour force at Pressed Steel, nine out of the eleven members of the committee were from outside Oxford. Four came from South Wales, two from Scotland, two from the North-East and one from Manchester.(1) However, it was not only immigrants from older industrial areas who were seen as being militant. Arthur Exell, himself a Welsh migrant to Oxford recalled that the most militant shop at Morris Radiators during the 1930s was the polishing shop, in which the majority were from London or Birmingham. Yet this militancy did not take the form of active trade unionism:

> "They were militant even though we could never get them into the union. They were militant unto themselves." (2)

It is possible to argue therefore that the development or revitalisation of trade unionism in the motor towns was dependent upon the efforts of a relatively small number of activists, who were generally immigrants from depressed areas of the country. It took time for these people to establish their position among their fellow workers in view of the disruptive effects of migration upon not only the migrants themselves but on the working-class communities

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(1) R.C. Whiting, op.cit. p.70

(2) Arthur Exell, op.cit.

in the towns which received them. Moreover, in Oxford, Luton and Dagenham, where the bureaucratic machinery of trade unionism was undeveloped, militants had no channels through which to work.(1) In these circumstances, there was a need for local issues around which to develop social solidarity and through which activists could establish their leadership among their fellow-workers, since it was often "easier to organise outside the factory than inside."(2) During the 1930s such a base began to emerge in Dagenham and Oxford. At Dagenham, most Ford and Briggs workers lived on the L.C.C. housing estate and in Oxford most lived in the Cowley-Headington area, where new estates were built during the 1930s. Grievances over rent levels existed in Dagenham and in Oxford, tenants on the Florence Park estate mounted a rent strike in protest against the poor quality of housing. Members of the A.E.U., the Communist Party and the Labour Party involved themselves with the tenants' association which was formed to conduct the strike and made contact with motor workers living on the estate. It was through the Florence Park rent strike that

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(1) Greater efforts were made in this direction in Dagenham than elsewhere as the T.U.C.'s attentionwas drawn to Ford workers during the 1930s. T.U.C. Report 1937-39.

(2) Arthur Exell, op.cit.

Arthur Exell was recruited to the A.E.U. and the Communist Party during 1934-35.(1) There can be no doubt that protests against housing on the Florence Park estate and the Cutteslowe Walls Campaign which was mounted at the same time coincided with the Pressed Steel strike to give trade unionism an enormous boost in Oxford.(2) The relative absence of such issues in Luton no doubt helps to explain its relative quietude before the Second World War. There were no comparable local issues in Coventry but here trade unionism was initially somewhat better developed among engineering workers. There existed an organisational framework which was based among aircraft workers and which could be used by political and trade union militants to rebuild organisation on the shop floor.(3)

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(1) Arthur Exell, op.cit.

(2) The Cutteslowe Walls Campaign was an organised protest against the building of a wall across one of the access roads to the Cutteslowe council estate in order to separate it from a private housing development being built during 1934. ibid.

(3) It has been argued that in Coventry the Communist Party, which was based in the aircraft industry, did much to revitalise trade union organisation in the late 1930s through their support and leadership in the 1937 apprentices' strike and through "bringing large numbers of workers into trade unions" through "patient spadework". During 1935, 11 out of 27 district and branch committeemen of the A.E.U. had made what were called "initial organisation breakthroughs" in at least one factory. Of these, "only two were definitely opposed to the Communist Party on the District Committee." R. Croucher, op.cit. p. 78-9.

The fact that Coventry did also have some history of semi-skilled trade unionism also helps to explain the relatively rapid, though by no means complete, recovery of trade unionism in Coventry when compared with its progress in Luton or Dagenham, or even, remembering the poor state of organisation at Morris Motors, Oxford.(1)

It can be seen that the economic and social composition of working-class communities in motor towns was a factor which helped to hold back the development of trade union organisation until the late 1930s, especially among semi-skilled workers, where trade union traditions were very weak. By the same token, the influence of some immigrant workers from the older industrial centres began

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(1) There remained a remnant of Workers' Union membership which provided a base from which the T.G.W.U. could begin to recruit during the mid-1930s. By the outbreak of the War the T.G.W.U. was recruiting widely among Coventry engineering workers. Moreover, its efforts were not confined to the less skilled. It began to organise all groups of unorganised engineers and build up a considerable membership amongst skilled men. So much was this the case that when the A.E.U. began to recruit more actively among the less skilled at the end of the 1930s, some within the T.G.W.U. Metal and Engineering Group began to argue that it should establish its own special membership section for skilled workers. T.G.W.U. General Executive Council Minutes 22 August 1940; see also N.U.V.B. National Executive Council Minutes 10 June 1939 where the T.G.W.U. was accused of recruiting skilled body makers in Coventry, e.g. at Carbodies Ltd. It was argued by the T.G.W.U. that no organising efforts had been made by the N.U.V.B. since 1935 and that the T.G.W.U. therefore had a right to any benefits of its own organisation campaigns. N.U.V.B. Head Office correspondence. Deakin to Halliwell 17 April 1940. Coventry R.O. ACC 635.

to exercise a favourable influence on organisation from the mid-1930s, aided by revival in the economy.

Nevertheless, one cannot simply see the evolution of trade unionism among motor workers in terms of an inert local labour force being vitalised by immigrants. Thus when action did occur it resulted not from the general influence of militant workers from depressed areas, but from specific grievances. When action over grievances arose it is clear that the majority of workers affected, whatever their origin, were willing to try to force redress. Examples presented above include workers at Austin in 1929, Ford and Briggs Bodies in 1933, Pressed Steel in 1934. The contribution of immigrants lay not so much in arousing local workers to action as in providing organisation and leadership once it had begun.

Moreover, once having established themselves in a leadership role, immigrant activists were often unable to extend the organisation which had been developed in one local plant to another. The best example is Oxford, where despite the growth of organisation and militancy among Pressed Steel workers in 1934, Morris remained free from union pressure until the Second World War. While it is true that Morris employed a smaller proportion of workers from outside Oxford than Pressed Steel did, there existed

by the mid-thirties a large number of outsiders who were trade unionists and members of the Labour Party and the Communist Party.(1)

The failure of organisation to develop strongly before the war may also then have been party due to workers not feeling a great sense of grievance at work or not daring to express it. It is therefore necessary to look at working conditions in motor plants and at employers' labour policies.

The main features of working conditions in the motor industry were: comparatively high rates of pay; strict work discipline and a fairly intense pace of work, enforced either by piecework systems or in Ford's case, by close supervision; and the alternation of periods of flat out production with long lay-offs and short-time working. From tables 4.8 and 4.9 below it can be seen that average earnings in the motor industry compared favourably with those in other occupations; however, a word of caution must be added. The earnings figures for the motor industry were obtained from a series of earnings surveys conducted by the Ministry of Labour during 1926, 1929, 1932 and 1937.

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(1) Arthur Exell, op.cit. A more significant difference may have been the fact that there was a higher proportion of skilled workers at Pressed Steel than at Morris. R.C. Whiting, op.cit. p.181.

In all of these surveys except that of 1926, average weekly earnings were based upon returns made by firms which related to the month of October. This month marked the beginning of the high season in the motor industry, so the figures make no allowance for the effects of lay-offs and short-time working during much of the Summer. Nevertheless, although average earnings over the year may not have been as high as indicated by the weekly figures, there is little doubt that they compared favourably with most other industries.(1)

In Oxford, building, brewing and printing were the main alternative industrial occupations. Average earnings in these lines of work may be compared with those in the motor industry thus;

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(1) The figure for 1924 was based upon an average of weekly earnings during four separate months - January, April, July and October. Inclusion of the month of July probably enabled some of the effects of short-time working to be captured, though of course no account can be taken of lay-offs. Moreover, the element of seasonality in the industry increased during the late 1920s and 1930s so that the rate at which earnings grew is also probably exaggerated in Table 4.8.

Table 4.8. A Comparison of Average Adult Male Earnings in the Motor Industry, Building, Brewing and Printing.

Year	Motors	Building	Brewing	Printing (1)
1924	63s 0d	59s 11d	60s 2d	67s 10d
1928	62s 1d(2)	59s 10d	59s 8d	68s 2d
1931	61s 8d	56s 5d	57s 6d	64s 4d
1935	78s 5d	61s 5d	-	-
1938(3)	95s 0d(4)	66s 0d	-	84s 3d

(1) General printing and bookbinding, except for 1939 when the only available category becomes "Printing etc." and so includes newspaper printing.

(2) All workers.

(3) Averages for building and printing are for October.

(4) This was the average claimed by W.R. Morris in 1939.

Sources: Ministry of Labour Gazette Sept. 1926; Nov. 1929; Jan. 1933; April 1937; Department of Employment and Productivity, British Labour Statistics 1886-1968: Historical Abstract, op.cit. Tables 39-40; R.C. Whiting, op.cit.p.90.

In Coventry, the main alternatives (other than aircraft) were general engineering, miscellaneous metal manufacture and silk and rayon manufacture. (1) Earnings in these occupational groups were as follows:

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(1) M.P. Fogarty, Prospects of the Industrial Areas of Great Britain, op.cit. p.344.

Table 4.9. Average Male Earnings in Main Industrial Occupations in Coventry.

Year	Motors	General Engineering	Miscellaneous Metal (1)	Silk and Rayon
1924	63s 0d	53s 0d	52s 10d	61s 0d
1928	62s 1d	56s 0d	55s 8d	62s 0d
1931	61s 8d	51s 8d	52s 3d	60s 0d
1935	78s 5d	-	-	-
1938	95s 0d	75s 0d (2)	-	-

(1) Light castings.

(2) Average for October in Metals, Engineering and Shipbuilding.

Source: Ministry of Labour Gazette, op.cit.; Department of Employment and Productivity, op.cit.

As far as motor workers were concerned, their possible earnings became increasingly attractive relative to other occupations. It was therefore natural that they should compare their earnings favourably with those of other local workers and deny the need for trade union organisation. Such attitudes were widespread even among skilled workers in the newer centres. Arthur Exell, recalling Oxrord in the 1930s, says that there were only two workers in the tool room of Morris Radiators who were union members. "There weren't more because they were satisfied. When you compared their wages with any other tool-room they were higher than

the average tool-maker in this area, much higher".[1] In Coventry during the 1920s there were no complaints about wage levels, only about variations in rates paid for different jobs and consequent unpredictability of earnings.[2]

In most cases, high earnings were the result of the operation of piecework systems with fairly low basic rates. The exception was Ford, which paid flat time rates of around 2 shillings per hour to production workers during the 1930s.[3] Elsewhere, basic rates could be very low. Exell recalls that there was a basic rate of 7d per hour for all workers at Morris Radiators during the mid-1930s; however, when bonuses were added, earnings varied from 1 shilling an hour for women to 2s 6d for sheet metal workers.[4] The basic rate at Pressed Steel was rather higher, being 1s 4d in 1935, with earnings rising to 2s 4d.[5]

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(1) Arthur Exell, "Morris Motors in the 1930s. Part I" History Workshop 6 (Autumn 1978) p.77

(2) F.W. Carr, op.cit. p.250

(3) H. Friedman and S. Meredeen, op.cit. p.23. Craftsmen were paid at higher rates.

(4) Arthur Exell, op.cit. in History Workshop 6 p.56.

(5) R.C. Whiting, op.cit. p.94.

It has been argued that individual piecework had a divisive effect on the workforce since the earnings that could be made on different jobs within the same shop varied considerably, some jobs being much easier than others. According to Exell, at Morris Radiators;

> "You had the same in every department, where some jobs were better than others. And men were always fighting over them to get more money. If they saw somebody coming they'd stop. But they'd have a couple of blows and land out.... There was always bits of scraps going on up there."(1)

Where group bonus systems were operated, e.g. at standard in Coventry and Vauxhall's at Luton, they encouraged a strong internal discipline among work-groups, since slacking by one affected the earnings of the whole group. For most of the period slack labour markets and weak workshop organisation meant that such systems ensured that earnings only rose with productivity and helped to preserve managerial authority. In Coventry during the late 1930s however, developing labour shortages and the resurgence of workshop organisation in some plants, notably Armstrong-Whitworth Aircraft, led to the system being used against management and reinforcing patterns of workers' control over the allocation of work and piecework times and bonus rates. However, the spread of organisation from such centres of strength as Armstrong-Whitworth to motor shops was gradual and in Luton the isolation of the workforce and the lack of any

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(1) Arthur Exell, op.cit. p. 56.

strong nucleus of organsiation before the war meant that the group bonus system continued to exert a coercive influence on Vauxhall workers throughout the 1930s.(1)

Yet despite its devisive and coercive effects, piecework was a major cause of strikes in the motor industry, accounting for 42.4 per cent of the total recorded during 1921-38.(2) It was also the case that piecework disputes triggered the organisational progress made at Pressed Steel from 1934 and among Austin workers from 1936.(3) While high earnings may have generated indifference towards trade unionism, sudden reductions led to upsurges of industrial action and stimulated union recruitment. Thus, referring to the 1929 Austin strike, the A.E.U.'s national organiser wrote that conditions which had been taken for granted had suddenly been threatened and consequently considerable progress in organisation was being made.(4) The strike at Ford in 1933 is another example of spontaneous protest against a sudden reduction in rates. During the period before 1933 however, deterioration in the general economic

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(1) See above, p.231-2 for discussion of the "gang" system in Coventry.

(2) R.C. Whiting, op.cit. p.98.

(3) See above, p. 314-5.

(4) A.E.U. Journal May 1929, National Organiser's Report. Also see above, p. 93, 105.

climate made such gains ephemeral and during the upswing of the 1930s there was less pressure on piece-rates and rising productivity meant that earnings could increase even if piece-rates were adjusted downwards.

Other aspects of working conditions are harder to determine and compare between industries. An externally determined pace of work and a tendency to speed up production was commented on by contemporaries, and this theme has been taken up in subsequent studies. Conditions were worse in the large body-making plants than elsewhere in the industry; the work was heavier, noisier and dirtier and the risks of accidents greater. Press shop production workers were of low status, were paid at comparatively low rates, worked for longer hours than other motor workers and were more liable to industrial injury.(1)

Intensity of effort was very much a consequence of the pattern of motor sales. Production was concentrated in the period from just before the Motor Show in October to

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(1) Arthur Exell, op.cit. p.57-8; D. McEvoy, "From Firm Foundations...", op.cit. p. 7-8; R.C. Whiting, op.cit.p.179; H. Friedman and S. Meredeen, op.cit. p.23.

the peak of sales in the Spring. During the early Summer production was cut back, many workers laid off and others put on short time. One union official described circumstances as follows:

> "The motor trade in Coventry is as bouyant as can possibly be but the worst feature of this business is that one has to work like a trojan for seven or eight months and then be idle for the rest of the year."(1)

In 1930 it was observed that the seasonality of production was becoming more pronounced. This was attributed to the spread of mass production which enabled work to be speeded up and compressed into a shorter period. It seems likely that the introduction of the annual model change also intensified seasonal fluctuations.(2) In Oxford, the percentage of insured workers unemployed in the motor, cycle and aircraft category fluctuated dramatically during the 1930s and Morris' change of policy regarding production had little effect in dampening down the swings. Thus during the best month of 1934, unemployment was 2 per cent.

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(1) A.E.U. Journal Jan. 1925, O.D.D.'s Report, Division 18.

(2) Ministry of Labour B.T. 56/22, cited in R.C. Whiting op.cit. p.93. In 1935 Morris abandoned the annual model change to get a more regular flow of production and longer production runs. P.W.S. Andrews and E. Brunner, The Life of Lord Nuffield, op.cit. p. 198-9.

In the worst, it was 28.8 per cent. In 1935, the figures were 2.4 and 26.8 per cent; 1936, 2.8 and 16.9 and 1937, 2.7 and 25.5 per cent.(1)

Seasonal unemployment in the motor industry can be seen as having inhibited the growth of trade unionism in a number of ways. One study suggests that it helped to maintain non-industrial attitudes among Coventry workers since it "prolonged the link between town and country" as men left the factories to help with the harvest.(2) A similar point could be made regarding Luton, where hat-making as well as agriculture experienced a peak of activity during the Summer. However, it is doubtful whether motor workers found much seasonal work in the countryside since May and June were the really slack periods in the motor trade and harvest was still far off at that time of year. It can also been argued that seasonal lay-offs made it more difficult to develop organisation among workers who were willing to become members since they let their membership lapse when they were laid off. It also gave firms a chance to lay off trouble-makers and made for a workforce which was fluid in its composition. However, this

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(1) M.P. Fogarty, op.cit. p. 402

(2) F.W. Carr, op.cit. p.234.

argument must not be taken too far. Although seasonally employed, the workforce was not complete unstable. Smaller quality manufacturers remained relatively immune from seasonal demand fluctuations. Also, larger firms were unwilling to lose skilled men, who in any case were less prone to seasonal unemployment than the bulk of production workers. Moreover, managements of firms in those motor towns which were relatively isolated from large sources of labour (i.e. Oxford and Luton) were also loath to lose experienced semi-skilled workers, and would give them preference when rehiring during the late Summer. Morris developed an arrangement with the labour exchange whereby workers who were laid off could draw unemployment pay without having to present their insurance cards, which were kept by the company.(1) Vauxhall tried to provide continuity of employment by putting men on plant maintenance at basic rates.(2) Employment fluctuations did not therefore mean that union organisers had the problem of tackling a largely new workforce each season. It did mean however, that lapsed members had to be brought back into the fold and it may have reinforced indifference to trade unionism.

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(1) Arthur Exell, op.cit. p.54.

(2) Len Holden, "Industrial Relations at Vauxhall Motors, 1920-1950" op.cit.

It would thus appear that there was little basis for the development or articulation of long-term grievances which might have fostered more rapid union growth. Discomforts at work, such as a fast pace and a strict discipline, were probably seen as being outweighed by high earnings, though this was perhaps truer of assembly plants and smaller components shops than the large pressed steel body plants.

The effects of working conditions on workers' attitudes towards trade unionism were reinforced by the labour policies of the major employers; indeed high wages were a central feature of the management philosophy of the big proprietors. The proprietors and top management of the major motor companies shared broadly similar attitudes towards their role and towards the proper relationship between employer and employee.(1) There was little room

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(1) There were differences over practice. Morris, for example is said to have been critical of some of the harsher and more arbitrary exercises of power by supervisory staff in American plants. P.W.S. Andrews and E. Brunner, op.cit. p.14.

in their schemes of things for trade unionism. To a great extent this may have been a pragmatic response to the technical dynamism of the industry and the need for flexibility in production. At the same time the ideas of Ford and his managing director in England, Percival Perry, Charles Bartlett of Vauxhall, William Morris and to a lesser extent, Herbert Austin, stemmed from similar outlooks on the world which denied that a valid role for trade unionism existed in their establishments. This weltenschaung focused upon an ideal of service to the public and the need for a corporate spirit throughout the enterprise.(1) This unitary view brooked little in the way of organised opposition to management and gave rise during the 1920s to a number of welfare and employee participation schemes to foster a spirit of co-operation.

The strong personal control which Austin and Morris exerted over their businesses during the 1920s meant that there was a considerable amount of paternalism in their

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(1) Corporatism also influenced the politics of Ford and Morris. Ford was a Fascist sympathiser during the 1930s and Morris contributed to Oswald Moseley's New Party. H. Friedman and S. Meredeen, op.cit. p.53; Roy Church, "Myths Men and Motor Cars: A Review Article", Journal of Transport History (1977) p.102-12.

relations with their employees. Both knew many of their workers personally and it is said that Austin was known as "Pa" in the works.(1) The close interest which they took in their enterprises and their individual authority meant that at times their own eccentric and arbitrary standards were imposed upon the conduct of their concerns, especially when it came to hiring workers. Austin's erstwhile private secretary was quoted as saying that he (Austin) personally vetted applicants for staff positions and that evidence that they smoked or drank went against them; "he also had an aversion to men with their hair parted down the middle."(2) The personal touch which Morris exercised could generate affection and respect among employees, for example his participation in social and sporting events.(3) The personal touch of Austin and Morris was emulated by Charles Bartlett at Vauxhall, who also used to visit the shop floor and become on familiar terms with a number of workers.(4)

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(1) Sir Miles Thomas, foreword to Z.E. Lambert and R.J. Wyatt, Lord Austin - the Man (1968)

(2) ibid. p. 179-80

(3) Andrews and Brunner, op.cit. p.17 relate the story that Morris joined in a practice run arranged for the Cowley works football team - and won.

(4) Len Holden, op.cit.

Motor firms also tried to foster contentment and loyalty in more institutionalised ways during the 1920s and 1930s. In so doing they shared a generally growing appreciation of the tangible benefits which could accrue from attention paid to employees' welfare. In 1926 the Balfour Committee referred to "the present movement for organised welfare (which) received a strong stimulus from the establishment of a Welfare Department in the Ministry of Munitions in 1916." It observed that

> "In a good many of the firms, welfare work is regarded as an integral part of management policy ..... practically all are convinced that it is an advantage from the purely economic point of view. Diminished sickness, better time-keeping, freshness at work and a general spirit of contentment undoubtedly contribute to efficiency."(1)

Morris set up numerous social and sporting clubs (he personally founded the Morris Motors Band), set up a system of free life assurance for most workers, provision for holidays with pay and from 1936 a profit-sharing scheme came into operation.(2) Some identification of the interests of the workforce at Morris with those of Morris himself may have been fostered by his campaign for the

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(1) Committee on Industry and Trade. Survey of Industrial Relations (H.M.S.O. 1926) p.29, 191.

(2) R.C. Whting, op.cit. p. 161; P.W.S. Andrews and E. Brunner, op.cit. p.275. However, the paid holiday cannot have been enjoyed by many, since to qualify a worker needed five years continuous service. Seasonal unemployment prevented most workers from achieving this. Arthur Exell, op.cit.

restoration of tariff protection for the motor industry following the repeal of the McKenna Duties in 1924. He certainly made a conscious effort in this direction just after the General Strike, when he launched the League of Industry. The aims of the League were to promote selective tariff protection, to establish imperial preference and to encourage co-operation between employers and employees. The League was open to all Morris workers, who were encouraged to join and many did so. Meetings of the League were used by Morris to maintain personal contact with his employees and according to Exell it was seen as an alternative to trade unionism.(1)

Similar, although not always such extensive provisions were made by other firms. Vauxhall paid a generous Christmas bonus which not infrequently amounted to £50 during the late 1930s. Pressed steel supported a Rugby Union club and a choir, as well as providing welfare facilities. It also supported protection through the League of Industry, though not with as much fanfare as Morris.(2)

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(1) Arthur Exell, "Morris Motors in the 1930s. Part II: Politics and Trade Unionism", loc. cit.; P.W.S. Andrews and E. Brunner, op. cit. p. 25-6; R.C. Whiting, op.cit. p. 148-50.

(2) Len Holden, op.cit.; R.C. Whiting, op.cit.p.172-4. The provision of welfare facilities by Pressed Steel was lacking in some respects, there being no adequate canteen until after 1934.

A less well-known example is that of Leyland Motors, which ran a tool purchase club, a library, benevolent fund, holiday and savings clubs and financed an annual works outing as well as providing sporting facilities.(1)

One should not, however, over emphasise the extent to which motor manufacturers committed themselves to welfare capitalism. Morris, in spite of his extensive provisions for his workers, was suspicious of it and stressed the importance of the cash nexus when he told the Oxford Times that the basis of good relationships at work was "a good day's wage for a good day's work."(2) Morris elaborated on this view in two articles he wrote for the journal System in 1924:

> "To keep down costs, you must have a staff of workers who are interested. My experience is that if you look after your men they will look after you. A low wage is the most expensive way of producing. A moderately high wage is the cheapest."(3)

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(1) In 1927 the works outing sent 2,000 to London at a cost to the company of £1,000. Leyland Motors Employees Guide (1928) Copy in T.U.C. Library; "Report of Proceedings at a Works Committee at Leyland Motors During 1927." Copy in T.U.C. Library.

(2) Oxford Times 28 Jan. 1927.

(3) W.R. Morris, "Policies that Have Built the Morris Business", originally published in System Feb., March 1924; reprinted in Journal of Industrial Economics No. 2 (1953-4).

In this his views were similar to those of Ford, who, while believing that management had a duty to foster a fruitful partnership with the workforce by relieving the workers of "cares and worries which might tend to reduce his efficiency at work" also stated that

> "The relation between the employer and the employee is not in the least a sentimental one and the artificial creation of good feeling only tends to obscure the real objectives."(1)

Ford and Morris firmly believed in the incentive effect of high wages. In Ford's case the inspiration for a high wage policy, i.e. the introduction of the "five-dollar day" at Detroit, probably came from the man who ran Ford's British operation, Percival Perry. (2)

High wages can also be seen as a response to specific needs. When Ford raised wages at Highland Park, Detroit

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(1) Ford Motor Company Ltd., A Study in Practical Sociology (Dagenham 1937) quoted in H. Friedman and S. Meredeen, op.cit. p. 20-21; Henry Ford, Moving Forward (1931) p.45.

(2) Perry, when setting up the Trafford Park factory in 1911 found as a result of his own investigations that an adequate family wage was £3 per week, or 1s 3d per hour. This became the minimum wage in the plant. It compared with an average hourly rate for unskilled labour in Manchester generally of 6½d per hour. Perry described his wages policy to Ford when the latter visited in 1912. Allen Nevins and Frank Ernest Hill, Ford, The Times, The Man, The Company (New York 1954) p.540.

in 1914 to the famous "five dollars a day", he was faced with a massive labour turnover problem. It has also been suggested that the new rates - which effectively doubled wages - were a counter to campaigns being mounted by the Industrial Workers of the World.(1) In Britain, high wages attracted labour to the remoter centres, e.g. Oxford, Luton, Dagenham. There is also a possible parallel between Ford and Morris in relation to the union threat since Morris raised wages during 1925 just in time to stifle a union recruitment campaign being mounted by the Oxford Trades Council.(2)

The hiring policies of some motor manufacturers were also such as to restrict trade unionism in their plants. Austin was not prepared to obtain labour through trade unions and he also avoided using labour exchanges, preferring to advertise in the local press.(3) Morris and Pressed Steel asked applicants whether they were trade unionists and while both companies denied that they did

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(1) Huw Beynon, Working for Ford, op.cit. p. 19-25; A. Nevins and F. E. Hill, op.cit. p. 517-22. However, Nevins and Hill argue that the I.W.W. had "shot its feeble bolt long before the wage decision" p. 537.

(2) Wages were raised to a level which exceeded union district rates, so that workers could be told that the union would only succeed in reducing their pay. R. C. Whiting, op.cit. p. 140.

(3) Birmingham Trades Council, Minutes of an Executive Committee Meeting, 27 April, 1927.

this out of a desire to discriminate against members, it led to fears of victimisation among workers.(1) In addition, it was common practice to promote men from the shop floor to supervisory and sometimes eventually to managerial positions. In a number of cases this took trade unionists away from the shop floor. At Vauxhall at least one originally staunch trade unionist became general production manager and in 1921 the A.E.U. complained that the firm had induced men to leave the union by offering them supervisory jobs.(2) A number of workers, some of whom were trade union members, were promoted to supervisory posts at Morris Radiators and Morris Motors during the 1930s.(3)

There is also evidence of more direct opposition to trade unionism on the part of some employers. Much of this opposition probably arose out of specific circumstances; for example, Austin's actions during the early 1920s and following the General Strike reflected the need to adjust to changing market circumstances and new technology.

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(1) A.E.U. Journal Dec., 1933, O.D.D.'s Report, division 18.

(2) Len Holden, op.cit.; Report of Central (York) Conference 8 April, 1921.

(3) Arthur Exell, op.cit.; P.W.S.Andrews and E.Brunner, op.cit. p. 15.

Nevertheless, anti-unionism was also based to some extent upon principle, a strong insistence upon freedom of management. Ford's view was that

> "Business holds no place for democracy, if by democracy is meant the shaping of policies by the vote of a large number of people or their delegates ... My conception of democracy in management has to do with the recognition of ability and with clearing the way for the advancement of each man according to his capacity." (1)

His early attitude towards trade unions was that they were tolerable as long as they did not try to operate in his establishment, where they were unnecessary. Thus;

> "There is nothing that a union membership could do for our people. Some of them may belong to unions, probably the majority do not. We do not know and make no attempt to find out, for it is a matter of not the slightest concern to us. We respect the unions ... In turn I think that they give us respect, for there has never been any authoritative attempt to come between the men and the management in our plants. Of course radical agitators have tried to stir up trouble now and again but the men have regarded them simply as human oddities ..." (2)

However, during the 1920s and 1930s Ford adopted a policy of open aggression towards trade unionism in his American plants. The notorious Service Department was developed in order to winkle out trade unionists and to prevent the

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(1) Henry Ford, Moving Forward, op.cit. p. 148

(2) idem., My Life and Work (1922) p. 262.

emergence of organisation through the use of intimidation and violence and Ford steadfastly refused to comply with Section 7a of the 1933 National Industrial Recovery Act which required that employers should allow their workers to organise and bargain collectively. Sidney Fine quotes a U.S. government lawyer reporting on the events surrounding a strike of Ford workers in 1933;

> "No person can read the records in this case without being convinced beyond any doubt, reasonable or otherwise, that the Ford employees were restrained, coerced and interfered with in their efforts to organise for their mutual benefit and protection."(1)

The hostility displayed towards unions by the management of Ford in Britain never approached that of its American counterparts but it reflected the general prejudice against organised labour which existed throughout the Ford enterprise. When Ford set up operations in Manchester in 1911 a number of woodworkers and sheet metal workers were hired who happened to be trade unionists. When the Amalgamated Society of Carpenters and Joiners and the General Union of Braziers and Sheet Metal Workers sought to negotiate conditions for their members they were firmly rebuffed, the management refusing to meet them. Ford

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(1) J.C.Randall, attorney for the Compliance Division of the National Labour Board, quoted in Sidney Fine, "The Ford Motor Company and the N.R.A.", Business History Review Vol. 32, No. 4 (1958) p. 353-85.

himself claimed that when the A.S.C. & J. called its members out on strike they refused to respond and were expelled from the union and that "this marked the end of interference by trade union officers with our operations in England".(1) During the strike at Dagenham in 1933, Percival Perry refused to meet trade union officials and after the strike had ended the chairman of the strike committee was sacked.(2) The suspicion with which Ford's management viewed organised labour was also shown in the terms of the recognition agreement signed with the T.U.C. in 1944 in its insistence upon dealing only with national officials and the absence of any procedure to deal with collective grievances among Ford workers at Dagenham.(3)

It has been said that William Morris was not concerned about the existence of trade union organisation in the firms which he acquired during the 1920s and 1930s; a number of these belonged and continued to belong to the Engineering Employers' Federation. Because of his personal involvement at Cowley however, he was opposed to the idea of having trade unions in his main works.(4) At Cowley,

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(1) Henry Ford, My Life and Work, op.cit. p. 263; General Union of Braziers and Sheet Metal Workers Annual Report 1914.

(2) Labour Research Vol XXII, 4(April, 1933) p. 89; A.E.U. Journal Nov., 1933, O.D.D.'s Report, division 20.

(3) See above, p. 120-21.

(4) P.W.S.Andrews and E.Brunner, op.cit. p.14. The N.U.V.B. was represented at Hollick and Pratt, a supplier of bodies for Morris which had been purchased in 1922 and were on negotiating terms with the management. N.U.V.B. Quarterly Journal Oct.-Dec., 1928, Midlands and South-West District Report.

