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UNION-MANAGEMENT RELATIONS:

A Factory Study in I.C.I.

by

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INTRODUCTION

This thesis was based on an investigation conducted into union-management relations at Ardeer, the principal works of the Nobel Division of Imperial Chemical Industries Ltd. The investigation was conducted by the Author when he was I.C.I. Research Fellow in Industrial Relations at the University of Glasgow during the years 1954 to 1956. The terms of reference for conducting the investigation were set by Dr. T. T. Paterson, Senior Lecturer in Industrial Relations at the University of Glasgow. At the same time as this investigation was being conducted a study was made into joint consultation at the factory by another I.C.I. Research Fellow in Industrial Relations, Mr. Henry McKinlay.

It was decided to restrict this particular study to the formal relations between union and management; in particular to examine the causes and types of disputes which arose between the parties, the method of settling them, and the consequences of the negotiations. Although Ardeer held many union-management conferences to resolve disputes, relations between the parties appeared to be good, in the sense that they had reached an advanced and sophisticated stage. As this factory had a long history of union-management relations it was reasonable to assume that certain conditions were present which made collective bargaining a success. Perhaps these conditions were of sufficient generality to explain the causes of effective collective bargaining and the functioning of the trade union. The principal trade union in this case study was the Transport and General Workers' Union which has received considerable attention in the post-war period due to unofficial stoppages amongst its members.

New information was collected about the formal relations of union and management in a factory; and some assertions about particular aspects followed logically from consideration of the data. There was natural limitations of subject matter in a case study. Although the assertions were made in relation to the persistence of the inter-craft demarcation dispute, the necessary conditions for effectively installing and maintaining job evaluation and incentive schemes, they did not form sufficient material for the development of a general hypothesis. Yet there were common phenomena of these seemingly unrelated subjects, principally negotiations to resolve union-management disputes. Certain conditions were found to exist when negotiations were effective, and it was about this subject that the central hypothesis was formed. From that hypothesis a number of other principles were deduced.

Sec. I. Location of the case study.

Ardeer was the principal works of the Nobel Division of Imperial Chemical Industries Ltd. The Nobel Division was a direct descendant of Nobel Industries Ltd., which combined with the British Dyestuffs Corporation Ltd., and Brunner, Mond & Co. Ltd., to form I.C.I. in 1926. ⁽¹⁾ The two dominant

(1) 'This is Our Concern', I.C.I., (1955).

personalities in the merger were Sir Harry McGowan of Nobel Industries Ltd., and Sir Alfred Mond (later Lord Melchett) of Brunner, Mond & Co. Ltd. The objective of the formation of I.C.I. was to take advantage of large-scale production and marketing of chemical products. I.C.I. grew rapidly, and by the post-war period it was Britain's largest manufacturing company. By 1954 its productive activities were conducted in a hundred factories and on its payroll were one hundred thousand employees. The number of stockholders was estimated to be at least one quarter of a million.

The Company was divided into a number of manufacturing divisions. At the time of the Ardeer study there were twelve manufacturing divisions: Alkali, Billingham, Dyestuffs, General Chemicals, Leathercloth, Lime, Metals, Paints, Plastics, Salt, Pharmaceutical and Nobel. Each of these divisions were under the control of a board of directors which had considerable autonomy from the main board of I.C.I. In addition, there were several councils, similar to a divisional board, which controlled the manufacture of agricultural chemicals and terylene, and the operations of the enormous works at Wilton. I.C.I. also owned or controlled a large number of overseas companies which manufactured or marketed its products.

The work of the Company was co-ordinated by a main board and a head office located in London. In 1955 the board consisted of twenty directors, sixteen of whom were full-time executive directors. Apart from the Chairman and the three Deputy Chairmen, the executive directors were divided into two groups. Six directors were responsible for the manufacturing divisions. Seven directors were responsible for special functions: commercial development, finance, overseas, research, technical, and personnel. In addition, a secretary, solicitor and treasurer reported directly to the board.

The headquarters of the Nobel Division were located at Glasgow, Scotland. In 1955 it employed about thirteen thousand personnel of whom one half were employed at Ardeer. Ardeer was situated about thirty miles south of Glasgow near the town of Stevenston, Arshire, and on the shores of the Firth of Clyde. The site of the factory was chosen in 1871 because of its remoteness from village and town, for its nearness to the sea, and because of the sand hills which could be adapted for the manufacture of explosives. The factory was operated for most of the period prior to the formation of Nobel Industries Ltd. by Nobel's Explosives Company. (2)

Ardeer commenced operations in 1873. At that time the staff and operatives numbered one hundred; by 1948 the number of personnel employed at Ardeer had grown to 6,800. The area of the factory was one hundred acres; by 1948 it was 1,790 acres. The length of bogie lines which was used for transporting materials and explosives was two miles in 1873; but by 1948 it had increased to seventy-five miles. Blasting explosives, the best known of which

(2) 'The History of Nobel's Explosives Company Ltd., and Nobel Industries Ltd., 1871-1926', (I.C.I.), (1938).

were gelignite and dynamite, were still the main product of the factory in 1948. Other products in 1948 were detonators, sporting powders, safety-fuse, blackpowder, cellulose derivatives, ether, sulphuric and nitric acids, ammonium, potassium, barium nitrates, and ingredients for pesticides and insecticides. (3)

The manufacturing operations used unskilled male and female labour. In addition a substantial number of skilled engineering and building workers were employed on maintenance and construction work. A printing shop was also located in the factory. Most of the workers came from the neighbouring towns of Stevenston, Saltcoats and Ardrossan. Ardeer was the main employment centre for this part of Ayrshire and there was a close community of interests between Ardeer and the local residents.

Sec. 2. The method of investigation and the source of the data

The problem for investigation was defined as the behaviour of management and union and its members in relation to negotiations. In particular the following questions were posed: what was the essential nature of negotiations, why did negotiations breakdown, and why did union members sometimes refuse to abide by agreements made on their behalf? These questions proved to be closely related.

Having defined the problem it was then necessary to determine the method of investigation. This was made rather difficult for two personal reasons. The Author was an economist by profession and theoretical concepts and techniques of research in the field of economics were relatively useless in this study; indeed, many of the economist's concepts were a hindrance rather than a help in the investigation. (4) The Author also had little knowledge of voluntary collective bargaining at the time he commenced the research for he was trained in the Australian system of industrial relations which was essentially a legalistic one, (F) and union-management behaviour was to a great extent settled by compulsory arbitration.

The obvious way of proceeding was to examine the British literature which dealt with industrial relations. At the time of the commencement of the research only one book, Clegg's Labour Relations in London Transport, (5) specifically covered a case study in something like the same terms as was conceived for the Ardeer project. The principal defect of that book seemed

(3) 'Ardeer Factory : A Short Guide', (I.C.I.), (1948).

(4) The Author entirely agrees with Zweig's remarks about the role of the economist in industrial and social research; see Zweig: Productivity and Trade Unions (Blackwell), 1951; especially pp.5 & 16.

(F) Prior to the Author's appointment to the University of Glasgow he was President of the Canberra Trades and Labour Council for two years and prior to that Assistant to the General Secretary of the Amalgamated Postal Workers' Union.

(5) (Blackwell), 1950.

to lie in its lack of information on specific aspects of union-management relations. For this reason the investigation at Ardeer concentrated not so much on the environment in which union and management conducted its negotiations but on the types of disputes that arose between the parties.

The main union involved at Ardeer was the Transport and General Workers' Union. This union was also involved in Labour Relations in London Transport, The Dock Worker ⁽⁶⁾ and Goldstein's notorious study ⁽⁷⁾ which made comparisons possible. A very thorough study was made of the local branch of the T. & G.W.U. at Ardeer. Minutes of the branch went back to 1928 and the subjects discussed over the following quarter of a century were classified. It soon became apparant that the local T. & G.W.U. was interested in improving the conditions of employment for general workers at Ardeer. It had only a superficial interest in politics. Its greatest worry was to organise the general workers at Ardeer and to bring those who flaunted its authority - female pieceworkers, a Communist, and an inefficient full-time official - under control. This it did in the post-war period, with favourable consequences for union-management relations at Ardeer.

Although a broad theory of trade union behaviour was to be discerned in the Webbs, ⁽⁸⁾ Cole ⁽⁹⁾ and Laski ⁽¹⁰⁾ it was not articulate enough for using as a priori assumptions for union behaviour at factory level. Moreover, there was some doubt as to whether general worker unions behaved differently to the craft unions. Despite a number of histories relating to craft unions ⁽¹¹⁾ no theory of their behaviour was apparent. An immediate methodological problem arose: how far should the history of local organisations be traced? A dozen different craft unions had members working in Ardeer. Only the largest of these, the Amalgamated Engineering Union, appeared to be important in union-management relations at Ardeer. An examination was made of the minutes of the district committee but it was found that Ardeer affairs played a small part in the deliberations of the A.E.U. The principal source of controversy was the employment of ~~non~~-unionists and unfinancial unionists in Ardeer. Correspondence of the Divisional Organiser of the A.E.U. with the Ardeer management and the A.E.U. headquarters in London over the years 1932 to 1947 dealt with this controversy. The story that unfolded provided another example of a union attempting to exercise authority over employees in industry. No detailed analysis was made of the internal affairs of the A.E.U. or the other craft unions as the material, if available, was likely to be irrelevant to the development of union-management relations at Ardeer. No general conclusions could be advanced about the comparative behaviour of craft or general worker unions.

(6) (Liverpool University Press), 1954.

(7) 'The Government of British Trade Unions: A study in apathy and the democratic process of the T. & G.W.U.' (Allen & Unwin), 1952.

(8) 'Industrial Democracy', (Longmans, Green); 1926.

(9) 'An Introduction to Trade Unionism' (Allen & Unwin); 1953.

(10) 'Trade Unions in the New Society' (Allen & Unwin); 1950.

(11) for example, Jeffreys: 'Story of the Engineers' (1945); Gillespie: 'A Hundred Years of Progress of the Scottish Typographical Society' (1953).

There was some difference in the subjects over which general worker and craft unions found themselves in dispute with the factory management. Craft unions were interested in demarcation, dilution, manning, and the introduction of incentive schemes. General worker unions were involved in disputes over the promotion and demotion of personnel, the employment of females, the introduction and maintenance of job evaluation, incentive schemes and piecework. This pattern was to some extent determined by terms of reference established outside the control of the local union and factory management. Wages for craftsmen were negotiated at national level, while differential job rates for general workers were mainly determined at factory level. General workers were involved in many more disputes than were craft workers. The peculiar history of the pieceworkers and the general militant attitude of the general workers employed in the blasting department made an exhaustive study of the T. & G.W.U. imperative.

A comparative analysis of craft and general worker union behaviour was important for one subject: the reaction of workers towards the introduction of incentive schemes in the post-war period. Some examination was made of union constitutions, their rules relating to working on piecework and incentives, the history of the unions' attitudes to incentives and policy decisions reached by their governing bodies. Information was also collected from national, regional and local officials about their members' attitudes to incentives. It soon became apparent that it was informal rather than formal group behaviour in the unions which determined the course of union-management negotiations at the plant level. This was true of both craft and general worker groups. Some of these groups changed their minds and agreed to accept incentives. To find the reasons for this behaviour a close examination was made of the transcript of a number of conferences on work study between officials of the unions and I.C.I. Unexpectedly, the answer did not lie in these proceedings; but the latter explained why negotiations were sometimes ineffective and this was an important step in the research. The research also helped to explain why informal group behaviour remained uncorrected by union-management negotiations.

Many aspects of union-management relations at Ardeer were determined by national negotiations. For example, the negotiating procedure was formulated at national level. Prior to 1947, for over a decade, there was no formal negotiating procedure at Ardeer. This left a vacuum in the parties' set of references for settling employee grievances. Several abortive attempts were made in the late thirties at national level to reach an agreement on a negotiating procedure. Agreement over the negotiating procedure nearly foundered over the Company's demand that unions recognise its joint consultation machinery in return for its recognition of shop stewards. A study was made of the transcript of conferences held in 1935, 1938 and 1946-7. The minutes of meetings of 'The Signatory Unions', as the unions with agreements with I.C.I. became known, were also examined. These minutes revealed that national negotiations were inclined to breakdown due to ineffective communication as well as to a clash of the parties' interests.

Although most of the research at Ardeer aimed at examining union-management relations in the post, rather than the pre-war period, it was reasonable to assume that the nature of relations were partly a product of historical development. Apart from the development of the local unions and extension of their membership in the factory, there were some other factors of importance. The principles of the hourly wages structure was determined in 1936-7. Uniform working conditions were introduced for most of I.C.I. factories in 1938. The wage and condition structure established for I.C.I. factories in the thirties at the same time created a new institutional framework for conducting union-management negotiations. These agreements were signed by I.C.I. and were not linked to other industries. These agreements introduced stabilised institutional relations for conducting union-management relations at Ardeer over the following two decades.

Some conjecture arose as to whether the institutional arrangements, as outlined above, adversely affected the behaviour of the management, unions or employee groups at factory level. The institutional relations between the Ardeer management and the unions were traced back to the time that unions first appeared in the factory in 1913. Originally, negotiations were conducted at factory level. World War I and its aftermath brought national negotiations in the explosives industry, and institutional arrangements for the craft unions were such that there were few local negotiations. There was a movement away from factory negotiations, a trend which was not reversed until the post-War II period. Against this background there was some discontent amongst male general workers with respect to their job rates, and female operatives frequently complained about their piece rates. A number of spontaneous stoppages took place and the T. & G.W.U. seemed to have little control over the situation. This information was collected from a file known as 'The Factory Rate Book', which recorded all agreements, job rates, changes in hours and working conditions, from 1911 to 1950.

I.C.I.'s personnel and labour policy was essentially an innovating one. Not only did it initiate the new wage and condition agreements in the thirties, it was also responsible for formulating a grading system for craftsmen based on merit rating, a job evaluation scheme for determining the work content of general worker jobs, and for introducing work measured incentive schemes. Information about these subjects was collected from Company publications, records, letters and minutes; and also from interviews with Company officials both in line management and in the specialist labour and work study departments. Except for the time spent at the neighbouring union offices and some brief visits to London, most of the research was done at Ardeer factory. It was not within the ambit of this study to examine the effects of union-management relations on the managerial hierarchy.

The most fruitful sources of information were the abstract minutes of conferences held between the factory management and the unions. Over two hundred local conferences were held from the time the negotiating procedure came into effect in May, 1947 until the end of 1954. ^(F) These conferences were the principal media by which union-management negotiations were conducted. The conferences laid down decisions in the form of some rule or precedent by which unions and management would respect and guide their future relations. Thus on each substantial subject - incentives, piecework, job rates, promotion, redundancy, work practice - there were a set of decisions which were similar in nature to 'case law'. So far as it was known this was the first time that a 'judicial' approach involving a systematic review of a private law making process was used to study formal union-management relations in a factory in Great Britain. The use of this research tool was so successful that it led immediately to formulating a central hypothesis about the nature of collective bargaining.

Sec. 3. Features of the pattern of dispute in the post-war period. (12)

Before research commenced at Ardeer a survey was made of the subjects which were discussed at union-management conferences. Examples of three types of disputes were sought: union security, job security and the substantial issues such as wages, hours and incentives. Disputes over incentives and piecework were the most numerous, and accounted for just on half of the disputes occurring in the post-war period. There was a considerable number of disputes over the fixing of job rates, including the introduction and the maintenance of a job evaluation scheme to cover general worker jobs. There were few disputes over the fixation of craft wages, and the merit rating scheme for grading craftsmen did not fall into dispute. General workers had considerable number of job security disputes, particularly over promotion and the employment of females and there were sufficient numbers of demarcation disputes to permit adequate analysis. There were few disputes over the security of a union.

The argument over unfinancial and non-unionists which developed in the thirties between the A.E.U. and the Ardeer management was finally settled in 1947. In effect, the A.E.U. secured a union shop, and the Ardeer management employed only members of the A.E.U. Some years later, the T. & G.W.U., struggling to organise the general workers at Ardeer, received similar help from management in organising all employees in a few sections. Management agreed to persuade some of its employees, who were either non-unionists or unfinancial, to become financial members of the T. & G.W.U. Management did not agree to a request that these employees be dismissed. In other sections of the factory where the ratio of unionists to total employees was relatively low, the union received no help from management in its organisational drives.

(F) These are examined in Part II.

(12) 'Survey of Industrial Disputes', Business, June 1956.

Management believed that it was the union's responsibility to do its own organising. Management had no disagreement in principle to the closed shop, for it recruited its new printing craftsmen through their unions. The factory management adapted its behaviour to the realities of the situation as well as to I.C.I.'s general policy on union membership. This policy moved generally in the direction of stricter union security.

Two conferences discussed the observance of the I.C.I. negotiating procedure. This procedure was laid down in considerable detail and provided for rules relating to the election and conduct of shop stewards, the processing of employee grievances and complaints, and the calling of local, intermediate and headquarters' conferences to resolve disputes. The parties at Ardeer agreed to stick to the letter of 'the law'. The negotiating procedure greatly strengthened the hold of the official union leadership over informal groups of employees ^(F) in the factory, and unofficial deputations of employees who had some grievance or illegally struck were no longer met by the factory management. The shop stewards were required to handle employee complaints with management. Most disputes were solved at the local conference stage.

Usually, the parties proceeded ad hoc; they only discussed disputes when they arose. Usually no attempt was made to work out a series of rules to cover aspects of an entire subject. In the case of the rules governing the promotion, demotion and retrenchment of general workers an exception was made in the post-war period and the rules were 'codified'. These rules were introduced many years ago to provide for promotion according to the length of service. The 'turnlist' system, as it was called, lent itself admirably to the goals of the T. & G.W.U. in attempting to make its members' jobs as secure as possible. The union made many representations about the administration and interpretation of the rules until there was a considerable body of 'case law' about them. In the post-war period it was found expedient to bring them together into one document. The rules had important effects on the social system of the factory. The more senior workers also filled the higher rated jobs, hence creating strong informal groups. There was discontent when job differentials were narrowed. The promotional rules were of considerable value in reducing the opposition of general worker groups to incentive schemes.

The demarcation dispute between the craft unions and the unskilled workers was a dead issue. But demarcation disputes between the crafts persisted despite efforts of management to get agreements between unions or allow them to work out their own arrangements with respect to the allocation of work. The cause of the dispute lay in the definition of the work prerogatives.

- (F) Informal group behaviour was defined to include any behaviour which was not part of the code of conduct set by the lines of authority of management, or any conduct which did not conform to specific decisions of the formal union organisation.

Three criteria were used to define the lines of demarcation - the sizes and types of materials, the type of tools, and the nature of the job. In many situations no one line could not be used exclusively and for this reason interpretation difficulties arose. This explanation of the demarcation issue in no way overlooked the fact that the number of demarcation disputes which arose in a shop was very much linked to the morale of the craft group. If a craft group became insecure then the demarcation issue was an ideal grievance point. There was some evidence to assert that whereas demarcation was originally a formalised dispute in the power struggle between craft union and management, it had become a symptom of insecurity of the informal craft group.

The Ardeer study tended to support the findings of an enquiry into restrictive practices in other parts of British industry made by Zweig. (13) Demarcation, dilution, manning and changes in other work practices were not widespread, nor were they associated with serious union-management conflict. No new information or principles about dilution or manning were found to exist at Ardeer. There seemed to be some evidence that the incidence of job security disputes were rising, and becoming more diversified. There was however, no evidence that craftsmen or general workers opposed technological or organisational improvements. A traditional function of management, that of disciplining of employees, was not challenged, although victimisation was alleged in one case.

Although unions did not oppose changes in technology or organisation as such, (14) the most important cause of disputes was the establishment of a mechanised unit to produce blasting explosives. This unit was staffed by men most of whom had a considerable amount of seniority in the factory. The men soon became the most important social group in the factory, and considerable arguments developed over the group incentive scheme installed to cover the unit. The high earnings of the men on the unit led to dissatisfaction on the old section of the department where the processmen were employed on time rates of pay. The female operatives paid by piecework also became anxious about the future of their jobs, as these were likely to be replaced by mechanised operations. Considerable arguments developed over the alteration of piece rates. Several spontaneous stoppages occurred in the department, the most serious of which occurred in 1950 and in 1954. An attempt by management to persuade the men on the old side of the department to accept an incentive scheme failed. After a 'go-slow' and suspension, this section of the department accepted the principle of job evaluation to determine hourly job rates, but to 1955 the men on the mechanised unit had refused to do so.

The analysis of the reaction of groups to the installation of incentives showed the following characteristics. Employee groups were generally suspicious of incentives. There was no evidence that this was due to the use of work measurement in setting the times of the jobs, although the unions seemed to prefer piece work. The reactions of groups were dominated by fears about the

(13) vide supra.

(14) See Jacques: 'The Changing Culture of a Factory', 1951, particularly Chapter IV.
and Scott & others: 'Technical Change and Industrial Relations' (Liverpool University Press), 1956.

security of their jobs. This applied whether individual or group schemes were offered; but the resistance was generally stronger where there was a group scheme. Usually a group scheme involved some displacement of personnel. If the group was large, as it was in the case of the maintenance fitters and general workers employed on the old side of the blasting department, the resistance was so strong that no scheme was accepted. General workers were more inclined to change their attitude and accept incentives than were craft workers. This was due largely to the existence of the seniority rules which governed the displacement of personnel. The craftsmen had no job security and consequently most groups refused to accept incentives.

Most of these reactions tended to be those of informal groups. (F) Their behaviour was altered in some cases by the intervention of the unions to negotiate the details of the scheme. In the case of the T. & G.W.U. the local official had experience in negotiating over the piecework system at Ardeer and this was used in negotiating over the new incentive schemes. In the case of the craft unions there was a traditional hostility to payment by results and no real attempt was made to negotiate the details of the schemes offered. However, in one case where the union intervened the craft group changed its decision and accepted incentives. Where management made some concessions with respect to the number of personnel to be included in a scheme, or the target at which bonus was to be earned, the groups tended to change their decisions. Unfortunately, the national conferences on work study failed to lay down definite conditions relating to the installation and maintenance of incentive schemes. The groups did not see that it was in their interests to accept incentives, fears about redundancy and the discriminatory nature of incentives remained dominant in their attitude.

Once incentives and piecework were installed they became the most dispute-prone of all subjects in the union-management nexus. This was due to the considerable amount of detail that had to be negotiated, and to the fact that incentives and piecework led to strong informal group behaviour which was directed towards improving the amount of the bonus earnings. The groups also wanted stabilised earnings and to reduce the worst discriminatory features of incentives. Incentive effort was forthcoming if satisfactory conditions were established by negotiations. Incentives placed a severe strain on union-management relations at the factory level. In particular, changes in jobs or methods necessitated alterations in the piece rates or defined tasks of an incentive scheme, and the operative acceptance of new rates or times was frequently difficult to obtain. Once an incentive scheme was accepted by employees management was precluded from altering the rates, times, or personnel if a group scheme was in existence, without the approval of the union. In Ardeer this meant without approval of the group of operatives involved in the

- (F) The groups usually came to their decisions at workshop meetings which were in nature informal and not part of the official union activities. Later most of these decisions were confirmed at official union meetings. A decision reached at an official union meeting was formal behaviour.

scheme. Both the female pieceworkers and the men on the mechanised unit were strongly disposed to informal behaviour.

At the formal level of negotiations there were many types of disputes. These were grouped under the following headings: factors determining the size of the bonus, reasons for altering incentive or piece rates, difficulties in altering the rates or times, and special problems of group schemes. There was virtually no difference between the effects of piecework and the various types of incentive schemes used in the factory. Work measurement was used in varying degrees in all types of schemes. A good deal of argument centred over the problem of 'tight' rates; the operatives claimed that they could not earn sufficient bonus while management contended that the rates or times were set equitably. Problems arose over the subsidisation of effort: when there were composite rates for piecework, when there was a hold-up of materials or break-down of machines, a group scheme included jobs which required different efforts and when learners, inspectors and other personnel were included. Problems were also met when the pace of the machine or some technical factor prevented the operatives working at a bonus pace throughout the day. Trial periods were used to secure the operatives' acceptance of altered rates. Special rates or make-up payments were made when operatives could not earn bonus because of no fault of their own. Practically any condition that had some connection with the earning power of operatives was discussed at union-management conferences on incentives.

A merit rating scheme was used to grade craftsmen for the purpose of paying them a margin over their hourly rate of pay. A job evaluation scheme was introduced in the post-war period to classify and rank general worker jobs according to their work content. Merit rating, job evaluation and work measured schemes all had a common objective: to establish an equitable system for determining the fixation of wages. The job evaluation scheme attempted to fix hourly rates of jobs according to the value of the work performed. The merit rating scheme attempted to assess the value of the work of the individual operative in relation to minimum acceptable requirements of the job. The work measured incentive schemes attempted to establish equitable times, tasks and rates for rewarding operatives for the amount of effort put forth. The equitableness of the results achieved by using these schemes depended on the reliability of the pre-determined criteria, their effective implementation and the right of the union to question the results obtained.

The existence of the job evaluation scheme gave union and management a set of references to fix and adjust job rates. This eliminated the haphazard adjustment of job rates due to the pressures of groups within the union. It had the same effect on union-management relations as multi-union agreements with I.C.I. to prevent leap-frogging of wages of crafts. These agreements were introduced in the thirties and laid down rates of pay for engineering and building craftsmen. They were so successful that only on a few occasions were claims filed for rates to cover special conditions existing at the Ardeer factory.

Similarly, few claims were lodged for a review of job rates once the job evaluation scheme was installed. At the time of installation there was considerable pressure by various groups within the union to obtain favourable classification of their jobs, and thus secure a higher hourly rate. Job evaluation was at first resisted by the union members, but as most jobs received higher rates under the scheme it was ultimately accepted. Once the scheme was properly installed the relativity of the job rates was maintained by the negotiation of a percentage increase to apply to all jobs evaluated.

Sec. 4. Some observations of the empirical data.

The vast majority of the two hundred conferences held between the Ardeer management and the trade unions ended in agreement. A set of rules relating to promotion, demotion, transfer and retrenchment were codified into one document; normally the parties agreed to a minute which implicitly set out rights and obligations of each party. In this process of reaching agreement they observed certain precedents, established by previous conferences, and they interpreted the rules laid down in national agreements which covered the negotiating procedure, the minimum wages for craftsmen and general workers, and the agreement relative to working conditions. In the case of maintaining incentives the negotiators found it extremely difficult to reach agreement for the rules laid down by the national conferences were vague and indefinite. The negotiators then proceeded to decide what was a 'fair' and 'just' solution to the dispute. While union and management were not unconcerned with the material outcome of a particular dispute, they tried to abide by the sets of reference which had been previously laid down. In this way they were able to reach agreement.

The most outstanding cases of ineffective negotiations were over the introduction of incentives. The failure of these conferences was largely due to the absence of clear terms of reference within which to negotiate. The national conferences on work study failed to establish sets of reference due to faulty communication and to a clash of interests, either real or illusory, between the parties. The parties did not logically think through their problem, they did not try to reach an effective agreement which laid down rights and obligations, and finally they became suspicious of each other's intentions. The failure of the parties to see mutual interests also prolonged negotiations over the negotiating procedure.

The I.C.I. negotiating procedure did a great deal to assist the local parties in their negotiations. Before the procedure came into effect the method of dealing with grievances of employees was tedious and cumbersome. Some groups took matters into their own hands, spontaneously stopped work and 'negotiated' directly with management. As a result there was disorder in the factory. After the negotiating procedure came into effect the means of dealing with grievances was laid down in detail, with the result that employees knew they had certain rights in using the procedure. Provision was made for staging appeals, firstly, within the department of the aggrieved employees, and secondly, by a system of union-management conferences. The formal lines of authority were clearly established and certain officials, notably the line management and shop stewards, were held responsible for trying to resolve their differences at the workplace. Both union and management adhered strictly to the provisions of the procedure.