Morris "insisted on dealing with the men personally if a dispute arose ... the idea that his own paid workmen should dictate what was to happen in his works made him especially war-like."(1) There is some evidence that during the 1920s Morris took active steps to rid himself of trade unionists at Cowley. In April, 1926 the N.U.V.B. disaffiliated from the Oxford Trades Council because many members had been forced to leave town, those in favour of affiliation being dismissed by Morris.(2) Morris is also alleged to have sacked the first man at the works to put his name down as a shop steward.(3)

The management of Austin Motors, being signatories to the 1922 Engineering Procedure agreement, were not in a position to refuse to deal with trade unions completely. Nevertheless, Austin showed considerable independence in industrial relations matters. He regarded himself as a model employer and was vehemently opposed to trade union restrictive practices, arguing that trade unions had to adapt to industrial change.(4) His aggression during 1922 and 1926 have already been mentioned- he also refused to recognise the Engineering Shop Stewards Agreement until

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(1) R.Jackson, The Nuffield Story (1964), p. 93.

(2) Oxford Trades Council Minutes 21 April, 1926. This probably explains why N.U.V.B. members at Morris worked through the General Strike. See above, p. 268 .

(3) Arthur Exell,"Morris Motors in the 1930s:Part II," op.cit.

(4) Roy Church,Herbert Austin.The British Motor Car Industry to 1941.op.cit. p.156.

1929. Following the strike of that year, Austin agreed to implement the agreement and even set aside a room in the works for the use of the shop stewards' committee. However, in the following year the A.E.U. alleged that Austin was discriminating against shop stewards by dismissing them and transferring them around the plant. These allegations appear to have had substance since the matter was referred to a conference with representatives of the Birmingham Engineering Employers' Association, who obtained an undertaking that the firm would abide by the Shop Stewards' Agreement in future.(1)

How important was this mixture of paternalism and repression in stifling trade unionism in the motor industry? There is a good case for saying that while high wages certainly detracted from the appeal of the unions, overt management hostility on the one hand and welfare provision on the other had effects which are more difficult to calculate and probably less than is commonly supposed.

In the first place, there are some indications that there was a diminishing amount of victimisation in the

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(1) A.E.U. Journal May, 1929, O.D.D.'s Report, division 17; N.U.V.B. Quarterly Journal July-Sept., 1929, Midlands and South-West District Report; A.E.U.Journal August, 1930, O.D.D.'s Report, division 17. The Engineering Shop Stewards' Agreement was signed by the A.E.U. and the E.E.F. in 1919.

leading companies during the 1930s. While Morris is remembered as having sacked two workers who put themselves forward as shop stewards, Arthur Exell's memoirs give the impression that many active union members were left alone. Exell wondered why Danny Evans, a Communist who used to try and recruit for the A.E.U. at Morris Radiators, never got the sack, but Exell himself wore a union badge from the mid-1930s and, in spite of his fears when he joined the A.E.U., was not victimised before the Second World War. It is thus possible that the threat of victimisation was more apparent than real.(1) Sir Miles Thomas wrote that Morris' attitude towards organised labour relaxed during the mid-1930s and that he "did not try to swim too hard against the tide."(2) Furthermore, the managements of Morris and Pressed Steel told the A.E.U. in 1933 that there was no reason for anyone to fear for his job because he was a union member.(3) Yet union membership at Morris remained low and remained very incomplete even during the war, when tight labour markets

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(1) Arthur Exell, op.cit. Communists appear to have been treated more harshly than trade unionists. Exell, "Morris Motors in the 1940s", History Workshop 9 (Spring, 1980) p. 90-114.

(2) Sir Miles Thomas, "A Study of Lord Nuffield's Life and his Influence on Production Methods in the Motor Industry", Proceedings of the Institute of Production Engineers 18 Nov., 1964.

(3) A.E.U. Journal Dec., 1933, O.D.D.'s Report, division 18.

must have reduced fears of victimisation.

Moreover, when one looks at the motor industry as a whole, it is clear that the majority of firms became prepared to develop a relationship with trade unions. Unions representing bodymakers for example, were on negotiating terms with management at Standard, Rover, Daimler, Armstrong-Siddeley and other Coventry firms; with Leyland Motors at Preston and Austin at Longbridge.(1) Yet the general level of organisation at these firms left a lot to be desired.(2)

Conversely, the provision of welfare benefits which may have been designed to forestall labour unrest and trade union activity did not prevent the rise of organised militancy at Pressed Steel, Ltd. In this case the occurrence of frequent conflicts over piece-work and poor conditions compared with the Morris assembly plant, together with a relatively high proportion of skilled workers, overcame the anodyne effects of organised welfare provision.

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(1) N.U.V.B. Executive Council Minutes, Coventry branch Minutes; N.U.S.M.W. Coventry branch Minutes.

(2) Standard was only semi-organised by the outbreak of the Second World War. R.Croucher, op.cit. p. 202. Many firms were less well organised than this, as the overall estimates in Chapter Three show.

It may be concluded from the foregoing discussion that managerial hostility towards trade unionism was not a constant factor holding back the development of organisation and moreover, that when most effective it was not independent of other influences. That is, the attack on trade unions during the early 1920s, which had a lasting impact on organisation, arose not merely from the prejudices of individuals but from the crisis of adaptation facing the industry. The need to develop modern methods of production in order to survive and grow led to a battle for control which, given the generally depressed state of the labour market, the unions could not help but lose.

During the 1930s this legacy, together with the continued antipathy towards trade unions shown by a number of major employers made workers nervous of joining trade unions and more seriously, discouraged the emergence of leadership on the shop floor. Hard-liners, notably Ford, appear to have continued actively to discourage well into the Second World War, since in 1943 shop stewards at Ford's Dagenham factory wrote to the Ministry of Labour complaining of victimisation.(1) However, from 1933

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(1) Letter from the Hon.Sec. of the Ford Shop Stewards' Committee to the Regional Industrial Relations Officer, 20 August, 1943, P.R.O.LAB 10/274. Nevertheless, the fact that such a committee existed indicates that the practical effect of such hostility had been diminished considerably.

onwards the existence of high wages and good basic working conditions, rather than other facets of the labour policies of employers, kept motor workers out of trade unions.

In this chapter, consideration has been given to a number of influences which may have accounted for the relative weakness of trade unionism in the motor industry after allowing for the effects of movements in the economy as a whole. In assessing the relative importance of these forces, it is helpful to make some comparisons with the aircraft industry.

It has been noted that aircraft manufacture, another "new industry", remained much better organised during the inter-war years than did motor manufacture and that during the war, organisation was to some extent transmitted from aircraft plants to automobile factories. This differential experience may be explained by reference to a number of points of comparison between aeroplane and automobile manufacture. To start with, wages and working conditions in the aircraft industry were good and while earnings were not perhaps as high as they were in motors, they compared favourably with most other occupations. In fact, in the light of the comments made above concerning the earnings figures for the motor industry and given the absence of

Table 4.10 Average Earnings of Adult Males in the Aircraft Industry, Motors and General Engineering

Year	Aircraft	Motors	General Engineering
1924	54s 7d	63s 0d	53s 0d
1928	60s. 0d*	62s 1d*	56s 0d
1931	58s 10d	61s 8d	51s 8d
1935	74s 10d	78s 5d	-

* all workers

Source: Ministry of Labour Gazette Sept., 1926; Nov., 1929; Jan., 1933; April, 1937; Department of Employment and Productivity, British Labour Statistics 1886-1968: Historical Abstract, op.cit. Tables 39-40.

seasonal fluctuations in demand for aircraft, the difference in yearly earnings of aircraft and motor workers was probably less than that indicated in Table 4.10.

General working conditions were probably better than in motors owing to the relative absence of line assembly and pressure for "speed-up" before 1938. On the other hand, aircraft firms did not concern themselves with employees' welfare as did some motor firms.(1)

(1) P. Inman, Labour in the Munitions Industries, op.cit., p. 261-2.

Generally, differences in wages and working conditions do not by themselves appear to have been sufficiently great to explain the differences in the level and stability of unionisation between the two industries. However, more stable employment in the aircraft industry, owing to the absence of seasonal fluctuations in demand undoubtedly aided the maintenance of organisation.

Employers' relations with trade unions were, on balance, more amicable in the aircraft industry than in automobile manufacture. To some extent this may have been because firms working on government contracts were constrained in their labour policies by the operation of the Fair Wages Clause and may have been under more pressure to recognise unions. Where aircraft firms did take an antagonistic stance (and it is significant that the chief example was De Havilland, the firm least reliant on government orders) they were able to hold back the progress of trade union organisation in their plants.(1) Moreover as more independent firms, which were outside the "ring" and hence the scope of government control, entered the industry during the late 1930s, organisational difficulties began to be experienced. The major difference in this respect however, was that there was no critical attack on

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(1) See above, p. 169 .

union organisation during the early 1920s since, unlike motor firms, aircraft companies faced no imperative need to incorporate rapid technical change in order to protect their market shares. The parcelling out of government orders and the limited scope for technical progress in manufacture meant that no confrontation over the employers' freedom to manage occurred in the aircraft industry generally during the early 1920s. Hence organisation was better able to survive and a stronger basis for later growth was maintained.

The other crucial difference lay in the structure of the workforce. It is noticeable that, as was the case in the motor industry, anti-union policies worked best in areas relatively isolated from traditions of industrial work and trade unionism, e.g. outer London, where De Havilland and Handley Page and Fairey were able to limit the growth of organisation until the mid-1930s.(1) However, a larger proportion of aircraft workers than motor workers were in close proximity to well-organised industries, for example shipbuilding and repairing in Southampton and

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(1) A.E.U. Quarterly Report March, 1923; June, 1925; Sept., 1929, Abstract Statement; Journal August, 1924; Feb., 1925; Feb., July, 1930, O.D.D.'s Report, division 25; Journal Nov., 1933, O.D.D.'s Report, division 19; July, 1934, O.D.D.'s Report, division 20; April, 1935, National Organiser's Report; Dec., 1935, O.D.D.'s Report, division 20. Also see above, p.168-9.

Portsmouth.[1] This probably boosted overall levels of unionisation in the industry. Yet strong organisation also developed in less likely areas, e.g. Gloucester and Cheltenham. This would seem to point to the skill composition of the workforce as being the main factor explaining different levels of unionisation in the motor and aircraft industries. As shown above, a much higher proportion of aircraft workers than motor workers were skilled. Given the economic climate of the 1920s and 1930s skilled workers were more likely to join trade unions than less-skilled operatives for a number of reasons. Because of the operation of apprenticeship they could be drawn into trade union organisation relatively easily; the desire of craftsmen to protect their status gave them a higher propensity to unionise; closer identification with the content of their work and the solidarity promoted by the sense of belonging to a craft made skilled workers less susceptible to the seduction of high wages than other workers, who were more easily bought off. Skilled workers also enjoyed more regular and secure employment and were less easily victimised. Finally, the higher proportion

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(1) In Southampton shipbuilding was the largest industrial occupation followed by building and aircraft manufacture. In Portsmouth, shipbuilding and aircraft work were the two most important sources of industrial employment. The position of shipyard workers in Portsmouth was strengthened by the amount of work done in Royal Navy establishments since cuts in defence expenditure fell chiefly on private firms. M. P. Fogarty, Prospects of the Industrial Areas of Great Britain, op.cit., p. 410-11.

of skilled men among aircraft workers than motor workers meant that more of the former than the latter attracted the attention of trade unions during the 1920s and 1930s. In this context it is significant that union organisers began to experience difficulties in the newer sections of the aircraft industry during the late 1930s, just as dilution began to get under way. Thus 70 per cent or more of the aircraft workers employed by Austin, Bristol A.C., Vickers and Short Bros. in 1938 were semi-skilled or unskilled operatives.(1)

It may be concluded that in the generally difficult circumstances facing trade unions during the inter-war years, changes in the structure of the motor industry exerted a powerful effect in weakening labour organisation. Technical progress was central to this change. It was the major force leading to industrial concentration. It provided the main basis for the attack upon trade unionism during the 1920s; it resulted in a rapid growth in the proportion of semi-skilled workers employed in the industry;

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(1) "Statement on Production and Employment in the Aircraft Industry, 31 July to 31 December, 1938", P.R.O. AVIA 10/18.

and it made possible the large increases in productivity which permitted earnings to rise above those in other occupations.

VI

It has already been shown that the Second World War saw a noticeable improvement in trade union organisation and its effectiveness in the motor industry and much of the aircraft industry; and that this was associated with wider recognition of trade unions by employers. Yet by the end of the war unionisation of motor workers was still incomplete, rather less than half of the labour force being members. This outcome was the result of changes in the economic and socio-legal environment which favoured trade union growth in general, and the relaxation but not the removal of many of the constraints on unionisation which had operated within the motor industry.

On a general level the underlying factors encouraging union growth and the extension of organisation in hitherto weakly organised sectors of manufacturing were the extremely tight labour market which developed as a result of the war effort, the Government's need to obtain the co-operation of organised labour in raising production and the pressure on firms to meet the orders placed with them under Government contracts. Unemployment fell from 9.7 per cent of the insured work force in 1940

to under 1 per cent by 1943. Shortages of skilled labour, which had already begun to develop in Coventry before the war, became universal during 1940. Firms began poaching skilled workers from each other by offering higher wage rates and in firms working on aircraft orders matters were made worse by the frequent modifications made in aircraft design. These meant a lot of re-tooling and re-jigging in preparation for the production of modified components and necessitated a larger pool of skilled labour than would have been required if longer production runs had been possible.(1) By 1942 however, the problem of skilled labour, while still acute, had been submerged in a general shortage and the Ministry of Aircraft Production began complaining of inadequate supplies of all classes of labour.(2)

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(1) 75 types of aircraft were available to the Royal Air Force up to the end of 1942. Only eight of these were produced in batches of more than 5,000. R. Higham, "Quantity vs Quality: the Impact of Changing Demand on the British Aircraft Industry, 1900-1960," Business History Review Vol. XLll, 4 (Winter, 1968).

(2) "Labour for the Aircraft Industry, 1942-3 : Survey of Labour Requirements March, 1942-Feb., 1943, submitted to the Production Committee, 21 April, 1942" P.R.O. AVIA 9170; Letter from J. Llewellyn to Bevin, 4 Nov., 1942 P.R.O. AVIA 9/45; "Labour Problems in the Aircraft Industry" minutes of a conference held on 4 Feb., 1940, P.R.O. AVIA 10/18.

The government's response to these difficulties was to exert a growing amount of control over the movement of workers so as to ensure adequate supplies of labour in the most essential areas and ultimately, to conscript labour into industry. In June, 1940 as a result of the widespread poaching of skilled workers, the Undertakings (Restriction on Engagement) Order was issued to prevent employers from advertising for skilled workers in the newspapers and compel them to apply to labour exchanges and trade unions.(1) However, while this limited the extent of poaching it could not ensure a flow of labour from non-essential to essential war work and it could not prevent a reverse flow as workers changed their jobs. Hence on 5 March, 1941 the government issued the Essential Works Order, which gave Ministry of Labour officials the power to prevent workers from leaving their current employment and required all skilled workers to be registered so that they could be directed into

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(1) H. Pelling, A History of British Trade Unionism, op.cit, p.213.

essential work as they were needed.[1] Transferring labour from one part of the country to another and between jobs could, however, result in a loss of earnings and opposition was mounted by the engineering unions. In order to overcome this problem the Engineering Employers' Federation was persuaded in June, 1941 that its member firms should make up any loss of earnings sustained by men who had been transferred to areas where district rates were lower than in those from which they had come.[2]

In the same year the Registration for Employment Order compelled all men over military age (i.e. over 41 years) and women over twenty to register themselves as available for war work. Initially the emphasis was upon conscripting young single women but by 1943 women

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(1) M.M. Postan, British War Production (1952) p.150. The fact that it was a government official rather than the employer who was empowered to refuse permission for a worker to change his job avoided the opposition to restrictions on labour mobility which had arisen as a result of the Leaving Certificate scheme during the First World War.

(2) J. Price, Labour in the War (1940) p.111-2.

of up to fifty years of age were being directed into the factories. By this time however, the limits of available labour supply had been reached and more attention was given to setting priorities in labour utilisation and ensuring its most efficient use. Thus during 1943 Stafford Cripps, Minister of Aircraft Production met with representatives of workers and management engaged in aircraft manufacture and stressed the importance of examining how labour was being deployed in individual establishments, upgrading workers to the fullest possible extent, employing part-time labour and training new entrants.(1)

Government regulation of the labour market did not, however, extend to formal control over wages. The experience of 1914-1918 suggested that attempts at control were ineffective, discredited the official trade union leadership and promoted industrial unrest.(2)

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(1) "Report of A Meeting Between the Rt. Hon. Sir Stafford Cripps (Minister of Aircraft Production) and Delegates from the Management and Workers' Sides of Firms in the Aircraft Industry, held in London on 21 Sept., 1943." (Copy in T.U.C. Library).

(2) P. Inman, Labour in the Munitions Industries, op.cit. p.315. In 1940 Arthur Greenwood proposed a four-month wage freeze to be followed by regular pay reviews by a central arbitration tribunal but this was opposed by Ernest Bevin, who argued that the central control of wages was impossible in the context of the private ownership of industry.

The rejection of formal wage control led the government to adopt a set of tactics which would cause trade unions to exercise voluntary restraint in pushing for increases. These comprised price control, frequent consultation with trade unions on labour issues so as to gain the co-operation of the leadership, and the exercise of indirect influence on wages through the terms upon which it issued contracts to private firms. Firms could be prevented from conceding ever-higher earnings by being forced to apply a maximum level of earnings as a basis for calculating labour costs on government contracts.(1) Conversely low-paying firms could be induced to raise wages.

As a consequence of this strategy, the system of peace-time bargaining was retained almost in its entirety throughout the war. Nevertheless, the desire to avoid production being disrupted by stoppages of work meant that strikes and lock-outs were declared illegal and a National Arbitration Tribunal, empowered to make binding awards in respect of disputed claims, was set up in July, 1940 under the Conditions of Employment and National Arbitration Order (Order 1305). In fact

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(1) During 1941-1943 the maximum was set as basic time rate plus 50 per cent piecework bonus. P. Inman, op.cit. p.326; C.S.E.U. Annual Report, 1943.

the N.A.T. quickly became the arbiter of national wage claims in engineering. The last privately negotiated national settlement of the war was concluded in February, 1940 when the Engineering Empoyers' Federation and the Engineering Joint Trades Movement agreed on an across-the-board increase of 5 shillings (25p) per week on national bonus for all adult males following the unions' claim for 10 shillings (50p).[1] Thereafter the E.E.F. refused to discuss any further claims, forcing the A.E.U. to refer them to the National Tribunal. Five arbitration awards were made by the N.A.T. between January, 1941 and April, 1945. They consisted of increases in national bonus, piecework allowances and basic rates.[2] These awards applied to the members of

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(1) The E.J.T.M. consisted of the A.E.U., National Union of Foundry Workers, and those unions represented on the C.S.E.U. Engineering Committee. See "Memorandum of Agreement Between the Engineering Employers' Federation and the Amalgamated Engineering Union; the National Union of Foundry Workers; and the Confederation of Shipbuilding and Engineering Unions," 6 Feb., 1940 in N.U.V.B. Quarterly Journal April-June, 1940.

(2) Three of the awards increased national bonuses. The third award, in March, 1943, Award 326, transferred 20s from national bonus to basic rates, added 6s (30p) to national bonus for time workers and raised the minimum piecework bonus from 25 per cent to 27½ per cent of basic rates. The last Award, in April, added 4s. 6d. (22½p) per week to basic rates. P. Inman, op.cit. p.341.

all unions represented within the Engineering Joint Trades Movement which were parties to agreements with the E.E.F.

These restrictions on labour were made acceptable to the trade union movement by the inclusion of clauses within Order 1305 and the Essential Work Order which effectively promoted the extension of collective bargaining and de facto union recognition. Order 1305, in addition to outlawing strikes and establishing compulsory arbitration of disputes, also made it compulsory for firms working on government contracts to observe trade union-negotiated conditions of work and to register all departures from existing trade practices, e.g. the employment of dilutees. The Order also specified that full use should be made of existing collective bargaining machinery. The Essential Work Order, in addition to restricting the freedom of workers to leave their jobs, also prevented employers from dismissing them without first obtaining permission from the Ministry of Labour.(1) Finally, as indicated in Chapter Two, government departments began to promote the formation of Joint Production Committees from 1942 onwards.(2)

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(1) H. Pelling, op.cit. p.214-5

(2) Cripps spoke in favour of J.P.C.'s at his meeting with representatives of the aircraft industry in September, 1943. loc.cit.

These developments directly encouraged the growth of union membership and the emergence of more effective organisation in motor and aircraft plants. As Turner et.al. have argued with respect to motors;

> "Wartime changes thus enabled the unions to make great headway in the car plants. Legal orders in any case made it difficult for firms to refuse trade unionists employment, obliged them to apply collective agreements and put them under some pressure to deal with the union workplace organisation. And the latter was also encouraged by the employers' desire for mutual co-operation in solving wartime production problems, and by government pressure for joint consultation at workplace level." (1)

To the extent that discriminatory hiring and blacklists were used by employers before the war, they became much less effective as a result of labour shortages and the protection of jobs afforded by the Essential Works Order. Thus a number of Communist Party activists allied with the Engineering Shop Stewards' Movement - the people who were probably discriminated against most widely - obtained work in the motor industry in Luton and Oxford during the war. Communist Party members were employed in the Tank Shop of Vauxhall Motors during 1941 and it was from here that pressure for unionisation within the firm began to

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(1) H. A. Turner et.al., Labour Relations in the Motor Industry, op.cit. p.194

spread during 1941-2.[1] It has also been recalled that it became easier for Communists to get work at Morris' plants in Oxford.[2] Nevertheless, there were limits to the extent to which such workers were allowed to build up support on the basis of opposition to managerial control. Two shop stewards associated with the Engineering Shop Stewards' Movement were removed from the Bristol Aeroplane Company's factory at Pine Mill, near Oldham, in 1943, following complaints from the management. The employers alleged that the men had been openly critical of management and that they had abused their positions on the Works' Committee, causing a deterioration in industrial relations at the plant which culminated in two strikes in September and November. A Committee of Inquiry appointed by the Minister of Labour, while accepting that the two stewards had voiced genuine grievances on behalf of the workers they represented, found that they held "strong political views which were pronouncedly hostile to the management of industry except by shop stewards" and that they had

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(1) Len Holden, op.cit.

(2) Arthur Exell, "Morris Motors in the 1940s", History Workshop 9 (Spring, 1980) p.90-115.

been unfairly critical of the management. As a result, one of the men was drafted into the Royal Navy and the other was given a full-time job with his union - the A.E.U.[1]

There is evidence to support the argument that pressure on firms to complete orders on time encouraged managements to adopt a more positive attitude towards trade unions and works committees. One of the most important ways in which employers came to view union organisation in the workplace more favourably was through their desire to improve discipline among their workers, especially dilutees and conscripts. Indiscipline at work was a major problem during the war. Unpunctuality, drunkenness and "skiveing" were common, and so was absenteeism.

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(1) "Report of a Committee of Investigation Appointed by the Minister of Labour and National Service, January, 1944", P.R.O. LAB 10/279 IR 2813/1943. It should be said that the attitude of the management towards stewards was restrictive, e.g. they were not allowed to have a noticeboard in the works, the management refused to change the composition of the Works Committee in spite of the fact that a number of the worker representatives had become charge-hands since their appointment to the Committee, the management was slow to implement new agreements, and that both men were strongly supported by their union, the A.E.U.

These difficulties resulted from long hours of work, a rapid work-rate and from general tensions associated with the disruption of people's private lives. In an attempt to improve the situation the Production Efficiency Board tried to persuade firms to pay more attention to welfare and personnel management. Major aircraft firms did begin to appoint personnel managers and improvements were made in safety at work. Nonetheless, there were few signs of a reduction in absenteeism.(1) There is no doubt that long hours, intensive work and the more generally harmful effects of the war upon individuals generated grievances which could not be anticipated and dealt with in advance by even the most enlightened management. Hence many employers approached trade unions and works committees in their plants with requests that they help to maintain discipline on the shop floor. At Morris Radiators the management agreed to set up a Joint Production Committee and (informally) to place no obstacles in the way of development of 100 per cent union membership so long as the unions reduced the very high rate of absenteeism among women in the works, which was drawing unfavourable

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(1) P. Inman, op.cit. p.261-2; R. Croucher, op.cit. p.93.

comment from the Ministry of Aircraft Production.(1) Similar considerations must have encouraged the wider acceptance of Joint Production Committees during 1942-4.

It has also been suggested that Order 1305 persuaded some employers to concede recognition in order to avoid outside intervention in their firms' affairs. G. S. Bain comments that

> "....it was possible for any union, recognised or unrecognised, to request the Minister to refer a firm to the (National Arbitration) Tribunal for an award on wages and working conditions. Simply by being involved in the determination of these conditions, the unions were being given a form of implicit recognition. More important, when faced with the possibility of having a wage structure imposed by a third party, many employers felt it was better to recognise the union and determine the firm's wage structure by collective bargaining." (2)

There are indications that these considerations were relevant to the granting of recognition in some major motor companies. During 1941 A.E.U. members at Ford's "shadow" factory in Manchester, which was producing

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(1) Arthur Exell, "Morris Motors in the 1940s", loc.cit.

(2) G. S. Bain, The Growth of White-Collar Unions (Oxford University Press 1972) p.158.

aero engines, were able to use Order 1305 to put pressure on the firm *via* the Ministry of Labour and obtain recognition of the union. At the end of the year the management signed an agreement with A.E.U. officials and shop stewards recognising the union's right to bargain on behalf of its members. During 1942-3 recognition was gradually extended to all of the other unions represented at the works.(1) At Dagenham, the 1941 Briggs' Bodies strike led to the appointment of a Court of Enquiry which forced the company to concede a limited recognition to the union representing workers in its engineering division. This encouraged further efforts on the part of trade unions to establish full recognition and proper grievance procedures.(2) Moreover, as the management at Briggs gained experience of dealing with shop stewards, they became readier to consult them on matters affecting labour and production.(3) Trade union organisation also

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(1) A.E.U. *Journal* Dec., 1941; Jan., June, 1942, O.D.D.'s Report, division 11; C.S.E.U. *Annual Report* 1943, Manchester District Report.

(2) See above, p.116-8.

(3) A.E.U. *Journal* Sept., 1942, O.D.D.'s Report, division 25.

began to be built up at the Ford plant at Dagenham, with shop stewards being elected from among the workforce during 1943. In August, Ford shop stewards presented complaints of discrimination against trade unionists to the Ministry of Labour's Regional Industrial Relations Officer and early in 1944 the Fairlop branch of the A.E.U. in Ilford wrote to Ernest Bevin demanding that Ford be placed under government control in view of "the treatment meted out to shop stewards and other active unionists".(1) These communications were undoubtedly relevant background to the negotiations between Ford and the T.U.C. conducted during February to April, 1944, which led to the signing of the "arms length" agreement. It is also likely that the possibility of outside interference following a short strike in the Tank Shop at Vauxhall Motors persuaded the management to set up a Management Advisory Committee upon which trade union representatives constituted the worker's side and to formally recognise the A.E.U., N.U.V.B. and E.T.U. in 1942.(2)

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(1) Letter from the Hon.Sec., Ford's Shop Steward's Committee to Regional Industrial Relations Officer, 20 August, 1943; Regional Industrial Relations Officer Weekly Report 19 May, 1944; Letter from A.E.U. Fairlop Branch to E. Bevin, 25 Feb., 1944. All in P.R.O. LAB 10/274.

(2) A.E.U. Journal Oct., 1941, National Organiser's Report; Len Holden, op.cit. Holden cites a Vauxhall worker as recalling that the Management Advisory Committee was set up on the advice of Bevin as a means of dealing with production problems.

There is less evidence that these pressures exerted much influence at Morris Motors. The decision to ballot the work force on the question of union recognition was not, according to the available evidence, associated with any stoppages or representations from trade unionists to the Ministry of Labour. As mentioned above, Exell recalls that at about this time Morris Radiators was having trouble with absenteeism and was under some pressure from Stafford Cripps and that this led to the establishment of a Joint Production Committee, but how far this affected the Morris assembly plant is unclear. Moreover, if Morris wished to avoid outside interference by recognising trade unions he acted rather oddly, since once recognition had been conceded the firm affiliated to the E.E.F.(1)

It is impossible to say how crucial pressure from the Ministry of Labour was in pushing managements into recognition agreements. In most cases it is more likely that it was a significant factor in the background to the decision to recognise unions than that firms caved in under direct threats from Bevin. Together with labour shortages and pressure on production which in any case encouraged de facto recognition, it undoubtedly tipped the balance in favour of the unions.

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(1) See above p.116.

Nevertheless, such pressure was rarely, if ever, exerted in the absence of agitation from below and recognition was preceded by organisational build-ups at Vauxhall, Ford and Morris, as exemplified by the A.E.U. branch membership figures below.(1)

TABLE 4.11 A.E.U. Membership in Bedford, Luton, Dagenham, Ilford and Oxford, 1939-1946 (1)

	1939	1941	1943	1944	1945	1946
Bedford	1081	1910	2817	2696	2595	2787
Luton	2099	2137	3726	3367	3490	4722
Dagenham	479	502	3177	3106	2145	4625
Ilford	451	448	974	1171	977	1140
Oxford	832	1360	3444	3024	2352	3128

(1) All figures are for December, with the exception of 1941, when they are for June.

Source. A.E.U. Half-Yearly Reports.

(1) The figures also show that in the case of Ford and its associates recognition was not immediately followed by further growth of membership. This does not mean that recognition was unimportant, however, since production and employment began to fall off during 1944-5, leading to a general drop in union membership. More indicative is the 1946 figure for Dagenham. Membership upsurges in Luton and Oxford during 1943 point to the positive effects of recognition, although the absence of data for 1942 creates some uncertainty as to their size.

It is therefore necessary to consider why motor workers developed a stronger propensity to unionise during 1939-1943 than they had shown previously.

General movements in prices, wages and earnings probably aided union growth, although the "threat effect" of rising prices was mild and confined to the first year of the war. The Cost of Living Index jumped by 20-21 per cent during 1939-40 and some items rose in price by much more than this, e.g. clothing nearly doubled in price between September, 1939 and December, 1941. However, the general cost of living as measured by the index remained stable from 1940 onwards, reflecting more effective rationing and price control and less inflationary methods of war finance compared with the First World War.(1)

The increase in prices was probably matched by rising earnings during 1939-40. Earnings figures for 1939 are not available but the average for adult male manual workers in all industries rose by 29 per cent between October, 1938 and July, 1940. Thereafter, earnings continued to rise while prices remained steady.(2) There

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(1) Department of Employment and Productivity, op.cit. Table 89.

(2) ibid. Table 40.

was therefore little basis for the development of grievances arising out of pressure on real wages, a factor which contributed to the slower pace of union growth during 1939-43 than in the First World War. However, union membership benefitted from increases in basic rates, which were associated in many workers' minds with union activity. This association was particularly evident in engineering, including motors and aircraft, as a result of the National Arbitration Awards which applied to union members only. Thus Exell states that workers at Morris Radiators began to join the A.E.U. in large numbers during 1943 when they were told of Award 326, which raised basic time-rates by 6 shillings (30p) per week, minimum piecework earnings by between 6s 3d and 6s 8d (31½p and 34p) and consolidated part of national bonus into basic rates.(1) Union membership could therefore be seen as yielding direct, tangible benefits.

At the same time there developed grievances over wage issues which in a climate which had become more favourable to collective bargaining, encouraged unionisation. The provision that workers who had been transferred

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(1) Arthur Exell, "Morris Motors in the 1940s", loc. cit.; P. Inman, op.cit. p. 341.

from areas where district rates were relatively high to towns where they were lower should have any loss made up by their employer shook the complacency of some workers in lower-paid areas. They became restive when they found themselves working with newcomers who were receiving higher pay for the same jobs. Thus workers at Armstrong-Siddeley's plant in Manchester, when observing the rates paid to men transferred from Coventry, demanded increases to bring them into line. Similarly, the arrival at Morris Radiators of unionised sheet metal-workers from Wolverton who were paid at higher rates than those normally obtaining at Morris went some way towards breaking down the contentment of the Oxford men, who had hitherto seen themselves as the best-paid workers in town.(1)

In addition, disputes over piece-rates became more common, especially in firms working on Ministry of Aircraft Production contracts in the Midlands. Piecework grievances accounted for a rising proportion of strikes in Coventry, from 30 per cent of the total in 1941 to 70 per cent in 1944. In 1941 strikes over piecework accounted for the majority of workers who became involved in stoppages in

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(1) P.R.O. LAB 10/380; Arthur Exell, "Morris Motors in the 1940s", loc. cit.

Coventry and in 1943 9,000 Coventry workers struck when firms on aircraft work tried to reduce piece-rates on new designs.(1) During 1944-45, as pressure on production and the demand for labour ran down, firms tried to regain control over piecework earnings and this led to more widespread discontent. In Coventry, 11,595 workers were involved in piecework strikes in 1944 and this was probably an important factor in the continued growth of A.E.U. membership in Coventry during 1944, since its membership in the country as a whole began to fall in that year.(2) Even more workers - nearly 39,000 - struck against piecework reductions in 1945 but by this time the growing slack in the labour market prevented membership from rising.(3)

During 1939-41 a number of other grievances among engineering workers also helped to raise trade union membership and promote shop-floor organisation among motor and aircraft workers, especially in the Midlands. One

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(1) This attempt was largely the result of pressure from the M.A.P., which ordered firms to reduce the basis upon which they calculated labour costs from time rate plus 50 per cent to time rate plus 27½ per cent. C.S.E.U. Annual Report 1943, Coventry District Report; R.Croucher, op.cit. p. 213, 323-4; P. Inman, op.cit. p. 326.

(2) Membership of the A.E.U. in Coventry rose from 21,168 in December, 1943 to 22,520 in December, 1944. The union's total membership fell from 908,893 to 898,508. A.E.U. Half-Yearly Report, Dec., 1943; Dec., 1944.

(3) In fact it fell to 20,023 by the end of 1945. ibid. Strike statistics are from R. Croucher, op.cit. p.105-6.

such grievance was the tendency for the earnings of skilled time-workers to fall behind those of skilled and even semi-skilled piece-workers. Piecework earnings rose rapidly during 1939-40, causing discontent among skilled men on time payments. The problem was most acute in the tool-rooms and while the response of many was to leave these shops for more lucrative piecework, it must also have stimulated unionisation.(1) However, this issue was largely resolved by the National Toolroom Agreement of July, 1940 and the Coventry Toolroom Agreement of January, 1941.(2)

Trade union organisation, particularly at workshop level, was also greatly stimulated by grievances concerning the implementation of dilution and shortcomings in managerial efficiency which disrupted production during 1940-41. Dilution began to get properly under way during 1941 and female as well as male dilutees began to be employed more widely. The intention was that women should be employed on relatively light work, e.g. aircraft

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(1) The tendency for skilled men to shift to piece-work, even where this was semi-skilled was reported by the Ministry of Labour's Senior Technical Officer on Aircraft Factories and Manpower in 1941. P.R.O. LAB 8/374.

(2) See above, p. 214.

assembly, thus releasing men for heavier jobs, e.g. on tanks. However, it was reported that in Coventry men were just made redundant rather than being properly transferred.(1) In addition, problems of labour utilisation, shortages of raw materials and poor organisation of production disrupted work and led to lost earnings.(2) Grievances arising out of these problems were heightened when managements began to reduce payment for "waiting time", i.e. time spent idle as a result of hiccoughs in production.(3) These difficulties provided ammunition for the Communist Party and its industrial arm, the Engineering Shop Stewards' National Council, especially in Coventry where the stock of the C.P. was raised by its criticisms of Air Raid Precautions which appeared to be vindicated by the devastation caused by the November, 1940 blitz. Membership of the C.P. in Coventry rose noticeably during 1940-42 and its influence in the factories was extended.(4) Since

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(1) Jack Jones (T.G.W.U.) cited in James Hinton, "Coventry Communism: A Study of Factory Politics in the Second World War", History workshop 10 (Autumn, 1980), p. 90-118.

(2) Allegations of managerial inefficiency in firms producing for the M.A.P. were made in official circles; one Ministry of Labour official wrote as late as December, 1942 that "... we have had severely to criticise managements for faulty production methods and wasteful use of labour..." Of five cases referred to, "three were exclusively M.A.P. firms and one a 50% M.A.P. firm ..." Letter from Eastern Regional Office to Ince, 30 Dec., 1942. P.R.O. LAB 8/615.

(3) James Hinton, op.cit.

(4) Hinton shows that Coventry C.P. membership rose from 70 in November, 1940 to 320 in December, 1941, and continued to expand at least until September, 1942, when it stood at 1,500. The number of C.P. Factory Groups in Coventry grew from 10 in November, 1940 to 40 by September, 1942. Ibid.

in addition to politicising the workforce the C.P.'s aim was to build workshop organisation through the E.& T.S.S.N.C., this enhanced the growth of the workshop movement in Coventry and other major engineering centres. Unofficial agitation also prompted Coventry trade unions to give greater consideration to the problems of redundancies and loss of earnings due to hold-ups in production. Moreover, the T.U.C., worried by the growing strength of the unofficial movement in Coventry and other towns, began to put pressure on the government to give its support to Joint Production committees as a way of extending a measure of official control on the shop floor.(1) Thus agitation from below played a part in generating government pressure in favour of the extension of consultation in the workplace and de facto union recognition. Furthermore, J. Zeitlin has suggested that the growing influence of C.P. activists was an important means whereby workshop organisation and techniques of piecework bargaining were transmitted from skilled engineers to semi-skilled workers in the motor industry.(2) The

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(4) continued:
The E.&.A.T.S.S.N.C. voiced a number of specific criticisms of management at its Stoll Theatre conference in October, 1941. These were lack of work due to poor organisation of production, unexpected and extensive modifications to jobs, inadequate allocation of materials and low earnings on some piecework systems. This last point was presumably an outcome of the others. See "Arms and the Men", a report of the conference. (Copy in T.U.C. library).

(1) James Hinton, op.cit.

(2) Jonathan Zeitlin, "The Emergence of Shop Steward Organisation and Job Control in the British Car Industry: A Review Essay", History Workshop 10 (Autumn, 1980) p.119-37.

evidence presented in Chapter Three concerning the role played by skilled aircraft workers in spreading trade union organisation to motor plants lends considerable support to this view since it was largely among them that the Engineering Shop Stewards' National Council was built up during the late 1930s.

The extension of organisation among semi-skilled and unskilled workers was aided by the growing willingness of trade unions to organise them as dilution led to a rapid growth in the absolute and relative size of this section of the labour force. The noticeable shift which occurred in the skill composition of the workforce is indicated by the changing proportions of less-skilled workers employed in firms producing for the M.A.P. as shown below. About two-thirds of the workforce consisted of semi-skilled and unskilled workers by 1942 and by the beginning of 1944 the figure was probably at least 70 per cent. Thus by the beginning of 1944 approximately 1,500,000 workers in the motor and aircraft industries were unskilled and semi-skilled.(1) Within this group, the proportion of women

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(1) 1,821,000 workers were employed in the aircraft industry in January, 1944. The motor industry employed 400,000, excluding 135,000 in aircraft "shadow" factories managed by motor companies. It has been assumed that "shadow" factory employees were included in the total for the aircraft industry. Central Office of Information, The United Kingdom Aircraft Industry (1952) p.6-7;"Post-War Resettlement of the Motor-Car Industry" 23 March, 1945, P.R.O. AVIA 10/274.

Table 4.12. Semi-skilled and Unskilled Workers as a Proportion of the Labour Force in Airframe Establishments 1938 and 1942

Firm	1938 %	1942 %
Airspeed	47.9	68.6
Armstrong-Whitworth	31.2	51.9
Austin	87.1	79.1
Blackburn A.C.	49.6	62.0
Boulton Paul	25.2	49.6
Bristol A.C.	75.2	81.3
De Havilland	39.5	55.9
Fairey (Hayes)	33.2	43.6
Fairey (Stockport)	-	71.2
Gloster A.C.	56.3	70.4
Handley Page	38.1	55.6
A.V.Roe	52.0	73.0
A.V.Roe (Yeadon)	-	79.5
Rootes (Speke)	40.7	74.6
Rootes (Stoke)	-	89.0
Short Bros.	69.6	70.8
Supermarine Aviation	57.5	72.1
Westland A.C.	51.7	62.7

Source: P.R.O. AVIA 10/18; 10/267

grew especially rapidly as they came to replace semi-skilled as well as skilled men on light work.(1) By the

(1) Thus at Rootes' Speke works semi-skilled men were being replaced by women at the end of 1940. "Notes of a Visit to Messrs. Rootes' Aircraft Works at Speke on Monday, 21 October", P.R.O. LAB 8/308.

second quarter of 1942, women accounted for between 25 per cent and 37 per cent of the M.A.P. workforce in the various regions of Great Britain.(1) Overall figures for 1939-1945 presented by Inman are as follows:

Table 4.13 Women as a Percentage of the Labour Force in the Construction and Repair of Motor Vehicles, Cycles and Aircraft, 1939-1945

Mid-year 1939	9.5
" 1940	13.0
" 1941	23.0
" 1942	31.9
" 1943	36.6
" 1944	36.5
" 1945	31.8

Source: P. Inman, op.cit. p.80

Consequently over 800,000 women were employed in the motor and aircraft industries by the beginning of 1944.

Engineering unions were compelled to respond to this change. The T.G.W.U. and the N.U.G.M.W. had, of course, been active among these workers from the mid-1930s but they

(1) Directorate of Labour Manpower Survey, March-May, 1942, P.R.O. AVIA 9/70/5B 37113.

stepped up their efforts during the war. Membership of the Metal, Engineering and Chemical Trade Group of the T.G.W.U. rose from 124,887 at the end of 1939 to around 400,000 by the end of 1942, by which time women accounted for 24 per cent of the union's total membership.(1) Very little information is available concerning the membership of the N.U.G.M.W. but its female membership grew rapidly, from 70,000 in June, 1940 to 162,000 a year later.(2) There is evidence that the A.E.U. also began to recruit more enthusiastically among less-skilled workers. At the end of 1939 it opened a special membership section - Section 5a T.R.A. - for workers coming into the industry under the Temporary Relaxation Agreement signed with the E.E.F. in 1939.(3) In November, 1940 it set up a Youth Section to cater for young workers other than apprentices and at the end of 1942 it was decided to open a membership section for women and girls.(4) There was a significant amount of recruitment to these sections during 1940-1944.

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(1) T.G.W.U. M.E.C. Minutes 16 April, 1943.

(2) N.U.G.M.W. Biennial Conference Report June, 1942.

(3) The Temporary Relaxation Agreement was signed in August and provided for the substitution of semi-skilled for skilled men and for the employment of semi-skilled men to assist skilled men where this was necessary in order to meet production requirements. Semi-skilled men employed on work hitherto classed as skilled were to be paid to the district rate for skilled work; semi-skilled assistants to be paid at the semi-skilled rate operating in the particular shop in which they were employed. "Relaxation of Existing Customs", Report of the Executive Council of the A.E.U. to the National Committee, 1940.

(4) A.E.U. Journal Dec., 1940, General Secretary's Report; Dec., 1942, editorial.

Membership of Section 5a T.R.A. peaked at 44,963 at the end of 1943 and membership of the new Youth Section rose to 15,804. The most spectacular additions, however, were to the women's section, which had over 130,000 members at the end of the first year of its existence. However, there was a net addition of only 2,800 during 1945 as female employment dwindled rapidly towards the end of the war. In addition, membership of Sections 5 and 5a grew rapidly, their respective totals rising from 97,948 and 59,981 in 1939 to 191,487 and 161,321 at the end of 1943.(1)

Other unions also began to pay more attention to the semi-skilled section of the workforce although they made little impact in terms of organisation. The N.U.V.B. became concerned at the growing number of women employed in the motor and aircraft industries during 1942 and attended a conference with the E.E.F. to discuss the question. It was in 1942 that the first reference to the organisation of women in wartime appeared in the N.U.V.B.'s Quarterly Journal, when the Scottish District Organiser

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(1) A.E.U. Financial Report Dec., 1939-1045. It must be remembered however, that some of the membership of Sections 5 and 5a consisted of skilled workers. Unfortunately, insufficiently detailed membership records were kept during the war to enable an occupational breakdown of entrants to these sections to be compiled. However it is likely that a growing proportion were in fact semi-skilled and unskilled workers.

reported on the efforts of members to recruit a "large influx of female labour" in Edinburgh.(1) In the following year attempts were made to organise female aircraft workers in the North-West.(2) However, female membership of the N.U.V.B. never rose above one thousand during the war and more generally only 12,583 workers were recruited to the Industrial and Semi-skilled sections of the union between January, 1940 and September, 1944.(3)

The efforts of the National Union of Sheet Metal Workers and the Amalgamated Society of Woodworkers in this direction were indeed half-hearted. The N.U.S.M.W. decided, following its dilution agreement with the E.E.F. in 1940, that it was necessary to extend the scope of its Auxiliary Section so as

> "to enable branches to deal with applications for membership from all classes of workmen engaged in those industries in which sheet metal workers are engaged. The term Auxiliary Workers shall apply to those workmen connected with the sheet metal industries who are not skilled in the sense of having served an apprenticeship ... but are workmen employed in making or preparing parts for or in completion of articles made in sheet metal."(4)

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(1) N.U.V.B. Quarterly Journal April-June, 1942.

(2) N.U.V.B. Quarterly Journal April-June, 1943, Manchester and Liverpool District Report.

(3) N.U.V.B. Returns to the Registrar-General, P.R.O. FS/125; N.U.V.B. Quarterly Journal 1940-1944.

(4) A.T.Kidd, A History of the Tin-Plate Workers' and Sheet Metal Workers' and Braziers' Societies, op.cit. p. 275-6. Of course, women were still excluded.

No breakdown of membership or recruitment for the union as a whole exists, but the Coventry Branch records show no progress being made in widening recruitment; membership of the Auxiliary Section in Coventry never rose above 26 during the war.(1) The A.S.W., feeling that the growing employment of women threatened the position of men, began to try to sign district agreements on behalf of women from 1941 onwards, although they were not as yet allowed to join the union. In 1942 it was decided to extend temporary membership to women on a district basis for the duration of the war. No statistical information is available but it is extremely unlikely that the A.S.W. recruited many women during the Second World War.(2)

There was, then, a growing commitment to mass unionisation in the motor and aircraft industries, at least on the part of the general unions and the A.E.U. Yet even if one makes unrealistically generous assumptions about the distribution of the less-skilled membership of these unions, organisation was still limited. Even assuming that the whole of the membership of T.G.W.U.'s Metal, Engineering and Chemical Trade Groups and all the members of the A.E.U. who were in Sections 5, 5a, 5a T.R.A.,

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(1) N.U.S.M.W. Coventry Branch account book. Coventry R.O. ACC 587.

(2) T.J.Connelly, The Woodworkers, 1860-1960 (1960) p. 90-91.

the Youth Section and the Women's Section were semi-skilled and unskilled workers employed in the motor and aircraft industries, they would still have accounted for only 53.9 per cent of all semi-skilled and unskilled workers employed in them at the beginning of 1944.(1)

Thus in spite of the existence of a number of circumstances favouring unionisation and despite the noticeable absolute gains among less-skilled workers, the extension of organisation during the war was still limited by a number of influences. The fact that prices were held in check has already been mentioned; it is also likely that government policy was seen as being more even-handed than it had been during 1914-18. The sheer physical and administrative difficulties of organising workers in such large and rapidly increasing numbers up to 1944 must have also set limits on what could be achieved. This problem was further aggravated by the growing dispersal of aircraft production during 1940-1942 as new plants were sited away from the main targets for enemy bombing. In addition however, there were more specific factors relating to conditions of work and the composition of the labour force which restricted the

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(1) The calculation is based on the membership figures presented in the previous pages, which are peak figures, and the employment figures also presented above.

development of trade union organisation among the wartime workforce in the motor and aircraft industries.

In the first place, many adult males working in motor and aircraft establishments continued to have reason to be relatively content during the war. Their earnings remained higher than in most other occupations and the differential between them and workers in the engineering and shipbuilding trades generally widened between October, 1938 and January, 1944 as shown below. Average earnings in motors, cycles, and aircraft were 10.8 per cent higher than in engineering and shipbuilding in October, 1938 and 15.5 per cent higher in January, 1942. This gain was eroded during 1942 and early 1943 but motor and aircraft workers surged ahead again in the second half of 1943 and by January, 1944 they were earning on average 17.1 per cent more than men in the metal, engineering and shipbuilding trades as a whole. It was therefore still possible for workers to deny the need for trade union organisation on the basis of their relatively high earnings. Thereafter, as production passed its peak, the gap narrowed significantly. As mentioned above, reductions in piece-rates gave rise to unrest and where disputes were particularly widespread, as in Coventry, they may have led to short-term increases in union membership. However, as reductions continued to occur during 1944-5, it is likely that some

Table 4.14 Comparative Average Weekly Earnings among Manual Workers (Adult Males) Oct., 1938 - Jan., 1945

	All Industries	Metals, Engineering, and Shipbuilding	Motors, Cycles and Aircraft
Oct., 1938	69 0	75 0	83 1
July, 1940	89 0	102 5	114 11
July, 1941	99 5	112 2	127 5
Jan., 1942	102 0	119 2	137 8
July, 1942	111 5	128 1	147 5
Jan., 1943	113 9	131 6	148 7
July, 1943	121 3	138 3	155 10
Jan., 1944	123 8	141 10	166 1
July, 1944	124 4	139 1	159 11
Jan., 1945	119 3	131 2	148 6
July, 1945	121 4	133 0	143 4

Source: Ministry of Labour Gazette August, Nov., 1938-1945;Department of Employment and Productivity, op.cit. Table 40.

workers revised their estimates of trade union effectiveness and membership began to fall. Yet the main reason for the downturn was not movements in earnings, but the reduction

in the size of the workforce and rising unemployment.(1)

Those who had most obvious cause to be discontented with their wages and working conditions were women and young workers. The terms upon which women were to be employed in engineering shops were determined in general by the Extended Employment of Women Agreement of June, 1940. This provided for the payment of skilled rates to women entering the industry who were already qualified and to those employed as dilutees who, after 32 weeks training and probation, were capable of skilled work without supervision. In other cases female dilutees' rates were to be negotiable, though not less than 75 per cent of the minimum rate for men.(2) Despite these arrangements, average female earnings remained low, being 58.1 per cent of those of males in 1943 and rising to only 62.5 per cent by July, 1945.(3) This was largely the result of widespread changes in the content and organisation of work. Employers contended that new jobs had been created which lay outside

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(1) At the beginning of 1944 the number employed in the construction and repair of motor vehicles, cycles and aircraft was about 2.2 million. By mid-1945 the number employed and unemployed in the "construction and repair of vehicles" stood at 939,100. Unemployment among insured workers in the vehicle building industries stood at 10.8 per cent in 1945. Central Office of Information, The United Kingdom Aircraft Industry (1952) p. 6-7; Department of Employment and Productivity, op.cit. Tables 111, 163.

(2) "Memorandum of Agreement Between the Engineering and Allied Employers' National Federation and the Amalgamated Engineering Union ... the Extended Employment of Women in the Engineering Industry 1 June, 1940" in A.E.U. Journal June, 1940.

(3) R. Croucher, op.cit. p.132.

the scope of the Agreement. Thus many women were paid at rates substantially lower than the minimum unskilled male labourer's rate and this remained so throughout the war, despite additions to basic rates and national bonuses in 1940, 1941, 1942 and 1944. By August, 1944, the minimum time rate for adult women was 56 s (280p) per week, compared with the male labourer's rate of 75s 6d (377½p).(1) It has been argued that poor earnings irked younger women in particular and that women in general were equally if not more concerned at long hours, inadequate hygiene and a lack of canteen, nursery and shopping time provision.(2)

Apprentices were also aggrieved over long hours and low wages. More and more employers abrogated the 1938 Young Persons (Employment) Act which had restricted the amount of overtime to be worked by sixteen to eighteen year-olds and the Factory Inspectorate did little to curb the drive for longer hours. Wages too, had fallen behind relative to those of other workers and in relation to prices by 1941. At the beginning of that year apprentices in their final year earned an average of 31s 3d (156½p)

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(1) P. Inman, op.cit. p. 353-4.

(2) R. Croucher, op.cit. p. 133. Croucher states that many Coventry firms were reluctant to provide these facilities.

weekly compared with the average adult time rate of £3-11s-6d (357½p).[1] Apprentices complained that they were earning less than the dilutees and trainees whom they were frequently required to supervise.[2] These grievances led to a strike of apprentices during the year and consequently the rate for final year apprentices was raised to 46 shillings (230p) and rates for each year of apprenticeship were adjusted so as to move proportionately with adult male rates. Even so, the increases awarded to apprentices were to be at most only half of those given to adult men. These proportions were raised in July, 1942 and April, 1943 but final year apprentices still received less than two-thirds of the increases awarded to adults. On the other hand, the wages of all young workers aged between 14 and 21, not only those of apprentices, were made subject to the same arrangement in April, 1943.[3]

Despite these grievances and despite the fact that they led to occasional rebellion - the number of apprentice

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(1) P.Inman, op.cit. p. 334; J.B.Jefferys, The Story of the Engineers, op.cit. p. 255.

(2) R.Croucher, op.cit. p. 116.

(3) J.B.Jefferys, op.cit. p. 255; "Memorandum of Agreement Between the Engineering and Allied Employers' National Federation and the A.E.U., C.S.E.U., Wages of Apprentices, Boys and Youths, 26th March, 1941", in N.U.V.B. Quarterly Journal July-Oct., 1941;"Amendments to the Memorandum," N.U.V.B. Quarterly Journal July-Oct., 1942; April-June, 1943.

strikes rose from six in 1940 to twelve in 1942 and it was reported that "disputes relating exclusively to the wages of women and girls are proportionately more prone to result in strike action than when men are involved"- few women or apprentices joined trade unions.(1) Croucher states that "the lads remained generally outside of the shop steward and union structure" and probably fewer than a quarter of women in engineering were organised.(2)

The persistent weakness of organisation among women in particular was, in view of their rapidly growing relative importance in the labour force, a major constraint on overall union growth in the motor and aircraft industries during 1940-1944. The reluctance of women to join trade unions can be explained in terms of a number of factors. One of these was probably the limited effectiveness of trade unions' efforts on their behalf. During 1940-42 the general unions tried to persuade employers to pay male rates to women as far as possible, although they accepted the existence of some "women's work", for which

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(1) H.A.Emerson, "Causes of Industrial Unrest", Ministry of Labour Memorandum 3 Nov., 1943, P.R.O. LAB 10/281.

(2) R.Croucher, op.cit.p. 122; Norbert C.Soldon, Women in British Trade Unions (Dublin 1978) p. 153-4, cites the Daily Herald of 25 June, 1941 to the effect that one in twelve women in the engineering industry were in trade unions. R.Croucher, op.cit. p.136 gives figures of 11.2 per cent in 1943 falling to 8.3 per cent in 1945. However, as he points out, these figures, derived from the Ministry of Labour Gazette exclude the membership of the general unions. Yet it is unlikely that allowance for this would double the proportion organised.

a lower rate was paid. Employers were unwilling to agree to the payment of male rates to women as a general rule for reasons outlined above, i.e., the creation of so-called new classes of work which were outside the scope of the Extended Employment of Women Agreement of June, 1940. However, during 1942 the T.G.W.U. and the N.U.G.M.W. succeeded in opening negotiations with the Engineering Employers' Federation which were aimed at amending the E.E.W. Agreement so as to provide for better rates for women. By December a provisional agreement was reached which provided for the grading of women according to the work they performed. By this time the A.E.U. had committed itself to the recruitment of women and began to campaign for the payment of male rates to all female dilutees.(1) The A.E.U. was considering the proposed agreement between the general unions and the E.E.F. when a strike involving a majority of women occurred at Rolls-Royce's aero-engine factory at Hillington, Glasgow in July, 1943.

The Hillington strike arose out of a dispute between Rolls-Royce and A.E.U. shop stewards over the

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(1) Report of a Court of Inquiry Concerning a Dispute at an Engineering Undertaking in Scotland Cmd. 6474 (1943) Appendix V.

rates being paid to female dilutees. The stewards argued that they should receive the basic rate paid to skilled men; the firm alleged that the jobs upon which they were employed had been created specifically for women since 1940. A Court of Inquiry was appointed which judged that the company had evaded the E.E.W. Agreement in a number of cases but that there did exist a great amount of new work. It recommended a scheme for grading women according to the work they did in such a way that their rates, while not in every case equal to male rates, were related to them.(1) This scheme was accepted by the management and full-time officials of the A.E.U. but was rejected by the women, who were hoping for a more generous application of male rates to their work. They struck again in November, supported by A.E.U. shop stewards.(2) Ultimately an agreement was reached whereby individual machines were identified and grouped into grades according to the degree of skill and responsibility required for their operation. This agreement, which applied to the company's Glasgow plants only, provided for rates which varied from 48 shillings plus 13s 6d bonus for Grade 1 work "possessing special skill and ability" to 29 shillings plus 22 shillings bonus for Grade 4(b) work, i.e. "continuous production on small capstan and

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(1) Ibid.

(2) T.G.W.U. General Executive Council Minutes 8 Dec., 1943.

turret operations ... and light, simple machining operations.(1)

This scheme might have set a pattern for the aircraft industry generally except that the A.E.U.,concerned by the threat of "cheap labour", decided to press for the abandonment of the notion of separate women's work, arguing that all semi-skilled work should be graded irrespective of whether it was performed by men or women and that the minimum male labourer's rate should be the minimum for all adult engineering workers.(2) A joint campaign in support of this demand was mounted by the A.E.U. and the Electrical Trades Union and from the end of 1943 they were backed by the T.G.W.U. and the N.U.G.M.W.(3) However, the effort was unsuccessful and no new general scheme for determining women's rates was achieved; these continued to be partly covered by the 1940 E.E.W. Agreement and partly determined by relative bargaining strength in individual plants. This failure to obtain a general improvement in the terms upon which women were employed

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(1) "Memorandum of Agreement Between Rolls-Royce Ltd. Glasgow, and the A.E.U. and the T.G.W.U. to Define the Basis of Payment for Hourly Paid Female Employees, and to be Applied Solely to the Company's Glasgow Factories" P.R.O. LAB 10/239. The factory at this time employed nearly 24,000 workers of whom only 4 per cent were reported as being skilled in engineering work. "Memorandum on the Hillington Aircraft Factory" P.R.O. AVIA 9/78.

(2) A.E.U. National Committee Report 1943.

(3) A.E.U. National Committee Report 1944.

did little to encourage them to join trade unions.

In addition the occupational background of women in engineering and their attitudes to work made for a low propensity to unionise. Over a quarter of women working in engineering during the war had not previously been employed at all. Most of the others came from domestic service and the distributive trades, where habits of personal dependence were well established.(1) This had two effects; first, it meant that lacking organisational experience and facing crises of adaptation to industrial work, most women expressed their grievances in an individual way, most commonly through absenteeism. Secondly, when upsurges of organised militancy did occur they were isolated and rarely occurred more than once in the same place.(2) In any case, too much may be made of women's grievances concerning wages and conditions of work. Their backgrounds meant that most of them were uncritical of the way in which plants were run and the majority employed in engineering were found to be reasonably satisfied with

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(1) Twenty-two per cent of women were in engineering before the war and 51 per cent in other occupations, mainly domestic service and distribution. G.Thomas, Women at Work (Wartime Social Survey June, 1944) p. 28, cited in R. Croucher, op.cit. p. 125.

(2) This last point is also made by R.Croucher, op.cit. p. 130.

their work and their pay.(1) Furthermore, most female engineering workers saw their jobs as temporary; fewer than half wanted to carry on working after the war and of those who did, a quarter wanted to leave the industry.(2) These characteristics were probably the most important factors keeping the majority of women out of the unions and holding back the overall level of organisation. It may also be argued that they applied to a considerable number of semi-skilled and unskilled men. In this respect the break with the 1930s remained incomplete.

The last two years of war saw employment in the motor and aircraft industries drop from its peak. Union membership also fell, though probably not as rapidly.(3) This reflected the same circumstances as operated during 1918-19; the exit of dilutees who had been the least well organised section of the workforce. To some extent there-

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(1) Mass Observation, Ltd., People in Production (1942) p. 117, cited in ibid. p. 125.

(2) P.R.O. INF 1/289 "Survey on Attitudes of Women to Post-War Employment" cited in ibid. p. 138.

(3) The number of workers employed and unemployed in the construction and repair of motor vehicles, cycles and aircraft fell by at least 50 per cent between January, 1944 and July, 1945. See above, p.458n . Membership of selected branches of the A.E.U., the N.U.V.B., N.U.S.M.W. and A.S.W.M. in the Midlands and London and the South-East fell by less than 20 per cent. No systematic figures are available for the general unions. See Appendix 3.

fore, the failure to organise more widely among women and indeed male dilutees can be said to have not been of long term significance; it hid the strength of the unions at the core of the motor and aircraft industries. Here significant progress had been made in terms of recognition and in recruitment, among semi-skilled workers as well as craftsmen, on the assembly lines as well as in the tool-rooms. On the other hand, the existence of a substantial unorganised section of the workforce - moreover this was not confined to dilutees - had helped to limit the reduction of employers' authority during the war and aided them in reasserting it at its end. Thus in 1945 there could still occur a dispute at Austin Motors over the management's refusal to recognise the shop stewards' committee.(1) Arthur Exell remembers his own victimisation and that of other Communist Party activists and shop stewards at Morris Motors during the recession caused by the fuel crisis in 1947. H. Friedman states that the same happened at Ford and that the dismissal of militants had a debilitating effect on shop floor organisation in the works which lasted until the mid-1950s.(2)

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(1) N.U.V.B. Quarterly Journal Jan.-March, 1945, Birmingham District Organiser's Report.

(2) Arthur Exell, "Morris Motors in the 1940s", loc.cit.; Henry Friedman and Sander Meredeen, The Dynamics of Industrial Conflict, op.cit. p. 57.