Part of the set of references for the parties at Ardeer was established by national agreements. In addition to the negotiating procedure other sets of reference were set out in the agreements relating to wage rates and working conditions. The national agreements reached on these matters involved multi-union bargaining. Although many amendments were made to the rates of wages laid down in these national agreements no national strike, or threat of strike action, ever took place. This suggested that the parties resolved their differences about the extent of the improvement of the wage rates by other means than a 'test of strength' or 'power' - two concepts constantly used in reference to union-management relations. The parties used equitable standards in reaching agreement.

From the middle of the thirties I.C.I. employees were not linked to other industries. Stabilised union-management relations developed in the collective bargaining frameworks, and this helped the parties to see their 'common' interests. I.C.I. had an innovating labour policy and a good deal of its success in industrial relations was attributable to that policy. However, it was quite wrong to suppose that because I.C.I. was a large combine, a monopolist in some fields of the chemical industry, that it 'bought' peace at a price. Industrial peace was only secured by effective negotiations and by sound personnel procedures.

There was no evidence to suggest that the trade unions at Ardeer aimed at eliminating private enterprise, or that negotiations were influenced by ideological differences between union and management officials. While the local branch of the T. & G.W.U. passed certain motions respecting political events in the thirties, its main interest was directed towards improving the wages and working conditions of its membersemployed at Ardeer factory. The situation could have been different had the Ardeer factory management frustrated the aims of the local union branch. The Ardeer management was subject to the control of the policies of I.C.I., and this organisation was under the influence of the late Sir Alfred Mond. He saw that the development of union-management relations was inevitable, and for this reason some co-operation between management and union was necessary to establish collective bargaining. The Mond-Turner talks, which took place after the General Strike, were of more than passing interest at Ardeer - Ardeer was a living example of Mondism-in-action.

The local branches of the unions did not seek to nationalise I.C.I.. Nor was there evidence to suggest that the union officials were in any way influenced by the prospect that I.C.I. could be nationalised had the British Labour Party been successful in the 1955 elections. Perhaps the local branches were impressed by the failure of the nationalised industries, particularly the railways and the mines, to maintain industrial peace. (15)

(15) Baldwin : 'Beyond Nationalisation', (Harvard), 1955.
Spero : 'Labour Relations in British Nationalised Industry',
(N.Y. Univ. Press), 1955.

Nor was there any evidence to suggest that the management officials were unduly influenced by the threat of nationalisation. The foundations of peace in union-management relations at Ardeer were laid by I.C.I. in the collective bargaining frameworks established in the thirties and in the negotiating procedure detailed in 1947. These foundations were established long before the threat of nationalisation.

The local T. & G.W.U. did not allow its bargaining function to be obscured by its political or strike function. It was primarily concerned with improving the wages and working conditions of its members employed at Ardeer. It never tried to organise an official strike amongst employees at Ardeer, although spontaneous stoppages of groups of employees took place both before, during, and after the second world war. Prior to the war spontaneous stoppages occurred amongst groups of employees, particularly amongst the female pieceworkers, who were not members of the union. Indeed, it was not until the post-war period that the union was successful to recruit as members all employees in the blasting department where most of the trouble occurred. Until employees became members a union could not exercise control over them. For this reason the T. & G.W.U. was weak and ineffective, and it was further handicapped by incompetent leadership which did not adequately discharge the branch's bargaining function.

The real turning point in the history of the T. & G.W.U. was the establishment of the negotiating procedure in 1947. From that date onwards the branch underwent some important changes which included the removal of a Communist part-time official, the dismissal from the position of secretary of a man conservative in his views, the re-organisation of the branch committee to include the shop stewards, and the creation at the workplace level a form of union organisation based principally on the shop stewards. The negotiating procedure also provided a ready means whereby the grievances of the employees could be transmitted to formal channels and this reduced the necessity for the informal groups to take direct action. Moreover, the rights of the branch to participate in formulating policies and rules to cover Ardeer employees was specifically recognised by the new negotiating procedure. As a consequence, the Ardeer branch of the T. & G.W.U. for the first time became a bargaining agency in the fullest sense of the term, and its control was extended over many aspects of employment policy of the management.

Spontaneous stoppages took place amongst employees of the blasting department in 1950 and again in 1954. These employees were members of the T. & G.W.U. The stoppages were triggered by the rapid deterioration of morale amongst the employees following two fatal accidents, and to an underlying feeling of discontent due to problems remaining unresolved by negotiation. The installation of the mechanised unit had raised serious doubts in the minds of many employees about the security of their employment, and it was this fear, plus a change in status of their earning capacity, which activated the behaviour of the informal groups. Job

rates, piece rates, and incentives became the targets for disaffection amongst the various employee groups. In 1954 the 'go-slow' of the men on the 'old' side of the department was a direct result of the agreement reached by negotiations to resolve a 'go-slow' on the mechanised unit.

It was noteworthy that the T. & G.W.U. was able to re-establish its authority, and there was no continued defiance of union directions by the informal groups as there was in other parts of British industry in the post-war period. (16) Authority was re-imposed by the management and the union negotiating to solve the problems confronting them, even though the strikes were still in progress. For this reason there was no drastic shift in power from the formal union leaders to the informal groups. The power of decision-making lay close to the formal union leadership in the post-war period because of the general success of negotiations. Management assisted the union to reach its objectives by co-operating with it in establishing appropriate rules to regulate the conduct of the employees, management and union officials. In short, the authority of the union did not break down for lengthy periods because of the behaviour of the Ardeer management; it broke down for short periods when management made some mistake in its dealings with its employees, but these mistakes were repaired because of the genuine desire of management to be equitable in its dealings with its employees.

The social structure of the Ardeer management was of the utmost importance to the maintenance of union-management peace. Management made real attempts to see that its employees felt that they belonged to a worthwhile society. For this purpose they used a wide range of personnel techniques including joint consultation, a suggestion scheme, works newspaper, social club, proper induction procedures, counselling, and extensive welfare services. (17) The organisation was built on sound principles of managerial theory (18), and this made work meaningful to employees. (19) The senior factory management tried to make the work of the organisation more humane by taking a close interest in personnel matters; the factory manager, for example, personally reviewed the gradings of the craftsmen, and he chaired the meetings of the works council and the conference between union and management. A good deal of time was spent in training supervisors and managers to be better leaders. Employees found satisfaction in their jobs, most of which were arduous, repetitive and involved a great deal of

(16) See The Dock Worker.

(17) See Yoder: 'Personnel Management and Industrial Relations', (Prentice-Hall) 4th Edit.

(18) See Koontz and O'Donnell: 'Principles of Management'; (McGraw-Hill) 1955;
Urwick: 'The Elements of Administration', (Harper) 1944;
Barnard: 'The Functions of the Executive', (Harvard) 1938.

(19) See Paterson: 'Morale in War and Work', (Parish) 1955;
Dubin: 'The World of Work' (Prentice-Hall) 1958.

(20) See Tead: 'The Art of Leadership', (McGraw-Hill) 1935;
Roethlisberger: 'Management and Morale', (Harvard) 1946.

skill. Unlike the dock workers, who did not feel that they belonged to the management organisation, the employees at Ardeer did not make unreasonable demands on their union because of any dissatisfaction of work. (21) Thus, the T. & G.W.U. was able to function effectively because the demands of the informal groups were basically satisfied by management behaviour.

(21) cf. The Dock Worker.

Sec. 5. A Theory of Collective Bargaining

What conclusions can be drawn from the evidence found in the Ardeer case? It is possible to test the theories of collective bargaining and to accurately define its nature. Three main groups of theories seek to explain the phenomenon of collective bargaining. These are the marketing, governmental and management theories. (22) The marketing theory corresponds most closely to the ideas of the classical economist. It looks upon collective bargaining as a means for settling a contract relating to the employment of labour. In the end an agreement, similar to a commercial contract, comes into being. On critical examination this theory does not explain the nature of collective bargaining for the following reasons: in Britain few agreements run a specified life, the total terms for union-management conduct are rarely committed to written agreements, an agreement to be effective must be based on equitable terms of employment, and it is open to doubt whether a union gives consideration in return for an improvement in wage rates, hours and working conditions. For these reasons the marketing theory can be rejected.

Much more plausible is the governmental theory which states that collective bargaining is a constitutional system which regulates conduct in industry. Slichter, (23) who first asserted that collective bargaining is a method of building industrial jurisprudence, excluded the price or wage-making aspects of collective bargaining. Dunlop (24) and Flanders (25) appear to agree with this exclusion, and even Chamberlain who clearly favours this theory does not push his arguments incontestably to this end. He prefers to view these three groups of theories as differences in degree rather than in kind. This view is open to question on general grounds as a theory has to explain the total phenomenon of collective bargaining. (26) To have validity it must also explain collective bargaining (27) wherever it is found, in the United States or the United Kingdom.

(22) Chamberlain: *Collective Bargaining*, (McGraw-Hill) 1951.

(23) Slichter: *Union Policies and Industrial Management*,
(Brookings) 1941

(24) Dunlop & Healy: *Collective Bargaining, Principles and Cases*, (Irwin) 1953.

(25) Flanders & Clegg: *The System of Industrial Relations In Great Britain*, (Blackwell) 1954

(26) Chamberlain: *loc. cit.*, pp.156-7

(27) This is not the only system of industrial relations; the Australian is one of extensive state interference.

At Ardeer union and management negotiated to reach agreements. The essential nature of negotiation was a law-making process. The parties legislated rules to cover such matters as the negotiating procedure and the national wages structure, they interpreted those laws when determining specific cases, they created, interpreted and observed precedent in case-made law, and they invoked the standards of equity when a case did not fall within the mutually accepted rules in order to resolve their differences. The end result of negotiation was an agreement set out in rights and obligations to be observed by union and management and their members. The parties used the same method of negotiations to resolve disputes whether they were over job security, wages, hours, working conditions or the details of the general union-management relationship. The system of industrial jurisprudence, enunciated by Slichter, governed union-management relations with respect to wages and hours as well as non-economic matters.

It follows from this analysis that collective bargaining should be defined not in economic terms but by those of social theory (28). Thus, collective bargaining is an institution which has as its purpose the government of relations between union and management. Its function, through which its purpose is achieved, is to establish rights and obligations for union and management and their respective members. These rights and obligations are set out in explicit and recognisable forms, that is they are structured in a formal way. The rights and obligations relate to the general rules which govern the method by which union and management are to lay down future rights and obligations, and to specific rules which cover particular subjects such as wages, hours of work incentives and other working conditions. The method by which the function of collective bargaining is achieved is known as negotiation. The 'process' of collective bargaining is therefore synonymous with negotiation.

Collective bargaining realises its purpose of resolving conflict between union and management when negotiations are effective. Peace in industry follows as a necessary consequence. Collective bargaining fails when it does not achieve its purpose when negotiations are ineffective. Conflict is a necessary consequence. In such a situation there is industrial anarchy, in the sense that the behaviour of the parties is not governed by law. Industrial anarchy can take two forms, viz, a strike or arbitrary behaviour on the part of management with respect to its employees. The latter has the opposite purpose to that of collective bargaining which seeks to govern employment conditions by reference to 'law' in industry. A strike on the other hand, may have the same goal as that of collective bargaining, to establish rights and obligations, but it is a phenomenon of disorder and not of order.

(28) See T. T. Paterson: A Methetic Theory of Social Organisation (University of Glasgow) 1957 (mimeo).

Are there any conditions which determine whether or not negotiations are to be effective? To satisfactorily answer this question it is worth making reference to existing knowledge of social institutions. It is asserted that in order for a social system to function effectively it is necessary that its members have common beliefs, definitions and values.(29) At once it becomes apparent that union and management, which are the two members of collective bargaining, have few common beliefs, definitions and values. History is such that the two distrust each other, and their functions, organisational forms and mores are such that they have very different behavioural patterns. The evidence of the Ardeer case suggests that even when there are no real conflicts of interests in a situation, faulty communication or errors on the part of one of the parties conducting negotiations, (such as the failure to determine an appropriate method to reach a goal in negotiations), tend to be viewed as a conflict of interests between the parties. Thus, there is a decided tendency for the separate interests of the parties to be accentuated during negotiations which prove difficult to resolve.

Union and management have one common interest, that is, the employment of union members by management. For this reason unions do not attempt to eliminate managements by strike, political action or by demanding wage increases that would cripple a business. Sometimes unions may not see the consequences of their actions, especially the adverse effect of a high wage claim on the security of employment of their members; this is an error in perception. For this reason it is possible that unions and management see their common interest most clearly when they are linked together in a narrow collective bargaining framework, rather than a broad one. This rule does hold for all situations; it is conceivable that the conflict of interest is intensified in a narrow collective bargaining framework by the management attempting to keep its wage payments lower than the rest of the industry.

Union and management are bound together in the institution of collective bargaining because of the need to establish a social order to allow production, and hence employment to take place. Conflicts still arise over the details of the social order to be established, that is over the terms of employment. The Ardeer case suggests that there is only one method by which these conflict of details may be avoided, and that lies in the judicial behaviour of the two parties. The parties must set aside their immediate separate interests when dealing with disputes and resolve the dispute in accordance with existing rules and precedents, and when these are absent in accordance with mutually accepted standards of equity. This is the same type of behaviour as that of a judge. This behaviour not only establishes fair rules which regulate human conduct at the workplace, it is a method of logical thinking, and as such it also helps to overcome other pitfalls of negotiations such as inappropriate goals and methods.

It is in this connection that a well-structured negotiating procedure is of tremendous importance to effective negotiations for the parties follow accepted methods when processing their disputes. It is prima facie evidence that the parties intend to act in accordance with law. Not all the terms of reference for the parties' conduct are found in the negotiating procedure, important rules are also contained in the agreement relating to substantial matters, such as wages and working conditions. The Ardeer case strongly suggests that in many cases successful negotiations are dependent on the prior existence of rules, themselves laid down by negotiations. In other words, negotiations are sometimes ineffective for the simple reason that previous negotiations were ineffective, or absent. The vacuum in the terms of reference to guide the parties' behaviour is so great that it is not possible for them to resolve disputes in present context.

There are some peculiarities of the institution of collective bargaining that need to be noted. Collective bargaining does not exercise authority directly over those human actors who are responsible for its maintenance; it has no power to punish the actors for their bad performance. The division of labour of tasks and roles which are required to maintain collective bargaining are not directly determined by it. It has authority only over two institutions, union and management, and these may in turn vest their own officials with authority to carry on the work of collective bargaining and hold them responsible for the way in which they perform their tasks. It follows from this that union and management must have officials who can cope with their roles if collective bargaining is to be maintained. Officials must perceive the purpose and functions of collective bargaining, union and management so that the first may be properly maintained. This complex situation makes collective bargaining vulnerable to strain, disruption, breakdown and even to disintegration.

There are reasons for suspecting that the impetus for disrupting the work of collective bargaining comes not from the union, but from management. In the first place a union's purpose is frustrated if collective bargaining fails. If collective bargaining fails the purpose of management is only frustrated if a union can bring its operations to a halt, and that is not always possible. In the second place a comparative analysis of case studies seems to indicate that the state of union-management relations is largely determined by the attitudes of management toward its personnel. Relations are bad in certain industries because their managements do not observe good personnel principles. (30) In the third place most of the pressures to change the sets of reference established by negotiations come from the need of the social structure of management to adapt to new

(30) See the Author's thesis: 'Canadian and Australian Industrial Relations; A comparative analysis of half a century of legislative interference in union-management relations in two countries' in which he compares the case studies made in Walker: Industrial Relations in Australia (Harvard) 1956, and Woods (Ed): Patterns of Industrial Dispute Settlement in Five Canadian Industries' (McGill) 1958.

conditions. (31) With one or two exceptions the social and economic environment which is said to surround collective bargaining can be classified as part of, or bearing on, the social structure of management.

It follows that the less the parties are inclined to alter the formal sets of reference the less there is likely to be disputes, and naturally the less chances are there of strains developing between the parties. A stable social structure of management is less likely to demand changes in the terms of reference than an instable one. If management has to adjust to few pressures from the external environment the chances of disruption of collective bargaining are few. Nevertheless, change is inevitable and it may be necessary to alter the terms of reference between the parties. Some managements are able to adjust successfully and do not damage their relations with the unions, while others adjust badly and disrupt collective bargaining. This seems to be compatible with the conclusion of the N.P.A. survey that 'external factors do not necessarily pre-determine the nature of the collective bargaining relationship; environmental factors set limits, but within those limits the parties are free to create a bad relationship or a good one. (32)

By far the most important determinant of peace in industry (which is the consequence of effective negotiations) is the attitude of management. When a management refuses to recognise the role of a union, in participating in formulating laws to regulate employment, conflict is inevitable. In such a situation it may be a misnomer to call the union-management relationship one of collective bargaining. Collective bargaining only exists where union management relations are characterised by judicial behaviour in their attempts to resolve disputes. Such a system of union-management relations is primarily dependent on management accepting the right of the union to negotiate with it, and the obligations laid down by agreement. In short, collective bargaining is a system of law which operates at the workplace by the consent of management. It is a system based not on power but on a sense of obligation.

Sec. 6. A Theory of Trade Union Behaviour

A trade union is one of two institutions which establish and maintain collective bargaining. As a good deal is known about the characteristics and behaviour of social institutions (33) it is possible to establish with prevision various characteristics and behavioural patterns of a trade union; its relationship to collective bargaining can be confidently stated.

(31) See Golden and Parker: Causes of Industrial Peace under Collective Bargaining, (Harper) 1955.

(32) *ibid.*

(33) See Schneider: *cit.*
Talcott Parsons: The Social System, (Tavistock) 1952.

From these principles deduced from existing knowledge it is possible to interpret the empirical data collected at Ardeer about the behaviour of the T. & G.W.U. This approach answers the final question posed by the Ardeer experiment: why do union members refuse to abide by agreements made on their behalf by their governing body?

A union has overlapping membership with that of management, and it has a separate but interdependent function with that of the employment function of management. (34) It is these two factors which give rise to a unique inter-institutional relationship. Thus, any definition of trade union must include reference to these two distinguishing characteristics. A new definition of trade union is attempted. A trade union may be described as an institution which has as its purpose the participation with another institution, management, in formulating laws to govern the rights and obligations of its members with respect to their employment by the second institution. Or more generally, a trade union is an institution which has as its purpose, the participation in formulating laws to govern the rights and obligations of its members with respect to a second institution to which they all belong as subservient members.

In order to realise its purpose a trade union has a number of functions. By far the most important is its bargaining function, that is the function of negotiating and reaching agreement with management respecting the rights and obligations of its members. It may also exercise a political function when the environment is such that it frustrates its purpose, and it is possible that a conflict may arise from the discharge of these functions, thus leading to strain, and possible disorganisation or even disintegration. This occurs where a union gives to its political function precedence over its bargaining function. Sometimes a union may discharge its function to strike when its bargaining function fails. It is possible that the discharge of this function may be frustrated by some groups of members refusing to strike. This is one case of a breakdown in union authority, but it is not specifically examined in this thesis. A union may also discharge several other functions, such as education and welfare, but these rarely conflict with its primary function of bargaining and no breakdown in union authority is experienced.

Next in importance to its bargaining function lies its law-enforcement function, that is the function of seeing that its members discharge their obligations laid down in the union-management agreement. It is in the discharge of this function that most instances of breakdown in union authority take place. Groups of members spontaneously strike without authority of their governing body and in defiance of the procedures laid down in agreements. Before a union is able to effectively exercise its authority

(34) Moore: Industrial Relations and the Social Order
(Harper) 1951.

over the work groups to secure their obedience to the rules contained in the agreements it is necessary that a union recruit all employees as members. Thus, the exercise of the law-enforcement function is conditional on the effective discharge of its recruitment function.

For this reason there is an a priori case in favour of strict union security provisions of the 'union' or the 'closed' shop. (35) All employees must be brought within the ambit of 'the law' established by collective bargaining. There is no room in a law-abiding society for perverse or isolate individual who refuses to confirm the norms of behaviour established by collective bargaining. It also follows that a management which allows a union to founder in its recruitment drives or actually frustrates a union's attempt to organise employees, is ipso facto fostering industrial anarchy in its workplace. This does not mean that a management is forced to agree to all proposals of a union to strengthen its security over its members, but it is in its own interest for management to agree to the most effective means to strengthen the membership drives of a union. This may be accomplished by the recognition of shop stewards as the exclusive means for processing grievances and helping the shop stewards to recruit employees as union members.

An examination of the formal structure of a union shows that it is much less fitted to enforce the obligations of its members than it is to negotiate their rights. It has an extremely weak authoritarian structure. Although its constitution establishes a contractual relationship between the union and its members its officials can rarely order their members in the same way as a manager orders and secures obedience of his subordinates. In the main a union relies on moral (36) authority, founded on the sense of obligation, to secure obedience of its members. Union members respect the orders of their governing bodies and officials when they feel that the orders are right and good. If a group of members feel that the order is neither right nor good it may not obey an order of its union, and hence a breakdown in union authority takes place.

There are several other features of the formal structure of a union which make it vulnerable to strain, disorganisation and breakdown. The authoritarian structure is built on a democratic hierarchy of governing bodies, and a bureaucracy of officials responsible for administering policy, and the work of these two sides sometimes conflict. The chain of command is blurred, the status structure is indefinite and the role structure is not sharply defined. In addition, there is a mass of laity who have no differentiated functions to perform. For this reason, apathy of union members

(35) Cf. Allen: Power in Trade Unions.

(36) See Paterson: A Methetic Theory of Social Organisation.

is a consequence of the passive role of union membership both in theory and in practice. For somewhat similar reasons the incentive and punitive system of a union is unlikely to motivate individual members to perform their best or to prevent groups disrupting the operations of a union. A union has control over its paid officials and active lay members who aspire to acquire positions of power and authority. But on the whole it appears that the formal structure of a trade union is so delicate that it only works effectively in special conditions.

A breakdown in union authority, whereby members refuse to obey an order of their governing body, is dependent on there being a shift in power from the formal to the informal structure of a union. The most important feature of this informal structure is the informal group. The Ardeer case suggests that the most important informal groups arise not from political religious or friendship interests, but from the organisation of work by management. Informal groups of workers have their respective common interest in job rates, piecework, incentive schemes, occupations, promotional system, and the departmentation of the organisation. These informal groups have two main functions. The first is to attempt to safeguard their jobs by marking out demarcation lines, resisting dilution, challenging manning ratios and work loads, and demanding conditions to protect themselves against the deployment of personnel. The second function is to improve their status in relation to other groups by attempting to increase their job rates and improve their working conditions. If a group feels that its interests are not being protected by the union it may decide to take matters into its own hands. This is likely to happen in those unions which have few common occupational interests.

Why does power shift to the informal group? Is it due to the failure of particular union officials to cope with their roles, or is it due to the size and composition of a union? (37) Or is it due to the details of the organisation structure? (38) The Ardeer case rejects these contentions, and puts forward the proposition that is the general union-management relationship which determines the way a union organisation functions. The empirical evidence suggests that the determining factor is the behaviour of management. If the latter 'co-operates' in the sense of participating with the union to establish law and order in the workplace, power remains with the formal union structure. In particular, the rules established by the negotiating procedure are important, including those relating to the authority and responsibility of shop stewards in the processing of grievances of the work groups. The promotional and demotional rules, and the agreements relating to demarcation lines and dilution, also go a considerable way to satisfy the job security needs of the work groups.

(37) See The Dock Worker.

(38) cf. Roberts: Trade Unions Government and Administration in Great Britain, (Bell) 1956.

The job evaluation scheme establishes a relativity between job rates and maintains the status of the various work groups. Agreements relating to the conditions covering piecework and incentives satisfy both job security and status drives of the work groups.

When a management does not co-operate with a union in establishing law and order in the work place through collective bargaining, that is negotiation and establishing agreement, a union tends to function as a protest group in order to challenge the arbitrary actions of management. In such a situation informal groups are forced to fend for themselves, and breakdowns in union authority are accompanied by drastic shifts in power from the formal to the informal group. In workplaces long characterised by industrial anarchy the establishment of order is particularly difficult; any action taken by management is viewed with suspicion by its work group. Any sharp drop in morale is likely to be followed by spontaneous action on the part of the work group. Where there are no rules to cover specific points of dispute between the parties the gap is open for disorder to develop. The procedural clauses included in the negotiating procedure are not sufficiently meaningful to the work group to elicit a sense of obligation and thus control its behaviour. The morale of a work team is primarily determined by the behaviour of management, and when it makes mistakes because of bad management, a union is thrust into a situation of having to repair the damage. For this task it is singularly unfit.

The Ardeer case suggests that the disorderly conduct of work groups can be brought under control by collective bargaining, both in the long and in the short term. In the long term it is necessary to condition employees to the rule in law in industry. This is achieved by a union establishing equitable rights and obligations for its members. In the short period, when disorder breaks out, it is necessary to re-establish control of the groups' behaviour through collective bargaining. A union is unable by its nature and structure to achieve this alone; it can only achieve it through negotiations with management to permit the return to work of the recalcitrant groups. In workplaces usually characterised by the rule of law the shift of power for the informal group is not drastic; for this reason there were no bad breakdowns in the authority of the T. & G.W.U. at Ardeer. In the post-war period the I.C.I. management at Ardeer assisted the union in establishing law and order in the factory.

PART I IMPACT OF UNION ON MANAGEMENT

Introduction

From a labour relations viewpoint the history of Ardeer factory fell into four periods. (F) The first was the pre-union period from the commencement of factory operations in 1873 until the emergence of unionism in 1913. The second period lasted until 1936 and covered the first world war, the recession and boom in the twenties and the Great Depression. In this period, Nobel's Explosives Company, which owned Ardeer, was merged with other interests to form I.C.I. The third period was ushered in when I.C.I. signed agreements with the major unions to govern wages and working conditions of most of its employees on a company-wide basis. The fourth period, the post-war period, commenced in 1947 when a formal negotiating procedure came into existence.

In the fourth period union-management relations reached an advanced and sophisticated stage. During the third period I.C.I. labour policies were felt in British industry for the first time. For Ardeer, it was a formative decade; the stage was set for the post-war development in union-management relations. The second period was not particularly significant for understanding events in the fourth period. Only a few social features affecting union-management relations in the post-war period could be traced to the first period.

During the forty years of experience of union-management relations negotiations over wages and working conditions at Ardeer were conducted within a number of frameworks. The term 'framework' was chosen to illustrate the existence of a bargaining relationship between two institutions, union and management. Changes in frameworks were due to three reasons: a fundamental change in ownership of, or control over the factory management, or its affiliation to a new employers' federation responsible for conducting negotiations; an amalgamation or federation of unions or the affiliation of unions to a new confederation of unions for the purpose of conducting negotiations; or the initiation of a bargaining relationship between the factory management or employer association with a union or confederation for the first time. The collective bargaining framework was antecedent to a negotiating procedure by which the parties set out rules to govern future negotiations on substantial matters.

- (F) Information for this and the following sections was compiled from the 'Factory Rate Book' which set out changes in rates of pay and working conditions for Ardeer factory from 1911 to 1950. The author was indebted to Ardeer Deputy Labour Officer, Mr. T. C. Hamilton, who was able to give a good deal of information about the early history of the factory. Mr. Hamilton was in no way responsible for the interpretation of events described in this chapter.

Initially, the factory management and the local branch of the various unions with members at Ardeer conducted negotiations. The frameworks for collective bargaining then consisted of the Nobel's Explosives Company on the one hand, and one of the several local union organisations, on the other. Over the period from the days of World War I to just before the outbreak of World War II, Ardeer had few settled terms of reference for conducting union-management relations as there were many changes in the frameworks of collective bargaining. These changes were due to state intervention in the first World War, the post-war development of national negotiations for determining wages and working conditions for the explosives industry, the linking of the explosives with other industries in the twenties, the creation of I.C.I., and the amalgamation of unions to bring the A.E.U. and the T. & G.W.U. into existence. It was not until just before World War II that I.C.I. collective bargaining frameworks were established, and these remained in existence for the next twenty years.