In view of this, to what extent can one see the war as turning point in the development of trade unionism in the motor industry? It did no doubt provide unions with a chance to obtain recognition from some of the most important motor firms which in other circumstances would in all probability have continued to withhold it.(1) There can also be no doubt that the security provided by full employment and government protection, together with more energetic recruitment on the part of the unions, brought semi-skilled workers more firmly into organisation than before. Moreover, owing to the different economic environment after the Second World War when compared with that following the First, employers' attempts to break the strength of militant workshop organisation were probably less wholehearted and rather less successful than they had been in the 1920s. Permanent organisational gains had been made.

Nevertheless, no more than half of the workers in the motor industry were organised at the end of the war and this continued to be the case at Morris and Vauxhall until the late 1950s.(2) Moreover, as shown above,

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(1) However, as shown above, the attitude of some motor firms began to relax in the 1930s.

(2) Personal information, Mr. Jack Thomas, ex-T.G.W.U. District Secretary in Oxford; H.A.Turner et al, Labour Relations in the Motor Industry, op.cit. p. 195, 200.

organisational advance was not continuous from the Second World War onwards. In addition, not all of the constraints on unionisation were swept away during the war. The attitudes of workers in the remoter centres such as Oxford and Luton changed only gradually, maybe with a new generation as younger men, not having inherited the habits and outlook of a non-industrial past, replaced older workers.

It may also be argued that the war qua war was not of itself an independent variable in the union growth equation. Rather, the first phase of the war generated forces favourable to union growth, i.e. movements in the demand for labour, money wages and prices, while the second phase did not, as shown by the drop in aggregate union membership and density during 1944 and 1945.(1) Once the role of movements in unemployment rates, prices and wages is emphasised, there is a case for a certain amount of continuity between 1933-9 and 1939-43. Special features were lent to the war years by government policy which favoured union growth and the spread of collective bargaining. Yet this can be seen as deriving largely from pressures on labour supply and the need to curb incipient

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(1) See G. S. Bain and F.Elsheik, Union Growth and the Business Cycle, op.cit. p. 19, 135.

inflation. But in one respect the development of government policy in wartime did mark a turning-point which was of relevance to union growth; a commitment to the maintenance of full employment, if necessary at the expense of inflation. Even so, as far as the union-isation of the motor industry is concerned, while the Second World War provided the first real opportunity to organise production workers on a large scale since 1920, the new phase in the development of motor unionism began in 1934 or 1935 rather than in 1939 and the war reinforced a trend which was already under way.

CHAPTER FIVE

OCEANS AND ISLANDS : THE PATTERN OF TRADE UNION ORGANIZATION

Having examined the main features of union growth, it is now intended to look at the evolution of the structure of unionism in the motor industry. H. A. Turner et al. have observed that "One of the outstanding characteristics of labour organisation in the motor industry is multiple unionism."(1) This pattern of organisation comprises two elements. The first is the absence of any one dominant organisation, either at the level of the industry or that of the individual plant. The second is the existence of competing organisations among particular grades of workers; what might be termed overlapping jurisdiction. Multiple unionism is not however, a recent development; nor, as Turner et al. point out, has it been confined to the motor industry.(2) It characterised trade union organisation among motor and aircraft workers from the earliest stages of development and it was transplanted

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(1) Labour Relations in the Motor Industry, op.cit. p. 198.

(2) ibid.

from older branches of engineering and vehicle building. During the 1920s and 1930s however, amalgamations, changes in the organisational policy of individual unions and inter-union competition resulted in the emergence of a specific pattern of trade unionism in the motor industry which persisted until the end of the 1960s. This was the growth of the A.E.U. and the T.G.W.U. as the leading organisations followed by the N.U.V.B., which lost ground during 1929-45. The remaining unions with footholds in the motor industry accounted for an ever-smaller minority of the total membership.(1) The aim of this chapter is to explain the emergence of multiple unionism in the motor industry and, using the analysis developed by Turner and outlined in Chapter One, to show why the T.G.W.U. and the A.E.U. grew in relation to other unions in the motor industry, specifically the N.U.V.B., which had by far the greatest commitment to the motor industry but did not take the lead in organisation and fell behind after 1929.

The early shape of trade union organisations in the motor and aircraft industries was inherited from the

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(1) By 1946 the A.E.U. probably had between 40 and 50 thousand members in the motor industry, the T.G.W.U. between 25 and 35 thousand and the N.U.V.B. about 20 thousand. The remaining organisations, e.g. N.U.G.M.W., N.U.S.M.W., U.P.A., A.S.W., accounted for probably no more than 20 thousand. Turner et al. estimate that by the mid-1960s the A.E.U. and T.G.W.U. had about 60 or 70 thousand each, the N.U.V.B. nearly 40 thousand, the N.U.G.M.W. about 10 thousand and the remainder accounted for between 15 and 20 thousand. op.cit. p.195.

older branches of engineering and vehicle building and its subsequent evolution reflected wider developments relating to the structure of trade unionism as a whole.

Trade union organisation in British engineering before 1914 was characterised by the existence of a considerable number of relatively small, craft-based organisations such as the Steam Engine Makers' Society, United Machine Workers' Association and the United Kingdom Society of Amalgamated Smiths and Strikers; some slightly larger and rather more powerful craft unions such as the United Patternmakers' Association, the Electrical Trades Union and the National Union of Foundry Workers; and the much larger and increasingly dominant A.S.E., which, although originally an organisation of skilled fitters and millwrights, had already undergone a process of horizontal expansion, drawing in men from a number of different crafts (notably turners) since its formation in 1851. Engineering labourers were, insofar as they were organised at all, represented by a number of general labourers' unions such as the National Union of General Workers, originally the National Union of Gasworkers and General Labourers, and the National Amalgamated Union of Labour. However, during 1910-14 the Workers' Union rapidly came to dominate the organisation of unskilled and semi-skilled workers in the newer branches of engineering. A certain amount of overlapping jurisdiction already existed; for example, both

the A.S.E. and the U.P.A. organised patternmakers and the Workers' Union began to recruit machinists whom the A.S.E. claimed were skilled men.(1)

In the coachmaking trades there existed at least eight different societies of coachmakers and wheelwrights which competed with each other in London and the provinces. In addition, less specialist unions of woodworkers such as the A.S.C. & J. and the General Union of Carpenters and Joiners recruited in the vehicle building shops.(2) Sheet metal workers were also divided among a number of different societies, e.g. the Amalgamated Society of Sheet Metal Workers, the various local tinplate workers' unions federated to the National Amalgamated Tinplate Workers' Society, and the London and Provincial Society of Coppersmiths.(3)

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(1) The A.S.E. accused the Workers' Union of enrolling skilled men on the basis of low subscriptions in 1913. Richard Hyman, in his study of the Workers' Union, is sceptical of this allegation, arguing that the Workers' Union "scrupulously" refused to enroll workers who were eligible for craft union membership. However, as he points out, a number of W.U. members were promoted to skilled work and while the union's rules provided for the transfer of such men to the A.S.E., transfers were only voluntary. Richard Hyman, "The Workers' Union, 1898-1929", op.cit. p. 191-2; idem The Workers' Union, op.cit. p. 71-2, 122. Moreover, the W.U., like most other general labourers' unions, was aware of the need to build a permanent core of organisation among workers possessing some degree of specialised ability and occupying strategic positions in the production process. While a number of semi-skilled grades in the newer branches of engineering may have met this description, there were obvious attractions to recruiting skilled men where they were unorganised. See E.J.Hobsbawm, "General Labour Unions in Britain, 1889-1914",

The motor and aircraft industries, with their heterogenous production processes which were rooted in more traditional branches of engineering and vehicle building, created new employment opportunities for the workers represented by all of the above societies. This encouraged their horizontal expansion into motor and aircraft production for the following reasons. First, unions of skilled men were preoccupied with maintaining standard rates of pay for the jobs claimed by their members. The emergence of motor and aircraft firms employing large numbers of workers skilled in engineering, body-making and finishing, sheet metal working, etc., together with their concentration in particular districts, compelled the extension of organisation to ensure that the rates paid in these new factories conformed to those already negotiated with other firms in the same locality. The clearest statement of this imperative was that made by the London Society of Tinplate Workers in 1910, referred to in Chapter Two, to the effect that organisation of the growing number of motor shops was necessary in order to

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(1) continued.
in idem, Labouring Men. Studies in the History of Labour (2nd edition, 1968) p. 179-203.

(2) "Report of the Conference Representing all the Unions in the Coachmaking Industry in London", 25 Jan., 1912 (T.U.C. Library).

(3) A.T. Kidd, History of the Tinplate Workers', Sheet Metal Workers' and Braziers' Societies, op.cit. p. 40-60.

obtain recognition of the Society's conditions and prevent them from being undermined elsewhere.(1)

Secondly, many craft unions were drawn into the motor and aircraft industries as a result of labour mobility. Engineering workers and vehicle builders moved from general engineering and railway carriage work to motor and aircraft firms, frequently taking their union membership with them. Some societies, such as the London Tinplate Workers, encouraged unemployed members to find work in the motor trade.(2)

Thirdly, a number of existing firms added motor manufacture to their activities; Coventry cycle firms took up motor vehicle production as a means of coping with seasonal fluctuations in the demand for bicycles and in Birmingham and Wolverhampton general engineering firms began to produce automobiles.(3) To the extent that trade

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(1) London Society of Tinplate Workers, "Report of a Special Committee on Organisation", 1910. See above, p. 44.

(2) London Society of Tinplate Workers, "Report of a Special Committee on Unemployment" 2 Sept., 1908; Allen Hutt, British Trade Unionism - A Short History (6th edition, 1975), p. 73.

(3) Examples include Rudge and Triumph, bicycle firms, Wolseley, which was originally a maker of sheep-shearing equipment and British Small Arms Ltd. G.C.Allen, The Industrial Development of Birmingham and the Black Country (1929) p. 297-8; Roy Church, Herbert Austin. The British Motor Industry to 1941, op.cit. p. 2-8.

union organisation was already established in these firms it was carried into the motor industry as companies became increasingly committed to automobiles.

Finally, the presence of the Workers' Union among semi-skilled motor and aircraft workers was the necessary outcome of its desire to establish a base in the engineering industry, since if it was to be effective in representing semi-skilled engineering workers it had to organise them as widely as possible given that it was unable to impose restrictions on entry to semi-skilled occupations. The reasons for the strength of the Workers' Union relative to other general workers' unions is not certain, but from Hyman's work it would seem that the W.U. was quicker than the rest to see the potential for organisation among semi-skilled production workers in view of its need to build up a permanent core of organisation among workers with some inherent bargaining power.(1)

The outcome of this process of horizontal expansion was that the pattern of organisation in motor and aircraft production reflected that in engineering

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(1) Richard Hyman, The Workers' Union, op.cit. p. 70-71. Also see above, p.474 n. Hyman also argues that the Workers' Union had nothing to lose and all to gain by embarking on a large-scale recruiting drive. ibid. p. 76.

and vehicle building quite closely, i.e. a number of organisations existed, many in competition with each other, but there were one or two leading unions in each branch of the trade. On the engineering side the leader was the A.S.E.; in body-making it was probably the United Kingdom Society of Coachmakers and the Amalgamated Society of Carpenters and Joiners; chief among sheet metal workers appears to have been the Amalgamated Society of Sheet Metal Workers. The Workers' Union was predominant among the less-skilled, although it probably had a number of men within its ranks who would have been accepted by the A.S.E. This picture is corroborated by the evidence of a Ministry of Labour Inquiry into Works Committees which reported in 1918. It surveyed the recent industrial relations history of a number of different establishments, including Rolls-Royce and "An Establishment Making Motor-Cars and Aeroplanes". Rolls-Royce was found to have been highly organised by 1912, with a shop stewards' committee in operation. Nine unions at least had members at the firm, but it was found that the A.S.E. supplied half of the representatives to the shop stewards' committee. The other investigation found that 26 trade unions had members in the motor and aeroplane works but only ten had members on the company's works committee before the war. These were the A.S.E., the Toolmakers' Society, the U.K. Society of Smiths, United Machine

Workers, United Patternmakers' Association, Steam Engine Makers, the Amalgamated Society of Sheet Metal Workers, the U.K. Society of Coachmakers, Amalgamated Society of Carpenters and Joiners and the Amalgamated Society of Woodcutting Machinists. Of these, the A.S. E. had by far the greatest presence, supplying twelve out of the 22 workers' representatives to the Works Committee.(1)

The evolution of trade union structure within the motor and aircraft industries continued to reflect wider developments. From the 1900s there was growing pressure for amalgamation within a number of industries. In engineering, the A.S.E. in particular began to favour wider amalgamation in order to combat the increasingly organised power of the employers and to reduce the inter-union conflict that was seen to be weakening the labour movement in engineering. At first little progress was made. The Federation of Engineering and Shipbuilding Trades was unable to prevent demarcation disputes and took a negative attitude towards amalgamation, rejecting a motion tabled by the A.S.E. in 1910 calling for amalgamation in favour of its own recommendation of "closer unity through federation."(2) However, the A.S.E.

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(1) Ministry of Labour Inquiry into Works Committees (1918).

(2) J.B. Jefferys, The Story of the Engineers, op. cit. p. 164.

continued its efforts and set up Amalgamation Committees in major engineering centres on the eve of the war. The war gave an important stimulus to efforts towards amalgamation and inter-union cooperation as a result of the development of national wage bargaining, not only in engineering but across the whole field of industry. In 1915 the A.S.E.'s local Amalgamation Committees were formed into a National Amalgamation Committee and further support for amalgamation came from the Shop Stewards' and Workers' Committee Movement which absorbed the N.A.C. in 1917. During 1918-19 a series of discussions were held among the engineering unions with a view to drafting a scheme for amalgamation and in May, 1919 seventeen unions agreed to ballot their members on the question of a merger. The outcome was the coming together of nine other unions and the A.S.E. to form the Amalgamated Engineering Union in 1920.(1) This helped to simplify the structure of trade unionism on the engineering side of the motor and aircraft industries, although as pointed out in Chapter Two, the amalgamation was in many respects limited, failing to include such important societies as the U.P.A., the E.T.U. and the National Union of Foundry Workers.(2)

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(1) ibid. p. 191-3.

(2) See above, p. 62-3.

A more thoroughgoing rationalisation occurred on the body-making side of the industry as a result of amalgamations of some of the leading coachmaking societies, the formation of the Amalgamated Society of Woodworkers and the National Union of Sheet Metal Workers. In the coachmaking trades the desire to obtain a standard minimum rate of pay for all bodymakers and finishers, the realisation that individual organisations were too weak to achieve this aim and a feeling that technical change, by encouraging the development of large shops at the expense of small ones was throwing "the men of all unions ... into closer association with each other," led to plans for closer unity being discussed in 1912.(1)

A further impetus towards closer coordination was supplied in 1915 when an employers' association - the National Masters', Wheelwrights', Smiths', Coach and Motor Body Builders' Society - was formed to promote legislation favourable to the industry and to coordinate industrial action among employers. In response to this a conference of the major vehicle building unions was held in 1916 to discuss the future pattern of organisation. Initially a scheme of federation was proposed but the

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(1) "Report of the Conference Representing all the Unions in the Coachmaking Industry in London" 25 Jan., 1912.

largest union, the United Kingdom Society of Coachmakers, held out for full amalgamation and drafted a scheme in 1918.(1) Four unions agreed to ballot their members on the scheme; the U.K. Society, the London and Provincial, the Operative Coachmakers and the Vicemen. The results of the voting being in favour of amalgamation, the National Union of Vehicle Builders was established in January, 1919.(2)

During 1918-20 two amalgamations of carpenters and joiners took place which resulted in the formation of the A.S.W. In 1918 the A.S.C. & J. merged with the Amalgamated Union of Cabinet Makers and in 1920 this new organisation absorbed the General Union of Carpenters and Joiners.(3) It was in 1920 too, that the Amalgamated Society of Sheet Metal Workers joined together with a

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(1) The other societies involved in the discussions were the London and Provincial Society of Coachmakers, the Operative Coachmakers' Federal Union, the Vicemen's Trade Society of London and the Amalgamated Society of Wheelwrights, Smiths and Motor Body Makers. National Union of Vehicle Builders, A Short History of the N.U.V.B., op.cit. p. 17-19.

(2) The Amalgamated Society of Wheelwrights withdrew from the discussions in order to pursue separate amalgamation negotiations with the Wheelwrights' and Coachmakers' Operative Union. It merged with the N.U.V.B. in 1925. ibid.

(3) A.S.C. & J. Monthly Journal Jan., 1919; A.S.W. Annual Report, 1921.

number of local sheet metal, tinplate and brassworkers' unions to form the National Union of Sheet Metal Workers, the new organisation coming into being on 1 January, 1921.(1)

Meanwhile moves were also made towards closer cooperation and amalgamation among the general unions. In July, 1917 seven general unions including the Workers' Union, National Union of General Workers, National Amalgamated Union of Labour and the Dock, Wharf, Riverside and General Labourers' Union set up a National Federation of General Workers to coordinate collective bargaining at national level - another response to the growth of national bargaining in wartime. At the same time the W.U., N.A.U.L. and the Municipal Employees' Association began to formulate plans for a close federation - the National Amalgamated Workers' Union - which would culminate in full amalgamation. The attempt was not a success, the N.A.W.U. collapsing in 1922 as a result of irreconcilable differences over the principles upon which it should be organised.(2) However, greater

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(1) A.T.Kidd, op.cit.

(2) National Federation of General Workers, Report of the First Annual General Council Meeting August, 1918; Richard Hyman, The Workers' Union, op.cit. p. 91, 124-7, 156-8.

progress was achieved among the dockers' and road transport workers' unions with the formation by amalgamation of the Transport and General Workers' Union in 1921 and in 1924 the N.A.U.L., N.U.G.W. and M. E.A. combined successfully to form the National Union of General and Municipal Workers.(1)

Nevertheless, while wartime experience had encouraged a significant trend towards amalgamation, the general expansion of trade union membership also permitted the independent survival of numerous organisations.(2) Moreover, given the limits of the amalgamations which did occur, inter-union disputes were not eliminated. In fact they became more frequent during the first half of the 1920s with the number referred to the Disputes Committee of the T.U.C. rising from three in 1920 to 28 in 1924.(3)

In view of the continued limits to unity within the movement, the desire to develop better coordination of action began to be expressed at the Trades Union

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(1) H.A. Clegg, General Union in a Changing Society (1964) p. 134-6.

(2) Sidney Webb, "Amalgamation in British Trade Unionism", International Labour Organisation Review (1921).

(3) T.U.C. Report 1920-4.

Congress after the war. This concern was encouraged by the rapid yet undirected growth of the movement during 1914-20, the spread of national collective bargaining and a feeling that inability to mount united action had led to failure to take full advantage of the post-war boom. Consequently a General Council of the T.U.C. was elected in 1920, the first formally constituted body designed to coordinate the activities of affiliated organisations. Its functions were to observe industrial movements and "where possible, to coordinate common action on general questions such as wages and hours of labour and ... assist any union which is attacked on any vital question of trade union principle" and to mediate inter-union disputes, assist in organisation campaigns and promote links with foreign labour movements.(1)

As labour was forced onto the defensive from 1920, the continuation of inter-union disputes and the multiplicity of organisations which encouraged them came to be seen as weakening the movement in the face of attacks from increasingly well organised employers. Consequently the General Council was forced to consider

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(1) John Lovell and B.C.Roberts, A Short History of the T.U.C., op.cit. p. 65-9; G.A.Phillips, The General Strike, op.cit. p. 14-15.

how these weaknesses might best be remedied. It took a pragmatic view of the solution to these problems; as shown above,(1) it rejected the idea of industrial unionism as being incapable of providing a basis for practical improvements in organisational structure. Instead, as a result of surveys conducted into trade union organisation in 1919 and 1923 and further exhaustive investigations during 1924-7 it decided that the only way in which it could act that was consistent with its own limited authority and with the historical evolution of British trade union organisation was to encourage unions in related trades to work towards amalgamation or failing this, to enter into joint working arrangements. Such arrangements were to be based upon groupings of craft and occupational interests within which were to be established joint bodies which, without interfering with union autonomy were to; promote joint action on industrial matters; arrange for the mutual recognition of union cards, and serve as a forum at which any change of policy by any union within the group which could affect its relations with others was to be discussed and a mutual agreement arrived at. In this the General Council confirmed in its report to the 1927 Congress the principles which had been outlined three years previously at Hull.(2) However,

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(1) See p. 27.

(2) T.U.C. Report 1924, 1927.

the essentially voluntarist nature of this approach, while being the only practical course, meant that individual unions remained free to adapt their organisations to changes in the structure of industry and the labour market. In these circumstances inter-union rivalry could not be eliminated; rather it was hoped that joint working and further amalgamation would reduce the incidence of demarcation disputes, minimise competition for members and contain such conflicts arising out of this as did occur, and prevent widespread disruption within the movement as a whole.(1)

These general developments, together with their incompleteness, were reflected in the pattern of organisation among motor and aircraft workers after the war. By the end of 1920 amalgamations in the wider movement had resulted in an apparently more unified structure in the motor and aircraft industries; the A.E.U. on the engineering side and the N.U.V.B. and the N.U.S.M.W. and Birmingham and Midland Sheet Metal Workers' Society

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(1) That this was recognised by the General Council is evident from its emphasis upon gradual, adaptive change in organisation and its acceptance that technical progress would alter industrial and occupational boundaries. T.U.C. Report 1927.

uniting the majority of organised woodworkers and metal workers respectively in the body shops. The failure of the Workers' Union to amalgamate was of little immediate importance since it was in any case the dominant organisation among semi-skilled motor workers.(1)

The relative weight of these unions in the motor industry can be roughly indicated by referring to their membership in Birmingham and Coventry during the early 1920s. Thus in 1923 the combined membership of the N.U.V.B.'s Birmingham and Coventry branches stood at 2,094, of which 1,661 were in Coventry. That of the A.E.U. was 9,357, of which just over 5,000 were in Coventry. The total membership of the Birmingham and Midland Sheet Metal Workers' Society was 2,977 and the W.U. had about 15,000 members in the two towns.(2) Bearing in mind the generally wider industrial coverage of the sheet metal workers, engineers and the Workers' Union relative to the Vehicle Builders, the A.E.U. was probably the largest society

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(1) In the longer term however, amalgamation might have allowed organisation among semi-skilled workers to have been better maintained since a more broadly based organisation than the W.U. would probably have been better placed to withstand the effects of the depression of 1920-2 and to rebuild thereafter.

(2) N.U.V.B. Quarterly Journal April-June, 1923; A.E.U. Quarterly Report March, 1923; Birmingham and Midland Sheet Metal Workers' Society returns to the Registrar-General of Friendly Societies, P.R.O. FS 12/90; Richard Hyman, "The Workers' Union, 1898-1929", op.cit. p. 143.

(this being in line with the Ministry of Labour findings discussed on page 478-9above), probably followed by the Workers' Union. The N.U.V.B. was certainly more dominant in the body shops than were the sheet metal workers.

This distribution was the outcome of the occupational composition of the workforce in the motor industry. Unfortunately no figures relating to this are available before 1927 but in that year the E. & A.E.N.F. began to circularise members with a detailed breakdown of occupations in the motor, vehicle building and aircraft industries. In the motor firms belonging to the Federation, 24.2 per cent of the workforce consisted of fitters and turners. No separate record was kept of the proportion of woodworking craftsmen in the body shops, or of finishers and painters, these being included under a general heading of "others, skilled and semi-skilled". This group accounted for 58.1 per cent of the total. Assuming that only a quarter of this group consisted of skilled body makers, this still means that one in seven of the total workforce was eligible for N.U.V.B. membership. Sheet metal workers were less numerous, accounting for just 6 per cent of the total. Less-skilled workers probably accounted for about 40 per cent. Moulders, patternmakers, boilermakers, electricians and machinists

made up the remaining 10-20 per cent.(1)

In aircraft firms the proportion of fitters and turners was larger in relation to the "others" group, being 37.3 per cent of the total in 1927. The "others, skilled and semi-skilled" group accounted for 44.6 per cent. The remaining categories occupied very much the same relative positions as in motors. Thus the composition of the labour force in aircraft was rather more predisposed towards a preponderance of A.E.U. members than it was in the motor industry.(2)

However, the process of rationalisation was far from complete and in some respects the pattern of organisation became more complex after the war. Again this partly reflected wider developments. For a start, a number of relatively small unions continued an independent existence in competition with each other or with larger societies; for example, there still remained small coach-makers' societies such as the Amalgamated Society of Wheelwrights and the Operative Coachmakers' and Wheel-wrights' Federation. Furthermore, the larger societies

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(1) E.& A.E.N.F. "Circular Letter to Local Associations ..." Oct., 1927.

(2) ibid.

were themselves in frequent competition. Thus the A.E.U., while catering predominantly for fitters, millwrights and turners, also had 7,500 brassfinishers, 1,600 pattern-makers and 1,600 electrical engineers in membership in 1923.(1) The A.E.U. also came into conflict with the N.U.V.B. and the A.S.W. over demarcation at Beardmore Ltd., Glasgow and the Gloucester Aeroplane Works during 1921.(2) Tension arose between the newly-formed N.U.V.B. and the A.S.C. & J.during 1919 over the recruitment by the N.U.V.B. of ex-A.S.C. & J. members employed in vehicle building shops and during 1920 one of the N.U.V.B.'s organisers in Scotland reported that the union was competing for members with the A.S.W.(3)

At the same time there occurred a breakdown in the relations between the A.S.E./A.E.U. and the Workers' Union as a result of the former's insistance on a return to pre-war engineering practice. This clashed with the enhanced aspirations of the Workers' Union, many of whose members had been upgraded as a result of wartime changes.

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(1) T.U.C. - Labour Party Questionnaire on Trade Union Organisation, 1923 (T.U.C. Library).

(2) N.U.V.B. Quarterly Journal Jan.-March, 1921, Scottish District Report; A.E.U. Journal April, 1921, O.D.D.'s Report, division 20.

(3) N.U.V.B. Quarterly Journal Oct.-Dec., 1919, General Secretary's Report; Jan.-March, 1920, Dumfries District Report.

The W.U. contained many members who were capable of skilled work and refused to accept that its status should be reduced to that of a representative of unskilled and semi-skilled labour only.(1) Consequently it persuaded the National Federation of General Workers to claim on behalf of all general unions that their members be allowed to progress in terms of status and earnings and in 1919 it revised its rules so as to allow it complete freedom to recruit craftsmen.(2) It is fairly apparent that this shift was not merely an expression of animosity towards the A.S.E. It reflected one of the pressures for vertical expansion pointed out by Turner, i.e. upward occupational mobility. Such shifts in the occupational composition of the W.U.'s membership could only enhance its ability to bargain on behalf of all its members in the engineering trades; hence its refusal after the war to consent to the removal of its members from skilled work or to their transfer to the A.S.E./A.E.U. This was to complicate

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(1) Richard Hyman, The Workers' Union, op.cit. p.122-3. Relations between the two unions had been soured during the war as a result of the A.S.E.'s attempts to direct female dilutees away from the W.U. into the National Federation of Women Workers, which had guaranteed that it would remove its members from all jobs claimed by the A.S.E.at the end of the war, and its efforts to exclude the W.U. from local joint negotiating committees. ibid. p. 120-2.

(2) ibid. p. 118. The main points of the statement by the N.F.G.W. were as follows: "That our members shall not be restricted to the use of any machine within the evolution of the engineering industry. We also desire that such hand operations that are within their capacity shall be available for our members". Statement by the general unions at a Central Conference with the E. & A.E.N.F. 28 Oct., 1920. Reproduced in E. & A.E.N.F., Thirty Years of Industrial Conciliation (1927) p. 24.

further the pattern of overlapping jurisdiction in the motor industry.(1)

This challenge to craft union interests subsided with the collapse of the Workers' Union during 1921-3, and somewhat perversely, the more relaxed climate which ensued encouraged the establishment of a joint working agreement between the A.E.U. and the T.G.W.U. in 1925, on the lines suggested by the General Council. The agreement aimed at providing means whereby the two unions could mutually assist each other "in trades affecting both organisations where a movement is instituted." In practical terms this meant exchanging the names and addresses of local officers, holding joint branch meetings and setting up a national joint committee to present recommendations to the Executive Councils, these to be binding if approved by both unions.(2) In December, 1926, following the establishment of Sections 5 and 5a by the A.E.U., an addendum was added to this agreement to the effect that

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(1) Despite the collapse of the W.U. this effect was not merely temporary. The T.G.W.U. inherited a sizeable membership among skilled engineering workers in the Midlands and in the Bristol-Gloucester region as a result of its absorbtion of the W.U. in 1929. T.G.W.U. Metal and Engineering Trade Group Report Nov., 1930.

(2) T.G.W.U. General Executive Council Minutes of the Finance and General Purposes Committee 17 Dec., 1924; T.G.W.U. Annual Report 1924, Appendix VI; A.E.U. Journal Oct., 1925, General Secretary's Report.

each union would refuse membership to workers who had previously been members of the other unless their recruitment was specifically sanctioned by the national joint committee and secondly, that if the committee felt that the organising activities of either union were likely to cause friction, full discussion should take place at the earliest possible juncture.(1) Generally however, the limited extent of recruitment by either union among workers for whom there was likely to be the most competition - the semi-skilled in engineering - before the mid-1930s meant that the strength of this arrangement was for a long while untested.

The fact that the challenge presented by the general unions in respect of the organisation of skilled motor and aircraft workers receded during the 1920s did not however, mean that the pattern of organisation was stabilised permanently. Changes in the structure of production tended to complicate further the already somewhat labyrinthine lines of jurisdiction and demarcation. By the 1930s the N.U.V.B. was competing fiercely with the A.E.U. and the sheet metal workers' societies in motor body shops and in airframe construction. By the late 1930s the A.E.U. and to a lesser extent the N.U.V.B.

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(1) A.E.U. Journal Feb,,1927, General Secretary's Report.

had begun to recruit semi-skilled production workers, thereby coming into conflict with the T.G.W.U., which had started to organise widely among this group during 1934-5. Moreover, the T.G.W.U. was also extending its membership among skilled men, building on the legacy left to it by the Workers' Union in 1929.

The 1930s thus saw increased inter-union rivalry arising out of decisions by major unions to redraw their lines of demarcation and jurisdiction. In order to analyse this development it is first necessary to examine the original bases of organisation among these societies and then identify the pressures for change. On the engineering side of the motor and aircraft industries the A.E.U., although composed of a number of skilled engineering grades plus a few less-skilled workers, was essentially a union of fitters and turners during the early 1920s. These two groups accounted for just under 70 per cent of its employed members in 1923.(1) This meant that initially the A.E.U. was based mainly in the toolrooms and engine erecting shops in motor and aircraft plants. However, changes in engineering processes led to the growth of a number of machine processes which were

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(1) T.U.C. - Labour Party Questionnaire on Trade Union Organisation, 1923.

allied to or replaced hand work. Specific examples were those utilising the centre lathe for turning operations and boring and grinding machines. A good many of these processes required skilled labour and there emerged a growing number of skilled machinists in engineering during the late nineteenth and early twentieth centuries. They accounted for a small but significant and rising proportion of motor workers during the inter-war years; i.e. 4.9 per cent of workers in motor firms supplying information to the E.E.F. in 1933 and 7.2 per cent in 1937.(1) The A.S.E. had begun to organise these workers on condition that they were receiving a basic rate of pay which was at least equal to that paid to turners in the same district and this policy was continued by the A.E.U., which by 1923 had 49,000 such workers in membership, this being the third largest group in the union, behind the fitters and turners.(2) This extension of organisation stemmed from the desire of the A.S.E. and later the A.E.U. that as skilled machine work replaced or supplemented hand work, the union's standard rate for the job should be maintained, irrespective of whether it was performed

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(1) E. & A.E.N.F. "Circular Letter to Local Associations: Earnings of Workpeople ..." Oct., 1933, 1937. Figures for earlier years are not available. They accounted for a rather more constant proportion of aircraft workers - between 5.4 and 6.3 per cent - during 1933-7. ibid.

(2) T.U.C. - Labour Party Questionnaire ...

by a skilled machinist or a skilled handworker. In this they were aided by the technical requirements of the job which meant that employers had to pay skilled rates if they wished to attract sufficient workers.

More significant for the development of overlapping jurisdiction however, was the growth of semi-skilled machine work as equipment such as capstan and turret lathes, centreless grinders, vertical drillers and bar-automatic lathes began to be introduced from the turn of the century. Semi-skilled machine processes spread rapidly during and after the First World War and by 1931 the employers were arguing that

> "production formerly accomplished by hand can now be done by machines and can only be done economically and expeditiously by such methods. Accordingly there has grown up a class of men known as machine-men who are efficient on a restricted range of operations but who have not the universal experience or skill of the old-time mechanics ... With constant development not only of machine but hand operations there must in the interests of the industry, be discretion in the training and selection of workpeople. The principle of selection refers to the change-over from a method of production involving skilled men to a method of production involving machine-men, or semi-skilled workpeople."

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(1) "Proceedings at a Special Conference between the Engineering and Allied Employers' National Federation and Various Trade Unions" 30 Jan., 1931.

This class of worker was considerably more numerous in the motor industry (though not in aircraft work) than the skilled machinist. E.E.F. data relating to motor firms indicate that by 1934 there were more than twice as many machinists below the fitter's rate as at or above it.(1) At the same time, as the employers' statement indicated, the technical requirements of a number of hand processes were being reduced. This was most common in finishing and assembly work as improved machining and the use of jigs and templates and fool-proof gauges simplified the later stages of production. It was these semi-skilled assemblers who made up the bulk of the "others, semi-skilled" category which the E.E.F. began to record separately in 1935, when they accounted for just over 28 per cent of the total workers in federated motor firms.(2) Significantly too, a separate record of "fitters other than skilled" began to be kept in 1934. This group, while small in relation to the total labour force in the motor industry - it was only 4.2 per cent in 1937 - still represented well over a quarter of all fitters employed in federated motor firms and nearly a third of those working outside the toolrooms.(3)

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(1) The figures were 7,840 and 3,763 respectively, or 12.7 per cent and 6.1 per cent of the total labour force in the firms reporting. E. &. A.E.N.F. "Circular letter to Local Associations: Earnings of Workpeople ..." Oct., 1934.

(2) ibid. Oct., 1935.

(3) ibid. Oct., 1937.

As outlined in Chapter One, G. E. Barnett analysed the way in which technical progress, by increasing competition among labour in occupations affected by it, can result in skill displacement; i.e. skilled workers may have to accept lower rates of pay than were previously warranted by their skill, bargaining power and the technical requirements of the job if they are to avoid technological unemployment.(1) The extent to which such effects will actually occur will depend on the wider demand for skilled labour. At one extreme it is possible that both unemployment and falling wages will occur as the overall demand for a particular class of worker falls. At the other, rising demand in an industry as a whole may offset the effects of skill displacement so that the number of skilled workers in a particular occupation actually grows and their wage rates increase, even though their relative numbers decline.

There is evidence to show that the A.S.E. began to see competition from semi-skilled workers as posing a threat to the employment and wages of its members before the First World War. In 1907 it moved an amendment to that section of the 1898 Terms of Settlement which dealt with the manning of machines to the effect that

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(1) G.E.Barnett, Chapters on Machinery and Labor, op. cit. See above, p.34-5.

> "The Engineering Employers' Federation recommend their members that ... consideration should be given to the case of workmen who may be displaced, with a view, if possible, of retaining their services (sic) on the work affected or finding other employment for them."(1)

Moreover, in 1912 the A.S.E. Executive Council was alleging that this recommendation was being ignored.(2) The experience of wage reductions and heavy unemployment during the early 1920s, and the depression of the early 1930s encouraged the view that machine processes were causing a deterioration in the position of skilled engineering workers. In 1933 a resolution was submitted to the A.E.U. National Committee from the Birmingham division which expressed growing concern at the "tendency of employers to ... displace skilled men by unskilled labour and the placing of skilled work done by skilled men on machines which are often low rated."(3) In 1934 it was reported that turners had been replaced by semi-skilled and unskilled workers throughout the motor industry in the Midlands and in 1935 a further resolution was submitted to the National Committee which spoke of the "continued advance of the machine manned by cheap

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(1) Quoted in J.B. Jefferys, op.cit. p. 156.

(2) A.S.E. Monthly Report June, 1912, cited in ibid.

(3) A.E.U. National Committee Report 1933.

labour into the realms of highly skilled work."(1)

However, the severity of the threat to skilled workers employed in the motor industry and presumably other newer branches of engineering may have been exaggerated. There is little evidence that even relatively vulnerable groups such as fitters and turners suffered serious loss of employment or pay as a result of technical change during 1924-37. The number of skilled fitters employed in federated motor firms actually rose slightly during the 1930s, from 6,067 in 1934 to 6,585 in 1937.(2) The case of turners is however, rather less certain. They grew in total numbers in the motor industry between 1927 and 1937 as a whole but there appears to have been a tendency towards decline after 1934. Nevertheless if this was the beginning of a downward trend it was slight and uneven.(3)

There is therefore no evidence of widespread

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(1) A.E.U. Journal March, 1934, General Secretary's Report; National Committee Report 1935.

(2) Unfortunately, before 1934 all fitters, skilled and unskilled were lumped together so no reliable estimate can be made of the number of skilled fitters during the mid-1920s. However, the total figure for 1927 was lower than that for skilled fitters in 1934, being 5,030 as opposed to 6,067. Thus even if all fitters in 1927 had been skilled, there would still have been a growth in their numbers by 1934. E. & A.E.N.F. "Circular Letters to Local Assocations ..." Oct., 1927, 1934, 1937.

(3) The figures for federated motor firms were 3,067 in 1927; 3,836 in 1933; 4,141 in 1934; 3,897 in 1935; 4,013 in 1937. ibid.

technological unemployment among skilled fitters and turners in the motor industry. Yet given the existence of heavy unemployment in those sectors of engineering in which skilled processes were most heavily concentrated, e.g. shipbuilding and locomotive engineering, the sluggish growth of demand for skilled workers in the motor industry as well as other newer sectors of engineering provided a basis for genuine concern.

There is also little evidence from data on wage rates to support the idea that skilled engineers suffered greatly as a result of technical change. Generally the basic rate earned by fitters and turners tended to rise during 1900-1939 once the hiccough in rates during 1914-24 is excluded. There was no absolute reduction in the remuneration of skilled men once the readjustment after the war had been completed. On the other hand there was a narrowing of differentials between fitters' and turners' rates and those of unskilled workers which may have reflected technical progress. Of course, differentials were eroded during 1914-20 for a variety of reasons but it is noticeable that they were not restored during the inter-war years. The engineering labourers' basic rate, which had risen from about 59 per cent of that of fitters and turners in 1914 to nearly 80 per cent by 1920, dropped back to just

over 70 per cent by 1924 but then rose again slowly to just under 76 per cent by 1938.(1)

What was probably more serious was what happened to piece-rates as employers gained greater freedom to apply their own piece-rate scales to individual jobs and to vary them as they saw fit. Reductions in piece-rates, as shown above, were a frequent source of friction since although earnings may have risen in spite of reductions in rates, that was frequently the result of "speed-up" and increased effort on the part of the worker, who felt that the security of his earnings was being diminished. Yet while it was in this way that the skilled worker was probably most affected by technical change he was not noticeably worse off in this respect than semi-skilled pieceworkers.

It was the growing freedom of employers to determine wage rates which was the main cause of concern to the A.E.U. Mechanisation and specialisation of work and the ability to define and grade work more precisely led to an increasingly fragmented wage structure and undermined the system of district rates upon which the

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(1) Statistical Tables Relating to British Foreign Trade and Industry (1924-30) Part 1 Cmd. 3737 (1930) Table 16; Department of Employment and Productivity, op. cit. Table 1.

A.E.U.'s ability to protect the conditions of its members had come to be based. The ability of the A.S.E. to resist this process before 1914 was weakened as a result of the 1897 lock-out and the subsequent Terms of Settlement which gave employers the right to select, train and employ workpeople as they saw fit and to pay them according to their individual ability.(1) By 1920 a variety of rates was being paid to workers on the same machines according to the degree of ability which the employer felt was required for the particular job in hand. The A.E.U. however, in trying to protect standard rates, argued that machines, rather than the work performed on them, should be graded. It proposed that all machines should be graded, taking the rate for the centre lathe (the turner's rate) as a base. Workers on some machines were to receive the skilled (turner's) rate while others would receive less. In this way the A.E.U. hoped to prevent the further erosion of skilled rates in machine processes.(2) This proposal, put forward in 1920, was rejected by the employers and the union, lacking an organisational base among semi-skilled machine workers, was unable to mount wider pressure to force them to reconsider. Consequently the 1920 National Committee accepted a resolution recommending the Executive Council

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(1) Terms of Settlement 1898. Reproduced in A.I. Marsh, Industrial Relations in Engineering, op.cit. Appendix C.

(2) J.B.Jefferys, op.cit. p. 246.

> "to consider the advisability of broadening the basis of the A.E.U. by opening an auxiliary section, to embrace the operators of automatic machines and semi-automatic machines who are not covered by rule."(1)

The slump and the lock-out and subsequent concern to revive organisation in its traditional areas of recruitment led to the question of adopting a more open organisational structure being dropped until 1925, when Jack Tanner wrote to the Journal, arguing that the A.E.U. should open its ranks to the majority of engineering workers, either by amending the existing rules on membership so as to allow any male engineering worker to join any one of the existing benefit sections or else by creating an "industrial section" to cover all workers in the engineering trades.(2) The initial response from the General Secretary was cool, arguing that there was "ample provision for the enrolment of all skilled and semi-skilled men engaged in the engineering industry" within the existing rules.(3) However, the question of extending membership to less-skilled workers more effectively was discussed widely within the union

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(1) A.E.U. National Committee Report 1920.

(2) A.E.U. Journal April, 1925. Tanner favoured the second alternative.

(3) A.E.U. Journal July, 1925. This was hardly accurate. The Machinists' Section, opened by the A.E.U. in 1901, was moribund, and the unskilled section had been closed in 1917. The [illegible] was that [illegible] engineering workers [illegible]

during 1925-6. A number of officials and active members on the National Committee had in earlier years supported the idea of organisation by industry and argued in favour of an industrial section. These arguments were given greater weight by the fact that as a result of the union's weakened position in the newer branches of engineering following the slump and lock-out and the reaffirmation of the rights of managment in relation to the hiring, training and payment of workers, it was unable to resist the development of semi-skilled processes. Thus it could be said that as long as the union refused to organise the semi-skilled it would not be in a position to exert any control over the terms upon which new processes were extended and would become less capable of defending the skilled rates still being paid on other kinds of machine work. Thus in May, 1926 the National Committee recommended the establishment of an industrial section, open to any male engineering worker over sixteen years of age. Thus Sections 5 and 5a were formally opened on 1 November, 1926.(1)

As shown in Chapter Four, this change of rule did not lead to an immediate extension of A.E.U. member-

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(3) continued.
district rate paid to fitters and turners could join Section III or IV of the A.E.U. A.E.U. Rules 1920. In 1922 this was amended to cover workers who had been in the industry for three months. J.B.Jefferys, op.cit. p.228.

(1) A.E.U.National Committee Report 1926; A.E.U.Journal June,July,1926, General Secretary's Report.

ship among less-skilled workers. The total number of machinists recruited to the union fell during 1927-32. While there was a rapid growth in the number of those joining the "industrial section" during 1926-7 there is reason to believe that most of these were skilled workers. In any case, recruitment of machinists to the "industrial section" fell off during 1927-32.(1) To a great extent this reflected general economic circumstances, especially the depression of the early 1930s, but it was also a product of A.E.U. policy on recruitment, which continued to exhibit some restrictive features. The continued desire to maintain district rates and to avoid countenancing wages paid to machine workers which were below them led to District Committees being instructed not to admit machinists whose basic wage was less than the basic rate for turners, excluding ten shillings war bonus, i.e. under 46 shillings a week in 1926, and under 48 shillings a week during the early 1930s.(2)

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(1) The admissions of machinists were as follows:

	Total	Sections 5 and 5a
1926	4036	239
1927	3228	2269
1928	2787	1596
1929	3202	1801
1930	2000	1099
1931	1104	710
1932	1012	703

A.E.U. Financial Report Dec., 1926-32.

(2) F.W.Carr, "Engineering Workers and the Rise of Labour, 1919-1939", op.cit. p. 436.

During the mid-thirties however, economic revival and the beginnings of pressure on the supply of skilled labour in Coventry encouraged the A.E.U. to try once more to establish a set of machine grades and this encouraged a relaxation of the wages restriction on entry. In October, 1935 the minimum qualifying rate for membership was reduced from 48 shillings to 40s. 6d for men with two years' experience and to 38s 3d for those who had been in the industry for three months. District Committees were urged to implement the new rules and recruit more widely among machine-men.(1) This change marked the beginning of the wider organisation of machinists. The total number of admissions among them rose from 1,830 in 1933 to a pre-war peak of 18,375 in 1937. The majority - 12,601 in 1937 - were recruited to sections 5 and 5a.(2)

The major aim underlying this expansion was to obtain an agreement regarding rates for machine work along the lines put forward in 1920. In 1936 a claim for the grading of machines was put forward which sought to establish that all work on planing, milling and grinding machines, capstan, turret and combination lathes was to be paid at the full fitter's and turner's rate. Certain

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(1) A.E.U.Coventry District Committee Minutes 3 Oct., 1935; 5 March, 1936; F.W.Carr, op.cit p. 449-50.

(2) A.E.U. Financial Report Dec., 1933-1937.

other machines such as vertical drillers were to be graded as 90 per cent of skilled rates and fully automatic machinery was to be paid a lower rate negotiated by the A.E.U. with the E.E.F.(1) The proposal was rejected by the employers but Jefferys states that subsequently a certain amount of progress in grading machines was achieved on a district by district basis.(2) Thus a primary aim of the decision to open A.E.U. organisation was to enable it to gain some control over the rates paid for machine work; to establish the principle that the machine rather than the work done on it should be graded and where possible, to maintain through collective agreements the payment of skilled rates on those machines most commonly operated by its members. Thus, as shown in Chapter Four, the A.E.U. began to recruit more widely among motor and aircraft workers during the late 1930s, being accused of "poaching" production line workers by the T.G.W.U. in 1938, reported as taking labourers into its ranks at Rolls-Royce's plant at Crewe and being said to be "prepared to take every section of the workers" at

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(1) J.B.Jefferys, op.cit. p. 246. This claim was submitted jointly with the T.G.W.U. and N.U.G.M.W.

(2) ibid.

A.V.Roe in Manchester.[1]

The fact that the A.E.U.'s main priority continued to be the defence of the rates of pay to the bulk of its existing membership, i.e. skilled men, made it anxious that it, rather than the T.G.W.U. or the N.U.G.M.W., should take the lead in organising semi-skilled machinists. Thus a further impetus to the effective extension of the A.E.U.'s boundaries during the mid-thirties was the growth of competition from the T.G.W.U. This caused the Executive Council to refer to the need to exclude the T.G.W.U. from engineering when it urged the Coventry District Committee to make greater efforts among semi-skilled workers in 1936.[2] Thus the growth of a competing body of workers which was the result of changes in the nature of production ultimately compelled a vertical extension of the A.E.U.'s organisation, which consequently began to become more open during the late 1930s.

The T.G.W.U.'s involvement in the engineering

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(1) T.G.W.U. M.E.C. Minutes 29 April, 1938, Area 5 Report; 27 Jan., 1939, General Executive Council Representative's Report; Circular from Dalgliesh to the T.G.W.U. General Council, Feb., 1939; M.E.C.Minutes 21 April, 21 July, 1939, Area 5 Report.

(2) A.E.U. Coventry District Committee Minutes 5 March, 1936.

industry began with its absorbtion of the W.U. in 1929, which led to the creation of its Metal and Engineering Trade Group in 1930. The organisational legacy of the W.U. meant that from the beginning the T.G.W.U.'s engineering base was among production workers in the newer branches of engineering in the Midlands and the South-West. Consequently it was the T.G.W.U. rather than the N.U.G.M.W., whose engineering membership was mainly made up of labourers in the older areas, which came to dominate organisation among production-line workers in the motor and aircraft industries and challenge the A.E.U. for the right to organise machinists.

Brief references were made to the Midlands motor industry during 1930-31 and during 1932-3 T.G.W.U. officials began to visit Morris Motors and Pressed Steel in Oxford and a number of concerns in Birmingham and Coventry, such as Austin, Singer, Morris Engines, Fisher and Ludlow, Riley, Humber-Hillman and Daimler with the aim of improving organisation among the "vast bulk of workers" who were outside trade unions.(1) The depression though, prevented immediate progress from being made. Total membership of the Metal and Engineering Trade Group stagnated during

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(1) T.G.W.U. Record Oct., 1930; Annual Report Dec., 1929-Dec., 1930; Trade Group and Departmental Review Jan., 1929-March, 1931; M.E.C.Minutes 12 Feb., 1932, 28 July 1933, Area 5 Report.

1931-3, being approximately 22,000 in January, 1931 and 26,430 in October, 1933.(1) During the mid-thirties however, the T.G.W.U. began to expand in engineering. Trade Group Membership rose from just over 43,000 early in 1934 to nearly 85,000 by the end of 1937 and by 1939 it stood at nearly 125,000.(2)

It was during the mid-thirties that the T.G.W.U. began to pay considerable attention to recruitment in the motor and aircraft industries. The most spectacular advance was at Pressed Steel, Oxford during and after the 1934 recognition strike,(3) but gains were also made at a number of Coventry firms during 1934; for example at Riley, where increases in membership followed the negotiation of wage increases for T.G.W.U. members; at Humber-Hillman, where men joined following a short strike

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(1) The fact that the 1933 total was higher than that for 1931 does not indicate progress among engineering workers because in February, 1932 the Trade Group was extended to cover chemical workers, bringing in some ten thousand extra members. The numbers then fell rapidly during 1932-3 as shown:

July, 1931	22,264
Feb., 1932	32,425 (addition of chemical workers)
Oct., 1932	25,782
Jan., 1933	26,676

Metal and Engineering Trade Group Committee Report 1931-4.

(2) ibid. 1934-9. The Metal and Engineering Group however, became more heterogenous, absorbing the government workers in 1934 so these figures do not give an exact assessment of membership growth in engineering, although they probably do give a good indication of the rate of progress.

(3) See above, p. 97-9.

over the introduction of a time and motion expert to one of the departments, and at Daimler as a result of a propaganda campaign.(1) The union also advanced among workers at motor plants in Birmingham from 1935 onwards. Two hundred and fifty new members were claimed at B.S.A. in July, 1935 and 360 at the body manufacturers, Fisher and Ludlow. Gains were also made at Austin as a result of the 1936 body makers' strike and by 1938 the T.G.W.U. claimed over 1,000 members in the company.(2)

T.G.W.U. organisation developed among several groups of motor workers; engine testers, welders, press shop workers and assembly workers and machinists, among whom it had inherited a significant membership from the Workers' Union.(3) Moreover, the T.G.W.U. also had a sizeable membership among skilled workers in the Midlands and in the Bristol Area. The basis of this was inherited from the Workers' Union but the T.G.W.U. built upon it during the 1930s.(4) The recruiting efforts of the T.G.W.U. in

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(1) T.G.W.U. M.E.C. Minutes 27 July, 2 Oct., 1934, Area 5 Report.

(2) T.G.W.U. M.E.C. Minutes 19 July, 1935, Area 5 Report; 22 July, 1938, Area 5 Report.

(3) The bulk of the 22,000 workers in the Metal and Engineering Group in 1931 were previously Workers' Union members. Richard Hyman, The Workers' Union, op.cit.p.171.

(4) The Workers' Union's presence in Bristol and in other parts of the West Country was built up during the First World War, when it organised the workers at Petters' Aircraft Ltd., Yeovil and opened a branch for aircraft workers in Bristol in 1916. Workers' Union Record, August, Nov., 1916.

the Midlands brought complaints from the A.E.U. as early as 1931 when the former began to distribute propaganda leaflets which made "a general organising appeal" to engineering workers. The A.E.U. argued that such a campaign, which appeared to be aimed at skilled as well as unskilled workers, was in breach of the joint working agreement signed by the two unions in 1925 and amended in 1926.(1) The reaction of the Metal and Engineering Group was to demand that the T.G.W.U. should not allow consideration of any other union's claims to jurisdiction to prevent it from organising any unorganised engineering workers. Moreover, Bevin, while arranging to meet with A.E.U. officers to arrive at a mutual understanding on recruitment, reassured the Engineering Group by stating that the agreement with the A.E.U. was one "which did not in any way prevent the Transport and General Workers' Union from organising any class of worker in the Engineering world if they felt so disposed."(2) By 1939 the Group was demanding that the T.G.W.U. open a membership section

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(1) See above, p. ; T.G.W.U. General Executive Council Minutes 18 May, 1931.

(2) ibid.; T.G.W.U. Metal and Engineering Trade Group Report 1930-31.

specifically for skilled engineers.(1)

The desire of the T.G.W.U. to establish itself among skilled workers can be explained in terms of similar considerations to those motivating the Workers' Union in 1919. The increasingly widespread practice of individual upgrading and the beginnings of dilution in the aircraft industry during 1938-9 generated upward occupational mobility among T.G.W.U. members and in order to represent them effectively the T.G.W.U. sought to extend its organisation among skilled workers, especially where they were not being catered for by another union. Also, an alliance of unskilled and semi-skilled workers with skilled men is generally to the benefit of the former since the skilled worker's greater inherent bargaining power gives added muscle to the union as a whole and provides a relatively stable core of membership from which organisation among the less skilled may be more easily preserved.

The growing weight of the T.G.W.U. in the motor and aircraft industries was however, chiefly due to the existence of a large proportion of semi-skilled workers and the fact that this proportion continued to grow during

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(1) M.E.C. Minutes 27 Jan., 1939.

the 1930s. By 1935 semi-skilled fitters and machinists, other semi-skilled workers - chiefly assemblers and inspection workers - together with labourers accounted for nearly 52 per cent of all workers in federated motor firms.(1) The T.G.W.U. benefitted from the slow pace at which unions of skilled men extended their organisation to semi-skilled workers during the mid-thirties and managed to build up an organisational base which was strong enough to resist attempted incursions by the A.E.U. and to a lesser extent the N.U.V.B. at important plants such as Pressed Steel, Austin and certain shops at Humber-Hillman and Daimler by 1939. The same was true of the aircraft factories. Although there was initially less scope for the T.G.W.U. there than in the motor industry, semi-skilled and unskilled workers accounting for only 36 per cent of the workforce in 1935,(2) the field widened towards the end of the thirties as the "shadow" factory programme got under way and the pace of dilution accelerated. By 1939, T.G.W.U. organisation was probably more complete among aircraft than motor workers.(3)

The upward extension of T.G.W.U. organisation to skilled men and the A.E.U.'s expansion downward to the

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(1) E.& A.E.N.F. "Circular Letter to Local Associations ..." Oct., 1935.

(2) Ibid.

(3) See above, p. 195, 198

semi-skilled led to increasingly strained relations between the two unions from 1930 onwards. Moreover, as the aircraft industry continued to expand and dilution came to be practised more widely it was here that much of the conflict occurred.

The means by which the A.E.U. and the T.G.W.U. sought to regulate the competition which developed between them was the amended joint working agreement of 1925-6 which incorporated the general principles concerning the conduct of inter-union relations promulgated at the Hull T.U.C. in 1924. Before going on to examine the course of A.E.U. - T.G.W.U. relations it is necessary to consider to what extent the contents of this agreement provided a practical basis for a mutually satisfactory or indeed any delineation of jurisdictional boundaries. The weaknesses of the arrangement in this respect are readily apparent. The only clause which specifically restricted the organisation activities of either union was that in the 1926 addendum which committed each to decline the membership of ex-members of the other.(1) It is true that the possibility of competition for members, raised by the A.E.U. rules revision of 1926, led to the inclusion of the following:

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(1) See above, p. 493-4.

> "That if, in the opinion of this Joint Committee the organising activities of either union are likely to engender friction, a meeting of this Joint Committee be called at the earliest convenience to review the position."(1)

However, under the terms of the original agreement of 1925, Joint Committee recommendations were only binding if accepted by both unions. During the late 1930s the commitment of the A.E.U. to organising semi-skilled machinists and that of the T.G.W.U. to maintaining its organisation among skilled workers rendered the Joint Committee impotent on the question of jurisdiction.

As shown above(2) signs of tension over the T.G.W.U.'s position regarding skilled workers emerged in the Midlands as early as 1931. With economic revival after 1933, relations became increasingly strained. The intensification of recruitment among semi-skilled workers in the Midlands by the A.E.U. began to become apparent during 1934-7, with Section 5 and 5a membership rising from 5.1 per cent of the total in Coventry in 1933 to 14.1 per cent in 1934 and 56.7 per cent in 1937. In terms of numbers this meant an increase from 125 in 1933 to 3,474 by 1937.(3) While this made relatively little impression on the total number of semi-skilled workers in

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(1) A.E.U. Journal Feb., 1927, General Secretary's Report.

(2) p. 513-4.

(3) A.E.U. Journal Dec., 1933-7, Trade Portion.

Coventry, it was a large enough increase to cause concern within the T.G.W.U., which rightly saw it as a move which was at least partially intended to oust it from the newer sectors of engineering. Thus in 1936 Ernest Bevin commented that "The A.E.U. is no longer a craft union ... I have a strong suspicion that their policy is to exclude on a union basis and not on a craft basis ...". Not only was the A.E.U. beginning to recruit semi-skilled workers; it was also trying to prevent members of general unions from being employed on certain machines; indeed the first tactic can be seen as being in support of the second. Bevin continued, "I feel that this method of putting a block against men using the machines is wrong."(1) By 1938 it was reported within the Engineering Trade Group that the A.E.U. was "encroaching upon our preserves in respect of semi-skilled workers", particularly in the Midlands although relations with the A.E.U. were said to be "becoming increasingly difficult throughout the country."(2)

Voices within both unions called for the repudiation

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(1) T.G.W.U. "57th Annual Report of the General Secretary to the Executive Council Meeting in August, 1936" in General Executive Council Minutes collection, Transport House.

(2) T.G.W.U. M.E.C. Minutes 29 April, 1938, Area 5 Report; General Executive Council Minutes 23 May, 1938.

of the 1925-6 agreement. However, in spite of growing rivalry over membership, a basis for cooperation still existed in other spheres, notably the movement mounted jointly by the A.E.U., T.G.W.U. and N.U.G.M.W. in 1936 concerning rates of pay for machine workers.(1) For this reason and also because the leaderships of both unions did not wish competition for membership to proceed to the extent that it led to a breakdown of cooperation in other areas they maintained the 1925-6 agreement. In April, 1938 it was agreed that there should be a "standstill" regarding organisation across disputed boundaries until the problem of jurisdiction was finally settled and that in the meantime there should be "no interference with the existing membership and allocation of work."(2)

This arrangement broke down almost immediately as a result of events at Pressed Steel Ltd. beginning in November. An unsuccessful unofficial strike which the T.G.W.U. had refused to support financially led to a number of members becoming discontented and joining the A.E.U. When the national officers of the A.E.U. were informed of this they instructed the Oxford branch not to accept ex-T.G.W.U. members as this was in breach of the

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(1) See above, p. 508, 509n.

(2) A.E.U. National Committee Minutes 28 April, 1938.

1925-6 joint working agreement. Nevertheless, complaints continued to be made concerning efforts by A.E.U. men to recruit ex-T.G.W.U. members at Cowley.(1) Consequently a meeting was held to discuss ways of enforcing the standstill agreement and it was agreed to circularise all district secretaries calling for its observance.(2) However relations continued to deteriorate. There were renewed complaints of poaching at Pressed Steel during 1939(3) and a number of reports were received from aircraft establishments concerning the A.E.U.'s efforts to obstruct the progress of the T.G.W.U. Thus at the start of 1939 the T.G.W.U. was trying to organise aircraft workers in Hampshire and in April opened a new branch at Woolston with about 200 members. However it was reported that

> "Complete organisation is difficult owing to the A.E.U. claiming to be the only union catering for aircraft workers. This is being used for propaganda purposes amongst all types of workers."(4)

A similar report was received from the A.V.Roe works at Manchester, and at Rolls-Royce the T.G.W.U. faced competition from the N.U.G.M.W. in the recruitment of labourers which was being encouraged by the A.E.U. This

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(1) T.G.W.U. General Executive Council Minutes 17 Nov., 1938; Dalgliesh, Circular to General Executive Council, Feb., 1939, in M.E.C. Minutes 1 Feb., 1939; A.E.U. National Committee Minutes 28 April, 1939.

(2) A.E.U. National Committee Minutes 28 April, 1939.

(3) A.E.U. National Committee Report 1940.

(4) T.G.W.U. M.E.C. Minutes 21 April, 1929, Area 2 Report.

tactic was employed by the A.E.U. since the N.U.G.M.W., with fewer members in engineering and a weaker membership among semi-skilled workers than the T.G.W.U., could be persuaded to confine its efforts to labourers and to leave machinists to the A.E.U.(1)

The continuation of conflict at Pressed Steel led to Bevin protesting on behalf of the T.G.W.U. against the actions of the A.E.U., saying

> "Then you begin an activity, not amongst skilled men, but amongst handymen and men who are semi-skilled and so-called unskilled. Recently, I am informed, you have even got amongst the production men, I am referring now to Pressed Steel at Oxford ..."

Bevin argued that these groups had been ceded to the T.G.W.U. as a result of the 1926 amendments to the 1925 joint working agreement and warned that

> "... unless some arrangements can be arrived at, we feel that there is no alternative but for us to adjust our scales and benefits and announce that we propose to develop our Engineering Group into a full Engineering Section. We are not putting this forward as a threat but we are driven to contemplate this course by the tactics which are being used against us."(2)

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(1) T.G.W.U. M.E.C. Minutes 21 July, 1939, Area 6 Report.

(2) A.E.U. National Committee Report 1940.

It was at this point that the A.E.U. openly declared that the joint working agreement contained nothing which could be strictly interpreted as constraining its organising activities. It stated that it had claimed the right to organise semi-skilled men since 1920 and that all it had done with the T.G.W.U. was to enter into "some tentative agreement to leave labourers alone", a condition which it claimed to have honoured.(1) By this time the growing reality of dilution and pressure on the A.E.U. from the Employers' Federation to enter into a Temporary Relaxation Agreement had made the termination of the joint working agreement inevitable. The A.E.U. was by August on the point of concluding a dilution agreement with the E.E.F. and was preparing to open a membership section for male dilutees. In view of this the A.E.U. decided to end the agreement with the T.G.W.U. on 9th August.(2)

Subsequently, further tension arose between the two unions as a result of the activities of the A.E.U. in relation to dilutees. The A.E.U. was determined that it should be able to exercise some control over the procedures whereby dilutees were introduced into engineering shops, i.e. that it would be able to enforce

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(1) ibid.