Sec. 1. The emergence of the unions

Forty years after the factory commenced operations trade unions made their first appearance in Ardeer. Unionisation of general workers did not come excessively late to this factory compared with other plants elsewhere in Britain. It was during this period, in the few years before World War I, that membership of general worker unions rose spectacularly from three hundred thousand to over a million. The organisation of skilled workers in Ardeer was late compared with that in the neighbouring Clyde shipyards. Ardeer was relatively isolated in the south-west of Scotland, and it did not pay union organisers to visit the factory to recruit a few members. The move to organise workers in Ardeer came from the rank and file themselves.

The way in which the general union came to represent the workers in Ardeer was rather unusual. In 1913 general workers went on strike for increased pay. This was the first big strike in the factory's history. At the time they went on strike they were not unionised. They had their informal leadership, for it was practice for management to meet deputations of workers to discuss wages and working conditions. The strikers had no financial resources. The local branch of the Scottish Union of Dock Labourers stepped in and maintained them. After the strikers' return to work, the S.U.D.L. became officially recognised by Nobel's Explosives Company as the bargaining authority for general workers within the factory. The parties signed their first agreement in 1913.

Shortly after this several craft unions entered into arrangements with the Company to obtain wage increases for their members employed in Ardeer. These unions were the Federated Society of Electrotypers and Stereotypers, Amalgamated Society of Carpenters and Joiners and the Scottish Painters' Society. In 1914 Nobel's entered into formal agreements with four engineering unions: the Blacksmiths' Society, Electrical Trades Union, Amalgamated Society of Engineers and the Amalgamated Society of General Toolmakers, Engineers and Machinists. Smaller groups of craftsmen were then brought under agreement by the Glasgow Amalgamated Coopers' Society in 1914, the Glasgow Typographical Society in 1915 and the Amalgamated Slaters' Society of Scotland in 1917. By the end of World War I boiler-makers, tinsmiths, plumbers and bricklayers, all had their wages and working conditions fixed by agreement between their respective unions and Nobel's.

Although the unions were recognised by the management this did not imply that they had strong memberships. There was no reason to suppose that the S.U.D.L. was able to organise a majority of general workers. Not all the fitters belonged to the unions represented at Ardeer, the A.S.E. and the A.S.G.T.E.M. In 1915 there was a mass walk-out of fitters including non-unionists, the only strike by engineering tradesmen ever to occur in Ardeer. In the same year the Scottish Painters' Society called a strike which led to the withdrawal of all painters from the factory. So it was probable that most painters belonged to their union. The extent to which other craftsmen were members of their respective unions was unknown.

The general worker union was in a weak position. For a number of years the S.U.D.L. was precluded from bargaining with management over the wages and working conditions for women employed at Ardeer. The S.U.D.L. was also unable to tackle the differential wage structure which existed in the factory. It was not unusual for a group of workers to approach the factory management to ask it for an increase in their job rates. Many years elapsed before the general worker union was able to secure the exclusive right to channel all employee grievances and complaints through its organisation.

The general workers' union also failed to control the piece rate structure. Practically all the female operatives in the factory at that time were paid by piece work. There were a large number of jobs performed by men who were also paid by results. Even the rabbit catcher, who was appointed at the labourer's hourly rate, was stimulated to snare his victims 'at the rate of a penny per pair'. The union found it impossible to take up the numerous questions which arose under a piece work system. The female operatives frequently resorted to direct action to press their case with management. On some occasions they did not allow the union to represent them. Management made matters worse by dealing directly with these workers instead of through their union officials. On one occasion

a group of workers opposed a certain provision in an agreement and went on strike. Management gave way to the workers' demand. This did not help to stabilise union authority in the factory.

Sec. 2. State intervention into industrial relations

Ardeer became subject to an inquiry by the Admiralty shortly after the general workers' strike in 1913. This enquiry was held under authority of the 'Fair Wages' Resolution passed by the House of Commons in 1891 and amended in 1909. The resolution was designed to prevent contractors to the Government paying their employees lower wages than those prevailing amongst 'good' employers in the same district. The enquiry revealed that weekly wages in Ardeer were slightly less than in neighbouring factories, because the hours of work were shorter. In 1911 the management had reduced the hours of work to fifty while other factories worked fifty-four hours per week. The Admiralty recommended that some increase be made to the wage rates of explosives workers. The Company then increased the wage rate by an extra farthing per hour. Apart from bringing the union into Ardeer the strike also brought the workers an increase in pay.

Another group of Ardeer workers also secured an increase in pay due to state intervention in 1915. The Conciliation Act of 1896 allowed the Board of Trade to appoint an arbitrator, if both parties agreed to refer a dispute to it for settlement. In the only case referred from Ardeer, the joiners claimed an increase in their rate of pay, based on the rate paid in the district of Glasgow. The Company resisted the claim but the arbitrator found in favour of the union. Most of the other crafts benefited from this decision. Their wage rates were also raised to those applying in Glasgow.

Shortly after the first world war, a case similar to the joiners' claim was referred voluntarily by the two parties for arbitration to the Industrial Court which had been set up in 1919. It gave the decision in favour of the National Union of Printing, Bookbinding, Machine Ruling and Paper Workers for its members employed in Ardeer to be paid the craft rate applying in Glasgow. As far as it was known, this dispute was the only one ever submitted to the Industrial Court from Ardeer.

Ardeer, along with many other factories in the country, was subject to war-time arbitration and wage regulation. In 1915 the Munitions of War Act gave the Committee on Production power to make arbitration decisions and to enforce them. Indirectly, this had the effect of raising wages of craftsmen in Ardeer. Under the terms of their agreements with the Nobel's Explosives Company, the craftsmen received the same increases as did Glasgow workers.

In 1916 an amendment to the Munitions of War Act gave the Committee power to fix wages for certain classes of munition workers. Until the end of the war Ardeer general workers had their wages altered by government decree. Under the circumstances it was agreed by the S.U.D.L. that there was no point in negotiating wages. Wages in Ardeer continued to be adjusted by the Committee on Production, and until 1920 by the Industrial Court, under its transitional war-time powers.

The wage fixation machinery of the trade boards, established under an act of 1909 to prevent the sweating of labour in non-unionised industry, also had the effect of raising wages in Ardeer. A board was established for the paper box industry. As Ardeer had a paper box unit, workers on this process were brought under the trade board regulations. As time progressed and the general union grew stronger in Ardeer, the wage rates fixed by voluntary collective bargaining outpaced those set by regulations of the trade boards. In the post-war II period, the latter ceased to have any effect in Ardeer because of the high level of wages paid under union agreement. Groups which were technically subject to wage fixation by the wage councils, as the older boards later became known, included workers employed on laundering, boot repairing, clothing, catering, tin and canister-making.

Sec. 3. The growth of extra-factory frameworks

The principal effect of the war-time regulations of wages was the development of industry-wide bargaining frameworks. In many industries plant bargaining was superseded by negotiations between national organisations of employers and unions. The explosives industry was no exception, and in 1919, an agreement was negotiated by the National Federation of General Worker Unions with the Explosives Trades Employers' Association. This set up a new collective bargaining framework.

The collective bargaining framework for the explosives industry did not appear to be too stable. In the recession of the twenties the wage rates of explosives workers were reduced. The authorisation of this action was not made by the explosives employers. The Engineering and National Employers' Federation was responsible for this decision, after most of the general worker and craft unions had met it in conference. The Ardeer branch strongly disapproved of the action taken but was not strong enough to strike against it. There was further unrest a few years later when the factory management referred a dispute of minor importance to the Engineering and National Employers' Federation. In 1925 it was agreed that future negotiations were to be confined to explosives employers and the unions named in the agreement. There was to be no repetition of linking negotiations in the explosives industry to those of other industries.

The twenties were a period in which the institutions representing management and labour changed rapidly and drastically. There were many amalgamations amongst the trade unions. The two giants, the Transport and General Workers' Union and the Amalgamated Engineering Union, both came into existence in the early twenties. The T. & G.W.U. took over the task of representing the workers at Ardeer in place of the Scottish Union of Dock Labourers. The A.E.U. set up a single branch to represent engineers in the factory who had formerly belonged to the A.S.E. and the A.S.G.T.M. & E. The large unions, by eliminating many regional, occupational and industrial unions brought common ideals and purposes to organised workers in British industry. This led to greater uniformity in union-management relations.

Employers also found it necessary to combine to determine common attitudes to labour problems and to set up centralised agencies for conducting negotiations with unions on an industry-wide basis. The Explosives Trades Employers' Association was an example of such an organisation. It had a relatively short life. The E.T.E.A. soon lost its identity in the late twenties, and was reconstituted as a group within the Chemical and Allied Employers' Federation. The latter body was formed for the sole purpose of dealing with labour relations. Its principal objective was to co-ordinate employers in their dealings with claims by workmen. An employer member was not empowered to concede an improvement in wages or in working conditions, unless first authorised by its sectional committee and endorsed by the executive board of the federation.

The Chemical and Allied Employers' Federation appointed representatives to the Chemical Joint Industrial Council, the latter having been constituted in 1918 to determine wages and working conditions in the chemical industry. The general worker unions made up the employee side of the C.J.I.C. When the E.T.E.A. lost its separate identity the C.J.I.C. became also the collective bargaining framework for explosives workers. This did not please the explosives workers who took objection to being placed in the same category as chemical workers, although they both belonged to the same unions. In 1931 the representatives of the explosives workers demanded the right to negotiate with the explosives employers over a proposed wage reduction. Although the right was granted explosives workers found that they were on the same minimum wage rate as the chemical worker - and there they remained. The explosives workers did not mourn the passing of the C.J.I.C. in 1935.

Sec. 4. The impact of I.C.I. Ltd.

Union-management relations at Ardeer were not bitter as they were in many parts of British industry during the twenties and thirties. Its workers did not take part in the General Strike. After 1926 the union-management relationship was influenced greatly by I.C.I. A central labour department was established and factory managements, including that of Ardeer, were required to conform to I.C.I. policies. These policies were influenced by the philosophies of Sir Alfred Mond. Far-sighted Mond believed that managements had to end their autocratic ways and recognise the participation of trade unions in formulating and administering wages and working conditions. The Mond-Turner talks aimed at establishing law and order in industry. Practical expression of Mondism was given when I.C.I. established its own collective bargaining frameworks with general worker, engineering and building unions. I.C.I. then became a 'pattern-setter' for industrial relations in Britain.

At Ardeer local agreements which governed the determination of wages for the various groups of craftsmen, remained in force for nearly a decade after I.C.I.'s creation. This period was one of declining or stabilised wage levels. I.C.I. had little influence on the negotiations which took place in the engineering, building and printing industries. For a large employer such as I.C.I., this was a distinct disadvantage for it had no control over the wage rates paid to its own employees. I.C.I. brought pressure to bear on the craft unions to end all local, district and regional arrangements and to substitute exclusive agreements with the Company for determining wage rates for craftsmen in I.C.I. employ. Two 'national' agreements were signed, one for the engineering trades and another for the building crafts.

Four important collective bargaining frameworks, which encompassed Ardeer, were thus created in the second half of the thirties. On the employer's side of each was I.C.I. On the unions' side were respectively four general worker unions, eight engineering unions, one building trades federation representing twelve constituent unions, and in the fourth framework, all the aforementioned unions. This last framework came into being in 1938 when the Company secured an agreement on working conditions which made the latter common to most workers within its employ. These agreements remained in force in the post-war II period.

All the unions, which became parties to agreements with I.C.I. were ultimately drawn together into a loose confederation, known as the Signatory Unions. They found it necessary to meet when one or more of their local branches or district councils asked for amendments to the agreement setting out the Company-wide working conditions. The custom grew to discuss other

matters which affected their members in I.C.I. When the Company desired to sound the unions' views on a change in labour policy, or when it wished to submit proposals for incorporation in a formal agreement, it approached them collectively. For example, in 1938 the parties discussed the recognition of shop stewards, and the Company submitted to the unions a proposed negotiating procedure to govern union-management relations.

One event threatened the development of stabilised collective bargaining frameworks created at the initiative of I.C.I. This event was due to the desire of the Amalgamated Engineering Union to 'go it alone'. The 1936 agreement which regulated the minimum wages for craftsmen was signed not only by the A.E.U., but by another seven engineering unions. I.C.I. did not want to create eight collective bargaining frameworks. It wanted, and got, one agreement with eight sets of signatures which had the appearance of administrative simplicity. In the year following the signing of the agreement, the A.E.U. sought an amendment to the agreement. The other unions immediately filed claims for similar amendments. I.C.I. then asked the A.E.U. to meet the other unions and work out a common policy with respect to wage rates for engineering craftsmen. The A.E.U. refused, demanding that it negotiate with I.C.I. alone. This did not suit the Company which strongly urged the creation of a union confederation for the purposes of conducting negotiations. Finally, the A.E.U. met I.C.I. in private and signed the same agreement as had been signed by the other unions. This comic opera was not repeated and from that time the A.E.U. co-operated with other unions in submitting new demands on the company.

After signing the agreement relative to the negotiating procedure in 1947, conferences between the Company and the unions became more frequent. Consequently there were more and more inter-union meetings held to work out policy. The Signatory Unions adopted no formal rules for the conduct of their business. No formal voting system was developed, and most matters were settled by discussion. Where a vote was taken it was usual to allow each union one vote. Failure to present a co-ordinated policy would have been disastrous to trade union unity and disruptive to the process of negotiations. The spokesman for the unions came from the general worker organisations, whose interests were much greater in the chemical and explosives industries than were those of the craft unions. Nevertheless the craft unions had more delegates as a group at the Signatory Unions' meetings and their viewpoints were well stated.

Although there was national bargaining - really Company-wide - on some important subjects, the great bulk of union-management relations at Ardeer in the post-war period took place at factory level. Negotiations were between the factory management and the individual unions. This differed from the national scene where multi-union bargaining was the custom. National and multi-union bargaining tended to bring uniformity in union-management relations to I.C.I. factories, as they had in other parts of British industry.

Conclusion

A collective bargaining framework existed when there was a general bargaining relationship between union and management. The simplest framework existed when negotiations took place between a management operating a single workplace and a union organising the one occupational group. More complex frameworks came into existence when an employers' association or associations negotiated with a federation or confederations of unions organising different occupational groups. Sometimes these complex frameworks covering an industry or even industries were created to obtain greater uniformity in wage rates and general employment conditions. At other times the collective bargaining frameworks were established following the merger of managements or the amalgamation or federation of unions.

The framework of collective bargaining was extremely important for the conducting of negotiations as it fixed the general terms of reference for the two parties, union and management. The general terms of reference for each party were to be found in the total social structure of each institution. While the total social structure of either management or union could alter regardless of the collective bargaining framework, a change in the collective bargaining framework usually involved a radical departure from the previous terms of reference for conducting negotiations. Moreover, the more complex the collective bargaining framework the more complex were the general terms of reference because of the diversity of the social structures involved.

After the I.C.I. frameworks were established there were no fundamental changes in the employer or the union side. Indeed, there were integrating forces at work which helped to stabilise the general terms of reference. The control which I.C.I. exercised over its many factory managements was strengthened, and this had a definite effect on the managements' behaviour. The unions were gradually drawn together into a confederation which moulded a common approach to I.C.I. problems. This was true even though negotiations between the Company and the unions were conducted at two different levels, at national and at factory levels. The local negotiations which were most important to union-management relations at Ardeer were conducted within given sets of reference made possible by stable collective bargaining frameworks.

CHAPTER II. THE FORMULATION OF A NEGOTIATING PROCEDURE

Introduction

In 1947 I.C.I. signed an agreement which established a negotiating procedure for its factories. A negotiating procedure embodied the procedural rules by which union and management conducted their relationships in coming to further agreements about wages and working conditions. The important points of the I.C.I. agreement were the recognition of shop stewards, the establishment of a grievance procedure and the convening of 'local' conferences between union and management to deal with disputes. Provision was made for 'intermediate' and 'headquarters' conferences. The agreement also included a new statement on union membership and formal recognition of I.C.I.'s joint consultation machinery, known as the Works Council Scheme.

Prior to the 1947 agreement I.C.I. factories conducted their union-management relations according to local custom. This was not very satisfactory and was resented by the unions. No shop stewards were officially recognised in I.C.I. factories, and there was no easy way to transmit worker grievances to the union-management nexus. At Ardeer the local union official wrote and asked management for a factory conference. The consequential delays in settling disputes during the war led to unofficial actions by the workers.

The importance of having a well publicised and understood procedure for bringing worker complaints to the attention of management and union, was fully realised in the years which followed its introduction. The 1947 agreement, although slightly amended some years later, was generally regarded by both management and union as a very effective one.

The negotiations leading to the agreement on the negotiating procedure were protracted. Compromise came only after some intense debates, some very hard bargaining, shifting of positions and a carefully worded resolution which meant much more to the parties than mere sophistry. (F)

- (F) The author was indebted to Mr. E. Higgins, National Officer of the T. & G.W.U. and Mr. G. Aitken, Research Officer of the A.E.U. for supplying union records relating to the Negotiation Procedure, 1946-47 and the negotiations which led to the signing of the national wage agreements, 1935-38. They were in no way responsible for the Author's interpretations of the records.

Sec. 1. Searching for a negotiating procedure.

The original agreement, signed in 1911, between Nobel's Explosives Company and the Scottish Union of Dock Labourers was, in a sense, a negotiating procedure. It contained clauses which recognised the right of the union to represent certain classes of workers employed in the factory, the right of management to hire personnel regardless of union membership and the right of workers to refrain from becoming members of the union, if they so desired. The agreement also laid down a procedure for dealing with wage claims, and it provided a method by which grievances were to be processed. Similar agreements were signed in turn with four engineering unions in 1914.

From time to time there were changes in the rules governing the relationships of union and management. In 1919 with the advent of national bargaining on minimum wages the local union branch was precluded from demanding general wage increases. This prohibition was continued in the 1925 agreement. In this last agreement provision was made for dealing with disputes which arose on the factory floor. They were referred to a headquarters' conference composed of delegates from the employers' association and the three general worker unions. Thus the idea of a 'court of appeal' became known to workers in Ardeer. With a further change in the collective bargaining framework the rules of procedure of the Chemical Trades Joint Industrial Council were adopted to resolve disputes in the explosives industry. The collapse of the C.T.J.I.C. brought to an end all formal procedural arrangements between general worker unions and factory managements of I.C.I.

I.C.I. and the general worker unions negotiated the 1936 wages agreement without reference to formal rules. Although this agreement was primarily designed to deal with wage rates, it also included some procedural clauses. These stated that only negotiations between the Company and the national headquarters of the unions were empowered to alter the minimum rates of wages for general workers. Similar procedural clauses were included in the agreements with the craft unions, and in the 1938 agreement setting out working conditions for I.C.I. factories. There was no formal agreement which set out a comprehensive negotiating procedure.

Negotiations between the A.E.U. and I.C.I. in 1935, prior to the signing of their wages agreement, showed the importance of a negotiating procedure for conducting orderly union-management relations. The A.E.U. complained to I.C.I. that many of its factory managements had turned down demands for wage increases. Their district committees did not know how to resolve these disputes for there was no established system of appeal, as existed in the engineering industry generally. A.E.U. officials were very surprised to learn that Lord Melchett (Alfred Mond) had told a group of union officials that they were free to come and discuss their disputes with the Central Labour Department any time that they wished. The union officials expressed their ignorance of this statement. In any event, they contended

that there was a vast difference between meeting the Company informally to talk about a disagreement, and having a set procedure which guaranteed workers the right of appeal when their demands were turned down by their respective factory managements. The A.E.U. wanted a negotiating procedure. It did not get one; instead it got a new agreement which introduced a uniform wage structure for engineering craftsmen employed in I.C.I. factories.

Confusion continued to dog the minds of employees and union officials as to how they were to process their disputes with the company. The latter tried to dodge the issue of a formal negotiating procedure. The unions, on the other hand, did not let the matter die. While discussing the agreement related to working conditions in 1938, they reminded the Company that there was still no correct way for dealing with grievances arising on the workshop floor. Later in the same year, I.C.I. produced certain memoranda on a proposed negotiating procedure. The scheme it put forth was very complex. It asked the unions to recognise the I.C.I. Works Council Scheme and assigned important roles to the individual councillors in settling grievances. It did not mention shop stewards whom the unions wished to have recognised. It also proposed to use the works councils as sounding boards for changes in factory or Company personnel policy. The unions objected to the inclusion of the works councils which they mistrusted. The proposals were shelved.

Sec. 2. Establishing a negotiating procedure.

Soon after the war, the unions renewed their demand for a formal agreement governing a negotiating procedure. On this occasion the unions took the initiative and presented the Company with a comprehensive document setting out their proposals. The latter were not unlike those which the Company had submitted to the unions in 1938. They omitted reference to the works councils and they provided for Company recognition of shop stewards. In presenting their case the unions stated that it was essential for an agreement to be reached. The Company was aware of the urgent necessity of establishing an adequate procedure by which complaints of the workers could be dealt with expeditiously. The war had brought some disorder to industrial relations within I.C.I. factories. Negotiations therefore commenced in earnest, and after six months of strenuous bargaining, a national agreement was signed in May, 1947.

The agreement established a procedure by which workers were permitted to raise any matter they liked with their management. A series of steps were incorporated in the procedure. The first series of steps took place in the section, plant or department and involved the shop steward and the line management. The next series of steps involved union-management conferences of which there were three types. Firstly, there was a 'local' conference. A local conference was called at the request of either the local union branch or the

factory management. It was a two way communication system which was used regularly by both sides. Under the terms of the agreement it was necessary to refer to a local conference any workshop issue which involved a national agreement or the general labour policy of the Company. It was impossible to settle these matters within the plant. Secondly, provision was made for the holding of an 'intermediate' conference if the parties failed to agree at the local level; and thirdly, a 'headquarters' conference was held when agreement failed at the intermediate one. This procedure embodied the idea of a court of appeal.

The composition of the delegations were varied to suit the needs of each conference. At the intermediate conference representatives of the headquarters of the union and the Company attended to bring outside influence on the local parties. At the headquarters' conference neither of the local parties were present and this allowed the conference to consider the issue impartially. Only after the parties had disagreed was notice to be given for a lock-out or strike. No such notice was ever given in relation to strikes occurring at Ardeer.

Several important principles were recognised in constructing the I.C.I. procedure. Firstly, time limits were imposed on the union and management officials to discharge their functions so that disputes were handled without undue delay. Secondly, the proceedings of each conference were recorded in an agreed minute so that there was no confusion or recrimination about the settlement. Thirdly, emphasis was placed on settling the issue as near to the workshop floor as possible. Fourthly, the agreement recognised the importance of a clear statement of the dispute and a precise statement of the resolution. The establishment of a communication system informed all workers of the procedure so that they understood its steps and abided by them.

Sec. 3. Recognition of shop stewards

The Company recognised the office of shop steward. In doing so it reversed its previous policy. In 1936 the Chief Labour Officer of I.C.I. told the A.F.U. that he hated the idea of shop stewards. The unions believed that the Company feared that shop stewards would undermine the works council system, a prophesy which turned out to be correct. The unions wanted the shop stewards not only to recruit new members and collect dues, but to bring matters to the attention of the union officials and management before they reached danger point. In 1947 the Company did not challenge the fundamental conception of the shop stewards' functions. The unions' spokesmen expressed satisfaction of the Company's change of policy and declared that the agreement gave status to capable and earnest rank and filers. This was bound to reflect itself in better leadership on the workshop floor.

The agreement laid down conditions which covered the election of shop stewards, their qualifications, their tenure in office and their duties. During the negotiations there was some bargaining on relatively minor points. The Company, for instance, pushed up the qualifications of candidates for shop stewards. They were to have a minimum service of two years in the Company's employ and be at least twenty-five years of age. The Company believed that these qualifications were necessary to obtain persons with a reasonable balance of discretion and judgment. This provision was subsequently altered to one year's service and an age limit of twenty-one.

Under the terms of the agreement the shop steward was required to sign a credential form in which he undertook to accept responsibility for carrying out his duties in accordance with the terms of the negotiating procedure. He was also required to observe all agreements and to accept personal responsibility for seeing that union members within his section complied with agreements. Where the shop steward wilfully failed to observe the terms of his credential, or induced others to break union-management agreements, the Company reserved the right to request a union to withdraw the steward's credential.

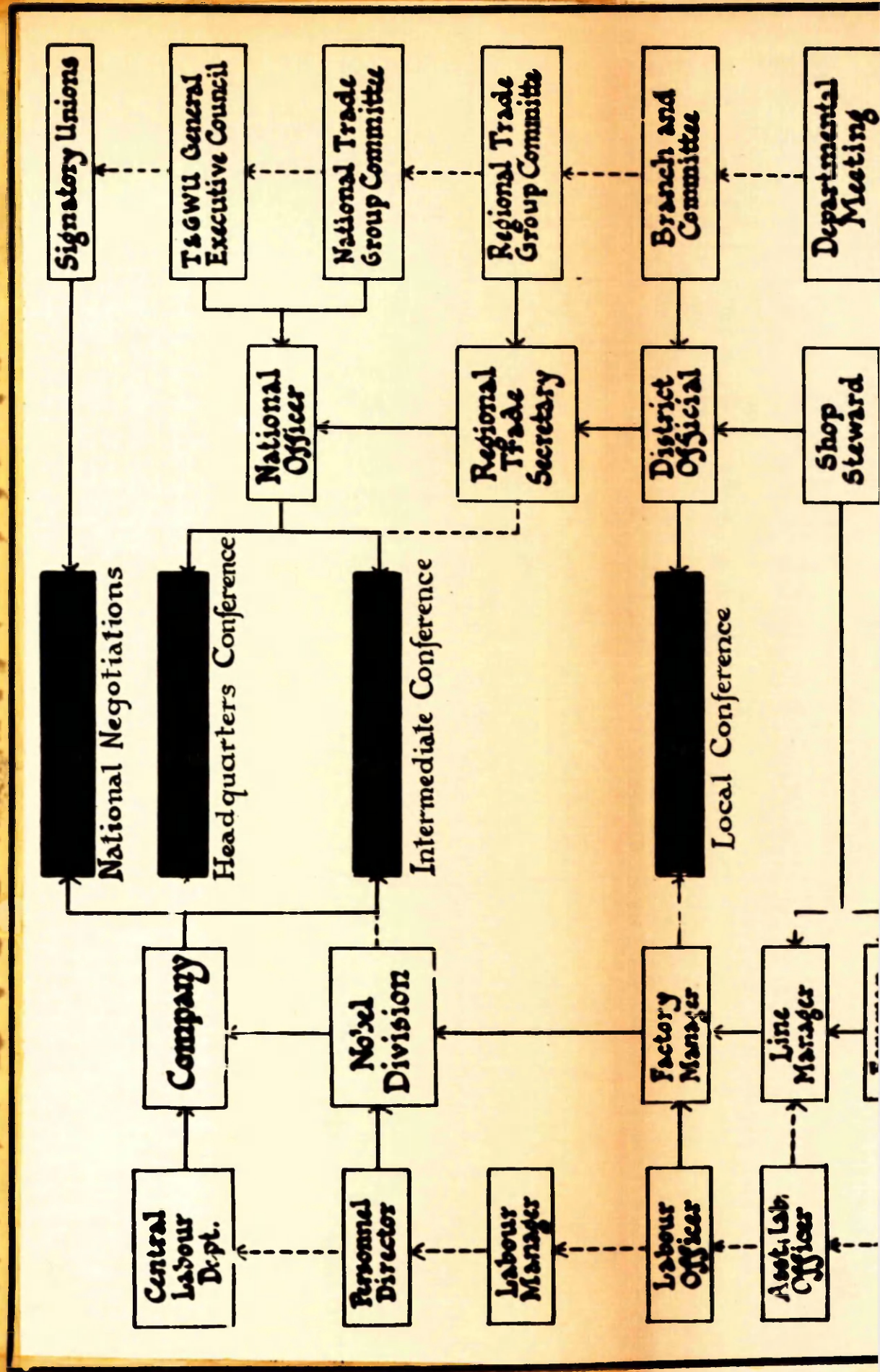
Unions were not permitted to appoint their shop stewards. They had to be elected by a ballot of the union members in the factory or section within the factory. Ballots were under the control of the respective unions. Candidates were restricted to workers of the particular electorate which the steward was to represent. By an amendment in 1951, the Company secured an additional right to raise with the trade unions any objections which it had to the election of an individual, and to discuss this objection at conference before the election was confirmed.