(2) The A.E.U. signed the Temporary Relaxation Agreement with the E.E.F. on 28 August. See above, p. 217, 223-4; A.E.U. Journal Oct., 1939; T.G.W.U. General Executive Council Minutes 17 August, 1939.

the protective and consultative clauses within the Temporary Relaxation Agreement, and to ensure that dilutees were removed from skilled work at the end of the war. In order to be able to do this it was necessary that the A.E.U. should organise dilutees. Therefore in September, 1939 a letter was sent from Head Office to all branches asking that every effort should be made to ensure that all dilutees were enrolled into the A.E.U. Special membership forms and contribution cards were prepared and sent out to all branches.(1) A policy of enrolling all dilutees necessitated that members of other unions coming into engineering as dilutees became at least temporary members of the A.E.U. Efforts to ensure this began to be made as early as October, 1939. A.E.U. District Secretaries were told that men registered as dilutees should be allowed to take employment on the condition that they joined the A.E.U. and that where they were already members of other unions they should take out additional A.E.U. membership.(2) In November the Area Secretary of the T.G.W.U. in the South-East informed all

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(1) Letter to Branch Secretaries Sept., 1939, reproduced in National Committee Report 1940. As yet, dilutees were seen as being male. No provision for the organisation of women was made by the A.E.U. until the end of 1942.

(2) Letter from Fred. A. Smith, General Secretary to District Committees 24 Oct., 1939 in ibid.

of his engineering and aircraft branches that as a result of the Temporary Relaxation Agreement the A.E.U. was endeavouring "to get our members who are so promoted (i.e. to skilled work) to transfer to the A.E.U." This was being done

> "mainly by A.E.U. shop stewards and the method of approach is to show our members a copy of the agreement, stating that it is their agreement and consequently, our members should transfer to the A.E.U.
>
> The second approach is to persuade our members to transfer temporarily to the A.E.U. and giving them the right to come back to our union when they resume their normal employment.(1)

These actions by the A.E.U. were strongly opposed within the T.G.W.U., which saw them as an attempt by the A.E.U. "to try and improve their membership at the expense of this Union due to a war emergency measure."(2) Dalgliesh, the National Secretary of the Metal and Engineering Trade Group, was strongly opposed to any attempt to persuade T.G.W.U. members to transfer to the A.E.U. on the grounds that the A.E.U. would leave them "stranded" as skilled men once more became available for jobs being done by dilutees and that "it has been

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(1) T.G.W.U. J.T.Scoulding, Area Secretary, Area No 1 to all Engineering and Aircraft Branches and Officers 8 Nov., 1939, in ibid.

(2) ibid.

the policy of our Union for very many years to insist upon the right of any man to progress in any work that he is capable of doing.(1)

The A.E.U. attempted to reassure the T.G.W.U. by pointing out that they were not asking members of other unions to transfer to the A.E.U., merely to take out additional membership while retaining their membership of their existing unions.(2) Understandably, the T.G.W.U. was not mollified, being faced with the problem that once its members became subject to A.E.U. rules they were effectively out of the control of the T.G.W.U., yet it would be faced with the difficulties of providing for these members once they were dismissed from skilled work. Thus Bevin wrote to Smith, the A.E.U. General Secretary, "It is certainly news to us that any union can accept a member for the period of hostilities only ... I suggest that you cannot very well allow another union to take a member for one period of the member's existence and then when he is no longer required politely hand him back or leave him stranded ..."(3)

In view of this resistance the A.E.U. wrote to Walter Citrine in February, 1940, asking whether the

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(1) Circular from A. Dalgliesh, 10 Nov., 1939, in ibid.

(2) ibid. p. 90.

(3) E.Bevin to F.A.Smith, 10 April, 1940 in ibid.

General Council was willing to approve that "an affiliated union" (i.e. the T.G.W.U.) "encroach upon the work of skilled men and not become members of the union who primarily negotiates the wages and conditions of this class of labour."(1) However, in an exchange of letters during March and April, Citrine insisted that an attempt be made by the A.E.U. to reach its own agreement with the T.G.W.U.(2)

A conference was held with the T.G.W.U. on 9 July, at which a draft agreement was drawn up to delineate spheres of influence among upgraded workers and ex-engineers returning to their trades from other industries. The agreement was in complete accord with A.E.U. policy. All T.G.W.U. members who were upgraded under dilution agreements were to be advised to become temporary members of the A.E.U.'s Section 5a - T.R.A. while retaining T.G.W.U. membership. Ex-engineers returning to the industry were to take temporary A.E.U. membership but could retain their T.G.W.U. card "in consideration of the fact that they will return to their previous employment at the expiration of the war."(3) The A.E.U. was to

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(1) F.A.Smith to W.Citrine, 27 Feb., 1940 in ibid.

(2) W.Citrine to F.A.Smith, 25 March, 1940; F.A.Smith to W.Citrine, 6 April, 940; W.Citrine to F.A.Smith, 12 April, 1940, in ibid.

(3) A.E.U. National Committee Report 1941.

inform the T.G.W.U. of all T.G.W.U. members admitted to Section 5a - T.R.A. and the T.G.W.U. in turn was to tell the A.E.U.of all of its members who had entered the engineering trades. Joint committees were to be set up at district level to deal with matters of mutual concern and a national committee was to be established to deal with matters referred to it from the districts.(1)

There was considerable opposition to these proposals from the Metal and Engineering Group of the T.G.W.U. The Area 1 Committee deplored what it called "the action of the E.C. in holding our membership to ransom in order to appease the A.E.U." and urged that the proposal be rejected and a section for engineering craftsmen set up within the T.G.W.U.(2) The main obstacle to the conclusion of the agreement was the question of what would happen to the T.G.W.U.'s skilled membership, which was quite considerable in Bristol and Coventry, since the proposed agreement was seen as a means of transferring skilled workers to the A.E.U.(3) No basis for agreement was reached until April, 1941, when it was suggested that special provision might be made to safe-

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(1) ibid.

(2) T.G.W.U. General Executive Council Minutes 22 August, 1940.

(3) T.G.W.U. Finance and General Purposes Committee Minutes 24 April, 1941.

guard the T.G.W.U.'s position in the Bristol area. Further discussions with the A.E.U. took place during the next three months and in June it was reported that the A.E.U. had agreed that the T.G.W.U.'s position among skilled men in the Bristol - Gloucester area would be respected. On this condition the proposals advanced in July, 1940 came into effect from 30 June, 1941.(1)

The agreement was however, put into effect against the wishes of the majority of T.G.W.U. officials in engineering districts. In September the National Delegate Conference voted to refer the agreement back to the Executive Council and when, as Arthur Deakin suggested, the trade groups and area committees were invited to comment on the agreement, the balance of opinion was hostile, with those in the main engineering centres demanding its termination.(2) In spite of this opposition however, the Executive Council was able to keep the agreement going by extending it for three- and six-monthly periods, each extension following a review of how the agreement was working.(3)

The nature of this agreement and the opposition to

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(1) T.G.W.U. General Executive Council Minutes 1 May, 1941; 9 June, 1941.

(2) Out of twelve Area Committees of the Metal and Engineering Group only three were in favour of the agreement. T.G.W.U. M.E.C.Minutes 7 Nov., 1941.

(3) ibid.; T.G.W.U. General Executive Council Minutes 5 Dec., 1941, 21 May, 1942, 21 August, 1942.

it within the T.G.W.U., especially in the Midlands and the South-East, did little to prevent the further development of overlapping jurisdiction; indeed in one respect it encouraged it by stimulating the wider opening of the A.E.U.'s ranks. As shown in Chapter Four, membership of Section 5 more than doubled during 1938-44, that of Section 5a nearly trebled and that of Section 5a - T.R.A. rose from 7,698 in December, 1940 to 44,963 at the end of 1943.(1) Section 5a - T.R.A. was closed at the end of 1946 and the membership of Section 5a fell during 1947-8 but it still remained much higher than it had been before the war - 135,000 in December, 1948 compared with 53,000 ten years previously.(2) In addition, Section 5 continued to expand, both absolutely and relatively to Section 1. Even bearing in mind the fact that a number of skilled men joined these sections, there is considerable evidence in favour of a significant, permanent extension of A.E.U. membership among semi-skilled workers.

At the same time the T.G.W.U. increased its presence in the motor and aircraft industries. It began

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(1) A.E.U. Financial Report Dec., 1938-44. See above, p. 451-2.

(2) A.E.U. Financial Report Dec., 1938, 1948.

to make considerable efforts to organise women, a policy which had begun during the early 1930s and which was stepped up after 1939 as a result of a decision by the General Executive Council to "make a bold attempt" at organising women in the engineering industry.(1) However, its organisation was not confined to women and unskilled males. Not only was its position among skilled aircraft workers in Bristol and Gloucester protected by the 1941 agreement; it also continued to build up membership among skilled men in the Midlands, the Metal and Engineering Group there continuing to favour the establishment of a membership section for skilled engineers. Wherever possible, attempts were made to avoid the transfer of skilled members to the A.E.U. and this encouraged attempts by both unions to dominate organisation in particular plants. By 1945 the Midlands Area Committee of the Metal and Engineering Group was demanding

> "that in view of the thousands of skilled men in membership of this union ... all possible steps be taken in the Midlands Area to protect our right to this class of worker."(2)

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(1) The lack of organisation among women in engineering was commented on in 1931. By 1932 the T.G.W.U. was signing collective agreements on behalf of women in the motor industry, e.g. at Rover, Ltd. T.G.W.U. Metal and Engineering Trade Group Report July, 1931; M.E.C.Minutes 28 April, 1932; 21 July, 1939.

(2) T.G.W.U. General Executive Council Minutes 4 Dec., 1945.

Resistance within the T.G.W.U.'s Engineering Group to the expansionary tendencies of the A.E.U. was heightened at the end of 1942 when the A.E.U., faced with an influx of female dilutees, decided to set up a Women's Section. Despite an agreement, drawn up on 27 May, 1943, which incorporated the principles of the T.U.C.Bridlington Agreement concerning recruitment by competing unions, rivalry was intense.(1) The T.G.W.U. in the Midlands claimed that the A.E.U. tried to force women out of the T.G.W.U. as soon as they were put onto skilled work and reports of "poaching" were common.(2) There is no doubt that the agreement had some effect in regulating competition for women; the majority of complaints of "poaching" were said to have been dealt with satisfactorily and it was reckoned that without an agreement "there would have been

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(1) The Bridlington Agreement, a code of conduct for trade unions relating to organisation, was drawn up at the 1939 Congress. It was an elaboration of the Hull Principles of 1924 and its main points, incorporated into the A.E.U. - T.G.W.U. agreement on the organisation of women, were that; no member of another union might be accepted without inquiry from that union; no member of another union should be accepted where inquiry showed that the member was under discipline, engaged in a trade dispute or in arrears; no union should start to organise in establishments among any grade of workers in which another union had the majority of workers and negotiated on their behalf. "Interim Report on Trade Union Structure and Closer Unity", T.U.C.Report 1946.

(2) T.G.W.U. M.E.C.Minutes 4 Feb., 1944.

open warfare in every engineering shop in the country."[1] Nevertheless, the agreement by no means prevented competition, and the same was true of the 1941 agreement regarding the organisation of male workers in skilled employment. The terms upon which these agreements were applied depended upon the relative strength of each union in individual plants. Where the T.G.W.U. was strong it could keep its hold over skilled workers as well as semi-skilled machinists, claiming the support of the Bridlington Agreement in respect of majority rights. Where it was weak however, it had to cede even female dilutees to the A.E.U. Thus each union had a considerable interest in recruiting workers as they entered the motor and aircraft industries and in organising new plants as they opened.

The result was that both the A.E.U. and the T.G.W.U. established competing organisation among wider groups of workers throughout the motor and aircraft industries. The T.G.W.U. probably took the lead in the large body plants and on the production lines, although the A.E.U. made inroads into these areas from the late 1930s. The A.E.U. itself continued to dominate skilled engineering workers, especially in the toolrooms and maintenance departments, although it had to face competition from the

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(1) ibid., M.E.C.Minutes 29 Oct., 1943; General Executive Council Minutes 4 June, 1944

T.G.W.U. among skilled machinists. It was in the machine shops and among semi-skilled machinists more than anywhere else however, that the relative strengths of the A.E.U. and T.G.W.U. varied plant by plant according to individual circumstances, e.g. the relative efficiency of organising machinery at shop floor or at local level.

The increasingly open and aggressive recruiting policies of the A.E.U. and T.G.W.U. began to challenge the N.U.V.B. during the 1930s. For a number of reasons it was unable to cope with this pressure and began to lose ground. To some extent this was the result of choice within the N.U.V.B. regarding policy on membership but it was also the consequence of developments which thwarted a number of attempts which were made to adjust to new circumstances.

The N.U.V.B. regarded itself as a union of craftsmen for the whole of the vehicle building industry.(1) However, this did not mean that it sought to organise all skilled motor and aircraft workers. The unions which had amalgamated to form the N.U.V.B. in 1919 were societies of skilled woodworkers, upholsterers and painters employed in the

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(1) As indicated by its rule on membership; see above, p. 353-4.

manufacture of vehicle bodies; the bulk of their membership was employed making and repairing railway carriages and omnibus bodies. When they expanded into motor and aircraft work during the 1900s they confined themselves to body and airframe shops. This orientation was maintained by the N.U.V.B. Thus the vehicle building industry as defined by the union was by no means co-extensive with the motor and aircraft industries. It extended beyond their boundaries to the railway workshops yet it did not encompass the whole of motor and aircraft production.(1) Therefore as far as the motor and aircraft industries were concerned the N.U.V.B. in the 1930s was narrower in its scope than either the A.E.U. or the T.G.W.U. which both began to involve themselves in engineering and bodymaking processes.

The N.U.V.B. developed a strong organisation within its chosen sphere during the 1920s. As shown in Chapter Two, the N.U.V.B. was able to build up organisation in a number of shops in Coventry and Manchester, especially those producing commercial vehicles, to the point where

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(1) According to Mr. Eric Bone, of the T.G.W.U. Automotive Group, between 30 and 50 per cent of N.U.V.B. members were employed outside the motor and aircraft industries during the 1920s and 1930s.

it was able to exercise considerable control over the hiring of labour, preference being given to N.U.V.B. members at Crossley Motors, and the terms upon which new processes were introduced at Leyland Motors.(1) In Coventry it claimed to have virtually 100 per cent organisation in the body shops.(2)

In this it was aided by the growing demand for bodymakers and finishers during the mid-1920s as demand outstripped productive capacity. This was important in conditioning the N.U.V.B.'s initial reactions to technical change, for while shortages of skilled men were important in encouraging the development of new bodymaking processes during the mid-1920s, the growing demand for skilled labour enabled the N.U.V.B. to insist in a number of cases that new processes continued to be performed by skilled men at skilled rates of pay.(3) In these circumstances too, the N.U.V.B. was better able to maintain its organisation in the motor industry than were the A.E.U. or the Workers' Union; indeed in contrast to their experience

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(1) See above, p. 73-4.

(2) ibid.

(3) e.g. at Leyland and Austin during 1924-5; see above, p. 73-4, 80. Rover Motors was forced to remove women from cellulose spraying work in February, 1926 and in 1927 the General Secretary stated that employers did not object seriously to paying the skilled rate for paint-spraying. N.U.V.B. Monthly Journal March, 1926, Midlands District Report; Quarterly Journal July - Sept., 1927, Midlands District Report.

of dramatic membership losses in Coventry during the first half of the 1920s, N.U.V.B. membership actually grew.

Table 5.1 Membership of the N.U.V.B., A.E.U. and the Workers' Union in Birmingham and Coventry, 1920-1929

Year	N.U.V.B.		A.E.U.		W.U.
	Birmingham	Coventry	Birmingham	Coventry	Total Birmingham and Coventry
1920		1,866	5,884	4,406	90,000
1921	846	-	4,842*	9,939	-
1923	431	1,661	4,292	5,065	15,000
1925	-	-	3,173	2,879	-
1926	701	2,286	-	-	-
1929	648	2,214	2,658	2,616	-

Source: N.U.V.B. Quarterly Journal; A.E.U. Half-Yearly Report; Richard Hyman, "The Workers' Union, 1898-1928", op.cit.

* There were substantially more branches reporting in 1921 than in 1920.

The relative strength of the N.U.V.B. was undoubtedly important in delaying the establishment of a membership section catering for semi-skilled workers until 1931. During 1926-7 a number of reports from district organisers began to draw attention to the growing number of semi-skilled workers, including many women, employed in the body-

shops, especially on assembly, spraying and upholstery work and to advocate their recruitment. Thus in 1926 a joint meeting of district representatives from Liverpool and Manchester resolved that

> "these councils are in favour of organising all females employed in our industry into our society and recommend that the E.C. fully explore the possibilities of such a new departure and submit findings to the next delegate meeting for revision of rules."(1)

In the following year the Midlands District Organiser suggested that semi-skilled men might be admitted to the skilled sections of the N.U.V.B. where they were being paid at skilled rates.(2)

However, there was a strong feeling that the union was able to control the introduction of new processes in such a way as to continue to be able to reserve them for skilled men and to obtain skilled rates of pay. Thus at the same meeting as that at which the Liverpool and Manchester representatives resolved in favour of organising women it was also resolved

> "That these councils are in favour of every effort being made to obtain and retain ...

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(1) N.U.V.B. Monthly Journal Feb., 1926, Liverpool and Manchester Joint District Council Report.

(2) N.U.V.B. Quarterly Journal Oct.-Dec., 1927, Midlands Area Report.

> ... (cellulose spraying) work for our members so that we may control its operation."[1]

Moreover at the 1929 delegate conference it was decided that the employment of women on upholstery work and paint-spraying did not warrant a change in membership policy "or justify the inclusion of women in our ranks" and that what was needed was to organise skilled men sufficiently well so as to be able to ensure "that women shall not go beyond the limits of machine sewing."[2] Thus the success of resistance to the skill-displacing impact of technical progress during the mid-1920s made the N.U.V.B. less ready to make concessions and adapt.

Yet the circumstances which had favoured the N.U.V.B. during the mid-1920s began to disappear after 1926. As shown in Chapter Four some employers, e.g. Austin, used the General Strike to attack N.U.V.B. organisation; also the growth of output and employment was checked during 1927-8 and the beginnings of depression began to be felt during 1929-30.[3] Employers therefore

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(1) N.U.V.B. Monthly Journal Feb., 1926, Liverpool and Manchester Joint District Council Report.

(2) N.U.V.B. Quarterly Journal April-June, 1929, General Secretary's Report.

(3) See above, p. 337-8. The index of total output rose by only one point from 144 to 145 during 1927-8 and that of employment from 111.6 to 112.2 (1924=100). There was more rapid growth during 1928-9 but then both indexes fell, from 163 to 161 and 120.1 to 108.9 during 1929-30. See Appendix 1.

became freer to introduce semi-skilled labour along with new production methods and this gradually compelled the N.U.V.B. to adopt tactics of adaptation alongside those of resistance. Thus during 1930 some officers in the Midlands recommended members to take semi-skilled work at lower rates while holding out for the skilled rate on other operations.(1) As semi-skilled workers came to be employed more widely and the effects of the depression upon the N.U.V.B.'s bargaining power began to be felt, the attitude within the union towards organising the semi-skilled also became more favourable, at least among full-time officials. In June 1931 the Assistant General Secretary stated that while nothing should interfere with the recruitment of skilled men, the "revolution" in the motor trade meant that "modifications must be made ... to deal with the new phases of modern production."(2) Consequently it was decided at the delegate conference in December to open an Industrial Section "to all working within the trade, irrespective of age or sex, with a guarantee of support in dispute, victimisation, legal claims and funeral, but with no liability on the society for unemployment benefits." The reasons for this change were made quite clear. It was said to have been "a great

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(1) N.U.V.B. Quarterly Journal Jan.-March, 1930, Midlands District Report.

(2) N.U.V.B. Quarterly Journal April-June, 1931, Assistant General Secretary's Report.

plunge", taken as a result of trade "moving rapidly to the mass production centres with their semi-skilled processes", and to eliminate "an evil competition that has grown up in the cheap, unskilled organisations in the principle motor, railway shops and corporation centres of our trade", i.e. competition from the newly-formed Metal and Engineering Group of the T.G.W.U.(1)

Technical progress had therefore created a group of workers who were in competition with skilled N.U.V.B. members and distinctively, many were women. In order to ensure that rates for semi-skilled work did not fall too far below the skilled rate and thus to mitigate the impact of skill displacement on those of its members who were forced to accept a change in status, and in order to prevent semi-skilled labour from threatening to cut further into skilled work, it was necessary that the N.U.V.B. should organise semi-skilled workers. Also, in view of the rapidly rising unemployment among its members, it wished to exclude members of other unions from the body shops as far as possible.

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(1) N.U.V.B. Quarterly Journal Jan.-March, 1932, Report of the Delegate Meeting 2 Dec., 1931. In the Summer of 1930, the T.G.W.U. secured a foothold among women workers in the body shop at Rover because the N.U.V.B. was unable to organise them when they struck over the introduction of a new system of payments by results. N.U.V.B. Quarterly Journal July - Sept. 1930.

However, as shown in Chapter Four, there was little extension of N.U.V.B. membership to the semi-skilled, even during the late 1930s, when the A.E.U. was beginning to adopt a more wholehearted approach towards less-skilled workers. Only 2.9 per cent of N.U.V.B. members in Coventry were semi-skilled or members of the Industrial Section in 1938, i.e. less than 60 workers. In Birmingham the proportion was much higher - around 50 per cent - but this still meant that there were no more than 540 semi-skilled workers in the N.U.V.B. in Birmingham by the end of the 1930s.(1) To some extent this was due to a widespread reluctance on the part of branch officials to admit semi-skilled workers.(2) Yet this was also part of a wider malaise affecting N.U.V.B. organisation in the motor industry as a whole as shown in Table 5.2 below.

It is immediately apparent that the N.U.V.B. suffered very badly as a result of the slump. Membership fell by 50 per cent or more in Coventry and Wolverhampton and by between 30 and 50 per cent in London and Oxford during 1929-33. Only in Birmingham, where earlier losses had been sustained, and Manchester was there any sign of

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(1) N.U.V.B. Monthly Journal and Quarterly Financial Report, Dec., 1938, 1939.

(2) See above, p. 360-3.

Table 5.2. N.U.V.B. Membership in Main Motor Centres, 1929-1939.

	1929	1932	1933	1935	1937	1939
Birmingham	648	500	448	493	743	691
Coventry	2,214	1,412	1,007	1,278	1,539	1,636
Wolverhampton	615	407	302	238	329	293
Leyland(1)	no branch	131	124	96	105	120
Manchester	1,108	971	912	934	940	942
Preston	544	319	253	306	376	383
Oxford	61	45	41	72	141	-
London West	818	626	548	694	752	635
Shepherds Bush	552	356	286	341	436	439
Ilford	117	66	77	90	98	108
Luton	31	11	-	28	43	112

(1) The Leyland branch was established in July, 1931. Previously its members had been in the Preston branch. N.U.V.B. National Executive Council Minutes 25 March, 1931.

Source: N.U.V.B. Monthly Journal and Quarterly Financial Report Jan., 1930-3, Dec., 1933-9.

organisational stability. In this the N.U.V.B. fared much worse than the A.E.U. whose Coventry membership for example, fell by only 269, or just over 10 per cent, during 1929-33.(1) This was partly because the A.E.U. had already

(1) A.E.U. Half-Yearly Report Dec., 1929, 1933.

experienced much heavier losses during 1920-6 and was thus reduced to a hard core of membership on the eve of the depression. However, the N.U.V.B. had its own specific problems. It suffered from exceptionally severe unemployment in the motor centres. In London "practically the whole of the membership" of some branches was reported to be out of work and in the West Midlands unemployment among members peaked at 41.5 per cent at the end of 1931, a much higher figure than that for the motor industry generally.(1) This was due to the effect of depression in curtailing the demand for larger, higher quality cars upon which most N.U.V.B. members were employed. Thus N.U.V.B. organisation at Armstrong-Siddeley Motors, which had been built up strongly during the mid-1920s, began to collapse during 1932 as several hundred men were laid off. Moreover, there is a suspicion that active N.U.V.B. members were victimised since they figured largely among the redundancies following a short unofficial strike at the beginning of the year. Organisation in the trimming and finishing shops was especially weakened. Thus in August, 1932 one member said that

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(1) N.U.V.B. Quarterly Journal Oct.-Dec.,1931, General Secretary's Report; Jan.-March, 1932. Unemployment among insured workers in the manufacture of motors, cycles and aircraft peaked at 22.4 per cent in 1932. See above, Table 4.2

> "12 months ago we were one of the finest organised shops in the country, 100 per cent strong. Now it is a question if there is 1 in 4 in the Finishing Shops. Also how many are left in the shops who sat in the office during the dispute period?"(1)

The reaction of the Coventry branch officials was one of helplessness, it being felt that nothing could be done but observe events at the firm. While this may have been the case, it was not to the liking of some members at Armstrong-Siddeley. Morale sank lower when, despite the feeling that something should be done to get allegedly victimised members reinstated, the Coventry branch secretary stated that "no useful purpose would be served by approaching the firm."(2) It would therefore not be surprising if disillusioned members severed their links with the N.U.V.B. and joined other organisations when the revival came after 1932.

The outstanding feature of the N.U.V.B.'s history during 1933-9 was its failure to regain the membership levels of the late 1920s. In this it fared far worse than the A.E.U., which began to build up membership rapidly, surpassing the earlier peak reached in Coventry during the

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(1) N.U.V.B. Coventry branch Minutes 20 Oct., 1925; 19 May, 1932; 16 August, 1932.

(2) N.U.V.B. Coventry branch Minutes 16 August, 15 Nov., 1932.

post-war boom by 1939.(1)

There were three aspects to this failure. The first was the absence of any noticeable tendency to develop organisation among semi-skilled workers. The second, which was more serious from the N.U.V.B.'s point of view, was the erosion of its position among skilled men. The third, which was of longer-term rather than immediate significance, was its inability to gain more than a toehold in the aircraft industry after 1935.

As shown above and in Chapter Four, the N.U.V.B. did not develop more than a marginal presence among semi-skilled motor workers before the Second World War. To some extent this can be said to have been the result of a deliberate choice on the part of N.U.V.B. officials and should not therefore be regarded as a failure. However, from 1935 the N.U.V.B., faced with growing competition from the T.G.W.U. and desiring to exercise some control over the scope of semi-skilled work and the terms upon which operatives were employed, began to claim exclusive jurisdiction over all vehicle building workers.(2)

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(1) Recorded A.E.U. membership in Coventry reached 9,939 in 1921. It touched its lowest point - 2,347 - in 1933. By 1939 it stood at 11,735. A.E.U. Half-Yearly Report, Dec., 1921, 1933, 1939.

(2) Its claim was to all workers "employed upon the construction or finish of a vehicle". N.U.V.B. Quarterly Journal April-June, 1935, "Report of a Conference with the T.G.W.U. regarding the organisation of mass production shops."

Yet the absence of an effective N.U.V.B. presence among semi-skilled workers in most body shops and the growing strength of the T.G.W.U. made this an empty claim. The N.U.V.B. was forced to give ground to the T.G.W.U. at Pressed Steel, Ltd. in Oxford and in the motor industry in Coventry during the second half of the 1930s. In both towns the T.G.W.U. refused to concede any jurisdiction over semi-skilled workers to the N.U.V.B., declaring that its concern with vehicle building began "... with the finishing of the plates in the steelworks and in fact we are concerned with vehicles from the time they were steel plates to the time they are scrapped in the metal merchants' yards."(1) Thus when the N.U.V.B. attempted to assert itself among semi-skilled workers, as it did at Pressed Stell in 1939, it was successfully resisted by the T.G.W.U., which already had the bulk of workers employed in the plant, the outcome being that the N.U.V.B. remained confined to the machine shops while the T.G.W.U. organised all production workers.(2)

The confinement of the N.U.V.B. to skilled sections of bodymaking during the 1930s limited its scope for growth

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(1) T.G.W.U. M.E.C. Minutes 1 Feb., 1935; Halliwell to Buckle (Coventry branch secretary) 29 Feb., 1940 (N.U.V.B. Head Office Correspondence, Coventry City Record Office ACC 635).

(2) N.U.V.B. Quarterly Journal Oct.-Dec., 1939; interview with Mr. Eric Bone. The N.U.V.B., like the A.E.U., sought to take advantage of discontent among T.G.W.U. members at Pressed Steel following the T.G.W.U.'s refusal to support an unofficial strike and the strike's failure. See above, p.520.

since changes in the structure of production meant that this section of the workforce was growing slowly, if at all. Quantitative evidence is generally lacking and imprecise since the data on workforce composition in motor firms in the archives of the Engineering Employers' Federation do not give specific details of the number of skilled bodymakers and finishers and figures for "others, skilled", the category in which they must have been included, are only available for 1935 and 1937. Nevertheless, this total ceased to grow in the mid-1930s and fell slightly between 1935 and 1937.(1) In those federated firms classed as vehicle builders the "others, skilled" category rose in absolute terms, from 2,290 to 2,748 during 1935-7 but declined relatively, from 40.6 per cent to 34.7 per cent of total employees.(2)

This development was ultimately the result of a shift of demand away from larger, more expensive vehicles to smaller, more standardised cars which began during the depression and persisted during 1933-9. It encouraged some important companies such as Standard and Humber-Hillman

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(1) From 12,244 to 12,220. In relative terms the drop was from 18.7 per cent to 17.3 per cent of the total workforce. E. & A.E.N.F., "Circular Letters to Local Associations ..." Oct., 1935, 1937.

(2) ibid. "Vehicle building" firms were, of course, not confined to the motor industry although they included specialist body makers.

to reorganise production on the basis of small cars, increased buying in of parts and greater standardisation and specialisation within the construction processes. This restricted the possible size of N.U.V.B. membership in the larger, more rapidly growing plants such as Standard in Coventry. The N.U.V.B., after mounting considerable effort to obtain 100 per cent organisation there during 1934-6, gained a total of only 117 members in spite of its success.(1) Thwarted in the larger firms, the N.U.V.B. was increasingly forced back into its strongholds in high-quality body manufacturing plants and commercial vehicle work where semi-skilled labour had not encroached very far, e.g. Park Ward and Crossville, where it had 100 per cent membership during the middle and late 1930s.(2) However, these sectors were smaller and grew less rapidly than did the mass production side of the industry.(3) Moreover, this development may itself have reinforced conservative tendencies within the N.U.V.B. as the bulk of members were concerned with defending and advancing their position at the quality end of the trade.

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(1) N.U.V.B. Coventry branch minutes 3 Dec., 1936.

(2) N.U.V.B. Monthly Journal Jan., 1934; July, 1936; Oct., 1938.

(3) See Appendix 1 for output figures for commercial and private vehicles.

The possibility of the N.U.V.B. developing as a small but strong organisation catering for skilled body-makers was however, diminished as a result of challenges from the T.G.W.U. and the sheet metal workers' unions. The basis for the T.G.W.U.'s tendency to expand vertically has already been outlined above. In 1935 the N.U.V.B. began to express concern at the T.G.W.U.'s activities among skilled men in Oxford and Coventry and in the same year the two unions came to an agreement whereby the T.G.W.U. agreed not to enrol craftsmen eligible for N.U.V.B. membership.(1) However, the resistance of the Metal and Engineering Trade Group of the T.G.W.U. to any agreement which restricted its organising activities meant that the policy of the General Executive Council was ambiguous, not to say disingenuous. While it was willing to instruct its district officials not to recruit crafts-men it took no more active steps to prevent them from doing so and once skilled men were in the union it refused to allow their transfer to any other society. Thus in reply to the N.U.V.B.'s request that skilled men recruited by the T.G.W.U. at Pressed Steel should be transferred to the N.U.V.B., the Metal and Engineering Trade Group Committee stated

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(1) N.U.V.B. Quarterly Journal Jan.-March, 1935, General Secretary's Report; T.G.W.U. M.E.C. Minutes 2 Jan., 1935, 26 April, 1935; General Executive Council Minutes Feb., 1935.

> "That we cannot agree to any proposal which would mean the transferring of our members to any other union after we have organised them."(1)

A similar incident occurred at Carbodies Ltd. in Coventry during 1939-40. Following complaints that the T.G.W.U. had been organising skilled workers at the company and elsewhere in Coventry, including ex-N.U.V.B. members, Arthur Deakin, Assistant General Secretary of the T.G.W.U. wrote to Halliwell, General Secretary of the N.U.V.B., saying that

> "It is ... true to say that we have enrolled 14 car finishers and whilst not proposing to generally depart from the suggestions made when we discussed the Oxford position, I am advised that it would be impossible to get these people to transfer to any other organistion..."(2)

More generally, the T.G.W.U. became less willing to accept the N.U.V.B.'s definition of what constituted a craftsman. Thus in February, 1940 Halliwell wrote to the N.U.V.B.'s Coventry branch secretary informing him of discussions concerning the activities of the T.G.W.U. among skilled men, saying that Deakin had

> "again ... offered us the exclusive rights to organise craftsmen ... The meeting left us to

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(1) T.G.W.U. M.E.C. Minutes 2 Jan., 1935.

(2) Deakin to Halliwell, 17 April, 1940 (N.U.V.B. Head Office Correspondence, Coventry R.O. ACC 635).

> define what was a craftsman and while we can do it to our own satisfaction I am afraid it would not satisfy the T.& G."(1)

The gains made by the T.G.W.U. among skilled body-makers in Coventry may have been partly due to the attitude of N.U.V.B. branch officers. Edward Buckle, the branch secretary, was cynical about the efforts of the T.G.W.U., which tended to be mounted during disputes. Referring to Carbodies he wrote

> "... we should watch we were not led up the garden path again like we were at the last dispute which cost the society over £500, this was Jan., 1935, when Mr. J. Francis told them all to fill up Ent. forms and they received dispute benefit and there was 129 Ent. forms, they all received dispute benefit and at the end of the Quarter there was only 39 paying in and these did not last long ..."(2)

From 1935 until 1940 the N.U.V.B. had made no further effort among Carbodies' workers and this cautious and sceptical approach to organisation led to criticism from other officials in the Midlands and from members, it being argued that much more could have been done by Coventry branch officers to develop membership in earlier years and that not enough use had been made of the machinery for

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(1) Halliwell to Buckle 29 Feb., 1940, loc.cit.

(2) Buckle to Halliwell 26 Jan., 1940, loc.cit.

organisation in the district. Criticisms were also made of branch administration and its dealings with other unions. In July, 1940 Halliwell wrote to Buckle, saying,

> "The charge I now make against you is that no steps were taken by you to prevent the Transport and General Workers' Union from taking into their membership craftsmen who ought rightly to belong to the N.U.V.B."(1)

On the other hand there were instances where more aggressive recruiting campaigns failed to generate results. A campaign among aircraft workers at Short Brothers in Rochester led to a number of applications for membership but these were subsequently withdrawn, "their preference going to the T.G.W.U. ... due mainly to our Tabled Contributions being higher."(2) Here was another way in which the craft background of the N.U.V.B., with its relatively high contributions to finance benefits such as superannuation, put it at a disadvantage during the late 1930s.

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(1) Halliwell to Buckle 4 July, 1940, loc.cit. Buckle appears to have been something of a character. Summoned to appear at Head Office to discuss these complaints, he replied that he was too busy with war work, suggested that the Executive Council meet him in Coventry and sent a £50 donation towardsa mobile canteen. Threatened with further action if he did not attend, he replied, "We refer you to our previous correspondence and say we have nothing further to add." Buckle to Halliwell 24 July, 1940; 5 Sept., 1940, loc.cit. Here the correspondence ended but Buckle continued as branch secretary until 1943. His retirement was noted in the Quarterly Journal for April-June, 1943 where it was commented that "Mr. Buckle is a typical Yorkshireman, blunt and very outspoken ...This outspokenness has sometimes led to difficulties but no one questioned the honesty of the view held, nor the honesty of purpose ..."

(2) N.U.V.B. Monthly Journal August, 1939, London District Report.

The challenge to the Vehicle Builders' jurisdiction which came from the sheet metal workers' unions was the result of the increasing use of pressed steel body sections during the 1930s. Initially used for cheaper models, pressed steel sections began to be used to an increasing extent by the "quality" manufacturers from the mid-thirties onwards.(1) The growth of metal work in motor body construction encouraged some firms to take on metal workers instead of woodworkers and led to sheet metal workers' unions beginning to claim motor body work for their members and to assert their right to recruit in the body shops on the grounds that the material used in construction had changed.

The sheet metal workers' unions, chiefly the N.U.S.M.W. and the Birmingham and Midland Society of Sheet Metal Workers, remained effectively closed to semi-skilled operatives throughout the period.(2) However, the growth of occupations in the body shops which were linked to sheet metal work elsewhere encouraged the horizontal extension of organisation to this section of the motor industry. Increasingly the sheet metal workers' unions

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(1) See above, p. 302-3.

(2) See above, p. 366-7.

demanded either that other workers such as woodworking vehicle builders be removed from metal body construction in favour of their members or that any worker employed on metal body work should join their ranks.

The response of the N.U.V.B., which had grown up largely as a union of woodworkers, was to deny that the material used in construction should be the criterion by which a union's claim to work in the vehicle building trades should be established. Instead it insisted on its own, i.e. the nature of the product, stating "we are vehicle builders whatever the material used."(1) The N.U.V.B. had responded to the spread of metal work as early as 1933, national officials advising members to accept new methods and "retain, independent of material, the work as that of vehicle builders."(2) This followed a number of demarcation disputes involving the N.U.V.B. and the N.U.S.M.W. during the early 1930s.(3)

Competition was stepped up during the mid-1930s as metal began to be used more widely. A series of demarcation

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(1) N.U.V.B. Quarterly Journal April-June, 1937, General Secretary's Report.

(2) N.U.V.B. Quarterly Journal July-Sept., 1933, General Secretary's Report.

(3) ibid.; Quarterly Journal July-Sept., 1930, Manchester District Report.

disputes flared up at Standard Motors during 1935-6, beginning when the N.U.S.M.W. succeeded in getting two vehicle building woodworkers dismissed. The N.U.V.B., whose organisation in the plant had collapsed during the depression, managed to fight back with a successful drive for 100 per cent organisation among vehicle builders. This produced a state of tension in the factory and a number of demarcation disputes occurred, culminating in a strike by the N.U.S.M.W. in September 1936 over the company's refusal to remove N.U.V.B. men from jobs claimed by the N.U.S.M.W. At the same time the N.U.S.M.W. and the Birmingham and Midland Society were reported to be claiming vehicle building work wherever sheet metal was being used.(1) A special meeting was called in September, 1936 to discuss the problem of incursion by the sheet metal workers who by this time were alleged to be taking N.U.V.B. members into their ranks at Rover, Ltd.(2) However, the Coventry branch was unable to persuade the Executive Council to intervene on its behalf until 1939, by which time the sheet metal workers' unions had extended

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(1) N.U.V.B. Coventry branch minutes of a special meeting of Standard Co. bodymakers 23 Nov., 1935; Coventry branch minutes 17 Sept., 1936; 22 Sept., 1936.

(2) N.U.V.B. Coventry branch minutes 15 Sept., 1936.

their presence in the Midlands, taking more jobs claimed by the N.U.V.B. at Triumph and Rover during 1937-8.(1) Similar competition developed in London where, in response to challenges from the N.U.S.M.W., the N.U.V.B. district organiser claimed "all work above the chassis; this we did on the wooden constructed vehicle" and argued that N.U.V.B. members had shown "sufficient skill in new processes to warrant the retention of metal body work."(2)

The actual extent to which the N.U.V.B. lost ground to the sheet metal workers' unions in the body shops during the 1930s cannot be assessed accurately but an indication is given by the comparative growth of the N.U.V.B. in the Midlands and the Birmingham and Midland Sheet Metal Workers' Society. Total N.U.V.B. membership in Coventry, Birmingham and Wolverhampton rose from 1,757 in 1933 to 2,620 by 1939; that of the Birmingham and Midland Society from 3,403 to 5,602.(3) One may conclude that the latter was in a better position to take advantage of technical change than the former.

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(1) N.U.V.B. Coventry branch minutes 5 Oct., 1937; 15 Nov. 1938.

(2) N.U.V.B. Quarterly Journal April-June, 1937, London District Report.

(3) See above, Table 5.2; Birmingham and Midland Sheet Metal Workers' Society Returns to the Registrar-General of Friendly Societies, P.R.O. FS 12/90.

The experience of the N.U.V.B. in the aircraft industry mirrored that in motor plants to a great extent. The Vehicle Builders began to develop a close interest in aircraft production in 1935 and they tried to build up organisation at Airspeed, the Bristol Aeroplane Company, A.V.Roe, Short Bros., Hawker and Westland. Organisation at Airspeed's two factories was good, the union's organiser commenting in 1937 that "If membership in other aircraft factories was doing the same as it is in the two mentioned, I am sure we would have a better hold on the trade."(1) Progress was also made at A.V.Roe's Stockport factory by 1939, with 100 per cent organisation being claimed in N.U.V.B. shops and the situation at Hawker's Brockworth plant was also said to be "very good".(2) Elsewhere however, there were few signs of success. The N.U.V.B. lost recruits at Short Bros. to the T.G.W.U. in 1939, nothing was heard from Bristol after 1936 and the N.U.V.B.'s advance at Westland was slow compared with that of the A.E.U. and T.G.W.U.(3) No new branches were opened in centres of aircraft production and in existing branches there was little sign of substantial growth. Membership

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(1) N.U.V.B. Quarterly Journal Oct.-Dec., 1937, London District Report.

(2) N.U.V.B. Quarterly Journal Oct.-Dec., 1939, Manchester District Report, Midlands District Report.

(3) See above, p. 553 ; N.U.V.B. Quarterly Journal Oct.-Dec., 1936, South-West District Report.

in Bristol grew from 98 to 186 and in Cricklewood from 282 to 482 during 1935-8. Moreover in some areas such as Yeovil, branches which had been closed during the depression were not reopened and in others such as Cheltenham and Crayford, membership declined during 1935-9.(1) Thus the evidence points quite conclusively to a minimal role for the N.U.V.B. among aircraft workers during 1935-9.

This failure to establish more than a toehold in the aircraft industry was largely the result of the switch from wood to metal in aircraft construction which had begun during the mid-1920s. When it tried to get its members employed on metal aircraft construction or to recruit aircraft workers, it faced considerable opposition from the sheet meetal workers' unions and the A.E.U., which was trying to back up its claim to be the only union for aircraft workers.(2) A more fundamental obstacle to the development of the N.U.V.B.'s organisation among aircraft workers however, was the fact that employers were reluctant to pay the full skilled rate for metal work to members of the N.U.V.B. on the grounds that it was a union of wood-

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(1) N.U.V.B. Quarterly Journal April-June, 1935-9, Returns of Branches.

(2) N.U.V.B. Quarterly Journal July-Sept., 1935, Midlands District Report; Jan.-March, April-June, July-Sept., 1940, Manchester District Report.

workers; indeed in some cases firms refused to employ them at all.(1)

The N.U.V.B. shared in the general expansion of trade unionism during 1939-43 but its growth remained relatively slow. Total membership rose from 27,000 in August, 1939 to 34,000 in August, 1943. In Coventry it crawled up from 1,636 in 1939 to 2,229 in 1943 at a time when over 24,000 workers were employed in six "shadow" factories in the district.(2) As show below it continued to remain very small in relation to the A.E.U. in the major motor districts.

This general picture of the N.U.V.B. in the motor industry shows the limits to its expansion which were carried over from the inter-war period. By 1940 the N.U.V.B. had been largely excluded from the aircraft industry owing to the difficulties it experienced in getting its members employed on metal aircraft work at skilled rates. Nevertheless, it managed during the war to establish a presence in

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(1) One example was the English Electric Co, Preston. N.U.V.B. Quarterly Journal April-June, Oct.-Dec., 1940; Jan.-March, April-June, 1941, General Secretary's Report. The union's strength at Airspeed was due to the fact that this firm was one of the few which continued to use wood in main air-frame construction.

(2) N.U.V.B. Quarterly Journal Jan.-March 1940, 1944; Kenneth Richardson, Twentieth Century Coventry (1972) p. 69.

Table 5.3. Membership of the N.U.V.B. and the A.E.U. in Major Motor Manufacturing Districts, 1939-1946.

	1939		1943		1946	
	N.U.V.B.	A.E.U.	N.U.V.B.	A.E.U.	N.U.V.B.	A.E.U.
Birmingham	691	6,097	889	11,367	754	10,470
Coventry	1,636	11,735	2,229	21,168	3,100	16,801
Oxford	200	532	147	3,444	439	3,128
Dagenham	-	479	-	3,177	-	4,625
Ilford	108	451	159	974	415	1,140
Luton	45	2,099	416	3,672	638	4,363

Source: N.U.V.B. Monthly Journal and Quarterly Financial Report; A.E.U. Monthly Journal

many aircraft firms, including "shadow" factories such as Nuffield Mechanisation and Aero at Castle Bromwich, where indeed, it recruited metal workers.(1) The N.U.V.B. also had members at Austin Aero in Birmingham, and a number of firms in the South and South-West such as Phillips and Powis, Handley Page, De Havilland, Hawker and Southern Aircraft, where N.U.V.B. shop committees had been established by 1943.(2) However, in view of the data in Table 5.3 the

(1) N.U.V.B. Quarterly Journal Jan.-March, 1940, April-June, 1940, Midlands and South-West District Report.

(2) N.U.V.B. Quarterly Journal Jan.-March, 1942, Midlands and South-West District Report; July-Sept., 1943, London District Report.

numbers involved must have been small and were probably largely made up of members transferred from motor and railway carriage work. Problems in relation to metal work and competition from the sheet metal workers and the A.E.U. persisted throughout the war.(1) In view of the discussion at the end of Chapter Three, it is possible that the failure of the N.U.V.B. to organise more widely among aircraft workers from the late 1930s prevented it from extending itself in the major motor plants after the war.

Yet to a great extent the limits to the growth of the N.U.V.B. during the war and, indeed the 1930s, were self-imposed and, given the aims of the organisation, were a rational response to changes in production. The N.U.V.B., while claiming to be an industrial union for the vehicle building industry by the late 1930s and hence willing to expand horizontally into airframe production, an attempt which was, as we have seen, largely a failure, was not concerned to organise workers in all aspects of motor or aircraft production. Within its own sphere, it

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(1) In April and July, 1945 for example, the A.E.U. cliamed that the N.U.V.B. had no right to metal aircraft work and that N.U.V.B. men so employed were dilutees. N.U.V.B. Quarterly Journal April-June, July-Sept., 1945.

had little intrinsic interest in extending membership to the semi-skilled. Throughout the period it remained essentially a union of skilled vehicle body builders and its relatively small, occupationally homogenous and predominantly skilled membership caused it to retain a strong craft outlook and its organisational reactions to changes in production were largely defensive and limited to what was thought to be necessary in order to retain control of its branch of the industry and so protect the interests of its craftsmen members. It was doubtless reinforced in this stance by the combined impact of rapid technical change and heavy unemployment during the late 1920s and early 1930s which forced it from all but its most secure niches in the motor industry.

This position is clearly illustrated by the N.U.V.B.'s attitude towards the recruitment of less-skilled workers. Reluctant during the early thirties, the prospect of other unions obtaining a base in the N.U.V.B.'s branch of the industry and possibly competing for work with its own members, stirred the union into sluggish action during the latter half of the decade. However, the continued weight of membership in the luxury and commercial vehicle branches of the industry, where the threat from semi-skilled labour was less than elsewhere, still limited the extent to which the N.U.V.B. became more open. The lack of con-

cern regarding semi-skilled workers in the small, "quality" body firms was due to the nature of the collective wage agreement existing between the N.U.V.B. and the United Kingdom Joint Wages Board of Employers for the Vehicle Building Industry. This recognised one grade of skill only. All vehicle builders, whether they were wheelwrights or labourers, were described as skilled. Rates varied between occupations, with labourers earning less than other grades. Work was also graded according to the quality of the job being done; top quality work, i.e. on first-class private body work and the manufacture and repair of 'buses and other licensed passenger vehicles, was worth 1d an hour more to all workers than "second grade individual and batch production" of private body work.(1)

Thus the N.U.V.B. was concerned with the organisation of semi-skilled workers only to the extent that it needed to control the terms of their employment in its shops in the larger motor companies, where employers had

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(1) "Memorandum of Agreement between the United Kingdom Joint Wages Board for the Vehicle Building Industry and the National Union of Vehicle Builders and the Amalgamated Society of Woodcutting Machinists of Great Britain and Ireland" in N.U.V.B. Quarterly Journal Oct.-Dec., 1938. This agreement dated back to 1919 when an identical agreement was signed with the National Masters', Wheelwrights', etc. Association. N.U.V.B. Quarterly Journal Oct.-Dec., 1919.

insisted upon introducing separate semi-skilled grades for body work as early as 1920.(1) The weakness of the N.U.V.B. in many of these plants after the depression and the need to rebuild organisations among skilled men, coupled with the fact that the union's main interest became more firmly located in the "quality" shops slowed down the trend towards more open organisation.

The N.U.V.B. began to take more interest in the organisation of semi-skilled workers during the war as it gained recognition and began to build up membership in major plants, notably Vuaxhall, where it, the E.T.U. and the A.E.U. were the only unions with which the company signed agreements,(2) and sought to establish its conditions of working. In these circumstances it was necessary to control the employment of semi-skilled workers by organising them.

Further impetus was given to the organisation of less-skilled workers during the war as a result of dilution, especially after the N.U.V.B. signed an agreement with the U.K. Joint Wages Board of Employers for the Vehicle Industry which provided for the employment of women. This was seen

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(1) E. & A.E.N.F., Thirty Years of Industrial Conciliation, op.cit. Appendix F.

(2) H.A.Turner et al Labour Relations in the Motor Industry, op.cit. p. 194.

as a possible threat to skilled male rates unless the women were organised so that the N.U.V.B. could ensure that firms were adhering to the wages provisions contained in the agreement, i e. that adult women should be paid at least 80 per cent of the skilled basic rate after a period of 32 weeks training.(1) It was also necessary in order to secure their dismissal after the war. By 1943 it was regarded as "imperative" that women be recruited, "especially if the shop had previously been engaged on vehicle building and repair."(2)

Consequently recruits to the Industrial and semi-skilled sections of the union began to rise as a proportion of total admissions during the war, from 17.9 per cent in 1938 to 57.3 per cent in 1943. Yet this recruitment was modest when absolute numbers are considered, the increase being from 614 in 1938 to 3,586 in 1942.(3) The scale of the N.U.V.B.'s operations being small, it had no need to recruit dilutees on a large scale, merely sufficiently to

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(1) "Memorandum of Agreement Between the United Kingdom Joint Wages Board of Employers for the Vehicle Building Industry and the National Union of Vehicle Builders and the Amalgamated Society of Woodcutting Machinists of Great Britain and Ireland, on the Employment of Women in the Vehicle Building Industry During the War, 26 August, 1941" in N.U.V.B. Quarterly Journal Oct.-Dec., 1941.

(2) N.U.V.B. Quarterly Journal April-June, 1943, Manchester, Liverpool and Irish District Report.

(3) N.U.V.B. Monthly Journal and Quarterly Financial Report 1938-44.

prevent them from undermining the position of craftsmen. As war production passed its peak, so the numbers entering the Industrial Section fell. However, during 1946-9 there was a renewed increase in semi-skilled recruitment and during 1949 semi-skilled entrants were equal in number to recruits to the skilled membership sections.(1) This reflected the need of the N.U.V.B. to establish itself more securely in the larger body shops as the demand for labour rose at the end of the war so as to "resist encroachment by other workers in our shops."(2)

By the late 1940s therefore, the N.U.V.B. was broadening its organisation more rapidly. However, the fact that it had felt relatively little need to recruit widely among less-skilled workers before the war meant that it could never hope to become the only organisation for motor body workers. In the mass production plants it shared organisation, even among skilled workers, with the T.G.W.U. and to a lesser extent, the A.E.U.; moreover the sheet metal workers societies established themselves in a number of body shops, including some of the "quality" manufacturers. To a great extent unwilling to spread its

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(1) ibid. 1944-50.

(2) N.U.V.B. Quarterly Journal April - June, 1935, North-Eastern Area Report. The need to maintain control in the body shops and prevent the entry of workers belonging to other unions was seen as being so great that members were told that they would have to give up aircraft work and go back into the motor industry.

net more widely, yet also pushed into narrow channels by the depression, the nature of technical change and competition from other unions, the N.U.V.B. was a permanent third-runner behind the A.E.U. and the T.G.W.U. by the end of the Second World War and "multiple unionism" continued to be a feature of the body-making as well as the engineering and final assembly sides of the motor industry.

As a result of develcpments in the structure of production and the labour force, trade union reactions to them and the specific circumstances affecting individual societies which led to various extensions of membership on the part of the A.E.U., T.G.W.U., N.U.V.B. and the sheet metal workers' societies, it proved impossible to delineate general spheres of influence in advance of actual recruitment. Thus what might be termed a scramble for motor workers developed by 1939 in which "effective occupation" was the only solid basis for claims to jurisdiction and this pattern continued to characterise the motor industry throughout the 1950s and 1960s.

It can be seen that the extent to which trade unions in the motor industry expanded their organisations so as to include new groups of workers and the specific nature of these extensions depended upon the strength of the pressures on them to do so and the particular form which they took.

The T.G.W.U. had an inherent tendency to expand since it was an "open" organ sation from the outset. The A.E.U., which opened its ranks progressively after 1926, experienced competition from semi-skilled labour over a wide range of engineering tasks which threatened its ability to maintain the status and pay of the largest section of its membership, skilled fitters and turners.

The N.U.V.B. was also under pressure to expand vertically if it was to establish control throughout the bodymaking side of the motor industry. Yet there existed an alternative course; to maintain a relatively "closed" organisation based mainly upon skilled men in the small, specialist car body plants and the commercial vehicle plants. While the decision to open the Industrial section in 1931 indicated an initial leaning towards the former path, at least among national officials, the impact of the depression on its membership and finances caused local officials, especially, to opt for the latter, at least until the Second World War.

The growth of sheet metal work in the motor body shops and in aircraft work led less to an extension of N.U.V.B. jurisdiction to a new group of workers than to an attempt to redraw demarcation lines in favour of its existing membership. This reaction occurred because

metal working processes threatened to displace its wood-working members if unions catering specifically for sheet metal workers were allowed to claim the work. Nevertheless, to the extent that sheet metal workers came to be employed the N.U.V.B. was impelled to try to organise them so as to ensure that its conditions and rules of working, rather than those of another union, were observed in its shops.

It was the growth of sheet metal work which exerted the only real pressure on the N.U.S.M.W. and the Birmingham and Midland Society to extend their organisation during the 1930s. There was little real pressure for vertical expansion since these unions were able to maintain tight control over entry into their trade, even during the Second World War.

The organisational policies of these unions in the motor industry can thus be ranged along an "open - closed" scale, with the T.G.W.U. nearest to the "open" end, the N.U.V.B. and the sheet metal workers' unions closer to the "closed" extreme and the A.E.U. somewhere between these positions, moving relatively more rapidly towards the "open" category than the N.U.V.B. or the sheet metal workers during the late 1930s.

The importance of specific pressures in causing trade unions to extend their jurisdiction is shown by the

presence within the motor and aircraft industries of societies which in the absence of such forces remained firmly "closed" throughout the period. The N.U.S.M.W. illustrates this to some extent, but the best example is the United Patternmakers' Association. The U.P.A. established itself in motor and aircraft plants as a result of the demand for patternmaking skills and its own need to ensure that as many workers in the craft as possible were within its ranks. Having established an initial jurisdiction among patternmakers however, it showed no interest in organising any other group of motor or aircraft workers and remained a closed, single-craft union until the end of the Second World War. The high technical requirements of patternmaking meant that the U.P.A. was able to restrict entry to the trade via apprenticeship. No attempt was made to dilute pattern-making during the First World War and the use of increasingly elaborate jigs, tools and dies to simplify the later stages of production had the effect of increasing the demand for skilled patternmakers. Signs of change did not begin to appear until 1944-5 when metal and plastic began to be used in place of some wooden patterns. The unique ability of the patternmaker meant that there was no pressure on the U.P.A. to expand as a result of the emergence of allied

or competing occupations.(1)

The shape of trade union organisation in the motor industry was therefore a shifting one made up of organisational cross-currents swirling round small jurisdictional islands which showed little or no tendency to expand.

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(1) United Patternmakers' Association Annual Report 1934, 1938, 1942,1944, 1945; W. Mosses, The History of the United Patternmakers' Association (1922); W. B. Beard, Patternmaking - a Short History. Its Development and Future (1945).

CHAPTER SIX

CONCLUSION

This study has attempted to analyse the early evolution of trade unionism in the motor industry, examining its overall progress and the development of its structure. In this final chapter it is intended to summarise the findings by considering the following questions - In what ways did the variables affecting union growth in the motor industry interact ? What was the relative importance of individual influences? What was the nature of the relationship between union growth and developments in structure ?

The second of these questions is by far the hardest to answer. It is impossible to assign weights to individual influences on union growth in the motor industry because of data limitations and more fundamentally, because of the interplay between them which prevents them from being the simple "independent variables" of formal social science models. However, it is possible, by summarising the way in which they operated, to identify the most important areas of conjuncture between them.

There can be little doubt that the general course of union membership and density in the motor industry was shaped mainly by wider influences operating upon trade unionism as a whole. These were shifts in the demand for labour, movements in prices and money wages and changes in employers' attitudes and policies regarding industrial relations which stemmed from the influences of the business cycle, war and the pressures of international competition on the British economy. These pressures, through their effects upon the relative bargaining position of unions and employers, led to periodic changes in the opportunity for workers to organise and their propensity to do so. Thus fluctuations in unemployment rates and movements in money wages and earnings were very much in line with those in the rest of British industry. The industrial relations climate in motors also reflected wider developments, as shown in Chapters Two and Four. Consequently the path of union growth in the motor industry was similar to that of unionism as a whole; expansion during 1910-20, a decline during 1920-1923 followed by stagnation until the depression of 1929-32 when another sharp drop occurred, and then recovery and further growth during 1933-43.

There were however, certain features which distinguished the course of union growth in the motor

trade from that in industry as a whole. The first of these was the comparative severity of the collapse during 1920-23, measured in terms of both membership and density and also union influence within the plant. The second was the combination of a relatively rapid growth in terms of membership after 1933 with a comparatively limited recovery in union density, at least up to the outbreak of the war. Closely linked with this was the absolute inability of unions to influence the working conditions of any but a very small minority of workers in some of the major plants, e.g. Ford, Morris and Vauxhall, before the Second World War. Thus in Chapter Four consideration was given to the particular circumstances of the motor industry and it was shown that its changing structure, the broad composition of the workforce and the changing occupational distribution within it, the nature of working conditions (especially high earnings) and employers' hostility towards trade unionism helped to weaken organisation during the 1920s and early 1930s and to retard progress after 1933.

The ways in which aggregate and industry - specific variables affected organisation, the nature of the conjunctions between them and the question of their relative significance may be clarified by a chronological

summary of the main phases of development. The expansion of 1910-20 which resulted in comparatively strong organisation among motor workers was the outcome of general forces encouraging union growth and the quite close links existing between motor manufacture and other industrial sectors which began to be organised more completely during these years. Falling unemployment and rising prices which, despite increases in money wages, put pressure on real living standards, led to a general growth of trade unionism and to its revival and further extension among less-skilled workers. This was of considerable significance for the motor industry which already employed a considerable number of semi-skilled operatives who, in addition to having to cope with rising prices, also faced problems of adapting to modern production techniques in the larger establishments. In addition, the motor industry's reliance upon existing bodies of engineering and vehicle building skill meant the presence of a relatively large number of craftsmen who became increasingly well organised during 1910-14.

These pressures were intensified during the First World War as tensions arose over rising prices, the failure of basic wage rates (especially those of skilled men) to keep pace, dilution and restrictions on labour mobility. The association of motor manufacture with

engineering and munitions production meant that employees shared in these tensions and this contributed to the further growth of union membership and to the development of stronger workshop organisation, centring upon shop stewards. The greatly enhanced bargaining position of organised labour meant that while the demands of wartime production encouraged the wider use of new techniques of production aimed at raising labour productivity and reducing costs, their introduction was very much upon the unions' terms.

The post-war boom enabled rapid union growth to continue and the authority of shop stewards to be maintained. The boom led to a considerable expansion of the motor industry as many new firms, many of them speculative ventures, started production and existing firms extended their capacity. The growing demand for labour strengthened further the position of trade unions among all groups of motor workers and this, together with rapid inflation, inhibited cost-reducing innovation.

The crisis which developed in the motor industry during 1920-22 resulted from the impact of the slump upon an industry characterised by high-cost techniques of production. The sharp drop in retail prices generally and the inability of most motor firms to reduce their own

prices in line with this trend, meant that many went out of business. Those which survived generally did so either because they were well established in specialist lines or else by changing the nature of their product and introducing cost-reducing methods in order to tap a wider market.

The impact of these developments upon trade unionism in the motor industry was exceptionally severe. The relatively weak basis for permanent organisation among less-skilled workers in the more recently developed industrial areas of Britain in which the motor industry was concentrated and the vulnerability of such workers to cyclical unemployment meant that organisation among this section of the workforce collapsed. At the same time the unions of skilled men were weakened by unemployment and by a successful attack upon their organisations by employers who, faced with the need to adjust to falling prices and profits and increased competition, were determined to regain control over the organisation of work, the manning of machines and systems of wage payment. This challenge occurred throughout British engineering but it was exceptionally vigorous in the motor industry where there existed a gulf between existing production methods and those which were necessary in order to reduce costs sufficiently to ensure survival and future expansion.

The weakness of the recovery of trade union membership during 1923-4 and its subsequent stagnation until 1929 also reflected the wider picture. Economic conditions were particularly unfavourable to the organisation of less-skilled workers outside traditional union strongholds. The persistence of mass unemployment, together with stable prices and money wages, did little to encourage workers to join trade unions or to persuade unions to mount organising drives in new areas. Yet the motor industry was expanding in precisely these areas and there was a rapid movement towards the wider employment of semi-skilled labour. Organisation among skilled men also continued to suffer as employers took a hard line against those who sought to resist the full impact of technical change. Moreover, both skilled and semi-skilled workers were reluctant to join trade unions when earnings were high relative to those in other local industries and when, in the context of generally heavy unemployment, the growing seasonality of employment in the motor industry raised the spectre of victimisation. In this connection the trend towards industrial concentration in motors meant that firms were better placed to resist unions' demands and to keep trade unionists out of their plants. They were strengthened in their desire to do so by the fierce price competition which developed during the 1920s and which put a premium

upon the freedom of management to introduce new methods and to adjust piece-rates and the pace of work.