There were limitations on the actions of shop stewards. Hewas not allowed to act outside the section for which he was elected, unless by special agreement with the management. He was not permitted to leave his work without permission of the foreman; this permission was not to be unreasonably withheld. A steward's earnings were safeguarded while carrying out the duties prescribed by the agreement.

An individual employee who wished to raise some issue with the management of the plant was first required to discuss his grievance with his foreman. If he failed to receive a satisfactory answer from the foreman, he was then permitted to consult his shop steward at the next break in working time. The shop steward was empowered to discuss the issue with the foreman. If the matter still remained unsettled, the foreman was required to take the complaint to his line manager who was to confer with the shop steward. This

Figure 1.

THE I.C.I. NEGOTIATING PROCEDURE



gave the shop steward the exclusive right to process individual grievances beyond the foreman. On a motion by the unions in 1951, an amendment was inserted which allowed the aggrieved member to accompany his shop steward when discussing his complaint. This provided a democratic check on the work of the steward and at the same time safeguarded the steward from unfair criticism by a dissatisfied member.

The shop steward became the link between the rank and file and the local official of the trade union. Where an issue remained unresolved for three days between the management and the shop steward, the latter reported the matter to the local union officer, who was then empowered to make formal representations to the management. The Company then met the union within fourteen days at 'local conference'. Shop stewards invariably accompanied the union delegation. It was possible for a union member to take a matter to the union meeting, so by-passing the shop steward. At Ardeer this was only a rare occurrence, as most issues that went to the formal 'local conference' stage emanated from the plant and not from the union meeting.

Sec. 4. The 'Bargain' of the I.C.I. Works Council Scheme.

The Company's immediate price in these negotiations for recognising shop stewards was reciprocal recognition by the unions of the I.C.I. Works Council Scheme. This scheme was organised with the object of fostering joint consultation between management and employees. Works councils were composed of equal representatives of employees and management. In addition, there were group or divisional councils made up of representatives from the factory councils. For the whole of I.C.I. there was a central council which considered matters of general interest to the Company. The scheme was mistrusted by the trade union movement. The unions felt that it was aimed at countering their efforts to organise the workers. To them, it was 'company unionism'. In 1947 I.C.I. did not attempt to give the works council a prominent place in the negotiating procedure as it proposed to the unions in 1938. It merely sought to have the scheme recognised by the unions. This counter claim held up agreement on the negotiating procedure for six months. Four conferences were held before the issue was resolved.

The sequence of the conferences shed some light on the resolution of controversial union-management negotiations. At the initial conference the unions' case for establishing a negotiating procedure was presented. The Company then asked for the inclusion of its counter claim. The meeting was adjourned to allow the unions to consider this new development. At the second meeting the unions opposed the recognition of the works councils. The Company refused to withdraw its counter proposal and the conference finished abruptly. The unions then considered ways of re-opening negotiations to see whether it was possible to modify each party's attitude. A third conference was held at which both parties attempted to test how far each would go in compromising their position. The fourth conference con-

sidered a number of counter-proposals including the Company's offer to broaden its policy on union membership. Agreement was reached on the central issue and the rest of the terms were settled.

The unions complained that I.C.I. was complicating the negotiations by seeking recognition of the works councils. They felt that joint consultation was one thing; a negotiating procedure was another. In actual fact, the Company did not establish a connection between the two. The unions did not want to give recognition to the type of joint consultation found in I.C.I. They soon realised that some recognition would have to be made in order to secure the recognition of shop stewards. In re-opening negotiations the unions sought to make some recognition of works councils - but as little as possible. The Company spokesman then questioned the unions' 'good faith' and wondered if their proposals did not 'savour like a death-bed repentance':

'Let us be honest. What is on your minds? You are really trying to down the works councils are you not, and you think if you get the recognition of shop stewards through, you will be one stage further to downing them?'

This did not seem very helpful to the negotiations; but the unions did not pick up their brief cases and walk out. For they knew that while the Company refused to deal with the unofficial shop stewards, the unions were not able to prevent the works councils from meeting. So in that way the Company was in a better tactical position. The unions responded with admirable restraint; their spokesman, also an able negotiator, replied:

'If you are trying to be provocative and get our dander up and get us going, it cannot be done; we are too old in the tooth to be caught out that way.'

The tactics of the Company spokesman yielded dividends. For the union spokesman soon acknowledged that while the unions were originally suspicious of the works councils, this attitude had gradually changed. This statement was very different from the one made shortly before by the unions which completely opposed the works councils.

The way was then open for the final round of negotiating. This took the course of an argument over the exclusion and inclusion of certain words; it was important that both mutually understood the limits of each other's obligations. The unions took objection to the word support, which if agreed to, might have involved them in fostering works councils. The Company stated that it had no intention of forcing employees to participate in joint consultation where it was not wanted. The unions refused to agree to the word support and substituted formally recognise, and this was as far as they were prepared to commit themselves.

The preamble, finally agreed, stated amongst other things that nothing was intended to restrict the works council scheme of the Company, or the freedom of any individual employee to associate himself with the advisory and consultative functions of the works council. Under their constitution the works councils were forbidden to discuss any subject which came into the realm of union activity. The Company suggested a further clause in order to allay fears that the works council might be used to encroach on union functions. Under this clause the Company undertook to make the fullest use of the negotiating procedure.

These seemingly small changes to each party's position were essential to bring about agreement. The process of compromise was described by the secretary of the Signatory Unions when he said:

'Trade union negotiations with employers do not mean that the trades unions have it all their own way all the time; nor do employers have it all their way all the time; we must meet on common ground and compromise must take place on both sides to reach a common solution.'

This point of view was put much more tersely during the more hectic moments of negotiations by another union official:

'If you do not give us recognition on one side, you cannot have it on the other and we reach a deadlock'.

Sec. 5. I.C.I. policy on union membership.

I.C.I. did more than recognise shop stewards in the 1947 agreement. The latter included a new pronouncement in regard to the Company's policy on union membership for its employees. In 1938 the unions asked the Company to recognise the principle of having all its employees members of their appropriate trade unions. The Company refused. It reaffirmed its statement of 1933 of recognising union membership as not being inconsistent with Company personnel policy. Later in 1938, the Company took a more positive stand in regard to employees who became members of a union and then refused to pay their union dues. The Company agreed to take action against these unfinancial members if the unions supplied the factory managements with their names. But I.C.I. refused to coerce its employees who had never been members of a union into joining an organisation.

No mention was made of union membership by the unions when they submitted their proposed negotiating procedure to I.C.I. in 1946. In order to allay fears of the unions in regard to the Company's works council scheme, it made a more positive statement in regard to union membership. The Company spokesman stated that it wanted its employees to be union members. I.C.I., it stated, had no intention of trying to deflect the workers'

loyalties from the trade union movement. Accordingly it suggested the insertion into the preamble of two clauses: one declaring that it was in the interests of the workers and the Company that all employees should be members of a trade union which was signatory to the agreement; and the second which stated that while union membership was not a condition of employment in I.C.I., the Company undertook to bring to the notice of workers its policy in regard to union membership. The effects of these changes of Company policy on union membership were important to Ardeer as will be seen in the following chapter.

Conclusion

The negotiating procedure established certain rules as to how the parties were to conduct their relations. The negotiating procedure established some particular terms of reference for the parties' negotiations. It did not establish the total terms of reference. The collective bargaining framework which was built on the social structures of union and management was more important because this fixed the general terms of reference. The negotiating procedure did not even lay down all the terms of reference by which the parties were to conduct negotiations. Important terms of reference were also included in the agreements which established the wages structure and set out employment conditions.

The significance of the negotiating procedure lay in the principle that the parties agreed to regulate their conduct in accordance with rules. In effect, they recognised 'the rule of law' in industry. Rights and obligations of each party were set out in the negotiating procedure. Reference to these rights and obligations helped the course of negotiations, but it was not possible to resolve all disputes by looking at the provisions of the negotiating procedure. It was still necessary to negotiate over many issues, and the negotiating process, as it was seen in this chapter, was strewn with many pitfalls - conflicts of interest, status situations, ineffective methods of reaching goals, and inadequate communication.

The effects of the establishment of the negotiating procedure on management, union and employees were extremely important. It established a formal line of communication for dealing with the grievances of informal work groups. Line management was obligated to try and resolve the grievance as near to the workfloor as possible. If it failed the union had the right to intervene, and provided the union gave its approval, the grievance of the informal work group became a formal one between union and management. When decisions were made by the local conferences between union and management representatives the employees were required to observe the terms of agreement reached. The negotiating procedure was not only a communication channel, it was also a formal line of authority.

CHAPTER III. THE GROWTH OF THE LOCAL UNION ORGANISATION

Introduction

The union with the largest membership in Ardeer was the Transport and General Workers' Union. About two thousand general workers were members of the T. & G.W.U. From the viewpoint of union-management relations in the factory it was by far the most important. After the T. & G.W.U. came the Amalgamated Engineering Union both in size and importance. About three hundred fitters were employed at Ardeer. The A.E.U. held fifteen, compared to the T. & G.W.U.'s one hundred and seventy-seven, conferences with Ardeer management in the post-war period.

The Amalgamated Society of Woodworkers had more than a hundred members. Then in numbers of members came the Electrical Trades Union, the Scottish Painters' Society, Associated Blacksmiths' Society, the Boiler-makers' Society, Plumbing Trades Union, National Union of Sheet metal Workers, and the Amalgamated Union of Building Trades Workers. The Amalgamated Society of Woodcutting Machinists and the three printing unions had very small memberships in Ardeer. The total number of conferences called between Ardeer management and all these unions totalled a mere eighteen in the post-war period.

The T. & G.W.U. branch was made up of workers from Ardeer. The A.E. U. branch was composed of craftsmen living in the area, most of whom worked at Ardeer. The organisation of other craft unions differed; some had local residential branches for Ardeer workers, others included them in branches which had a wide geographical or industrial membership.

Sec. 1. The T. & G.W.U. branch in depression, recovery and war. (F)

When the Great Depression lifted only a handful of general workers at Ardeer belonged to the local branch of the T. & G.W.U. Less than one hundred out of sixteen hundred men were paying regular contributions to the T. & G.W.U. Not one of the five hundred female workers was a financial member of the union. The onslaught of unemployment and the collapse of the local organisation, due to the transfer of the full-time official to another area, had left the union weak and ineffective. The local branch gave up the struggle to recruit new members. It continued to meet during the depression with an average attendance of about half a dozen members. It made no suggestions, either industrial or political, as to how the economic

(F) The Author was indebted to Mr. A. Matthews, local secretary of the T. & G.W.U. for allowing him to use the minute books of the Ardeer Branch 1928-1954. In no way was he responsible for the interpretations of those records.

catastrophe might have been solved. In five years it lodged only one claim, and that was for a small group of workers. The workers did not turn to their union in their hour of greatest need.

The branch became active again with the up-turn of the business cycle. Employment in the factory rose and the branch commenced a campaign to organise the general workers. The methods it chose were traditional, in the sense that they followed the time-worn paths of the early unionists. Meetings were organised in residential areas adjacent to the factory. Leaflets were distributed within the factory. A door-to-door canvass was made of workers' homes. Membership climbed slowly and spasmodically. This increase was assisted by the transfer to Ardeer of groups of union members from English factories, departments of which were closed down to rationalise explosives production in the United Kingdom. These workers were accustomed to a union life and brought new vitality to the branch. Claims for increased wage differentials were lodged by the branch with the factory management. The branch also passed many motions which bore on the events of the late thirties - the Miners' Hunger March, the Spanish Revolution, Abyssinia and Nazi Germany.

Employment in the factory expanded to a peak of eleven thousand during the second world war. Union membership reached two thousand but declined as peace drew near. For the first time in the history of the factory the union collectors addressed meetings of their departments in the mess rooms. This privilege was never withdrawn but management still resisted union activity in the factory. It refused to allow the branch to take a ballot amongst workers on the job about claims which the union was proposing to submit to management. Union collectors played no part in the grievance procedure. Local factory conferences to discuss worker complaints were arranged by the branch secretary with the management.

The war saw industrial unrest at Ardeer. The immediate causes were explainable in terms of internal factory conditions. The local branch of the T. & G.W.U. had little control over strike action taken by workers within the factory. Workers, and particularly female operatives, frequently took their complaints direct to line management. I.O.I. was partly to blame for this practice for it did not recognise shop stewards, nor had it encouraged the establishment of a grievance procedure which might have solved the workers' dissatisfactions.

The union organisation did not always function effectively. Frequent criticisms were made of the person who then held the position of branch secretary, for failing to arrange conferences with the management in order to discuss workers' grievances. The regional officials of the

T. & G.W.U. were called to make an enquiry into branch affairs. The regional officers in turn reported that the disgruntled members did not attend the meetings of the branch and had no idea of union rules.

Female members, in particular, had little idea of the obligations they incurred when they joined a union. At one conference, shortly after the war, the regional official told the representatives of female operatives - very much to their surprise - that they could not go on strike simply because a sectional meeting had rejected management's offer. Under the rules of the T. & G.W.U. a dispute had first to be reported to its Executive Council which alone could authorise a strike. The actual calling out of the workers was the responsibility of the appropriate local and regional officials. The union had obviously not succeeded in establishing its authority over the workers at Ardeer factory at this time.

Sec. 2. Strengthening the local T. & G.W.U. branch

After the war the branch went through a number of developments which had the effect of strengthening its authority over its membership. The branch took action against those members who actively disobeyed the decisions of branch meetings. A resolution was passed which prevented collectors (still not recognised by management as shop stewards) from speaking in the canteens about union policy. This stopped certain individuals from misleading workers about the official decisions of the branch. By this means the branch reduced the possibility of unofficial strike action by the workers and kept the control of affairs securely in its grasp.

Action was also taken against the anarchical elements within the branch. The chief offender in this regard was a member of the Communist Party. In 1947 he was removed from the chairmanship of the branch because he persisted in criticising other branch officials. The action taken by the branch was not for political reasons. The branch took the view that its officers had to work together, if it was to increase its membership and become an effective bargaining authority in Ardeer. The same person was defeated in elections for shop steward. These events took place before the biennial conference of the T. & G.W.U. declared that no member of the Communist Party was allowed to hold office in the union. It was the Left's own folly and indiscretion which led to its eclipse in local union affairs in Ardeer.

Perhaps the most important action taken by the branch was the removal of the secretary from office. This person had originally been elected in the depression days when nobody else wanted the job. Later he was appointed a full-time officer of the union. There were many complaints that he was not attending to his duties. An attempt was made to eliminate him from negotiations with the factory management. At last, as feeling mounted against him, the branch at a plenary meeting called on the national executive of the T. & G.W.U. to remove him. After an enquiry he was dismissed from his full-time position in the union.

The impact of the new I.C.I. negotiating procedure in 1947 was tremendous. The recognition of shop stewards by the Company, and the assigning to them of important roles in the settlement of grievances, strengthened the branch in its control over its members. The management was not permitted to deal directly with worker delegations, a habit which had been rife in Ardeer factory. On one occasion the T. & G.W.U. officials warned that industrial anarchy would result if management dealt with a delegation of workers when the latter violated an agreement by unofficial strike action. Worker grievances were channelled through the official representatives of the union. The workshop officials of the local branch were now able to work in the open, whereas before they had no official status. Membership grew as a percentage of the factory's work force, and in the case of the women, the increase was spectacular.

One of the main reasons why the negotiating procedure helped strengthen the branch was the extension of its organisation into the workplace. Individuals participated in the work of the union by bringing their complaints to the attention of the shop stewards. These were dealt with in the first instance at the plant level. In some important disputes sectional meetings were called. If direct action was involved the meetings were well attended. Unfortunately, these usually decided in favour of militant action, including not observing union-management agreements. A breakdown in union authority was usually associated with a high degree of participation. Smaller attendances met in a more reflective mood.

Generally speaking, informal leadership of work groups was considerably reduced by the recognition of shop stewards. All shop stewards were elected according to the I.C.I. negotiating procedure. The latter set out the shop stewards' duties and responsibilities. These rules conditioned the behaviour of the shop stewards when they were carrying out their functions. Trouble over the shop stewards was prevented because they had definite rights and obligations. They did not 'manufacture' grievances. In the main they abided by the negotiating procedure.

After the negotiating procedure came into effect the committee of the local branch was re-constituted to include shop stewards, a president elected by the annual meeting of the branch, and a secretary who was a full-time appointed official. The new secretary, who was appointed in 1948 after the dismissal of his predecessor, worked in close touch with the committee. The monthly meetings of the branch were so badly attended that the committee grew to be the real power in local organisation. The secretary as co-ordinator of the local organisation, once an issue came to the attention of the local union official, became the key man in subsequent negotiations. It was his responsibility to prepare and present his union's case to management. At the same time he drew heavily on the knowledge of the shop stewards for they had the specific experience of the actual working of the plant. Quite frequently the full-time official

initiated improvements for his members. He had to work in close co-operation with the shop stewards. When issues went to an intermediate conference, both the regional and the national officers participated in the negotiations and the local officials' importance declined. As very few headquarters conferences were held in connection with disputes emanating from Ardeer, the importance of the local union officials, both lay and full-time, was paramount in maintaining satisfactory labour relations.

Sec. 3. T. & G.W.U. extends its membership.

From 1947 to 1955 there was a steady increase in union membership amongst general workers at Ardeer. Although a majority of workers were organised, the T. & G.W.U. was unable to obtain a hundred per cent of workers throughout the factory. While union membership was widespread throughout the various departments, some sections remained obstinately non-union or only partially organised. Some of these were predominantly manned by female operatives. The difference in sex, however, was insufficient to explain why some sections refused to be drawn into the union. Some female sections were very extensively unionised.

During the thirties the methods of recruitment of new members, it was observed, were primitive. In the post-war period the local branch of the T. & G.W.U. was beginning to use more sophisticated methods, using the question of membership as a bargaining point. In 1948, when a large group of workers was being transferred to work on the new mechanised plant producing blasting explosives, exception was taken to management including several non-unionists. In 1950 the branch applied pressure on the workers, by declaring that it would not handle a particular dispute involving female operatives unless all became members. As a result of these threats both these sections became one hundred per cent unionised.

In 1953 the branch had a conference with the factory management over four non-union workers employed alongside seventy-four union members. The branch alleged that one individual was causing discontent and asked management to take disciplinary action against him. In accordance with the statement in the 1947 I.C.I. agreement relative to union membership, the factory management brought to the attention of these four non-unionists the desirability for them to become members of a union. Subsequently, this section of workers became one hundred per cent organised. Management assisted the union to extend its authority over I.C.I. employees.

In 1954 a further conference took place between the local branch and the factory management following a slight change in company policy towards the question of union membership. Plants which showed a hundred per cent union membership were, in effect, to become union shops. Local management also agreed that it would consider the representations of the branch regarding non-unionists in sections which were nearly organised to a hundred per cent. The branch was required to prove that the 'odd' workers

were causing dissatisfaction in the section because of their failure to join the union. The factory management was not able to give an undertaking that it would dismiss a recalcitrant worker as this was not within its authority. There was nothing to prevent the company from exercising this power on the recommendation of the factory management. These policy changes further strengthened union authority in the factory.

Sec. 4. The A.E.U. struggles for a union shop. (F)

The extension of the local organisation of the Amalgamated Engineering Union in Ardeer was a very different story from that of the T. & G.W.U. The T. & G.W.U. was faced with the task of organising a large group of workers, many of whom were disinterested in joining a trade union. The A.E.U. with its long history of success in organising skilled engineering craftsmen, was not so unlucky. The majority of workers in the Ardeer engineering workshop were in good financial standing with their union. Only a few remained outside the union or did not pay their dues. These few engineering craftsmen were to cause the A.E.U. and the factory management a headache for over a decade. The events illustrated the friction and suspicion which arose through management being unwilling to concede full recognition to a trade union which believed all workers owed allegiance to it.

A few workers were of unorthodox religious sects who considered membership of trade unionism incompatible with their beliefs. The A.E.U. refused to accept this argument as a legitimate reason as to why they were not union members. Its officials believed that there was a dual system of moral obligations, one to religion and one to the union movement. The officials attempted to persuade the men that there was compatibility between the two, but with no avail.

Most of the non-unionisers told the A.E.U. officials that they would join the union, if all other workers also became regular financial members. No moral principle was involved here - only sheer opportunism. These recalcitrant workers caused considerable trouble to the A.E.U. as other workers then refused to pay their dues. The local branch claimed that, as the union provided the machinery for negotiation with the employer, it was only fair that all workers should have contributed towards its cost.

(F) The Author was indebted to A.E.U. Divisional Organiser, Mr. J. Savage, for allowing him to compile much of this information from the Union correspondence files (1932-47), and to former A.E.U. District Committee officials Mr. A. Matthews, Sen. and Mr. D. Mitchell for supplying additional information about the history of the A.S.E., A.S.G.T.E.M. and the A.E.U. in Ardeer. None of these persons were responsible for the author's interpretation of the events.

The workshop in the late thirties became restive about the non-unionists in its midst and talked of taking direct action. It was restrained by the A.E.U. Executive Council, as national negotiations were then in progress with I.C.I., respecting the recognition of shop stewards and compulsory union membership. The local officials thought their headquarters too cautious and blamed it for not forcing the issue. They did not see that the Executive Council had to consider the implications of direct action, especially if it was a failure. The local branch was apprehensive of calling a strike on its own authority. It was afraid that its action would have been branded as 'unofficial', a term which was not really understood. Asked the local secretary of his divisional official:

"When can you have an 'official' strike after years of negotiations, and you have forgotten what you thought of striking about?"

The factory management was not insensitive to the local branch's contentions and became increasingly concerned in finding a solution to the problem. It too was not free to follow its own labour policy. I.C.I. laid down the policy to be followed regarding union membership of its employees. Until 1938 Ardeer management took the view that the question of membership and payment of fees was one to be worked out by the union with the individuals concerned. The declaration was then made by the Company that it would take action against those union members who failed to pay their contributions regularly. This new policy allowed the local Ardeer argument to be re-opened with some hope of resolution.

Unfortunately, new disagreement concerning the facts of the argument arose. After interviewing the recalcitrant workers, the management reported to the A.E.U. that the men had claimed that they refused to pay their dues because of domestic troubles within the branch. Accordingly, management would not take action against the men, suggesting that the A.E.U. do something about its branch. The branch officials strongly resented this management's antagonism. A summoned meeting was called for the aggrieved members to put their case, but they did not appear. It was not impossible, therefore, that the men had strung management a story about unfair treatment.

Through the war bickering continued over the non-unionists. In 1944 the main workshop tried to force the issue by refusing to work under incentives until the non-unionists were removed. This was not successful. Finally in 1947, following the new statement on union membership by I.C.I., the issue was resolved at local conference. The branch agreed to drop its demands to force the religious objectors into the A.E.U. In return, management put pressure on the rest of the non-unionists and those unfinancial to make their peace with the union. In future, only engineering craftsmen,

who had financial standing with the A.E.U., were to be employed in the factory. In this way further trouble was avoided. This gave the A.E.U. a union shop at Ardeer after a long protracted struggle.

Sec. 5. Attitude of management towards union security.

The attitudes adopted by management at any one time towards each union differed according to the realities of the industrial situation. As far back as the thirties management was prepared to interview its employees who were members of the A.E.U. for the purpose of persuading them to conform with the rest of the workshop. It was nearly two decades before management gave the same help to the T. & G.W.U. In the early post-war period, management was prepared to agree to hiring only members of the A.E.U. who were in financial standing with their union. No such concession was made for the T. & G.W.U. Ten years later, a somewhat similar concession was granted to the T. & G.W.U. on a sectional basis but not for the whole factory.

Management took the view that it was not going to organise its employees. That was the union's function. In the thirties I.C.I. did not oppose its employees becoming members of their appropriate trade unions. Only where there was trouble was management prepared to bring pressure on individuals to make peace with their union. Management was exercising its essential function of keeping its factory free from industrial disturbance. In contrast to this narrow conception of its personnel policy, after the war I.C.I. acknowledged that it was in its own interests to extend the authority of the trade unions over its employees, in order to improve union-management relations. But there still existed a strong sentiment among managerial officials that unions were responsible for their own organising.

From experience in Ardeer during the thirties, it did not appear wise for management to take a moralistic view on whether or not an individual had a legitimate argument with his union. It looked as if the management was supporting the non-conformist, motivated frequently by sheer idiosyncrasy. This was the wrong approach. In later years a better method was available to resolve union-management difficulties about union membership of individual workers through the use of the negotiating procedure. In the post-war period there were no accusations that any employee was harshly treated by his union. Had such a case arisen, there was good reason to believe that the holding of a factory conference would have been sufficient to safeguard the rights of the individual against arbitrary treatment by his union officials. The issue of the religious objectors was by-passed rather than resolved.

While management was opposing some of the claims of the A.E.U. and the T. & G.W.U. at the same time it tacitly recognised the closed shops of the printing unions. For many years the three printing unions supplied the Ardeer printing shop with craftsmen when these were needed.

The existence of the 'closed' shops of the printing unions and the 'union' shop of the A.E.U. implied that these unions had exclusive bargaining rights. Other unions with members at Ardeer also enjoyed exclusive bargaining rights. In fact, it was possible for exclusive bargaining rights to exist without a union having any or only some members in the plant. (1)

The T. & G.W.U. had exclusive bargaining rights for general workers in Ardeer. This was a local custom. It was not due to an agreement. In other parts of I.C.I. general workers were covered by the Municipal and General Workers' Union. On one occasion, management refused to negotiate with the Construction Engineering Union when it attempted to cover riggers, who in Ardeer were covered by the T. & G.W.U. Management did not want to see another organisation cover the same group as it feared inter-union jealousies and attempts to upset the existing wage structure. This union was not a signatory union and I.C.I. considered that it had no negotiation rights over company employees.

(1) This has not altogether been appreciated.
See J. McKelvey 'The closed shop controversy
in post-war Britain's; Industrial and Labour
Relations Review, July, 1954.

Conclusion

One of the objectives of the local union organisation, both of craft and general workers, was to extend its membership over employees at Ardeer. The methods that the union used depended on the extent to which employees had already joined the organisation, and the help or hindrance which management gave the union in reaching this objective. Although I.C.I. was never anti-union, for a long time its policy was one of laissez-faire; it did not positively help a union in its organising. This was seen in the case of the A.E.U. which attempted to force a few recalcitrant individuals into the union. However, the shortcomings of I.C.I. policy were to be seen in the story of the T. & G.W.U. Until 1950 the general workers' union was weak, unable to extend its membership in Ardeer, and incapable of controlling the behaviour of employees when they took unofficial strike action. Amongst the female pieceworkers its influence was particularly weak, and it had little control over their actions. In order to discipline these groups it was necessary for the union to recruit the employee union members. Membership of the union was a prerequisite for exercising authority over employee behaviour.

After the war the local T. & G.W.U. organisation strengthened its internal discipline. It took steps to remove those who refused to follow its policy. In particular, it removed from office an avowed Communist and an incompetent full-time secretary. It discouraged the discussion of issues particularly political ones, which divided the loyalties of its members. It re-organised its committee by including the shop stewards, once these were recognised. The recognition of shop stewards and the introduction of the negotiating procedure had the effect of extending union authority amongst Ardeer employees. The negotiating procedure allowed employee grievances to be processed by the union, and this had the effect of increasing the union membership and ultimately controlling employee behaviour. Informal leadership, especially amongst the female pieceworkers, was dealt a grievous blow. Disorderly conduct of informal groups was brought under control.

The local branch also extended its authority to negotiate over the range of subjects which were included in disputes. For the first time in its history the branch negotiated the details of the entire piece and job differential rate structures, and the rules for promotion and demotion. Until the post-war period it had protested specific changes or demanded certain improvements in a piecemeal fashion. It negotiated over the details of incentive schemes based on work measurement which the management proposed installing. Previously, most incentive and piece rates had been offered directly to the groups of employees concerned. It also challenged changes in work practice which it thought were inequitable. It was really not until 1950 that the local general workers' union organisation became a fully-fledged bargaining authority.

PART II DISPUTES IN THE POST-WAR PERIOD

CHAPTER IV. THE SUBJECT MATTER OF DISPUTE

Introduction

The principal relationship between union and management was the 'dispute'. The analysis of union-management relations in the post-war period was directed to examining the reasons for disputes, the subject matters over which they took place, how they were settled, and what rules were established by the resolutions of the disputes. A strike was a different phenomenon from a dispute, although sometimes a strike developed out of a dispute. A dispute was a disagreement between management and union which had to be resolved by formal negotiation. Under the 1947 negotiating procedure the local conference was the principal medium for settling disputes. The number of conferences, held between May, 1947 and December 1954, was a measure of the number of disputes which occurred in this period.

Only 'local' and 'intermediate' conferences were included in the figures used in the tables in this chapter. A few 'headquarters' conferences were held in the post-war period, but these were excluded from the figures. Some local conferences dealt with more than one subject, so the figures underestimated the number of disputes. On the other hand some of the more important disputes took more than one conference to resolve. These over-estimated the number of disputes which occurred. The numbers in the following tables were designed to convey an impression of the importance of each subject matter of dispute.

Sec. 1. Disputes involving the T. & G.W.U.

(i) By subject matter.

The number of conferences held to discuss the various subjects in dispute involving the T. & G.W.U., from the inception of the 1947 negotiating procedure to the end of 1954 were as follows: (F)

Table I

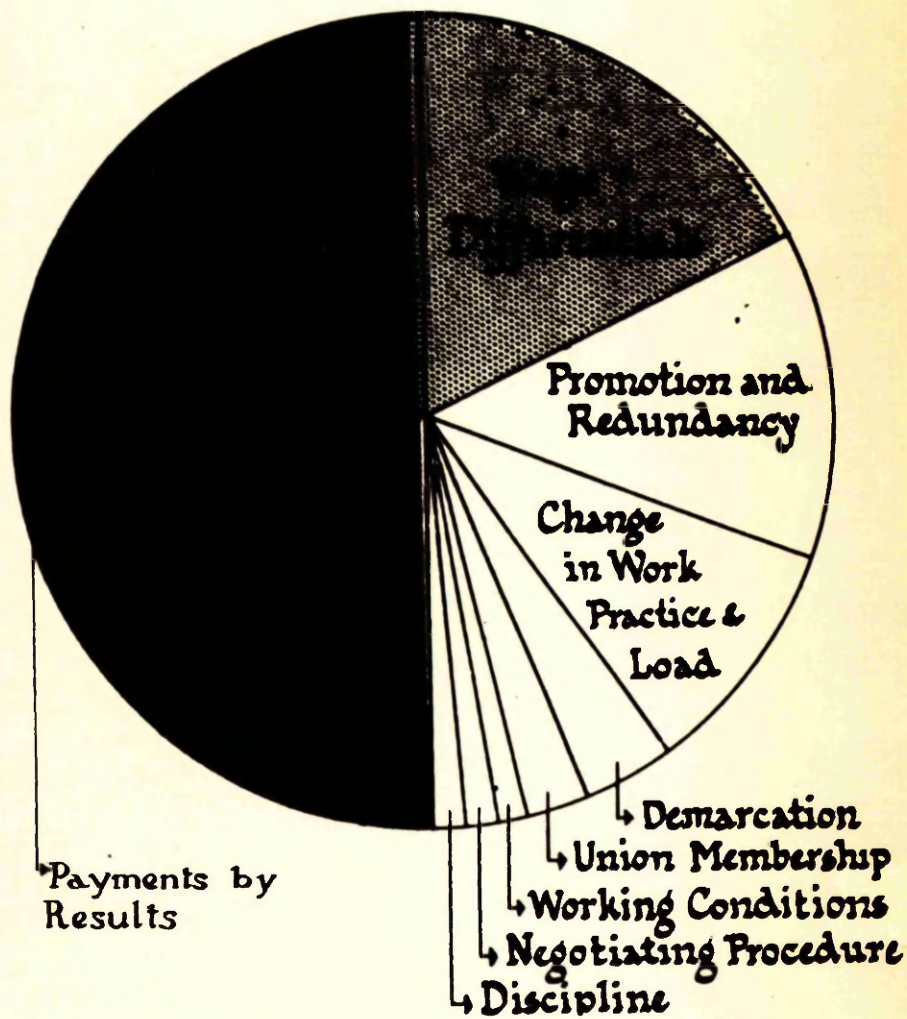
	<u>1947-1950</u>	<u>1951-1954</u>	<u>Total</u>
Introduction of incentives	7	9	16
Consequences of incentives	14	33	47
Traditional piece work	16	22	38
Total payments by result	37	64	101
Wage differentials	13	15	28
Promotion and redundancy	10	15	25
Changes in work practice	4	12	16
Working conditions	2	-	2
Union membership	-	2	2
Negotiating procedure	1	1	2
Discipline	1	-	1
TOTAL	68	109	177

(F) These figures were compiled after examining the records of local and intermediate conferences in Ardeer. The author is indebted to Ardeer Labour Officers, Messrs. Wilson Shaw and Ian McDavid, for use of their records.

Figure 2.

DISTRIBUTION OF DISPUTES

BY SUBJECT MATTER



Compared to the early part of the period, 1947-1950, there was a sharp rise in the number of disputes in the second part of the post-war period. Disputes over all the four major subjects, viz: payments by result, wage differentials, promotion and redundancy, and changes in work practice showed increases in the second part of the period. The number of conferences held to discuss work-measured incentive schemes greatly increased while those concerning piece work rose only slightly in the second half of the period.

Job security disputes occurred over the rules relating to promotion and redundancy and also over changes in work practice and load. By comparison with the immediate post-war period job security disputes showed a considerable increase in the period 1951-1954. They were virtually non-existent at Ardeer during the war and in the pre-war period. A number of conferences were devoted to discussing the rules relating to promotion and demotion. Disputes over redundancy were concerned with the many female operatives who were recruited to the factory during the war and the post-war period. There was only one dispute about disciplinary action.

Disputes over wage differentials were important in the post-war period. A job evaluation scheme was introduced in 1948-1950 to fix wage differentials for the jobs in the factory. The installation of this scheme was discussed at plant rather than factory level. Most of the disputes shown in the above table referred to disputes over job rates not initially brought within the job evaluation scheme. Minimum wage rates for general workers were fixed by national negotiations and were not therefore subject to local negotiations. Working conditions were also determined by national negotiations. Working conditions covered such matters as hours of work, shift arrangements and vacations. Only two conferences fell into this classification.

Some conferences discussed more than one subject. Towards the end of 1954, for example, a series of conferences dealt with interrelated disputes over incentives, wage differentials and changes in work practice. Disputes were classified according to the main subject discussed at the particular conference. The rest of the conferences dealt only with one principal subject. However subjects in dispute were frequently interrelated for example; rejection of incentives was related to job security, promotional rules to the job rate structure, and wage differentials to incentives.

(ii) By department.

Only one dispute in the post-war period affected all general workers in the factory - a union claim for an increase in wages based on the hazard of producing explosives. Not even the job evaluation scheme covered all the jobs in the factory. The rules for promotion and redundancy covered all general workers insofar as they dealt with factory seniority. So far as departmental seniority was concerned the rules only applied to the departments and sections specifically named. Disputes over work practice usually affected small groups or even single workers.

More disputes arose in the department producing blasting explosives than in the rest of the factory. This department employed about forty percent of the workers. It was the original core of the factory and the 'bread and butter' department of Ardeer. From an industrial relations viewpoint it consisted of three main social groupings. Firstly there were the men employed on a mechanised unit which commenced operations in 1948. No women were employed on the mechanised unit. Secondly, there were men employed on the old side of the department which produced much the same products as the mechanised unit. Thirdly, there were the female operatives employed on the older side of the department on the final stages of production. These were paid by piece work.

The rest of the factory was made up of another seven manufacturing departments producing acids, propulsive explosives, detonators, safety fuse, blackpowder, nitrocellulose and nitrobody products. All these departments employed general workers who were eligible to join the T. & G.W.U. In addition, general workers were also employed in the commercial department including transport, stores, and docking. General workers were employed in the engineering and research departments as trades assistants and labourers. The processes and the physical working conditions in each of these departments varied tremendously. Not all the processes were dangerous. Some were extremely dirty, others no worse than in any engineering factory.

All departments but one were involved in disputes over incentives. Disputes over all the subjects set out in the table above were experienced in the blasting department. Disputes over most subjects also arose in the engineering department. The other departments were involved in only a limited number of disputes. The department producing blasting explosives was the most 'dispute prone' and was the 'pattern setter' in settlements for the rest of the factory. More job security disputes occurred in other departments than the blasting department.

A breakdown of the number of conferences by subject for the blasting department and the rest of the factory was as follows:

TABLE II

	<u>Payments by results</u>		<u>Wages</u>	<u>Job Security</u>	<u>Total</u>
	<u>Introduction</u>	<u>Consequences</u>			
<u>Blasting Department</u>					
Mechanised units	2	18	3	6	29
Traditional manuf.	6	4	8	5	23
Female piece-workers	0	38	2	3	43
Total Department	8	60	13	14	95
<u>Rest of Factory</u>	8	25	15	27	75
<u>Grand Total</u>	16	85	28	41	170 (f)

(f) In addition there were 7 other disputes not falling within the principal categories.

Sec. 2. Disputes involving the craft unions.

(i) by subject matter.

The number of conferences held between the Ardeer management and thirteen craft unions totalled thirty-three, compared to the one hundred and seventy-seven with the T. & G.W.U. Incentives were the principal source of dispute between the management and the craft unions. In 1950 management urged all craft unions in Ardeer to accept incentive schemes, although their members were formerly paid by time rates. Demarcation was the next most important subject of dispute and showed no sign of disappearing. The disputes over other aspects of job security were unimportant. Disputes over working conditions and wages were small in number.

The conferences held between 1947 and 1954 dealt with disputes over the following subjects.

TABLE III

<u>Subject</u>	<u>1947-50</u>	<u>1951-54</u>	<u>Total</u>
Incentives - introduction	2	8	10
Incentives - consequences	1	5	6
Wages	2	1	3
Working conditions	1	-	1
Demarcation	3	4	7
Dilution	-	1	1
Manning and other work practice	1	2	3
Union membership	2	-	2
Total	12	21	33

(ii) by union.

About seven hundred skilled workers were employed in Ardeer. Most of these worked in the engineering department which was responsible for maintaining the equipment and buildings of the factory. These craftsmen belonged to thirteen unions. The union with the largest membership in Ardeer was the Amalgamated Engineering Union. It had over three hundred members. The Amalgamated Society of Woodworkers had more than a hundred members. Then in numbers of members came the Electrical Trades Union, the Scottish Painters' Society, Associated Blacksmiths' Society, the Boiler-makers' Society, Plumbing Trades Union, National Union of Sheet-metal Workers, and the Amalgamated Union of Building Trades Workers. The Amalgamated Society of Woodcutting Machinists and the three printing unions had very small memberships in Ardeer. The printing trades worked in a separate shop to the other craftsmen.

The A.E.U. was the only union which had conferences with management over a wide range of subjects. A breakdown of the conferences held between management respectively with the A.E.U. and the rest of the craft unions grouped together showed the following:

TABLE IV

<u>Subject</u>	<u>A.E.U.</u>	<u>Others</u>
Incentives - introduction	2	8
consequences	4	2
Wages	2	1
Demarcation	3	4
Dilution	1	-
Work practice and Manning	1	2
Working conditions	-	1
Union membership	2	-
TOTAL	15	18

Sec. 3. The importance of change as a cause of dispute.

Why did disputes occur? They arose when there was some change in the sets of references which guided each or both parties' behaviour. Some factors which set off these reactions were exogenous to the collective bargaining framework. For example, cost of living increases and the general employment trends were beyond the control of a particular union or or federation of unions. So too was the state of consumer demand beyond the control of management. Changes in these factors reacted on the behaviour of union and management. Changes in the social and political climate also had their effects on the behaviour of both parties; neither of these factors were controlled by union or management. Even a decrease in working hours or an increase in wages for workers covered by one collective bargaining framework was an external factor so far as another collective bargaining framework was concerned. Sometimes the parties of one particular collective bargaining framework adopted as part of their set of references the wage rates

and conditions laid down by another, but these were external to that particular framework.

Other factors which changed the set of references for the behaviour of the parties were endogenous to the collective bargaining framework. For example, an increase in wage differentials for one group of workers was bound to influence the behaviour of another group within the same factory. Management had complete control over the efficiency with which it carried on its operations, over its product development or technical improvement. Its supervisory standards were important in the way they reacted on the employees. There were certain factors which had special significance in altering the terms of reference for the parties' behaviour; for example job evaluation and work measured incentive schemes both determined methods of paying wages. The negotiating procedure was also an endogenous factor.

So far as the Ardeer case study was concerned the endogenous factors were the most significant in changing the sets of references for guiding the parties' behaviour. The most important of these changes was an organisational one which caused the greatest upset of union-management relations. In 1948 a new section of the department manufacturing blasting explosives was brought into production. This section was known as the mechanised unit, for its method of operations was a vast technological improvement over the old method of manufacturing explosives. It was manned by some of the longest-served employees in the factory, who quickly formed themselves into a new and powerful social group in the factory. This section was paid by a group bonus scheme, based partially on work measurement. It was seen in Table II that the unit was responsible for a large number of disputes, mainly over the incentive scheme but also over job security and job rates. A change in the safety factor due to an explosion involving the deaths of two workers in 1954 set off the most important post-war strike.

The establishment of the mechanised unit had important reactions on the behaviour of other groups of workers, in particular on the older sections of the blasting department which still produced explosives in the traditional way. The men on the mechanised unit soon earned large bonuses. The men left behind on the old side were not paid by incentive, and so they demanded an increase in hourly rates of pay in 1949, 1950 and in 1954 to compensate them for loss in status. Demands for increases in hourly rates were resisted by the management, although it was forced to make some adjustments in job rates. In 1950 and 1954 there were stoppages of work. Management tried to persuade the men to agree to an incentive scheme, but this was rejected several times. A stoppage also occurred over this subject.

The mechanised unit was staffed entirely by male workers. They performed certain operations which were customarily carried out by female operatives on the older side of the department. These operations included the cartridging operations which produced the well-known sticks of gelignite and dynamite, and the packing of sticks into cartons and boxes. Management expected to discharge a large number of female operatives once the mechanised unit caught up with demand. The women not unnaturally sought the protection of strict job security rules, demanding that discharges be made in accordance with seniority, and that married women be dismissed first despite their length of service. Many women were beyond the marrying age and had spent a considerable part of their working lives in the factory. At one time they had a powerful social system built in the form of an oligarchy based on length of service in the factory. Before the war the leaders of the oligarchy were responsible for negotiating piece rate changes with management. While there was no doubting their militancy when it came to resorting to direct action, they had not built the best possible piece rate structure. The deficiencies in the piece rate structure came to light in the post-war period, unfortunately at the same time as the women workers were becoming anxious about redundancy. The female operatives tried to push their earnings as high as possible by challenging any alterations in rates. At the same time there were suggestions that management was trying to use time study to reduce the percentage of bonus earnings of piece workers. There was considerable disparity between piece earnings and those under the newer incentive schemes.

Fears about redundancy spread to other parts of the factory and job security disputes became widespread. This accounted for the large number of disputes about this subject in all departments. Management decided that it was desirable to codify the rules relating to promotion, demotion, dismissal and transfer. In 1953 for the first time in the history of the factory the rules were incorporated in a single union-management agreement. The rules covered general workers, they did not cover craftsmen. Job security disputes involving craftsmen were few and spasmodic, and along traditional lines - demarcation, dilution and manning.

The other big change which affected the pattern of disputes in the post-war period was management's attempt to introduce incentive schemes based on work measurement. In 1950 it offered most craftsmen the opportunity to work on incentive schemes. Most of the craftsmen rejected the incentive schemes for fear that these would lead to redundancy. This anxiety was no doubt increased by the general workers' uneasiness with respect to their future employment prospects. The craftsmen had no seniority rules which determined an order of discharge. Anxiety about job security also motivated general worker groups to reject incentive schemes. However, the fears of these workers gradually vanished as the atmosphere in the factory became one of optimism about the future market for explosives. General workers had the protection of their seniority rules, and ultimately

all but one group accepted an incentive scheme. This group of workers on the old side of the blasting department, and the largest group of craftsmen in the factory, the maintenance fitters, refused to accept incentives under any conditions.

The craftsmen did not appear to become particularly anxious about their jobs once they rejected incentive schemes. Demarcation issues persisted. The A.E.U. strongly resisted management's attempt to dilute the trade in 1951. The plumbers and the fitters both took exception to a new record system which they contended could be used for introducing an incentive scheme. Some of the disputes involving changes in work practice and load of general workers could also be traced to the proposed incentive schemes and the fear of redundancy. Management was fortunate in that insecurity did not develop amongst craftsmen at Ardeer.

Although the job evaluation scheme led to a few disputes in those sections not covered, amongst the female and male operatives of the old side of the blasting department, on the whole the change was generally accepted. Many job rates were raised and this helped the acceptance of the scheme. It was somewhat surprising that there were no parallel demands for increases in rates for craftsmen. This occurred only once, the stimulus was not improvement in hourly job rates for general workers, but an incentive scheme for unskilled workers. The rates for skilled jobs were set nationally and were adjusted from time to time in the post-war period to meet rising costs of living. The craftsmen were graded according to their ability and paid merit money. This gave them a high wage rate compared to the rest of Scotland. There was a waiting list for employment at Ardeer.

The study at Ardeer was largely one of tracing the effect of endogenous factors on the behaviour of the parties. It was not concerned with the effect of external factors, such as the state of demand or the cost of living, on the two institutions' behaviour. The study was directed at examining the interplay of the formal endogenous factors within the collective bargaining framework. The informal factors, such as the creation of social groupings due to differential job rates, seniority rules and incentive schemes, were examined only to explain the formal relationships. The formal relationship between union and management commenced with a dispute over a specified subject. The method of resolving that dispute was by formal negotiation.

Conclusion

The starting point for the relations between union and management was a dispute. A dispute was a disagreement between union and management which had to be resolved by formal negotiations. A dispute arose because of some change in the sets of references of the two parties. The change in the sets of reference were sometimes specifically related to the formal relations already existing between the parties. For example, a change in the method of arriving at the wages structure, by the introduction of job evaluation or incentive schemes, directly affected the sets of reference which were common to both parties. Other changes were not directly associated with the formal relations of the parties, but grew out of a change in the social structure of one of the parties. For example, the most important change that occurred in Ardeer in the post-war period was the re-organisation of the largest department when the mechanised unit was installed. This set off reactions of insecurity amongst the work groups in the department and led to a disparity of earnings which caused considerable friction in the factory and in the union.

Both the union and management institution adjusted to changes which took place in the general social and economic environment. But before rises in the cost of living or costs of production could be transmitted to the union-management relationship, some alteration had to take place in the social structure of one of the parties. Even then the change had to take the form of one of two types of disputes: job security or the substantial issues of wages or hours of work. For a change to become a dispute between union and management it had to involve the fairness or equity in the way employees were to be treated. Basically, the subjects over which management and union traditionally disagreed formed the matter for dispute in the post-war period at Ardeer. The introduction of job evaluation and work measurement were inseparably linked to the old problem of rewarding labour. The types of formal disputes which took place between union and management were distinctly limited.

CHAPTER V. JOB SECURITY PROVISIONS FOR GENERAL WORKERS

Introduction

A fundamental aim of the trade unions was to make their members' jobs as safe as possible. Originally, job security disputes took place over demarcation, manning and dilution. The craft unions sought to limit the prerogative of management in deploying skilled labour as it sought fit. Management believed that these actions of the unions were restrictive. In time other changes in work practices were questioned and the types of restrictive practices grew.

As the general workers became organised they too sought job security. At Ardeer, the local T. & G.W.U. branch was successful in obtaining provisions to cover some of the more important aspects of job security. These included rules for the promotion, demotion and transfer of workers and supervisors, establishment of an order of dismissal for married and single women, and the safeguarding of male jobs from encroachment by women. The union also protested changes in work practices which adversely affected work loads or earnings of particular groups of workers.

By far the most important of the job security provisions were the seniority rules governing promotion, demotion and retrenchment. These rules had been in existence for many years, but they were not set down in a union-management agreement until 1953. The rules provided that all promotions were to be based on seniority acquired by employment in a particular department or section. One notable feature of the system was the multiplication of promotional sequences in the factory, and the gradual elimination of managerial prerogatives over the placement of labour. Management reserved its rights to select supervisors. Although the system of promotion was frequently criticised by managerial officials it performed several important functions which contributed to the stability of labour relations in the factory.

Sec. 1. Factory rules of promotion and demotion.

Long before trade unionism appeared at Ardeer management had its own rules about working conditions which it observed when employing and placing labour. One of its policies was to promote and demote workers according to seniority. This scheme fulfilled several functions. Firstly, only trustworthy employees were employed on the dangerous stages of manufacturing explosives. Secondly, the scheme kept the longest served employees on the payroll when production was out. Thirdly, promotion and demotion according to length of service provided a measure of social justice to the workers in the factory. By the twenties there existed a formidable set of rules which guided line management when making promotions and demotions. The names of the workers were set down on departmental lists, by seniority, and the whole scheme became aptly known as 'the turn-list'.

In the thirties the local T. & G.W.U. branch commenced making representations to management about its supervisors' interpretations of the rules of promotion. In time, the rules were modified by this process of interpretation and managerial discretion was reduced. As new sections or departments were established at Ardeer the union sought to include them within the promotional rules. The union attempted to make its members' jobs as secure as possible, and the turn-list system lent itself admirably to this purpose. The workers gradually came to believe that the system was formulated by the union, and jealously guarded its provisions. Yet it was not until 1953 that the whole scheme was set out in an agreement with the local T. & G.W.U. and the factory management.

One of the main principles of the system was the separation of promotional lines for each department or section of a department. The separation of these turn-lists narrowed the opportunities of promotion to the workers on the particular sequence. When a vacancy occurred the promotion had to be made from the worker next on the list. A worker on another promotional sequence was not considered for the promotion. Nor were transfers permitted from one promotional sequence to another, except under certain well defined conditions. The number of promotional sequences grew from three in 1925 to twenty-five in 1953, covering eight departments, with a further seventeen sequences for female workers. The separation of the promotional sequences reduced the movement of personnel from one part of the factory to another.

Promotion was by length of service. A male worker acquired both factory and departmental seniority. An employee was allocated to his department according to his factory seniority. He was promoted according to his seniority in the department. Seniority was measured by the number of shifts served in the department. Management was entitled to withhold promotion to the most senior worker 'in exceptional circumstances'. When the union disagreed about the application of this let-out clause a grievance was sometimes filed on behalf of the individual by-passed. Management promised to inform any individual of the reasons for refusal of promotion. When it was necessary for the promotion to be made according to technical qualifications, the union insisted that management show the place of the potential promotee on the turn-list. No argument then took place about the promotion.

Under the 1953 rules no employee was permitted to refuse promotion. An employee was dismissed if promotion was refused. This rule was included for very good reasons. The promotional steps were determined according to the hourly wage rate for the jobs in the department. Due to incentives and shift allowances the hourly rate did not necessarily reflect the earning capacity of the job. Employees had in the past refused promotion until it suited them. This was considered unfair practice by the union branch and so the rules were tightened. After 1953 the only excuse accepted for refusing promotion was on medical grounds. A member who asked for this

concession had to appear personally at the plenary branch meeting before his case was taken up with management. The factory medical officer then decided whether or not the worker was unfit to take the promotion. This practice suited management as the latter did not want large numbers of workers to refuse promotion to dangerous jobs.

Management was entitled to downgrade a promotee who could not perform his job satisfactorily. A worker who was demoted because of incapability lost all seniority rights to all other workers holding higher rated jobs. In the case of ill health management attempted to find the demotee a suitable job. It refused to consider a union request that it pay a special rate when a worker was demoted on the grounds of ill health. It paid for the job, and not the man.

Demotions also occurred when labour demand dropped due to technological improvement, introduction of incentive schemes and reduced product demand. Individuals were then removed from the department until the personnel complement corresponded to the number required for production. The worker with the shortest length of service was removed first. Under this system of demotion workers with the longest service were left on the job. Workers who looked upon their employment in Ardeer as a career naturally favoured this system of demotion. The rules greatly strengthened the security of their jobs. The demotional rules were to have special significance in removing general workers' objections to the introduction of incentive schemes.

A male worker once displaced from a particular promotional sequence, or 'turn list', was then allocated to the general labour pool. Here he took up his position according to length of service in the factory. He was not discharged until all others with less service were first dismissed. He was allocated to a vacant job in another department, according to his factory seniority. He then acquired departmental seniority on this new promotional sequence. He was not permitted to count his previous service on another promotional sequence. He did however maintain certain seniority rights if he was re-allocated to his original department. Similarly, he maintained certain rights when he was dismissed from the factory and subsequently re-employed within one year. No credit for seniority was given to a worker who was re-employed after resigning on his own volition.

Sec. 2. Assessment of the 'turn-list' system.

An interesting feature uncovered by this research was the attitude of line management towards the turn-list. Few officials had any idea of its history and many believed it was union-inspired. They complained about it when frustrated with day-to-day problems. They cursed it when they became 'anti-worker' orientated in times of anxiety. Some of the factory officials genuinely believed the seniority system of promotion to be a bulwark against efficiency. When the rules were codified in 1953 management attempted to throw over previous practice and asked the union for discretionary rights in promoting workers. It told the union that seniority would be kept as the main factor in selecting individuals for promotion. The union strongly opposed this suggestion, and the rules remained substantially the same as they were in the twenties.

The promotional system had several disadvantages. It prevented management placing workers according to their capabilities. For a large range of jobs it prevented the placement of personnel according to job specifications based on job study and analysis. It was impossible to employ new workers at hourly rates above the minimum. All male workers had to start in the factory labour squad. They were then allocated to jobs in departments according to their factory seniority. In times of labour shortage this procedure accentuated recruitment problems. On the credit side, the system reduced problems of labour placement to manageable size. Ardeer was primarily an employer of general labourers. Much of the work was unskilled and rather arduous. The scheme did not apply to craftsmen. The number of promotion steps according to the wage structure, by comparison to other factories, was small. Experience was an important job factor in sections manufacturing explosives.

From a union-management relations viewpoint the system prevented disputes arising over the promotion, demotion and dismissal of individual workers. The turn-list was definite, and showed how each individual stood in respect to any future action by management. When an employee felt aggrieved he or she could request the T. & G.W.U. to take his or her case to management, and if necessary to local conference. Few disagreements in the post-war period were ever carried to local conference stage. Most workers were satisfied that the system worked equitably.