The depression of 1929-32 led to a further weakening of organisation *via* its general impact upon wages, prices and employment and, in the motor industry, also by encouraging further concentration, standardisation and specialisation of labour. Moreover, the depression also served to delay the impact upon organisation in motor towns of immigrants from other parts of the country who had begun to arrive during the 1920s.

Recovery from the depression was accompanied by a revival of trade unionism, both generally and in the motor industry although as stated above, the extent to which organisational strength was improved among motor workers was limited. Rapid membership growth was generally encouraged by the diminution to wipe out some of the sacrifices forced upon workers during the depression. But as well as easing the general problems of organisation, economic recovery also reduced a number of obstacles to trade unionism which, in the harsher climate obtaining before 1934, had been inherent in certain features of the motor industry. Thus while the growing domination of production by a few large firms enabled employers to resist trade unionism more effectively, during the mid-1930s

trade unions interested in increasing membership and breaking into the more rapidly growing areas of the country saw the larger motor plants as potentially rewarding targets for recruitment drives, as shown by the efforts made in Oxford and Dagenham. In addition, it was during the recovery of the 1930s that the features of model-price competition encouraged union growth in the body plants even though model-price competition itself developed at the end of the 1920s. Finally, it was not until the mid-1930s that activists from depressed industrial areas began to have any real impact on the development of trade union organisation in the motor towns. While specific reasons for this have been advanced, i.e. problems of assimilation and seasonality of employment a general increase in the demand for labour, particularly in Coventry and signs of a relaxation in employers' attitudes towards trade unionism which was undoubtedly engendered largely by renewed market growth, made their task easier.

The continuing limits to the development of effective organisation during the 1930s can also be seen in terms of a conjunction of general features of the economy and the characteristics of the motor industry. The recovery was limited in that unemployment remained high in many parts of the country and continued internal

internal migration during the 1930s meant that feelings of insecurity among motor workers who were faced with a constant inflow of workers from other districts, although diminished somewhat, were not entirely eliminated. This was particularly true of semi-skilled workers, who continued to expand as a proportion of the labour force and who were most vulnerable to seasonal unemployment. This, together with the lack of strong trade union traditions in motor towns, especially among the semi-skilled, and the payment of high wages which made organisation appear unnecessary to many, held back union growth during the 1930s.

The pressures in favour of organisational advance became stronger during 1939-43 as a result of the rising demand for labour, tension over wages issues and dilution and because government policies which aimed to contain these problems tended to encourage union recognition and collective bargaining. Yet there were still limits to the extent to which trade unionism gained strength among motor workers. These were largely imposed by the growing proportions of women and other dilutees employed; however, even discounting dilutees, a considerable proportion of workers remained unorganised by the end of the war. This seems to point to the importance of relatively high earnings as a factor limiting the development of grievances

and hence reducing the propensity to unionise and to the high proportion of semi-skilled workers, who were susceptible to the seduction of high wages because they lacked a sense of craft solidarity and were slow to develop a more broadly-based occupational consciousness owing to the lack of trade union traditions in motor towns, the relative instability of their employment and the frequently divisive effects of piecework.

In summarising the inter-relationships between the influences acting upon the strength of trade unionism among motor workers, certain patterns emerge which enable an intuitive judgment to be made as to the importance of some of them in relation to others. It may be concluded that the course of union growth in the motor industry was primarily the outcome of general movements in the economy which affected wages, prices and the demand for labour. These were however, mediated by the main features of the industry's own development. The most important of these features were; first, changes in its technical and market structure; specifically the shift towards mass production and oligopoly and the development of fierce competition, initially on the basis of price but later also on that of model changes. Secondly, the structure of the labour force was of great importance; in particular the lack of well-established industrial and

trade union traditions and the shift towards the employment of semi-skilled workers which resulted from technical change. The adverse effects of these characteristics upon organisation began to be countered by the influence of immigrant activists from older industrial areas during the mid-1930s and by that of better-organised aircraft workers via the Engineering Shop Stewards' Movement from 1938 onwards. Thirdly, certain aspects of working conditions, chiefly high earnings, held back the development of organisation although in the more favourable climate after 1933, sudden alterations in conditions, e.g. piece-rates, served as a powerful stimulus to organisation.

No attempt will be made here to assign specific weights to each of these influences; it is merely argued that they were the most powerful industry-specific variables interacting with general factors affecting the progress of organisation. However, in accounting for the long-term weakening of organisation which began during 1920-22 the interaction of the general economic crisis of those years with the effect of technical change in encouraging the relative growth of the semi-skilled section of the labour force may reasonably be seen as having been decisive. Technical change was also a major factor encouraging the trend towards concentration in the

industry and by raising labour productivity, helped promote the high and rising earnings of motor workers which figured in their low propensity to unionise.(1)

Other factors which have been considered as contributing to the weakness of trade unionism in the motor industry during 1922-39 are employers' hostility, seasonal unemployment and the reluctance of trade unions to recruit semi-skilled workers on any scale before the mid-1930s. These features, while relevant, may be regarded as having derived largely from general circumstances and from the major industry-specific variables discussed above. Employers' hostility towards trade unionism varied and the variations were very much a response to other factors. It found its most effective expression as a result of the industry's difficulties during the early 1920s and the growth of fierce price competition which put a premium upon freedom to reorganise production and introduce new systems of payment. Gradual relaxation after 1932 may be seen as stemming from the more expansionary environment of the recovery and from the fact that the bulk of technical and organisational adjustment had been completed by the mid-1930s. Morever, the

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(1) These conclusions are reinforced by the comparison with the aircraft industry presented on p.417-22.

extension of recognition during the Second World War was due to employers experiencing a variety of pressures to take a more positive attitude towards trade unionism, i.e. the growing shortage of labour, pressure to fulfill government contracts, increasingly organised pressure from the shop floor and advice from government departments. In this connection it must be stressed that the favourable influence exerted by the government during both world wars was itself a response to labour shortage, the need to contain inflation and pressure from below.

Seasonality of employment, which also helped to inhibit the establishment of stable organisation among motor workers, grew out of the development of mass production which concentrated production into shorter periods and the growth of model-price competition. Moreover, its impact on organisation must not be exaggerated since although motor workers experienced seasonal lay-offs, most of them were re-hired at the beginning of the next production cycle. Thus the workforce was not as unstable as might be supposed.

The fact that the A.E.U. and the N.U.V.B. retained conservative attitudes towards recruitment at least until 1935 and that the T.G.W.U. did not begin to involve itself fully in the motor industry until after the depression of

1929-33 must be seen as having had little significance for the overall development of organisation. Given the existence of heavy unemployment during the period between the wars and the exceptional vulnerability to it among less-skilled workers, who were also more easily victimised, it is very doubtful whether more than marginal gains would have been made as a result of more determined efforts to recruit them before the mid-1930s. This conclusion is supported by the continued difficulties experienced in trying to organise semi-skilled workers in the motor industry until just before the Second World War, despite the increasing efforts being mounted in their direction by the T.G.W.U., N.U.G.M.W. and A.E.U.

From this brief recapitulation it is clear that while it is useful to distinguish between aggregate and industry-specific influences on union growth for purposes of analysis, in practice they interact. Primacy must be given to the broad influences operating within the economy as a whole and affecting trade union organisation generally, since to a great extent they shaped and limited the forces working within the motor industry. Thus the accelerated pace of technical change and industrial concentration in motor manufacture during the 1920s was greatly stimulated by the crisis of 1920-22 and the search for wider markets which it helped to generate. It

was further encouraged by the growth of real incomes which provided the basis for the beginnings of a mass market for automobiles during the inter-war years. Thus the progress of trade union organisation in a particular industry is not determined by a series of unrelated forces, each exerting independent pressures, but by the interplay of influences at various levels within the industry itself and the economy as a whole.

It remains to consider the nature of the relationship between trade union growth and trade union structure. There are two sides to this question, i.e. the effects of the general pattern of union growth in the motor industry upon the pattern of organisation which emerged by 1945 and the impact of trade union structure on growth.

It seems evident that the evolution of British trade unionism in the nineteenth century and the virtual absence of arrangements for determining unions' jursidictions in advance of recruitment created a predisposition to multiple unionism in the engineering and vehicle building trades which was carried over into the motor industry. The latter's technical structure, together with the general union expansion of 1910-20, ensured that multiple unionism was an early feature of its organisation. It may be argued however, that this tendency was reinforced by

factors affecting overall union growth during the inter-war years.

The depression of 1920-22 decimated the Workers' Union and left an organisational vacuum among semi-skilled motor workers. The difficulties experienced by the A.E.U. and the N.U.V.B. during 1920-33 prevented them from filling this gap even after they had made revisions to their rules which would have enabled them to do so. Apart from the fact that high unemployment made the permanent organisation of less-skilled workers very difficult indeed, the depressions of the early 1920s and 1930s reinforced defensive, "closed" attitudes within unions of skilled men. Thus within the A.E.U. falling membership during the 1920s retarded any movement towards "open" organisation as the union became understandably preoccupied with re-esablishing organisation among engineering craftsmen. Some indication of the scale of this task is given by the report made to the A.E.U.'s Coventry District Committee in 1930 that there were ten thousand ex-members working in Coventry engineering shops.(1) In the case of the N.U.V.B. the losses sustained during 1929-33 led to it becoming more narrowly based on the quality body and commercial vehicle shops until the Second World War and

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(1) Cited in F.W. Carr, "Engineering Workers and the Rise of Labour, 1914-1939", op.cit. p.436.

thus minimised pressure from within the union to extend its organisation to the bulk of mass production workers.

The renewed growth of membership after 1933 was accompanied by a slow revival of organisation among the semi-skilled. The lead was taken by the T.G.W.U. which was motivated to recruit in the motor industry by its absorption of the Workers' Union and a desire to gain a presence in expanding sectors of the economy. The A.E.U. also began to take an interest in semi-skilled workers, especially after 1935, for narrower reasons, i.e. to support a movement for the grading of machines. Both organisations were aided however, by an improving labour market, especially in the Midlands, which created better opportunities for the organisation of semi-skilled operatives.

Yet no single organisation was able to make sufficiently rapid progress on a wide enough front to take a commanding lead. This stemmed from continued problems of organisation which not only meant that gains were piecemeal and locally based, reflecting local variations in union strength and permitting a number of unions to make small gains at the same plant as a result of a succession of organising campaigns, but which also made it necessary for unions to mount joint organising efforts in

the larger plants.(1) Similar difficulties caused by the rapid expansion of the aircraft industry from 1935 onwards led to inter-union cooperation there *via* the National Aircraft Workers' Committee.(2)

It can therefore be seen that general factors affecting union growth had the effect of reinforcing the pattern of multiple unionism in the motor and aircraft industries and that they accounted very largely for the lack of organisation among less-skilled workers. Yet recent studies have taken up Turner's argument, referred to in Chapter One, to the effect that the initial domination of organisation by unions of skilled workers creates an environment which is unfavourable to the establishment of broadly-based organisation among the mass of workers in the industry on account of their "closed" character which fails to stimulate unionisation outside their ranks.(3) With reference to the A.E.U. and the deterioration of organisation among engineering workers between the wars, F.W. Carr argued that with the collapse of workplace power in 1922 the A.E.U. became isolated from

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(1) As for example at the Dagenham motor plants. T.U.C. *Report* 1938. Also see above, p. 86-7.

(2) See above, p. 184-5.

(3) H.A. Turner, *Trade Union Growth, Structure and Policy*, *op. cit.* p. 167.

workshops and, "trapped within its craft outlook ... was slow to shed exclusive attitudes in the revival of the unions in the 1930s"(1) In this case however, it appears that it was not the lack of workshop organisation per se that was significant, but the absence of a shop-floor movement idelogically committed to mass unionism. This is reinforced by J. Zeitlin's argument to the effect that techniques of organisation were brought to the mass of semi-skilled motor workers, not through the formal trade union structures, which continued to be largely craft-dominated, but by mulitant skilled workers who were largely Communist Party members.(2)

As shown in Chapter Three, there is some support for this argument, yet it is not entirely convincing, especially if it is used as an explanation for the limited development of organisation among motor workers before 1939. In the first place, there is little evidence that there was any great extension of A.S.E. / A.E.U. organisation to the less-skilled during 1910-20, when left-wing influence on the shop floor was presumably at its height.

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(1) F.W. Carr, op.cit. p.237.

(2) Jonathan Zeitlin, "The British Car Industry: the Emergence of Shop Steward Organisation and Job Control", History Workshop 10 (Autumn, 1980).

Moreover, even when the A.E.U. began to open its ranks more effectively after 1935, much of the initiative and pressure appears to have come from national rather than local or workshop level, even allowing for the activities of the Aircraft Shop Stewards' National Council and the E. & A.T.S.S.N.C.[1] Finally, if one is to find the roots of the collapse of the basis for mass unionism in the motor industry before, say 1934, it is not to the destruction of the Shop Stewards' Movement connected with the A.S.E./A.E.U. that one must look, but to the break-up of the Workers' Union. In any case the causes of the collapse of the Shop Stewards' and Workers Committee Movement and the W.U. were the same; the slump of 1920-22, the engineering employers' offensive and the continued heavy unemployment of the 1920s. Thus the general and specific factors holding back the development of widely-based, effective trade union organisation before the Second World War were largely independent of developments in structure and in fact exerted a measure of influence over them.

By 1945, trade unionism in the British motor industry was by no means complete but its basic structure

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(1) See above, p.352, 508-10.

had been established. This was one of multiple unionism based upon competing recruitment by organisations for which the motor industry represented only a small proportion of their members, with the exception of the N.U.V.B. The effective basis for organisation was to a great extent already the shop steward and his committees, a form of organisation which was extended to a wider section of workers in motor plants, in many cases as a result of an injection of militancy and organisational experience from the aircraft industry. In fact H.A. Turner et.al. wrote in 1967 that because trade unions were not heavily committed to the motor industry in terms of members, they did little to develop specific policies for motor workers and this led to shop stewards' organisation developing as a kind of "parallel unionism" which was seen by workers as being more relevant to day-to-day matters than the formal trade union structure.(1)

The absence of a more unified organisation in the motor industry can be explained in terms of the historical evolution of British trade unionism, with its emphasis

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(1) H.A. Turner et.al. Labour Relations in the Motor Industry, op. cit. p. 221-2. Even the N.U.V.B. had 50 per cent of its members outside the motor industry in the mid-1960s.

upon craft and occupational organisation, the heterogeneity of processes within the motor industry and their close links with older branches of engineering and vehicle building which persisted as a result of the slow pace of technical change before 1920 and allowed craft-based unions to gain a firm foothold in the industry, and the general difficulties of 1920-33 which interrupted the growth of "open" organisations committed to "all-grades" organisation. Finally, the pattern was further complicated by the reactions of both "open" and "closed" unions to pressures brought about by technical change and the growing control over the allocation of work and rates of pay exerted by employers.

APPENDIX 1

OUTPUT AND EMPLOYMENT IN MOTOR AND AIRCRAFT CONSTRUCTION

Changes in the volume of motor vehicles produced in the United Kingdom, 1908-1942

Year	Private & Taxis		Commercial & Buses		Total Vehicles	
	No.	Index	No	Index	No.	Index
1908	-	-	-	-	10,500	7
1909	-	-	-	-	11,000	8
1910	-	-	-	-	14,000	10
1911	-	-	-	-	19,000	13
1912	-	-	-	-	23,000	16
1913	-	-	-	-	34,000	23
1922	-	-	-	-	73,000	50
1923	-	-	-	-	95,000	65
1924	116,600	100	30,000	100	146,000	100
1925	132,000	113	35,000	117	167,000	114
1926	153,500	132	44,500	148	198,000	135
1927*	164,553	141	47,227	157	211,750	144
1928	165,352	142	46,525	155	211,877	145
1929	182,347	156	56,458	188	238,805	163
1930	169,669	146	66,859	223	236,528	161
1931	158,997	136	67,310	224	226,307	154
1932	171,244	147	61,475	205	232,719	159
1933	220,779	189	65,508	218	286,287	195
1934	256,866	220	85,633	285	342,499	234
1935	311,544	267	92,176	307	403,720	275
1936	353,838	303	107,609	359	461,447	315
1937	389,633	334	118,116	394	507,749	346
1938	341,028	292	103,849	346	444,877	305
1939	305,000	261	97,000	323	402,000	275
1940	1,949	2	131,920	440	133,869	92
1941	5,117	4	140,313	467	145,430	99
1942	5,468	4	155,054	417	160,522	110

* Estimate

Source: Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938 and 1965).

Employment and unemployment in the construction and repair of motor vehicles, cycles and aircraft, 1924-37

Year	1 No. of workers registered under the National unemployment insurance act	2 Number unemployed	3 Total actually employed	4 Index of 3
July 1924	203,340	13,618	189,722	100
" 1925	214,840	12,132	202,708	106.8
" 1926	224,040	21,609	202,431	106.7
" 1927	230,130	18,339	211,791	111.6
" 1928	234,830	22,015	212,815	112.2
" 1929	245,510	17,614	227,796	120.1
" 1930	247,140	40,626	206,514	108.9
" 1931	251,320	57,462	193,858	102.2
" 1932	252,080	55,779	196,301	103.5
" 1933	261,720	44,168	217,552	114.6
" 1934	271,530	28,819	242,711	127.9
" 1935	285,830	26,538	259,292	136.7
" 1936	314,000	19,705	294,295	155.1
" 1937	351,630	17,014	334,616	176.4

Source: Society of Motor Manufacturers and Traders, The Motor Industry of Great Britain (1938), p.50.

APPENDIX 2

MOTOR, CYCLE AND AIRCRAFT FIRMS BELONGING TO THE ENGINEERING AND ALLIED EMPLOYERS' NATIONAL FEDERATION IN 1938

Motor Car Manufacture:

Alvis Ltd.

Austin Motor Co. Ltd.

Humber Ltd.

Jowett Cars. Ltd.

Morris Motors Ltd.*

Rover Co. Ltd.

Standard Motor Co. Ltd.

Triumph Co. Ltd.

Commercial Vehicle Manufacture:

Albion Motors Ltd.

Associated Equipment Co.Ltd.

Crossley Motors Ltd.

Dennis Bros. Ltd.

Leyland Motors Ltd.

T.S. Motors Ltd.

Motor Cycle and Cycle Manufacture:

Associated Motor Cycles Ltd.

Enfield Cycle. Co. Ltd.

Aircraft and Engine Manufacture:

Armstrong-Siddeley Development Co. Ltd.*

Bristol Aeroplane Co. Ltd.

De Havilland Aircraft Co. Ltd.

Fairey Aviation Co. Ltd.

Handley Page Ltd.

D. Napier & Sons Ltd.

Rolls-Royce Ltd.

Westland Aircraft Ltd.

Aero and Motor Accessories:

Geo. Angus & Co. Ltd.

David Brown & Sons (Huddersfield) Ltd.

Clayton Dewandre Co. Ltd.

Fisher & Ludlow Ltd.

Hoffman Manufacturing Co. Ltd.

A.E.Jenks & Cattell Ltd.

Joseph Lucas Ltd.

Moss Gear Co. Ltd.

New Hudson Ltd.

Pressed Steel Co. Ltd.

Quicktho (1928) Ltd.

Ransome & Marles Bearing Co. Ltd.

Simms Motor Units Ltd.

S.Smith & Sons (Motor Accessories) Ltd.

*Non-federated firms controlling a number of federated establishments.

APPENDIX 3

NOTES ON THE ESTIMATION OF TRADE UNION MEMBERSHIP

Trade union membership in the motor industry has been estimated from figures for the number of trade unionists employed in vehicle building derived from the Ministry of Labour, 18th Abstract of Labour Statistics of the United Kingdom Cmd. 2740 (1926) and 20th Abstract of Labour Statistics of the United Kingdom Cmd. 131 (1931); from branch membership returns of the A.E.U., N.U.V.B., N.U.S.M.W. and Birmingham and Midland Society of Sheet Metal Workers; from occasional reports of membership in individual plants which appeared in the Metal, Engineering and Chemical Trade Group Minutes of the T.G.W.U., the General Executive Council Minutes of the T.G.W.U., T.G.W.U. Record; and from figures for the Workers' Union presented by Richard Hyman in "The Workers' Union, 1898-1929".(1)

18th and 20th Abstracts of Labour Statistics

The 18th Abstract provided total union membership

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(1) op.cit.

figures for metal, engineering, shipbuilding, iron-founding and other metalworking for 1911-1924. The 20th Abstract provided totals for the same groups but with the addition of vehicle building for the same period. The totals were thus:

	Total in 18th Abstract	Total in 20th Abstract
1911	353,147	362,175
1912	412,329	422,828
1913	462,744	475,782
1920	984,944	1,011,909
1921	883,744	907,869
1922	724,105	746,705
1923	611,097	633,575
1924	586,455	609,888

This gives totals for vehicle building as follows:-

1911	9,028
1912	10,409
1913	13,038
1920	26,965
1921	24,125
1922	22,600
1923	22,478
1924	23,433

These figures do not, of course, allow for membership of the general unions as their members were assigned to the "general labour" category.

Branch Membership Returns

Based on membership returns of A.E.U. branches in:- Birmingham, Coventry, Wolverhampton, Oxford, Bedford, Luton, Dagenham, Ilford, North and West London (i.e. Acton, Southall, Shepherds Bush, Tottenham, Chiswick, London North, London West, London West 2 and West 4 branches) and in the North-West, i.e. Leyland and Sandbach.

Also based on returns from N.U.V.B. branches in:- Birmingham, Coventry, Wolverhampton, Oxford, Leyland, Manchester, Preston, Ilford, Dagenham, Luton, Bedford, Shepherds Bush.

In addition the Coventry branch membership of the N.U.S.M.W. has been included, as has the entire membership of the Birmingham and Midland Society of Sheet Metal Workers.

Branch membership returns have been used to estimate the progress made by unions of skilled men among motor workers from 1925 onwards. Because total branch memberships have had to be taken, the figures exaggerate the actual membership levels in the motor industry and thus also exaggerate the density of organisation.

A comparison was made between the branch membership totals for 1922 and 1923 and the estimates derived from

the 18th and 20th Abstracts. The branch membership-based total for 1922 was 29,932, noticeably higher than the figure for 1922 derived from the Abstracts. That for 1923 was much more closely in line, being 22,555.

Given the inherent inaccuracy of these estimates they are intended as a guide to movements in membership and density rather than as a precise measure of them. The inaccuracy is probably even more pronounced in the case of the general unions. For the 1920s, it has been necessary to rely on Richard Hyman, "The Workers' Union, 1898-1929" for estimates of W.U. membership. These are for geographical areas or for engineering as a whole, so that the figures for the membership of the general unions in the 1920s presented in Table 2.2 are little more than guesses. The 1930s figures are based on various reports on T.G.W.U. organisation in individual establishments. These reports were neither systematic nor comprehensive, consisting of occasional brief references to Pressed Steel, Ltd., Austin Motors, Humber (Rootes), Daimler, Standard and Rover. Thus whereas the figures probably exaggerate the extent of organisation among motor workers developed by the A.E.U., N.U.V.B. and the Sheet Metal Workers, they probably understate somewhat the progress made by the general

unions, certainly by 1946.(1)

In dealing with the aircraft industry a similar procedure has been observed, taking branch membership figures of the A.E.U. and N.U.V.B. in "aircraft-relevant" branches. These were: all branches in Coventry and Birmingham and Bristol set up from 1935 onwards plus:

Acton
Brough
Cheltenham
Chiswick
Crayford
Cricklewood
Dalmuir
Dumbarton
Eastleigh
Edgware
Erith
Farnborough
Feltham
Gloucester
Greenford
Hamble
Hatfield
Hayes
Hendon
Kingston-upon-Thames
Southall
Southampton
Speke
Thornton Heath
Tolworth
Yeadon
Yeovil

It has been impossible to make any allowance for the general unions in the almost complete absence of quantitative data.

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(1) The main references are in T.G.W.U. General Executive Council Minutes 10 August, 1934; M.E.C. Minutes 27 July, 1934; 29 April, 1935; 19 July, 1935; 25 Oct., 1935; 17 July, 1936; 29 Oct., 1937; 22 July, 1938; 21 Oct., 1938.

APPENDIX 4

LABOUR FORCE STRUCTURE IN MOTOR, VEHICLE BUILDING AND AIRCRAFT FIRMS AFFILIATED TO THE ENGINEERING AND ALLIED EMPLOYERS' NATIONAL FEDERATION, 1927-1937

The following tables are from Engineering and Allied Employers' National Federation, "Circular Letters to Local Associations: Earnings of Workpeople (Males over 21) October", in the E. & A.E.N.F. archives at Broadway House, Tothill Street, London S.W.1. Three sets of figures are provided; for those firms classed as "motor firms"; those in the "vehicle building" category, which includes railway carriage and repair work, and aircraft firms. No details were given in the "Circular Letters" as to which firms were represented in each of these categories and the figures for each group of workers was expressed as a total, with no particulars being given of individual companies. The total number of motor workers covered was between 30 per cent and 50 per cent of manual workers employed in the motor industry as estimated by Political Planning in 1950 and a similar proportion of aircraft workers was represented.(1)

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(1) See above, p. 129, 168, 203-4.

LABOUR IN FEDERATED MOTOR FIRMS
(Number and Percentage Occupational Distribution)

Type of Worker	1927 No.	1927 %	1933 No.	1933 %	1934 No.	1934 %	1935 No.	1935 %	1937 No.	1937 %
Skilled Fitters					6,067	9.9	6,088	9.3	6,585	9.3
Fitters other than skilled	5,030	15.0	8,224	13.0	2,420	3.9	2,693	4.1	2,987	4.2
Toolroom Fitters					1,145	1.9	1,144	1.7	1,156	1.6
Turners	3,067	9.2	3,836	6.0	4,141	6.7	3,895	6.0	4,013	5.7
Patternmakers	169	0.5	388	0.6	404	0.7	433	0.7	474	0.7
Moulders	400	1.2	571	0.9	451	0.7	522	0.8	591	0.8
Platers, Riveters and Caulkers	-	-	19	0.03	16	0.02	61	0.1	38	0.05
Sheet Metal Workers	1,801	5.4	2,245	3.5	2,874	4.7	2,893	4.4	2,790	3.9
Machinemen at or above Fitters Rate	-	-	3,077	4.9	3,763	6.1	4,013	6.1	5,124	7.2
Machinemen Below Fitters Rate	-	-	5,828	9.2	7,840	12.7	7,202	11.0	8,163	11.5
Labourers	3,362	10.0	4,549	7.2	5,358	8.7	5,582	8.5	6,069	8.6
Others, Skilled	19,440	58.1	34,361	54.3	26,784	43.5	12,244	18.7	12,220	17.3
Others Semi-Skilled							18,418	28.1	20,156	28.5
Coppersmiths	177	0.5	202	0.3	260	0.4	243	0.4	298	0.4
Boilermakers	27	0.1	-	-	-	-	-	-	-	-
TOTAL	33,473	101.5	63,300	99.9	61,523	99.9	65,423	99.9	70,662	99.9

LABOUR IN FEDERATED VEHICLE BUILDING FIRMS
(Number and Percentage Occupational Distribution)

Type of Worker	1933 No.	1933 %	1934 No.	1934 %	1935 No.	1935 %	1937 No.	1937 %
Skilled Fitters			226	6.2	341	6.0	416	5.3
Fitters other than skilled	382	12.4	175	4.8	281	5.0	368	4.6
Toolroom Fitters			29	0.8	48	0.8	104	1.3
Turners	111	3.6	152	4.2	223	3.9	269	3.4
Patternmakers	13	0.4	19	0.5	23	0.4	23	0.3
Moulders	14	0.4	11	0.3	20	0.3	27	0.3
Platers, Riveters and Caulkers	70	2.3	52	1.4	101	1.8	124	1.6
Sheet Metal Workers	22	0.7	30	0.8	41	0.7	66	0.8
Machinemen at or above Fitters Rate	64	2.1	91	2.5	170	3.0	156	2.0
Machinemen Below Fitters Rate	201	6.5	218	6.0	321	5.7	394	5.0
Labourers	307	10.0	421	11.6	666	11.8	764	10.0
Others, Skilled	1,894	61.5	2,195	60.6	2,290	40.6	2,748	34.7
Others Semi-Skilled					1,115	19.8	2,452	31.0
TOTAL	3,078	99.9	3,619	99.7	5,640	99.8	7,911	100.3

LABOUR IN FEDERATED AIRCRAFT FIRMS
(Number and Percentage Occupation Distribution)

Type of Worker	1927 No.	1927 %	1933 No.	1933 %	1934 No.	1934 %	1935 No.	1935 %	1937 No.	1937 %
Skilled Fitters	1,401	28.7	2,189	27.2	2,441	23.7	3,545	24.5	7,510	25.5
Fitters other than skilled					725	7.0	1,078	7.4	2,661	9.0
Toolroom Fitters					312	3.0	461	3.2	768	2.6
Turners	421	8.6	471	5.6	601	5.8	693	4.8	1,044	3.5
Patternmakers	24	0.5	43	0.5	121	1.2	145	1.0	72	0.2
Moulders	52	1.1	32	0.4	44	0.4	45	0.3	55	0.2
Platers, Riveters and Caulkers	-	-	18	0.2	30	0.3	75	0.5	465	1.6
Sheet Metal Workers	244	5.0	499	6.2	696	6.7	914	6.3	1,872	6.4
Machinemen at or above Fitters Rate	-	-	434	5.4	649	6.3	878	6.1	1,709	5.8
Machinemen Below Fitters Rate	-	-	421	5.2	697	6.8	973	6.7	1,376	4.7
Labourers	507	10.4	607	7.5	732	7.1	1,140	7.9	2,328	7.9
Others, Skilled	2,176	44.6	3,240	40.3	3,180	30.8	2,419	16.7	5,367	18.2
Others Semi-Skilled							2,009	13.9	3,985	13.5
Coppersmiths	22	0.4	86	1.1	85	0.8	98	0.7	205	0.7
Boilermakers	34	0.7	-	-	-	-	-	-	-	-
TOTAL	4,881	100.0	8,040	99.6	10,313	99.9	14,473	100.0	29,417	99.8

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Amalgamated Society of Wheelwrights, Smiths and Motor Body Makers	Annual Report
Amalgamated Society of Wood-cutting Machinists	Annual Report Quarterly Report
Amalgamated Society of Woodworkers	Annual Report Monthly Journal Quarterly Report
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London and Provincial Society of Coachmakers	Annual Report
National Amalgamated Furniture Trades' Association	Annual Report
National Federation of General Workers	Executive Report
National Society of Brassworkers and Metal Mechanics	Quarterly Journal
National Union of General and Municipal Workers	Biennial Conference Report Monthly Journal
National Union of Vehicle Builders	Monthly Journal Quarterly Journal and Financial Report

Ship Constructors' and Shipwrights'Association	Annual Report
Trades Union Congress	Trades Union Congress Report
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