Before workers were forced to accept promotions discontent arose over the disparity of earnings. On one occasion senior workers demanded increases in their time rates of pay. The system formalised the status of groups according to their hourly wage rate. The system generally stabilised union leadership amongst the employees with some length of service at Ardeer. The promotional system had a distinctly favourable effect in removing worker objections to the introduction of incentive schemes. The system gave general workers job security.

The promotional system had important effects on the formal and informal behaviour of groups of employees. The seniority system, linked inseparably to the hourly rate structure, created formal status groups within management's hierarchy and informal groups within the union. The behaviour of these groups had an effect on union-management relations. For example, the hillmen, who generally had the longest service in the most important department and had the highest rate of pay, demanded an increase in their hourly rates of pay to maintain their status in earning power within the factory. On the whole the seniority system probably stabilised rather than disrupted the local union organisation. It had a favourable effect on the groups who would have otherwise rejected incentive schemes. The seniority system gave a high degree of job security for general workers, almost career employment to workers normally on the fringe of the labour market.

The seniority system reinforced another aspect of personnel policy of I.C.I. which gave career employment. Hourly workers obtained certain privileges and status normally accorded to staff employees. The I.C.I. Staff Grade Scheme applied to workers who had three years or more of service with the Company, and who in management's opinion were worthy of acceptance. Its benefits included payment of wages in time of sickness. The scheme was not without its difficulties. Many employees who had achieved the privilege of sick leave with pay immediately used it. Little could be done about this matter as it was a symptom of general social trends.

The unions did not participate in administration of the I.C.I. Staff Grade Scheme. Its conditions were not subject to negotiation by the unions, nor were they permitted to protest the treatment of their members when they were excluded from its benefits. For this reason management officials did not regard the scheme with scepticism as they did the 'turn-list', yet both had exactly the same objectives. The central labour officials responsible for the formulation of the Staff Grade Scheme wrote into it a rule which permitted union members to legally strike without loss of privileges. This rule did not apply to illegal strikes where the informal group took action without approval of their union executive. It was the aim of the local union organisation at Ardeer to extend the staff grade privileges of the scheme to all workers. It appeared inevitable that this was to be a bargainable issue in the future.

Sec. 3. Supervisory and staff positions.

The lowest rank of supervision was that of leadinghand. The leadinghand's authority and responsibility was to transmit orders to the group of workers with whom he or she worked. The leadinghand was paid a small margin above the hourly rate of the most senior operative in the group supervised. The rules, laid down in 1953, stated that seniority was to be the chief factor in the selection of leadinghand. The T. & G.W.U. branch claimed that all promotions were to be made according to seniority. Management did not agree to this. Where, for example, senior workers were allocated to a new work group management refused to demote a worker with less seniority from the position of leadinghand. This was an exception to the general principle of the right of 'bumping' in the same promotional sequence.

The intermediate rank of supervision was that of the chargehand. The chargehand was paid a higher differential than the leadinghand but was still on an hourly rate. At the time of the codification of the promotional rules the union pressed strongly for applying seniority as the sole criterion in promoting workers to the position of chargehand. Management agreed to consider the claims of the most senior worker, but refused to make it a hard and fast rule to promote by seniority. Where it was necessary to reduce the number of chargehands, due to cuts in the requirements of personnel, the redundant chargehand reverted to worker status and took up his or her position on the turnlist according to strict seniority. In this way the most senior operatives' interests were safeguarded. The senior operatives still occupied the highest paid jobs.

The union had no say over the method of selecting the foreman. This was left entirely to management's prerogative. Management also had sole say over the appointment of spare foremen, who acted as foremen when they were required. The chief complaint the T. & G.W.U. branch had about the foremen and spare foremen was over the question of demotion. The union wanted the person demoted to take up his position on the turn list according to strict seniority. In the case of a foreman who was demoted, management agreed to the union's contentions. It was unusual for a foreman to be demoted. In the case of spare foremen the management disagreed. It argued that the spare foreman had to be placed at the top of the turn-list so that he was always senior to the chargehands and leadinghands. The spare foreman's authority was impeded if he was subject to direction by persons whom he supervised when acting as foreman. The union was able to force a concession from management when the latter agreed that in the blasting department the spare foreman had to take up his place on the turn list by strict seniority. Thus the rules governing this particular subject were not uniform throughout the factory.

There were no rules to govern the appointment of persons to the salaried staff of the factory. On one occasion the local T. & G.W.U. branch protested to management about the appointment of a certain individual (who had previously been dismissed from the secretaryship of the union branch) to the position of stores clerk. The union claimed that a promise was made to the checkers that they were to be given the opportunity to apply for the position of stores clerk if a vacancy occurred. This had not been carried out, and the man appointed had less clerical experience than the checkers. Management stated that none of the checkers had applied for the position, and it was not obligated to appoint a checker. Apparently the workers were ignorant of the method of appointing staff. This incident showed how little the hourly workers knew of the rules relating to the salaried division. Yet most of the hourly and the salaried employees lived and worked together in quite a small community.

Sec. 4. Female employment.

The factory was a large employer of female operatives. Before the war only single women were employed in the factory. During the war a considerable number of married women were recruited to the factory. In the post-war period the T. & G.W.U. urged management to give preference to single women in recruitment, and to discharge married women first. The union expected that many female employees would be declared redundant when the new mechanised unit producing blasting explosives went into operation. Women, particularly the single women, were apprehensive of their future employment prospects. The branch argued that single women were forced to travel many miles in search of employment other than at Ardeer, and as Ardeer was the main employer in the area, the townspeople looked to the factory to provide them with employment. The union argued that it was socially desirable for single women to have preference in employment over married women.

Management did not wish to give total preference to single women because it felt many married women were good workers. It agreed to discharge all married women with less than three years' service, before single women. Workers with more than three years' service were to be discharged according to seniority, regardless of marital status. These provisions were originally drawn up to cover the department which expected to retrench a lot of female labour, (although in actual fact the lay-off did not occur at that time due to the high demand for explosives). Subsequently, the preference given to single women in the blasting department was extended to all others in the factory. A local conference ruled that a girl marrying, and who had less than three years' service, lost her preference. She had to be discharged before all single women with less seniority than she had.

Although there were union fears about the employment prospects for women there was at times a very acute shortage of manpower. This led management to seek to use women workers, in place of male labour, in parts of the factory store. The local branch of the T. & G.W.U. opposed the dilution of jobs by women workers. The representatives stated that there was no knowing how long the labour shortage would last. Although only twenty-one jobs were involved in the case they should be kept for disabled male workers. The management dropped its proposals, although it was convinced that the jobs were within the capabilities of female workers. In its opposition the branch was clearly influenced by a set of social preferences which to a great extent mirrored deep-seated community (Scottish) values.

Sec. 5. Changes in work practice.

A number of disputes arose over changes in work practices. These changes involved personnel matters. The T. & G.W.U. did not oppose technical changes such as improved layout of plant or methods of work. One dispute occurred over a proposed change in methods of materials handling. The branch claimed that management was using work study to fix the number of personnel on the job, but without offering an incentive scheme. Management replied that it was entitled to alter the manning ratio of the operation, provided it respected the rules for demotion when getting rid of excess labour. Although the workers complained that they had to work too hard, the new practice continued.

Management then drew up an incentive scheme and offered it to those personnel left on the job. The scheme proposed a further cut in their numbers, and consequently the scheme was rejected. The materials handling section then changed the methods of the job and reduced the manning ratio, although not to the ratio proposed in the incentive scheme. The T. & G.W.U. protested that the cut in personnel was contrary to union-management procedure as the workers had rejected the incentive scheme. Management insisted that it had the rightful prerogative of making changes in the jobs, and deploying labour, in the absence of any specific agreement to the contrary. It acknowledged that under an incentive scheme it was not permitted to make changes in the deployment of labour without negotiation with the union. The branch was therefore not successful in its appeal.

It was customary for the older side of the department producing blasting explosives to work to a given 'task'. In 1947 when the forty-four hour week was introduced the union agreed that workers would produce the same amount of material despite a reduction of three hours in their working week. This led to demands by some sections for additional labour to help them maintain their output. In 1956 there was a 'go-slow' which brought the 1947 agreement into discussion but it was not changed.

The rest of the disputes over changes in work practice were of a minor nature and involved few workers. One complaint occurred over the 'one-man-one-job' principle. A foreman performed work during the week-end which was normally done by a processman during the week. Apparently this change was made to save paying penalty rates to a processman. For a similar reason management placed certain maintenance workers on call, rather than pay them extended overtime. Quite clearly the union acted to maintain the earnings of the workers affected by the changes in work practice.

Conclusion

The subject matter in this chapter was an interesting example of the impact of a union gradually extending its authority to limit the prerogative of management to unilaterally determine the working conditions of its employees. Management did not necessarily exercise its prerogatives in an unwise and arbitrary manner. On the contrary, the 'turn-list' system grew out of management's needs to have an orderly system of placing its labour force. The policy of management was to promote and demote its employees according to their seniority of service. The rules for the scheme were formulated and administered by management. At a later stage the union made some representations about the interpretation of the rules. It made these representations when one of its members claimed that the administration of the rules was anomalous, or was inequitable in the sense that a member's rights or privileges suffered from a particular managerial decision. The rules had to be administered equitably and with as few anomalies as possible, otherwise the morale of employees was likely to be damaged by not fulfilling their expectations about job security. This principle of personnel management held true regardless as to the role of the union.

The particular system of placement at Ardeer was compatible with the union's objective of providing job security for its members. Seniority was an objective measure of social justice in placing employees. The union wanted the system extended to those parts of the factory where there were no rules covering the promotion and demotion of personnel. The ad hoc approach of the union in intervening to raise specific issues continued until well into the post-war period. Then for the first time in the forty years history of unionism in the factory, union and management, on the latter's proposal, worked out a comprehensive agreement on the rules to cover promotion and demotion. The role of the union was no longer one of intervenor, but one of participant in formulating an important part of the personnel policy of management. On some other aspects of job security, for example a change in work practice or load, the union continued its role of intervenor and raised matters only when specific decisions of management were thought inequitable.

CHAPTER VI. DEMARCATION, DILUTION AND MANNING

Introduction

The traditional job security disputes involving craftsmen were over demarcation, dilution and manning. There were few disputes of these kinds in Ardeer before the second world war. During the war all unions, except the Scottish Typographical Association, agreed to the upgrading of workers to skilled jobs. After the war dilution in most trades was brought to an end. The N.U.P.B. & P.W. agreed to continue its dilution agreement because of the intense shortage of skilled workers. The A.E.U. refused to permit dilution of certain jobs in Ardeer. A few manning disputes occurred at Ardeer in the printing trades, but they were unimportant.

Demarcation disputes over the use of unskilled workers on jobs were almost negligible. The reasons for this were simple. General workers were organised by the T. & G.W.U., and this union did not allow its own members to do work which was rightfully that of the crafts. The general narrowing of differential earnings between the craft and general worker jobs gave management little cost advantage in using the odd non-skilled worker on contentious work areas. Ardeer management preferred to respect mutually agreed work prerogatives set up by the unions.

There was however a second type of demarcation dispute, that which took place over the rival claims of two craft unions. This was the most important type of job security dispute in Ardeer. Analysis showed that there were fundamental reasons for the persistence of this type of dispute. A demarcation claim by a craft against another craft was not simply a matter of 'empire-building'. The demarcation dispute arose due to the use of over-lapping criteria to fix the area of work prerogatives of two trades. Many disputes over certain work areas were avoided in Ardeer by carefully defining criteria in advance, so setting up satisfactory demarcation lines. (F)

Sec. 1. Demarcation between crafts.

(1) lines of demarcation

It was customary in the factory to define the exclusive areas of work prerogatives for particular crafts according to certain criteria, which attempted to define the 'lines of demarcation'. Three criteria were used:

- (F) The author was indebted to the following who read portions of this chapter: Mr. H. Girdwood, General Secretary of the S.T.A.; Mr. Hugh Kelly, General Secretary of the P.T.U.; and Mr. J. Savage, Divisional Organiser of the A.E.U. In view of the controversial aspects of demarcation, it must be stressed that the interpretation of the events was entirely that of the Author.

the type of tools, the type and size of materials, and the nature or the technique of doing the job. Due to technical factors it was not possible to draw lines of demarcation according to only one criterion. The parties frequently used two or even three criteria, and this led to considerable argument because of the overlap in determining the work areas. Demarcation disputes did not show any tendency to diminish in the post-war period; in fact they slightly increased.

During the war boilermakers and blacksmiths were involved in a dispute over welding. The boilermakers claimed the exclusive right to jobs which required welding. Management rebuffed the claim, holding that the nature of the job determined the work area and it would not agree that the tool fixed the line of demarcation. Its policy was to allow each trade to weld in connection with their respective work. The blacksmiths also argued over welding. They took objection in the war years to a female dilutee using a torch. Management likewise dismissed this contention. Thus it was the nature of the job which settled the demarcation line between the boilermakers' and blacksmiths' work areas.

Blacksmiths found themselves in dispute with the fitters over the use of materials. It was customary practice for fitters to handle all pipework carrying air, steam or acids, and also any work involving ninety-five percent (sic) of pipe. The blacksmiths were using pipe as a substitute for materials which were in short supply. The fitters claimed the work, contending that the type of materials settled the line of demarcation. The blacksmiths, supported by management, argued that the job was theirs, because it was normally performed by them. The dispute was settled in the blacksmiths' favour. But it was not clear whether the type of materials or the nature of the job was to be the guiding criterion in fixing future demarcation lines. The two criteria obviously overlapped, and there was no simple way of resolving the difference of opinion by reference to principle.

Boilermakers in their turn complained to management that the fitters had done certain work which, they claimed, was theirs. Certain material was initially prepared by the boilermakers, but was later lined up by the fitters because the work required accurate adjustment. In this case the difficulty of fixing the demarcation line resulted from a change in the criterion, from type of materials to nature of the job. The boilermakers sought to obtain the right to work until the fitters were required to make the accurate adjustment. The boilermakers' claim was rejected by the A.E.U. and the management.

(ii) establishing the precedent

The disputes discussed above arose over the necessity to interpret existing lines of demarcation in relation to specific cases. With the possible exception of the welding dispute the unions were not claiming new work areas. They were attempting to safeguard existing work areas. The criteria which the parties used led to blurred lines in practice. On other occasions the demarcation dispute aimed at setting a new precedent, for example, when new tools or new materials were introduced or when new jobs were performed in the factory.

Considerable argument developed in the factory over the introduction of a new type of plastic, alkathene. The plumbers claimed exclusive use of this material in the factory. They referred to a previous conference held at headquarters level, which they contended had decided in favour of allowing plumbers to use this material. The plumbers claimed that the factory management had broken precedent by allowing other crafts to use its material. Management rejected this argument, contending that no precedent was yet established. It recognised that plumbers had used this new material more than others but this did not imply that other crafts had no claim.

Management had already received complaints from the sheetmetal workers that some of their work was being transferred to the plumbers. The sheetmetal workers did not claim the exclusive use of alkathene, but wished to safeguard existing work areas by using the criterion of nature of the job for fixing the demarcation line - as did the boilermakers and the fitters. In fact the latter were already working with this new material. Management proposed therefore that all crafts should continue working according to the nature of the job. The plumbers replied, that if it was correct to fix lines of demarcation solely by the nature of the job, then they would be pleased to receive back all the work area they had lost when stainless steel replaced lead. Management stated that this was not a valid argument because district practice determined the allocation of work involving stainless steel. Although not relevant to the dispute in point, the argument of the plumbers showed how extremely difficult it was to establish equitable precedents.

Management, supported by the other crafts, was firmly against setting a precedent based on alkathene. Nor was it possible to draw a satisfactory line of demarcation for the various work areas by reference to the use of a particular type of tool. A nitrogen blow lamp was used to work alkathene and there was no precedent which laid down that this was to be used exclusively by a certain craft. Management proposed training all crafts likely to use the new material in the use of this tool. Even joiners were using the material in place of wood.

The plumbers then sought to take the issue to arbitration. For the first time since the twenties a dispute at Ardeer was referred to arbitration. The Ministry of Labour appointed the Director of the Glasgow Technical College as arbitrator, and after considering the case he found in favour of the management. While this dispute was waiting settlement the plumbers lodged an additional complaint to the factory management that it had broken the status quo by allocating work involving alkathene to the tinsmiths. In the light of the arbitrator's award this protest was not correct. For there was no established precedent by which management agreed to allocate the work to the plumbers. Until the arbitrator gave his decision management was free to allocate the material according to lines of demarcation established by the nature of the job.

(iii) Management's attitude.

In the demarcation disputes reviewed above, management was not responsible for changing precedent. Management adopted a neutral policy towards disputes when the craft unions agreed themselves to settle the lines of demarcation. A demarcation dispute, it must be stressed, arose only after a decision was made by management to allocate work in a certain way. In the first instance it was management's responsibility to respect established demarcation lines.

Management also adopted a positive role in avoiding demarcation disputes, by bringing together the crafts in conference to draw up agreements relating to the limits of their respective work areas. An agreement drawn up at workshop level set out the prerogatives of blacksmiths, boiler-makers, sheet iron and sheet metal workers, by types and sizes of materials and methods of working. For four years after the drawing up of this agreement no demarcation dispute arose. The agreement was subsequently endorsed a few years later. It did not set out the respective rights of the fitters and plumbers in relation to those included in the agreement.

(iv) inter-union co-operation.

Towards the end of the war the plumbers became concerned about the use of substitutes for lead. They requested a conference with the officials of the A.E.U. The Divisional Organiser of this union, when authorising the District Committee to confer, stated that demarcation lines were settled according to existing practice -- 'Practice can be altered as a result of mutual discussions. If there is any indication that our members are prepared to yield anything to the plumbers then I have no objection to you meeting them.' A meeting was held, and lines of demarcation agreed upon. As a consequence no dispute arose between these two crafts.

Sometimes considerable friction arose between the crafts. On one occasion discussions about demarcation were loaded with suspicion and counter claims by two unions. During the war years the blacksmiths became anxious about the future status of their craft. The work of this craft was said to be declining. There was plenty of work in Ardeer, as there was elsewhere in those days, but the union was watching its work prerogatives, and if possible, it attempted to expand employment opportunities for its members. For these reasons the union demanded the right to do certain welding. When management agreed to train an apprentice in this field, the boilermakers then attempted to secure an exclusive right to all welding, because they felt "that blacksmiths' work was getting less and less", and they were afraid that this other craft might encroach on their work. There was much misinformation and a rather absurd and mythical situation developed leading to suspicion which management found difficult to dispel.

Sec. 2. Demarcation involving unskilled workers.

In the early days of trade unionism the crafts were wary of the encroachment of unorganised unskilled workers, whom employers attempted to use on jobs claimed by the crafts. It was pointless for the crafts to organise, control the admission of members, secure reasonable wages and then find that their jobs were swallowed up by the unqualified and lower paid workers. Employers had an obvious interest in keeping the number of skilled jobs as low as possible in order to save paying the craft rate of wages. Demarcation disputes were accordingly fought out in considerable bitterness.

There were only two demarcation disputes in the post-war period at Ardeer involving unskilled workers. In the first dispute the T. & G.W.U. backed the A.E.U.'s claim that a certain machine used on experimental work, should be worked by a skilled man. Management held that while the machine was set up by a skilled worker, it should be operated by a general worker. The A.E.U. argued that it was the machine, and not the skill required to operate it, that was the deciding factor in determining the work prerogative. The A.E.U. won its case, but management gave notice that it intended to raise afresh the whole issue, if the machine was used in a manufacturing department.

In the second dispute the T. & G.W.U. opposed the A.E.U. The dispute occurred over relative claims of the mechanics and the drivers to do minor repair work on motor vehicles. The mechanics were skilled tradesmen who wanted the exclusive use of all tools. Tools were to be used as the demarcation line. Management and the T. & G.W.U. claimed that the nature of the job determined the work prerogatives. The two unions then drew up a demarcation agreement to allow motor drivers to do some minor repair work. Thus tools were not used as the sole criterion for fixing the demarcation line. Drivers were paid almost as high a rate as mechanics, so it was of little interest to management, from a cost viewpoint, who did the repairs.

Demarcation issues were not confined to the engineering trades. During the war the Scottish Painters' Society complained to the management for allowing general workers to use a brush to paint out marks on drums. It also took objection to general workers doing other rough painting. It claimed that management violated precedent. At a conference called to consider the question, management secured the right to use unskilled workers on rough painting jobs. In this way the nature of the job settled the issue, while the tool ceased to be an effective line of demarcation. Later painters succeeded in establishing the spray gun as a tool of exclusive use for skilled craftsmen.

Sec. 3. Dilution of the crafts.

Dilution disputes originally occurred over the up-grading of unskilled workers to skilled jobs. Disagreement arose over the principle of using a worker who had not served his apprenticeship on a skilled man's job. In the second world war the Ardeer management found it necessary to ask the craft unions to agree to the up-grading of non-skilled men to skilled jobs. Only one union, the Scottish Typographical Association, refused to agree to dilution. A kindred union, the National Union of Printing, Bookbinding and Paper Workers entered into a dilution agreement which was subsequently renewed to allow dilution in peace time. The agreement covered job security for its skilled members. No dismissal of qualified men was to take place while a dilutee was employed. Generally craft unions opposed dilution in peace time. The E.T.U. pressed the Ardeer management to remove dilutees in the electrical trades long before the war ended. Ultimately all engineering jobs were returned to skilled workers.

Some of the war-time agreements allowing dilution, which were negotiated at national level, were not cancelled. Under one of these the Ardeer management in 1951 asked the A.E.U. to approve the dilution of certain jobs. The approach failed. It had come to the notice of the A.E.U. that some of its members had been refused employment in the factory. Management stated that it was not its policy to re-employ workers who left of their own accord to take employment in neighbouring factories. The A.E.U. refused to permit dilution while any of its members in the district were unemployed. Dilution was shown to be practicable only when there was an acute shortage of labour. It was not possible to enforce a discriminatory personnel policy at the same time.

Sec. 4. Manning in the printing trades.

The manning dispute was very much akin to that of demarcation. The demarcation dispute involved the right of a particular craft to perform a certain job. The manning dispute concerned the number of craftsmen to work a particular type of machine. The demarcation dispute was qualitative; the manning dispute was quantitative. The manning dispute was generally less complicated than the demarcation issue. In Ardeer the manning dispute affected only the printing trades.

The Scottish Typographical Association attempted to enforce strict manning standards. In this way it established a powerful control over job security for its members. It policed the introduction of new machines and set manning ratios for them. After the Ardeer management had installed a new type of machine, the S.T.A. sent a note to the management setting out the ratio of skilled and unskilled men required to operate the machine. Management complained that the suggested ratio was uneconomic. A compromise was then arranged. Sometime later the S.T.A. refused to consider the alteration of this ratio when management wished to introduce an incentive scheme. On another occasion the S.T.A. refused to consider a change in another manning ratio as a basis of discussing a wage increase.

The National Society of Electrotypers and Stereotypers also kept a close watch on manning ratios. Shortly after the war its officials noticed that a manning ratio in Ardeer did not conform to normal industrial practice. However, they were unable to insist on its alteration, as the union could not supply the additional craftsmen to Ardeer. Had there been a surplus of labour then no doubt the union would have demanded the raising of the manning ratio.

Another printing union, the National Union of Printing, Bookbinding and Paper Workers, complained to management that one of its members was employed on two jobs. In view of the labour shortage it did not press for the employment of an additional worker. Instead management agreed to pay the worker at the higher of the rates which applied to the two jobs. This union also refused to consider a change in the manning ratio when asked to consider the application of an incentive scheme.

Sec. 5. Change in supervision methods.

Like the T. & G.W.U., the craft unions did not oppose changes in work practice which were made in the interests of efficiency. They occasionally questioned a change which affected the rights of personnel. One such change in work practice, which was disputed, concerned supervision. Management introduced a record system which required individual workers to fill out cards about work performed. Management wanted the information for planning the maintenance of the plant. As many craftsmen worked without a great deal of supervision over a wide area, management believed it impracticable for the foremen to make the recordings. Unfortunately, insufficient preliminary information was given to the workers, who viewed the new system with suspicion.

The A.E.U. and the Plumbing Trades Union protested to management about the use of the scheme. The A.E.U. thought that management was going to use the information for checking on worker performance. It objected to the craftsmen filling out the cards. In effect the union seemed to believe this was unfair supervision. So did the P.T.U. The latter union also accused management of storing up information to introduce an incentive scheme - despite the fact that both maintenance workers had rejected schemes. This was probably the basis of both unions' suspicions. Management assured the unions that it did not intend to use the information for introducing an incentive scheme, nor to assess the personnel performance of any individuals. The system remained.

The P.T.U. spokesman also added another objection: that the system was part of an efficiency drive. While he appreciated the management's interests in improving efficiency, from his personal experience, such drives always adversely affected the job security of his members. He stated that the union was opposed to any deviation from work practice which adversely affect his members. There was no evidence however, that the union actually opposed technical improvements. The spokesman was repeating some of the myths that some union members still cling to and some managements accuse them of harbouring.

Sec. 6. The incidence and nature of restrictive practices.

The Ardeer study showed that disputes over demarcation, dilution and manning were relatively unimportant in the union-management relationship. Was this true of British industry generally? In the days before the first world war some of the most bitter struggles between management and union took place over the demarcation, dilution and manning disputes. (1) In those days the craft unions had two mutually consistent objectives: to maintain

(1) For example, see Jeffreys: 'The Story of the Engineers'.

the security of their members' jobs and to strengthen the bargaining power of the unions. They supported a system of apprenticeship which limited the entry of new persons into a given trade, work prerogatives were demarcated to prevent the use of lower paid labour, they stopped the dilution of the trade by preventing the upgrading of non-qualified personnel, and they fixed the ratio of men required to man a machine. The unions successfully limited the prerogatives of management to deploy labour as it saw fit, and established job security for their members.

Since the first world war disputes over demarcation, dilution and manning lost much of their bitterness as their importance in the power struggle between union and management declined. Disputes over demarcation, dilution and manning still arose but they were usually resolved without too much difficulty. This was the conclusion of a survey made by Zweig into the cotton, iron and steel, printing, engineering and building industries (2) in the period after the second world war. Manning disputes in the printing and engineering industries were unimportant. Usually the engineering trades stuck to the principle of 'one man, one machine', while the manning ratios for minding printing machines was determined by mutual discussions between unions and managements. Demarcation disputes in the building trades were practically non-existent, and while they were occasionally troublesome in the engineering trades, they were not far-reaching. (3)

The really significant aspect of the demarcation issue at Ardeer was the persistence of the inter-craft dispute. This demarcation dispute was a jurisdictional conflict, involving two or more craft unions, over work prerogatives. The conflict was not simply a manifestation of 'empire-building'. On close analysis of the problem an inherent difficulty was found to exist in defining the lines of demarcation. It was customary to use several types of lines - type of tool, type and size of material, and nature of the job - to define work prerogatives. Due to the realities of production it was frequently impossible to mark off work prerogatives of each trade by the use of a single criterion. Interpretation difficulties were bound to arise once two lines were used. Where new materials, tools or jobs were used or came into being for the first time, a precedent had to be established, and it was possible for a dispute to occur over the allocation of tool, materials or job. These demarcation issues arose from a system of apprenticeship and craft unionisation.

(2) Zweig: 'Productivity and Trade Unions', (1951), p.21.

(3) Ibid; see pp. 201, 210, 234.

The demarcation issue between the crafts was not bound to become bothersome, especially where management allowed the crafts to come to their own agreements with respect to the allocation of work. It was likely to arise when morale in the workshop declined, due either to an underlying threat to the security of the jobs of the particular craft or because of poor supervision and management. This was true of most job security disputes - over changes in work practice and load, promotions, demotions and dismissals. Zweig also contended that unions became restrictive or non-co-operative when the morale of their members deteriorated. To be more precise, the informal groups of employees with common craft interests took action to protect the security of their jobs when a managerial action threatened them. The group demanded protection from their union, and formal disputes over demarcation, dilution, manning, change in work practice or load were then created.

The opponents of unions argued that any practice imposed by a trade union which affected the efficiency of management was prima facie a restrictive practice. As the argument went, restrictive practices were limitations on managerial prerogatives to organise their work as efficiently as possible, including the right to deploy labour in the best possible manner. These views were subject to severe questioning by Zweig. In the first place there was evidence that not all employers regarded the provisions covering job security as necessarily 'restrictive'. There was no evidence that employers believed that unions were taking over the management of their enterprises. In the second place Zweig concluded that work practices were part and parcel of rules and regulations of industry which were necessary to eliminate industrial anarchy. The joint rules were often a stimulus to good management, while a hindrance to less efficient management. Even if the practices involved some sacrifice of production by restricting the freedom of deploying labour, they offered valuable compensations which found expression in stability and continuity of production without disturbance.

Zweig concluded (unfortunately, tantalisingly briefly) that each industry had its system of industrial jurisprudence, and "the boss's word was no longer law". Many felt that this elaborate system of industrial jurisprudence needed developing into a positive and formal system of industrial administration of justice at all levels. (4) The Ardeer study showed that this had taken place, both with respect to craft and general workers' job security.

(4) Ibid: pp. 24-5.

Conclusion

Originally, the demarcation, dilution and manning disputes arose from the craft unions challenge to management's prerogatives to deploy its employees. As this challenge became more successful customs and practices were established in employing craftsmen. These customs and practices became part of a system of industrial jurisprudence which set out the rights and obligations of management and the unions. At Ardeer, the growth of practices which protected the job security of craftsmen differed somewhat from the development of the rules relating to placement of general workers. The latter which were set out in a single document, were something equivalent to 'statute law'. The demarcation and manning practices were established on 'a case to case' approach which was strongly based on existing 'precedent'. When a union made its protest to management it based its arguments on past customs, which were observed or put into practice by management. When new materials, tools or jobs were introduced for which there was no previous practice, a precedent had to be established. From then on, allocation of work amongst the different craft groups was made in light of this precedent.

Frequently, difficulties arose over the interpretation of the existing precedent, and a union claimed that management had attempted to alter precedent. As it was within management's prerogative, and its responsibility to allocate work amongst the craft groups, the demarcation dispute arose between it and a particular union. This was so, even when management encouraged the craft unions to agree on the lines of demarcation. During the post-war period a number of unions attempted to codify their rules relating to demarcation. This agreement seemed to have a salutary effect on the relations between the craft unions, even though interpretation difficulties still arose at the workshop level.

Dilution disputes were virtually eliminated by 'statutes' - agreements negotiated at national level. Manning ratios in a few cases were set by union-management negotiations; otherwise changes in work practice fell into dispute only when there was some inequity, which was challenged on an ad hoc basis. When an incentive scheme came into being the manning ratio had to be set out in the scheme, and negotiated between union and management.

Introduction

Features of the Ardeer wage structure included a minimum hourly rate of pay for male general workers, and separate rates for female and juvenile workers. All three rates were common to other I.C.I. factories as well as Ardeer. They were fixed by national negotiations between I.C.I. and the general worker unions. The differential structure was determined on a factory basis. After 1948 the differential wage structure was to some extent determined by a job evaluation scheme. Females did not receive the same rate for the job as male workers.

Craftsmen were paid at an hourly rate, negotiated at national level by I.C.I. with the building and engineering unions. These agreements set out the differential rates to be paid to the particular type of craft and semi-skilled workers. These rates were more than minima. The craft rates were common, in the sense that they applied to all types of work in I.C.I. factories. The craftsmen enjoyed a grading system, which granted extra hourly rates to workers on a merit rating scheme.

Both craftsmen and general workers had a common code which related to premium payments, such as overtime and shift allowances. Many general workers and craftsmen were also paid by result. One I.C.I. agreement set out working conditions to be observed for all categories of labour employed in I.C.I. factories producing chemicals.

Sec. 1. Features of the craft wage structure.

The present wage structure for craftsmen was introduced into Ardeer in 1936 when the I.C.I. national agreements came into being for the first time. Prior to this the wages structure at Ardeer was determined by local negotiations. Several features of this method of fixing wages conditioned the craftsmen at the factory to accept the new I.C.I. agreements. In the first place the local engineering and building unions had no real control over wages paid at Ardeer. They had agreed to follow movements in the Glasgow rates for each craft occupation. Originally, the rates paid in Glasgow were higher than those paid at Ardeer, so there was a stimulus for the Glasgow standard to be adopted. In the second place, the large number of amalgamations of unions after the first world war made the craftsmen, wherever they worked, conscious of the desirability of a national wage rate, (rather than a series of regional and local variations of rates,) although uniformity was never achieved. In the third place, craftsmen at Ardeer worked under the same working conditions as did the general workers. These conditions were determined by negotiations within the various frameworks encompassing general workers. In effect, the individual local craft organisations at Ardeer had little or no control over the wage rates or the working conditions which applied to their members at Ardeer. The Ardeer frameworks were inseparably linked to other frameworks which covered much larger groups of workers.

Although I.C.I. was founded in 1926 it was another decade before its real influence was felt in British industrial relations. In 1935 it left the rest of the chemical industry to deal directly with the general worker unions. At the same time it commenced negotiations with the A.E.U., and later with other engineering unions and the building trades, for exclusive Company-wide agreements. By skillful negotiations with the A.E.U. it obtained that union's assent to a national wage structure covering all engineering trades in I.C.I. factories (with some exceptions). It offered a levelling up of unequal craft wages then found in I.C.I. factories. The resulting agreement was signed in 1936 by seven other engineering unions as well. A similar agreement was signed with the building trades unions shortly after.

In 1938 I.C.I. signed an agreement for introducing common working conditions to cover engineering, building and general workers. In some I.C.I. factories certain craftsmen lost some advantages when they agreed to follow the conditions of general workers. In Ardeer all workers lost a rather small long-service payment. But craftsmen in the factory accepted the new conditions for they were long conditioned to observing working conditions which applied to general workers. The craftsmen never participated in local negotiations over working conditions in Ardeer. They did not lose any rights when the new agreement came into being. Instead the local branches of the craft unions acquired rights to indirectly determine these conditions.

There were three main features of the new I.C.I. wage structure: the substitution of district and local negotiations by the national fixation of wages for craftsmen, the development of multilateral negotiations with two major groups of unions, and the establishment of uniform working conditions to cover both craftsmen and general workers. These agreements cut off most of the craftsmen employed in I.C.I. factories from the rest of the engineering and building industries. There were many advantages for a large employer such as I.C.I. in having its own exclusive agreements and not being tied with other employers. I.C.I. workers were kept out of the fierce wage arguments which flared up from time to time in the engineering industry. I.C.I. paid its general workers higher than did other chemical employers. There was also another reason. I.C.I. took over many companies and plants, each of which had different labour relations histories. By bringing the determination of the minimum hourly rates for most categories of its workers within the control of the Central Labour Department, I.C.I. exerted considerable influence over its managements in applying a progressive personnel policy.

Multi-lateral negotiations had some important consequences. As the approval of all unions was required to alter the agreement it followed that no union was able to 'go it alone'. The A.E.U. tried to do this but its tactics were not successful. The unions were forced to agree on a common alteration to the rates of wages paid. This had to be done before the unions met the employer. This encouraged inter-union co-operation, simplified the union-management pattern, and brought stability to the movement of wage differentials as between the various crafts in the workshop. Multi-lateral negotiations prevented leap-frogging of wage rates. The local union branches had to submit proposals for changes in wage rates (and subsequently in working conditions as well) to their national executives. The demand had to be endorsed by a meeting of delegates from all the engineering unions. This naturally curtailed the power of the local union organisations. In the case of Ardeer no particular frustrations occurred because the craftsmen were long condition to following extra-factory norms.

The principles of wage structure established by I.C.I. in the period before the second world war remained in existence for the next twenty years. At Ardeer there were few disputes which dealt with craft wages or the working conditions covering both craft and general workers. A conference was called to discuss the introduction of the forty-four hour week shortly after the war, and another conference dealt with another matter relating to vacation pay. There were few interpretative disputes. The only one of importance occurred when the A.E.U. attempted to obtain special rates for dirty work and special skill. Management rejected these claims as the rates contained in the national agreements were common rather than minima. Craftsmen were paid more than this rate when they qualified for a higher grade according to their merit. There were also one or two conferences in the post-war period to fix the rates for printing crafts, which were not included in the I.C.I. national agreements.

Sec. 2. The merit rating scheme.

The only way open for craftsmen employed in Ardeer to receive a higher hourly wage than the common rate was through a grading scheme which paid special allowances to those whose work performance was assessed to be above minimum acceptable standards for employment. The object of the scheme was to reward those, who in the opinion of the management, showed a higher degree of skill in their work than was required for their continued employment in the factory. Grading was based on a merit rating scheme which assessed the individual worker on his capabilities. The factors taken into account for assessing performance included technical ability, reliability, standard of dexterity of work, sense of teamwork, regard for general tidiness and discipline. The merit rating was carried out every six months by a management team consisting of two officials. All the craftsmen (except those in the printing trades) were included in this periodic survey. The merit scheme applied only to craftsmen, and had nothing to do with the job evaluation scheme which covered general worker jobs in the factory.

Provisions for paying allowances for grading were included in the 1936 I.C.I. agreements. The rates were negotiated together with the rates for the various crafts. From 1936 to 1954 the allowances for grading were adjusted three times. On the last occasion the number of grades was increased from five to six. The rates paid ranged from one and half to nine pence per hour. Receipt of an allowance, particularly the higher amounts, had a considerable effect on the earnings of the craftsmen. The Company fixed the percentage of workers allocated to each grade. It was a forced distribution scheme of merit rating.

Under the revised scheme adopted in 1954 'any tradesman who felt dissatisfied with his grading was at liberty to seek an explanation from management'. If the explanation given to him was unsatisfactory then the individual worker was entitled to appeal according to the established negotiating procedure. If necessary the case could be referred to local conference. Before a worker was downgraded he was given due warning so that he might improve his performance. The Company reserved the right to downgrade a worker for disciplinary reasons. These conditions were discussed with the Signatory Unions. They went a long way to meet the general objections levelled by unions at merit rating schemes.

Sec. 3. The general workers' wage structure.

The wage structure at Ardeer for general workers had both a base rate for male and females, and a differential rate according to the job performed. The minimum rates were determined by a number of frameworks mentioned in the opening chapter. First, there were local negotiations between the Scottish Union of Dock Labourers and the factory management; then the rates were determined by the explosives employers and the national unions; later, rates were fixed by the chemical industry. In 1936 the I.C.I. agreement came into force. The rates paid to general workers were higher than those paid in the rest of the chemical industry. Shift allowances were included in the general I.C.I. agreement relating to working conditions.

Many jobs at Ardeer carried higher hourly rates of pay than the minima. For many years management fixed these rates without negotiation with the union. Indeed, it was not until the job evaluation scheme was introduced in 1948 that rates for all jobs in the factory were negotiated by the union. Nevertheless some rates were adjusted from time to time by representations of workers or the union. Adjustment of job rates took place rather haphazardly, and consequently the differential structure became uneven. This was illustrated by the percentage growths of a sample of job rates between the years 1931 to 1947 as indicated in Table V.

TABLE V

Percentage Increases in selected rates: 1931 to 1947

<u>Ancillary workers %</u>		<u>Blasting Department %</u>		<u>Acids and Prop. Dept. %</u>	
Wharfman	74	Junior Runner	58	Proc'm (paste mix)	65
Motor Driver	72	Senior Runner	53	Proc'm (spt.pdrs)	61
Rigger		Processman	44	Runner (Prop.)	58
Pipe coverer	58	Hillman	42	Runner (Acid)	58
Labourer	58			Proc'm (Nit.of lead)	50
Loco driver	57			Proc'm (T.N.T.)	48
Engineman	54			Proc'm (rifle press)	48

The national minimum for male workers increased by 58% over the period.

At the time I.C.I. negotiated with the general worker unions for a minimum wage agreement it gave consideration to introducing a uniform differential structure for its factories. There was considerable unevenness of job rates not only within the same factory, but between factories. The principal difficulty that confronted I.C.I. officials was the creation of a yardstick for comparing the rates of jobs in widely differing circumstances. It experimented with a rating device but found it impossible to co-ordinate its use. It was forced to abandon its proposals. At Ardeer the method of determining the differential wage structure remained the same as it had over the past three decades. Job rates continued to be adjusted haphazardly, and some of the important jobs, particularly in the main department producing blasting explosives, remained unaltered for many years. This led to considerable industrial trouble in the post-war period, as the next chapter will tell.

After the war I.C.I. gave fresh consideration to the introduction of a better method of determining differential job rates. It drew up a job evaluation scheme which was worked out on a company-wide basis but which was applied to its factories on an individual basis. No attempt was made to introduce a common wage structure. When the job evaluation scheme was applied in a particular factory local negotiations determined the job rates to be paid. There were advantages in this method of fixing wage rates. Disputes were confined to relatively small numbers of workers, compared to the large numbers affected by disputes such as in the railways when negotiations over the differential structure broke down. Moreover, it was questionable whether complete national uniformity was desirable. It was appropriate that some matters be reserved for determination by local negotiations.

Sec. 4. Installation of Job Evaluation. (F)

After the war I.C.I. formulated a job evaluation scheme for use in its factories. I.C.I. claimed that its scheme, called 'job appraisalment', was based on the most favourable features of the ranking, classification, factor-comparison and point methods. Some of the techniques of all four methods were used. Key jobs were chosen from a number of I.C.I. factories in order to set standards of comparison. Other jobs were then classified, ranked and rated.

The four job factors for which points were allotted were mental requirements, physical requirements, acquired skills and knowledge, and working conditions. Under each job factor there were a number of sub-factors that had to be taken into account by the assessors.

TABLE VIJOB FACTORS RATED UNDER I.C.I. SCHEME

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
<u>MENTAL</u>	<u>PHYSICAL</u>	<u>ACQUIRED SKILLS</u>	<u>WORKING</u>
<u>CHARACTERISTICS</u>	<u>CHARACTERISTICS</u>	<u>AND KNOWLEDGE</u>	<u>CONDITIONS</u>
Good Memory	Muscular Strength	Education	<u>Physical</u>
Ability to Reason	Stamina	Training	Vibration
Speed of Reaction	Agility	Experience	Position
Even temperament	Sensory Accuracy		Fumes/Smell/
Co-operativeness			Dust/Dirt
Perseverance			Heat/Cold/Changes
Mechanical Sense			Wetness
Initiative			Clothing and
Disparate Atten-			Equipment
tion			Poor Light
Ability to			Exposure
Visualise			<u>Mental</u>
Sense of			Noise
Responsibility			Height
			Below Ground
			Isolation
			Monotony
			Nervous Tension
			Accident Risk
			Disease Risk

The factors represented characteristics of the job, not those of the individual performing it. Each of the four main factors was rated by a point system. The points reflected the overall work content of each factor. For example, points allotted to the third main factor rated the relative effort expended by the worker in acquiring the necessary skill and knowledge to do the job. One inherent difficulty with this method of rating was the possibility of taking into account a sub-factor which may have been implicitly allotted points under another main factor. It was considered, however, that the accuracy of the ratings was improved by keeping the number of job factors to a small number.

(F) See a summary of this subject in 'Business', Nov., 1956, 'What job evaluation can mean to industrial peace'.

For each of the four main job factors there was a rating scale of a hundred points. Jobs with the highest work content under each main factor were placed at the top of the scale. The job of cleaning boilers was considered to have the worst working conditions and was therefore given the maximum number of points under that particular heading. Other jobs with high work content under the other three main factors were also found and placed at the top of their respective scales. Using a combination of the ranking and factor-comparison methods the rest of the jobs were then placed on the scale so that the points finally allotted to each mainhead bore a direct relationship to the work content of that job factor.

At the bottom of the scale for each job factor certain jobs were found. These were: floor sweeping, barrowing of sand, carrying of messages, recording of figures and taking of simple messages. Some definition was also made of the minimum adverse requirements a worker was to experience in working conditions. The selection of these jobs was important for they were not to carry any differential. They were to represent the jobs for which the Company and the general workers' unions fixed the minimum rate of pay.

After some empirical investigations each of the four main factors were given the following weights:

mental requirements	0.4
physical requirements	0.4
skill and knowledge	1.0
working conditions	0.7

The validity of the scheme rested on these weights to a considerable extent. Otherwise a distortion of the differential structure would have resulted. The weights had to stand the test of time. They represented the relative importance of job factors in making up the work content, on which the new differential structure was to be built. The actual differentials were calculated from a conversion scale which set out monetary values in relation to points allotted.

A job evaluation survey was made of general worker jobs in Ardeer in 1948. In addition to some of the general difficulties encountered in applying job evaluation, Ardeer had a special problem. Due to the rather complex method of allocating labour by the 'turn list' system it was impossible to set up too many job rates. It was found necessary to group various jobs together in order to give them the one job rate. In other words, strict rating was modified in favour of a classification system. In this way the differential structure was kept reasonably simple and provided a flexible system for promoting and demoting labour.

The local branch of the T. & G.W.U. at first rejected the principle of job evaluation. The workers did not understand how the job evaluation scheme worked. The Company took the precaution of setting out its principles in a booklet, which was widely distributed to its employees. It was not a good piece of public relations as it was written in rather mechanical terms.

It did not show how the worker benefited from the introduction of job evaluation. The very term was enough to cause suspicion. There was also reason to believe that some lower management officials did not understand the scheme's full implications and meaning.

Some time after this several shop stewards attended an appreciation course on job evaluation. This seemed to have the desired effect for the local branch then approved of the principle of job evaluation. This did not end the difficulties of installation. Having rated and grouped the jobs under various wage headings it was then necessary for the management and the local branch to agree on every one. This was a substantial task. It was two years before the negotiations were completed. These negotiations were usually conducted at plant, rather than factory level.

Many job rates were increased as the result of installation of job evaluation. This softened worker resistance towards the introduction of the scheme, and lent evidence to the proposition that such schemes have to be implemented in times of rising wage rates. Few job rates were decreased. A worker holding a job whose rate was found to be too high, under job evaluation procedures, received compensation in the form of a lump sum. No individual had his rate reduced by the introduction of job evaluation. Management held an additional bait for the adoption of the scheme. The scheme was not officially declared to be in operation until all departments agreed to the new rates. Increased rates were paid retrospectively to the date agreed by the particular department.

Sec. 5. Procedural effects of job evaluation.

The I.C.I. scheme, like other job evaluation schemes, established a ranking of importance of jobs according to a pre-determined formula. The point system gave quantitative expression to the ranking of the jobs. The work content represented the 'real' worth of a job compared to all other jobs surveyed in the system. The quantitative measure had the advantage of allowing both management and union officials to compare the range of jobs within each mainhead. This allowed the union to see the scheme as a whole. It helped the establishment of a symmetrical job structure.

Management sent the local union official of the T. & G.W.U. the schedule of jobs and points allotted to each under each job factor. This was of vital importance to the success of the scheme. Union and management officials then argued about the rating of the jobs, and not about the monetary differential each job was to carry. This method confined union-management disagreements to specific points, and like the negotiating procedure, conditioned each party to follow certain steps in resolving an issue.

Worker groups, who were disposed to look critically at job relativities, were able to make their own comparisons. A particular group of workers, believing that it had higher responsibilities and duties than set out on the schedule, found it necessary to convince other union members that it had an equitable claim. Changes in the schedules were made at the time of installation. Very few alterations were made after the installation; and only when the group and union were able to prove that the work content had changed since the time of original assessment. Few disputes over assessments went to local conference stage.

Some writers have scorned the use of job evaluation techniques. (1) Yet the Ardeer case showed that they were of considerable use in settling standards by which the parties resolved their differences. Under job evaluation the parties tried to assess a claim in the light of an accepted set of job factors. If the job factors, or their weightings, did not reflect the real characteristics of the job then the scheme was bound to lead to difficulties. Similar arguments could be applied to the merit rating scheme used in grading craftsmen. If the personal characteristics named in the scheme did not determine actual performance, for which the worker was himself responsible, then the scheme was unfair. Equitable grading of jobs according to their responsibilities and equitable grading of individuals according to their personal performance, were fixed by the parties within certain limits and subject to certain standards contained within the particular predetermined scheme.

At a recent international conference (2) a worker's delegation attacked the principle of job evaluation on the following grounds: it was not 'scientific', it was based on value-judgments, it did not take into account every factor of significance in determining 'equitable rates' for different jobs, it limited collective bargaining it froze the wage-structure, and it was so incomprehensible to the workers that it disturbed union-management relations.

What evidence did the Ardeer case offer on these allegations? Job evaluation was a technique and it was certainly not 'scientific'. But it allowed a rational comparison of data to be made according to value-judgments, within an agreed framework of reference. Under the I.C.I. scheme the ratings were subject to negotiation. The I.C.I. scheme did not directly determine the wage differentials. A conversion scale set out the monetary differentials for ranges of points allotted under the job evaluation scheme.

- (1) e.g., Barbara Wootton: 'The Social Foundations of Wage Policy', Allen & Unwin, 1955; see p.148 where she questions the change in weights. Obviously Mrs. Wootton did not understand the importance of job analysis and weighting of job factors.
- (2) Resolution of the Workers' members of the I.L.O. Metal Trades Committee, Sixth Session, Geneva, 1957.

This conversion scale was subject to national negotiations. The monetary differentials were increased by twenty-five percent in 1954, to restore the relativities reduced by inflationary trends. Thus, the scheme was a good deal more flexible than the system that existed before its introduction. Then differentials were adjusted haphazardly. Many groups of workers became dissatisfied as they watched others succeed in obtaining wage increases. Under the job evaluation scheme all jobs had to be considered in relation to each other. There was room for adjusting individual job rates to take account of special real factors. The general result of the application of the I.C.I. job evaluation scheme in Ardeer was a more equitable wage structure. This assisted, rather than hindered, the development of stable union management relations.

Conclusion

There was a constant search to establish principles which would reduce union-management disputes over the determination of wage rates. As was seen in this and Chapter I. the parties even went to the length of erecting a new collective bargaining framework, if they thought that it would resolve the problem. In the case of Ardeer the wage rates were linked to those determined by other collective bargaining frameworks. The I.C.I. collective frameworks made provision for determining part of the wages structure at national level and part at the factory level. At both levels there were features of the wage structure which had much the same objectives. The multi-union agreements attempted to maintain a constant relativity between the differentials paid to the various craft occupations. Occupational rates were adjusted in relation to one another, and leap-frogging of wage rates was prevented.

The job evaluation scheme also attempted to fix job rates for general workers in accordance to the real value of the job, thus establishing a constant relativity between the jobs. Once the scheme was installed job rates were not altered, unless there was a change in the work content of the job. Under a job evaluation scheme all job rates were adjusted by a percentage increase which maintained the relativity of the differential structure. The aim of job evaluation and merit rating schemes was to establish criteria, acceptable to both parties, by which jobs and workers could be ranked in an equitable way for the purpose of fixing their hourly rates of pay.

The effectiveness of the job evaluation and merit rating scheme depended to some extent on the application of technical details of the schemes, and these in I.C.I. were not negotiated by union and management. The union's role was largely one of intervenor by challenging managerial assessments which it thought anomalous or inequitable. The use of the job evaluation scheme did a great deal to make the terms of reference of the parties more explicit,

Chapter VII.

and so reduced the area of disagreement. Certain residual areas of disagreement still had to be resolved at national negotiations -- over the minimum company rates of pay for general and craft workers, the rates paid to the various grades fixed for craftsmen, and the increases to be given to general worker jobs covered by the job evaluation scheme.

Introduction

The job evaluation scheme did not cover the entire factory. The main department at Ardeer, producing blasting explosives, was not included in the scheme due to its extensive re-organisation with the building of the mechanised unit. It was in this department that the principal difficulties with respect to adjusting wage differentials occurred in the post-war period. There were several reasons for this. The wage structure had remained unaltered for many years, while rates for other jobs in the factory were increased from time to time. The higher paid jobs lost relativity to other jobs within the factory. This department was the most dangerous in which to work. From 1948 there was a disparity of earnings between the workers employed on the mechanised unit and others remaining on the old side. The female operatives were becoming anxious about their jobs and feared redundancy. They were also concerned that the management was trying to cut back their generous earnings by use of work measurement.

Several unofficial stoppages took place in the post-war period. By tradition the department was inclined to be strike-prone, particularly amongst the female operatives. The two most important stoppages occurred after accidental explosions killed a number of employees. The first explosion was in 1950; the second took place in 1954 while this research was being conducted in the factory. The workers in the department demanded that they be compensated for the hazard of working on explosives manufacture. The management refused to adjust wage rates on a general basis and argued for the use of job evaluation to determine the relativity of job rates. The workers refused to agree to the introduction of job evaluation. Management also wished to introduce an incentive scheme for the old side of the department, but after a short trial the incentive scheme was thrown out by a rank and file decision.

Sec. 1. The historical movement in job rates

Originally three types of labour were employed on the manufacture of blasting explosives. These were known as the hillman, the mixing processman and the runner. The hillman was employed on the highest rated job existing in the factory. He was responsible for the manufacture of nitroglycerine. This was a dangerous operation and only experienced workers with the greatest seniority were promoted to this job. In 1911 the hillman had a differential of sixty-one percent over the labourer's base rate. In 1913 the hillman's rate lost relativity to that of the processman. The latter was employed on the second stage of production of blasting explosives.

The loss of relativity by the hillman's rate came about in a very haphazard fashion. In 1913 the runners, with the lowest differential obtained an increase in their job rate of a half-penny. They did this by presenting a

petition to the Nobel's Explosives Company. The runners were responsible for moving the semi-processed materials about the department. Their work was unskilled. The processmen a few months later, apparently annoyed that the runners obtained a concession, also petitioned the Company for the increase to be extended to them. For some reason unknown the hillmen did not receive this increase.

Table VII

Differential Wage Structure of Blasting Department
showing percentage margins of job rates over the
labourer's basic rate in Ardeer factory.

	<u>1911</u>	<u>1920</u>	<u>1929</u>	<u>1947</u>	<u>1955</u>
Hillman (N.G.)	61	28	45	24	25
Processman (Mixing)	50	28	35	20	22
Senior Runner }			12	9	16
Junior Runner }	16	8	5	5	13

In 1917 and 1920 the S.U.D.L. negotiated two increases for the processman. The hillmen received the same increases. It was not until 1927 that the hillmen received an increase in their job rate which went some way to restore the relativity of their earning power over that of the processmen. In 1929 the hillmen had a percentage margin of forty-five percent over the labourers' basic rate.

In 1929 a distinction was made between 'senior' and 'junior' runners. The senior runners received an increase in their job rate, while the junior runner stayed on the old margin. Although the T. & G.W.U. tried to obtain this concession down the line its please were rejected in 1930 and again in 1935. The only pre-war change in differentials came about in 1938 when an amount, paid after serving a qualifying period in the department, was merged with the job rate. Apart from this the junior runners' rate remained the same from 1913 to 1950. Job rates for the three other categories of labour were unaltered from the twenties until the post-war period.

Sec. 2. Management resists a sectional wage claim.

Promotion to a higher rated job was by way of seniority. In promotion to hillman there was something of an anomaly. Workers were promoted from senior runner to processman in the mixing house. The next promotional step was to chargehand, which carried a differential payment of one penny over the processman. From chargehand workers were then promoted to hillman. But this last step carried no increase in the hourly rate of pay.

In 1949 the local branch of the T. & G.W.U. lodged a claim with management to provide for an increase in the rate of pay of the hillmen. The branch claimed that the hillman's job carried greater responsibility, and accordingly they should be recompensed for it. Due to the existence of

a bonus paid for extra work in the mixinghouse, it was also claimed that the actual earnings of the hillmen were sometimes less than those of the processmen.

These conditions had long applied to this section of the factory. Why in 1949 did the workers suddenly complain about them? The real answer to this question lay in the changes that were then taking place in the factory. The introduction of job evaluation in the factory led to some other groups of workers improving their differential wage rates. In effect this led to reduction of the status position of the hillmen, who were considered the 'aristocrats' on the promotional-rate structure. Even more important was the introduction of the incentive scheme for the mechanised unit producing blasting explosives. This was a group scheme which included the hillmen. Hillmen on the old side of the department naturally resented this disparity of earnings. In addition, some workers on the mechanised unit, with less seniority, were now earning more than the hillmen because of the incentive scheme.

The dispute of the hillmen remained unresolved for almost a year. This was due to a mistake in not following the negotiating procedure according to the letter of the law. In the meantime the hillmen simmered. They passed a resolution condemning the union for not meeting the Company in intermediate conference. When this was held the management again rejected the branch's claim. The union then appealed to a headquarters' conference against this decision. I.C.I. in supporting Ardeer management's stand stated that it was against Company policy for it to grant a sectional increase in wages.

The Company also rejected a suggestion of the national official of the T. & G.W.U. to pay a 'lieu bonus', until it was possible to work out an appropriate incentive scheme. The Company stated that it was not possible to install an incentive scheme until the old side was surveyed by the work study experts. The hillmen repudiated this suggestion by their national officer - and in the following years rejected managerial attempts to place them on such a scheme - and sought to take their wage claim to arbitration. The T. & G.W.U. did not wish this matter to go to arbitration for there was no certainty that it would be successful. The union (as was I.C.I.) opposed in principle the use of arbitration.

Sec. 3. A general wage increase sought

Considerable indignation was felt by the hillmen when their claim for increased job rates was rejected. Shortly after the headquarters conference was held an explosion occurred in a neighbouring section of the department. Several female operatives who worked on the cartridging operations were killed. They were paid by piece rates. At a local conference called to consider piece rates 'failure to agree' was recorded by the branch on no less than twelve items. The workers believed that management was

attempting to reduce the favourable rates by using work study. Workers were becoming more conscious of work study, even though it had been used for some time in determining piece rates. Discontent grew, nerves were frayed, and finally after a short stoppage in one section, a large number of workers in the blasting department went on strike. The immediate effect of this action was to bring union membership to a hundred percent of the department for the first time in its history. The workers obviously felt the need for the union to protect their interests.

At a mass meeting held in June, 1950, a resolution was unanimously passed which called for an increase in job rates of the junior runners. As already explained, these workers had no increase in their differential since 1913. By comparison with other workers in other departments of the factory the branch claimed that the runners were under-paid. Rates for jobs in other parts of the factory had been increased by the introduction of job evaluation. Workers in the 'danger area', which covered most of the blasting department, had as a whole lost in relativity in earning power with other sections in the factory. They claimed that they should have been compensated for the danger hazard. The claim put forward on behalf of the runners was designed to bring up the whole question of the differential structure of the blasting department.

The management rejected the claim for the increase in the runners' job rates. It was not prepared to grant a general wage increase. Instead management offered to apply job evaluation to the blasting department and to determine whether or not an increase in particular job rates was justified. It also offered to follow up the suggestion of the T. & G.W.U.'s national officer and offer the workers an incentive scheme. A meeting of the workers rejected the management's proposals. At the intermediate conference which followed several union representatives stated that the workers in the blasting department were very suspicious of job evaluation. They did not want to wait until an analysis of jobs was made, and then bargain over the individual job rates - as had been done in other parts of the factory.

The union finally accepted a management proposal to send it a set of new job rates based on evaluation techniques. This was done within one month. The jobs analysed were grouped and no buy-outs, applicable under the job evaluation scheme, were made for the jobs which showed lower rates than were then being paid. The union officials recommended that the workers accept the increased rates of pay. The emotional crisis was over and the workers endorsed their union official's recommendation. The principle of assessing wage differentials by the means of job evaluation was not accepted by the blasting workers.

A year or so later a further increase in wage rates was demanded but was rejected. Two years later the workers were persuaded to give an incentive scheme a trial for four weeks. The men worked on incentive for a week longer than the period authorised. The scheme was withdrawn when the men stopped work for a short period. The old problem remained for earnings on the old side continued to be lower than on the mechanised unit. In addition, the female operatives continued to earn high bonuses through their favourable piece rates.

Sec. 4. A fatal explosion and strike

Further trouble broke out in the blasting department towards the end of 1954. On the 18th October an explosion occurred in the mechanised section. This blew to pieces two workers and injured a number of others. There was an immediate psychological reaction on both workers and management officials. (F) A great deal of damage was done. Workers found that it was impossible to work at a pace which returned them their normal bonus earnings under their incentive scheme. According to the local T. & G.W.U. official the men were told by their line supervisor, without apparent approval from his superior, that they would be compensated for their loss of earnings. Within a few days this statement was countermanded and the workers told that they were to receive only the normal 'make-up' pay. This was calculated at the hourly rate of pay. The workers immediately took this as a breach of faith and promptly went 'slow'. They also decided that they would in future not work at incentive rates. To compensate themselves for loss of earnings they asked for a substantial increase in their time rates of pay.

- (F) The Ardeer management really feared explosions. This stemmed from early days. Alfred Nobel ran into many difficulties in producing explosives both in the technical and the commercial field. It was not until 1882 that blasting gelatine was manufactured commercially in Ardeer. Two years later an explosion killed ten female operatives. Despite this set-back, in the first twenty-five years the number of fatalities were kept down to twenty-one due to extreme safety precautions; every death was bad public and personnel relations.

The author was in the factory the day the October explosion occurred. Within seconds the wailing sirens of the factory fire brigades and ambulances were heard. The well rehearsed emergency programme was in operation. The factory manager was on his way with his experts to investigate the area. The doctors stood by. Strict security blanketed the factory and communications were cut with the outside world. Welfare officers hurried to the sections where there were large groups of females to prevent outbreaks of emotion. In the meantime the factory labour officer and his deputy sat grim-faced, watching the seconds tick by, until they knew the casualties. It was their duty to go to the homes of the workers who were killed to break the news to their families.

The local branch accordingly lodged a claim for increased job rates in the mechanised section of the department. At the local conference the secretary also expressed regret that the management had not offered compensation for the loss of bonus earnings due to the explosion. Management then offered to pay a temporary amount to the workers. This amount was considered by the workers to be cheese-paring. Indeed, the workers were so annoyed that they even wished to prevent the local secretary from asking for a review of this amount. They wanted to rid themselves of the incentive scheme entirely. The local union official knew that this was a temporary feeling and pressed management to review the amount previously offered. Subsequently, the workers lifted the go-slow decisions and resumed working at incentive rate.

In the meantime the main argument about increased job differentials continued. Like the older section the mechanised unit was not covered by job evaluation. Management refused to concede a general wage increase based on the hazard element. It insisted on using job evaluation to study each job and determine whether it was worth more than its current rate. An assessment by management was made and it was found that no increase in job rates was warranted. In fact, management claimed that some jobs were already being paid too high a rate. Nevertheless, management proposed increasing the senior processman's rate to that of the hillman. In this way senior personnel on the mechanised sector could be deployed on a number of jobs without infringing the turn-list system.

After the matter went to intermediate conference a compromise was reached. The senior processmen received one penny three-farthings per hour extra to their job rate, while junior workers on the unit received one penny-farthing. The hillmen on the mechanised unit did not receive any increase. The workers on the mechanised unit refused to accept in principle the differentials based on job evaluation. In the following year management continued to press the workers to accept job evaluation and a buy-out of rates which were too high. It was unsuccessful.

Sec. 5. Group interaction and a 'go-slow'

The granting of this wage increase to the workers of the mechanised unit led to immediate repercussions from workers on the old side of the department. The latter demanded equality of treatment, and to enforce their demands the workers went 'slow'. At a local conference one union official remarked that it was apparent that the parties had made a mistake in granting one group of workers an increase in their job rates without considering the equity of other workers' claims. This was precisely what job evaluation aimed at preventing, but job evaluation did not apply to the department. To the workers on the old side it appeared as if the mechanised unit was being favourably treated by management - and even by union officialdom. One shop steward from the old side accused the management of being 'blackmailed' by the mechanised section. For this reason workers on the old side also decided

to take matters into their own hands and worked as slowly as possible.

The union lodged a claim for a 'down the line' increase of the workers' hourly rates. An increase in wage rates was considered necessary to compensate the men for the danger hazard. Management was responsible for the safety of the plant. If it was unable to provide for the safety of its employees it had to pay the penalty in compensating workers for the risk. Management replied that it did its utmost to prevent accidents. It claimed that safety was a shared responsibility and the necessary co-operation was not always forthcoming from the workers. It rejected the claim for a-down-the-line increase. It offered an increase on job rates which were assessed according to the job evaluation scheme; each job was then properly evaluated. The workers were in no mood to compromise and management's proposals were rejected.

The workers on the old side continued their 'go-slow' or 'working to rule', as they chose to call their behaviour. As a group they really believed that they were working according to rules - those of the factory, those set out in government regulations, and those which they conveniently made up themselves. Management officials addressed one shift and asked the workers whether they intended honouring a seven year old union-management agreement which provided for a certain target to be achieved. The workers refused, and management then suspended the shift. As a consequence many of the female operatives, previously unaffected by the go-slow, were thrown out of work. The factory management considered closing down part of the factory while the suspension of the men was in force.

Tension mounted in the factory. Management officials became highly emotional and almost psychopathic in their defence of management action. There was a general breakdown in formal lines of communication between management officials as they attempted to seek information. The junior labour officers seemed to have little idea as to the cause of the dispute, the motivation of the workers' subsequent behaviour, and the proceedings at the official union meetings, most of which were open to the press. They did not interpret the events in a rational way, mainly because they had little understanding of group and inter-group reactions. They believed the union meetings to be in the hands of 'a lot of hotheads', as the rank and file refused to agree to return to work at the normal speed. This action was only to be expected when a large number of emotional and excited members met. Nor was there any evidence at that time, or later, that there was a serious challenge to the leadership of the local union official. In general, the labour staff specialists seemed to be rather ineffective in forecasting the action of the workers, in interpreting their actions, and in maintaining adequate lines of communication with informal groups within the union.

It was true that the full-time officials - local, regional and national - had difficulty in persuading the men to return to work. For one thing the men believed that they were on strike - the fact that they were suspended did not concern them. They were in a highly nervous state, suffering both from the psychological effects of the explosion and the inequity of treatment. The mechanised unit was not only better paid, but it also had good working conditions. They compared their own conditions of work, which were comparatively primitive. Moreover, they did not want to admit that they were wrong in working to rule. Their status was at stake, not only with the officialdom at the factory and in the union, but with other workers in the factory. Their position in the social structure of the factory was in jeopardy, and they were also under criticism from other workers who found themselves jobless. Indeed, when they finally agreed to work according to normal practice, union and management went through the ritual of discussing the equity of the work load - to save the face of the men.

In the situation as it developed there was some shift of power from the formal to the informal group. However, once the men were suspended the meetings of the 'strikers' were held and conducted by the union. Communication patterns took much the same course in the union as they did in management. The rank and file wanted information, and for this they not only turned out in force to attend the official meetings, they also gathered in the taverns of the neighbouring towns 'to keep in touch'. The local tavern continued to serve its historical place in industrial relations, that of meeting place. Despite the development of the grape-vine and the power of the informal group, the leadership of the local full-time official was never really challenged; and in many ways he became the informal leader. There was some friction between he and the regional official, who was mainly concerned with seeing that the rules of the T. & G.W.U. were observed, but this did not cause undue stress. The union officials pointed out to the men that they had broken both the union rules and agreements made by the union with the Company. After a time the men were persuaded to return to work as the New Year grew near. They felt the loss of earnings, the management wanted a reconciliation as soon as possible, and their attitude became less emotional. They did not immediately resume working at their normal speed, but management was tolerant and closed its eyes to this fact.

Negotiations were resumed. The shop stewards stated that the workers mistrusted job evaluation. They did not like the buy-out principle which the company used when rates were found to be higher than they should have been. The buy-out principle gave management a permanent advantage. The individual worker did not suffer but the group workers were in the long run worse off. This was a security minded notion. The union was unable to get the workers to accept job evaluation so the matter went to intermediate conference. Management made a strenuous plea for the introduction of job evaluation. Job evaluation was the basis of an equitable differential

structure. It was systematic in fixing the relative worth of jobs. It was better to pay the job what it was worth rather than adjust all rates in a section without taking into account the work content of each. Its application to other departments in Ardeer had proved satisfactory.

The holding of an intermediate conference was only to gain a breathing space in the argument. No new subject was introduced. It did allow the union officials to work on their members to break down the opposition. When the dispute was referred back to the local parties the old section agreed to accept job evaluation as the correct technique for assessing job rates. The actual rates assessed were accepted without a murmur by the blasting workers. The item hardly warranted discussion at the union meeting. Ten weeks previously a mass meeting of hundreds of workers threw out the offer. The state of emotion passed and this allowed the settlement. But the old problem nevertheless remained. The workers on the mechanised unit resumed working on incentives. The old side rejected them. The disparity in earnings of the two sets of workers was still considerable.

Conclusion

Events in the blasting department in the early fifties emphasised the need to adjust the hourly wage rates in a regular and orderly way. A haphazardly adjusted wage structure, which contained inequities between the job rates was a potential trouble point, if conditions arose to touch off group reaction. In this case the installation of the mechanised unit with its incentive scheme caused the group on the old side to look critically at their job rates. In 1954 failure to adjust job rates throughout the entire department led to spontaneous action. The groups' actions were in defiance of the provisions of the negotiating procedure and were taken without approval of the governing body of their union. Their actions were prima facie evidence that union authority over its members had broken down. Union authority was repaired without too much difficulty as there was no permanent shift in leadership from the formal to the informal group in the union.

A spontaneous stoppage made the task of the negotiating teams extremely difficult. The circumstances accentuated the differences in the terms of reference of the two parties. As no job evaluation scheme was in existence in the blasting department there was no objective criterion by which to measure any proposed wage increase. There tended to be a vacuum in the relations between union and management. Moreover, it was impossible to install job evaluation at that time. The installation of a job evaluation scheme required rational thinking on the part of union, management and their members; this sort of thinking was not to be had when passions were aroused. Even in times of peace, it was difficult to explain to the members of the union the principle of job evaluation. The value of job evaluation lay in the fact that once installed, it conditioned the parties to deal with future wage increases in terms of the criteria laid down in the scheme. Thus, when a change set off violent reactions amongst the informal group, there was some

hope of reaching agreement about a proposed wage increase by reference to the principles of the job evaluation scheme.

CHAPTER IX. HESITANCY OVER ACCEPTING INCENTIVES

Introduction

Some time after the war I.C.I. decided as a general policy that its managements were to introduce incentive schemes for as many workers as possible. Incentives were to become a normal part of the wage structure. The factory management at Ardeer offered incentive schemes to practically all craftsmen within its employ. These schemes were based on time study, and provided for a bonus to be paid on the performance of the individual or the group according to an allowed time system. Craftsmen in Ardeer belonged to twelve different unions. Members of six unions refused incentives, two accepted them on trial, two initially rejected them, but subsequently reversed their decisions, and one asked that a scheme be extended to them. Groups of members of the twelfth union, the A.E.U., had all these reactions.

So far as general workers were concerned payments by results were not new at Ardeer. For many years a large number of female operatives were paid by piecework. Many general workers were on incentives during the war, but the reactions of groups of general workers towards the introduction of incentive schemes in the post-war period were similar to those of the craftsmen. Only one group scheme was immediately accepted by the workers and there were special reasons for this. The other group schemes were initially rejected; all save one group changed their minds and accepted incentives. Individual schemes of which there were a considerable number were immediately accepted. In this there was a significant difference in the general workers' behaviour and that of the craftsmen which was attributable to the existence of the promotional agreement. Unlike most craft unions the T. & G.W.U. was not opposed to incentives. At the same time the complex reaction of their numbers on the floor showed that there were similar motivational forces at work which influenced both general workers and craftsmen in their attitudes towards incentives. (F)

- (F) The author was indebted to many persons for help in compiling this chapter. In particular the following were particularly helpful: H. Kelly, General Secretary of the P.T.U.; H. Girdwood, General Secretary of the S.T.A.; J. Savage, Divisional Organiser, and G. Barratt, National Officer of the A.E.U.; W. Hilton, District Officer of the S.P.S.; G. Cole, National Officer of the E.T.U.; D. Carson and E. Dale, District Officials of the A.S.W.; A. Matthews of the T. & G.W.U.; W. Hilton jnr., Research Officer of the A.U.B.T.W.; and H. Hoyman, Research Officer of the N.F.B.T.O. In addition, shop stewards of the above unions, and the Sheet Metal Workers' Union, the Boilermakers' and Blacksmiths' Societies were also interviewed.

Worker reaction to the proposed incentives schemes illustrated the importance of group behaviour on the factory floor. Most groups of workers showed considerable hesitancy about accepting incentives schemes. These decisions were taken initially by the workers themselves, either at a workshop meeting or outside the factory at a meeting sponsored by the official union organisation. In a few instances a ballot was held to determine the workers' attitudes to incentives. The groups did not make their decisions in isolation. They had certain sets of references by which they judged the issue before them. The groups were influenced by their own self interest, experiences of other workers in the plant or factory, the decisions of the branch, district and regional councils of their union organisation, and by the policies and rules laid down by national executives and conference.

Sec. 1. The Engineering Trades Unions

(i) Unions whose members rejected incentives

In 1950 the Ardeer management approached the shop stewards of the Electrical Trades Union, the National Union of Sheet Metal Workers and Braziers, and the Plumbing Trades Union to ask them to consider the introduction of incentive schemes. All three were work measured schemes based on allowed times, and provided for a bonus to be paid to the individual on his performance. Management proposed that the times for the jobs be set by estimators. Estimators were already drawn from the ranks of the craftsmen, a fact which did not please the unions as they were not consulted over their appointment. Although this may have increased resistance, the reasons for the unions' subsequent refusal to accept the schemes were much more complex.

Management claimed that increased maintenance work in the factory necessitated a new deployment of labour, which could only be achieved through the introduction of incentive schemes. Skilled labour was scarce. Management wished to increase the work load of the individual craftsman. Initially, management declined to give a definite assurance that there would be no displacement of labour. Later it stated that redundancy was extremely unlikely. The unions then raised two other traditional reasons as to why they should reject the incentive schemes: the effect of incentives on the workers' health and the deterioration of the quality of the crafts' work. To meet these arguments management stated that a certain percentage of time was allowed for rest and it also fixed a possible maximum bonus of fifty percent. These provisions, with normal inspection and supervision standards, were designed to safeguard the quality of the work performed.

The unions were also sceptical about the schemes from another fundamental angle. Long experience taught them to be beware of rate-cutting. Management replied that with the new techniques developed by work measurement times and work-unit values were now set more accurately. Workers were protected by the terms of their national agreement on working conditions. Under this no changes were to be made in rates, unless there was alteration in the materials, means, method of production. Such a clause was designed to safeguard the earnings of the workers. The schemes were so arranged as to allow an average worker to earn a bonus of one third over his normal hourly base rate. Management also claimed that operatives then working on incentive were earning from thirty-one to thirty-five percent above their basic time rate of pay.

The three craft groups then held workshop meetings and decided to reject the schemes, all by large majorities. These decisions were subsequently confirmed by their branches. There was no evidence of interference by full-time union officials in order to influence the men in their rejection. The unions were against accepting incentive schemes, particularly those based on time and motion study. The executive council of the E.T.U., some time after its Ardeer membership had rejected the proposals for a second time, passed a resolution which opposed the I.C.I. incentive schemes based on work study. The other two unions were not happy about the use of work measurement in setting bonus rates. Yet all three unions had members working under systems of payments by results in industry outside I.C.I. Under a 1928 agreement covering the engineering industry, employers were given the right to work craftsmen on incentives.

The rules of the three unions also opposed incentives. The E.T.U. rules provided that its executive council was first to approve a system of payments by results before a member was permitted to work under the system. Individual bonus schemes were totally prohibited. The rules of the Sheet-metal Workers' Union opposed use of the stop watch on the factory floor. The Plumbing Trades Union during World War II declared its opposition to piece work because 'it led to bad workmanship, it set up competition between union members, it impaired the unity of the Trade Union Movement, and in normal conditions it produced unemployment'. In 1950 the biennial conference called for an all-out fight against premium bonus schemes. The following conference re-affirmed a previous decision that wage increases should be general, and 'that all bonus schemes should be on a collective basis'. It would seem from this last resolution that certain types of group schemes may not be ruled out. But to 1955 I.C.I. had failed to shift the opposition of the plumbers towards its incentive schemes.

(ii) Unions whose members accepted schemes immediately

Members of two engineering trades, the blacksmiths and the boiler-makers, behaved differently to the craftsmen described above, although they all worked in the same shop. The type of incentive schemes offered were basically the same. While these unions were not enthusiastic about the use of work measurement for setting incentives their members had worked on piece work in outside industry, especially in the shipbuilding yards. This difference in tradition probably explained the reason for their members acceptance of incentive schemes at Ardeer. The schemes were free of dispute, with earnings somewhere a third above the base hourly rate. There was no redundancy due to the introduction of the schemes.

Some of the work that had been contracted outside was returned to the factory trades shop on a cost-to-cost basis. Management made this gesture in return for a trial run on incentives by the boilermakers. The events leading up to their acceptance were rather unusual. A representative of the work measurement section of Ardeer factory was invited to attend the meeting of the local branch of the Boilermakers' Society. He explained various aspects of the scheme, including:

- method of computing bonus and fixing limits of bonus earned on jobs which were carried over from week to week;
- payment of bonus on jobs carried out at short notice on overtime;
- provision for access by workers to records of work carried out under the scheme;
- procedure when it was impracticable to prepare an estimate before the commencement of a job;
- methods of computing appropriate compensatory rest for tasks performed under varying conditions;
- appointments of estimators to deputise during periods of absence due to holidays, sickness or other emergencies.

(iii) The indeterminate attitude of the A.E.U.

The respective members of the five engineering trades so far discussed at least reacted homogeneously. Members of the A.E.U., on the other hand, showed no such simple reaction. Their behaviour was complex. Members working in the general trades shop of the factory were first offered a group incentive scheme, a non-work measured type, in 1943. The men initially rejected the scheme, but later reversed their decision. The bonus earnings turned out to be considerable and it was not long before other A.E.U. members working in the nearby tool room sought to be placed on an incentive scheme. It was not until 1949 that management was able to devise an individual incentive scheme for their workers. There were no official disputes involving these two groups.

The great bulk of A.E.U. members, employed as maintenance fitters, refused point blank to consider an incentive scheme offered to them in 1950. These fitters frequently worked in close proximity to general workers, many of whom were paid by result. Despite strenuous efforts to persuade the fitters to accept the scheme they remained adamant in their refusal. Their reactions were certainly puzzling to management, and they were not entirely explained by the union officials. The latter were not generally opposed to the introduction of incentive schemes in the factory. At national level the A.E.U. approved of the I.C.I. type of work measured incentive scheme. This did not persuade the men at the plant level to accept incentives. The real explanation for their reaction lay in the ambiguity with which the A.E.U. approached the problem of incentives. Traditionally the union was opposed to payments by results. It had fought many a war with employers against the piece work system. In 1943 the National Committee modified its policy of opposition to incentives. A.E.U. members were then allowed to accept schemes after their district committee gave permission. There was too much confusion amongst the rank and file and too little leadership about the question of incentives, to permit the orderly establishment of union-management relations on this subject.

Sec. 2. Building Trades Unions.

The reactions of building workers were no less perplexing. The bricklayers refused to accept incentives, the painters first refused them and then changed their mind, whilst the woodcutting machinists asked that they be given an incentive scheme. The joiners twice rejected them, but gradually accepted them on a gang basis. For many years the building trades were held together in a fairly tight national bargaining unit, the National Federation of Building Trades Operatives, and it was distinctly opposed to the use of incentives in the building industry. Incentives were forbidden in 1931 under an agreement negotiated within the auspices of the Scottish National Joint Council of the Building Industry. ⁽¹⁾ The N.F.B.T.O. also opposed the introduction of incentives by the government during the war years. After strong pressure by the employers the Federation agreed to accept incentives in 1947. This decision was subsequently confirmed in later negotiations, despite a good deal of heart-searching by constituent organisations.

(1) See V. L. Allen "Incentives in the Building Industry"
- Economic Journal. Vol. LXII, 1952, p.595.

Bricklayers and their labourers were the first to be brought within coverage of the Essential Work Order during the war. Their union, the Amalgamated Union of Building Trade Workers, supported the 1947 decision of the N.F.B.T.O. to accept incentives. Subsequent conferences of the union called for the abolition of incentives. To the leadership there appeared little hope of achieving this as many operatives accepted the schemes on the job. At Ardeer bricklayers steadfastly refused incentives. Their attitude did not change after the 1954 national delegate conference decided to give their executive council the right to control the introduction of incentives. Threats to job security, dangers of redundancy and deterioration of the craft, were the principal objections to incentives. The type of schemes offered were based on an allowed time for a task, and paid on the individual worker's performance.

In 1950 members of the Scottish Painters' Society at Ardeer first rejected an incentive scheme. A year later the previous decision of the local branch was reversed by a large majority. The painters took exactly the opposite view to that of the bricklayers about the dangers of redundancy. Management made no promise that labour would not be displaced. Originally twenty-seven painters were placed on an incentive scheme. Three years later this figure increased to forty-six. The painters' optimism was borne out by events.

One explanation of the change of attitude by the painters was supposed to lie in the initial approach by management, this approach did not immediately bring the local union official into the negotiations. The Scottish Painters' Society was the only union, apart from the T. & G.W.U., that maintained a local office in the nearby town of Saltcoats. The members in Ardeer apparently relied more on this full-time official than on their shop stewards for guidance and leadership, and consequently felt that he had been deliberately left out of initial discussions. Certainly, there was little, if no difference in the details of the two schemes offered. When the local secretary entered the discussions opposition to incentives by his members faded. The type of scheme offered was based on allowed times, but was paid on a group basis, and not on the performance of the individual. The decision of the branch followed the precedent set by the 1947 decision of the N.F.B.T.O. to agree to the introduction of incentives into the building industry.

Shortly after the painters agreed to accept an incentive scheme the woodcutting machinists, of whom there were only seven in the factory, requested management to introduce a scheme for them. Management, wary of the dangers of dealing directly with the rank and file, including their shop steward, first sought approval of their union, the Amalgamated Society of Woodcutting Machinists. The scheme adopted was one based on allowed times and paid on an individual basis. During the period which this research covered there was no formal disagreement about the operation of the scheme.

The really interesting situation developed amongst the joiners in the factory. Along with most other craftsmen joiners rejected incentives in 1950. Before the war the Amalgamated Society of Woodworkers had very strict rules in relation to payments by results. Members caught working for incentives were liable to be expelled. Incentives were first introduced during the war in Admiralty dockyards, shipbuilding and aircraft establishments. In 1947 the Society faced another crisis when the majority of unions affiliated to the N.F.B.T.O. accepted incentives. The A.S.W. later authorised its members to accept incentives on a gang basis. This gave Ardeer management the opportunity to once again attempt the introduction of incentives. The scheme was similar to those already offered to other craftsmen and was considered favourably by the district official. Despite his support the rank and file refused to change their decision. At a meeting of eighty joiners only seven stated that they were prepared to accept incentives.

Then occurred a most startling event. When the shop steward commenced to collect the names of those willing to accept the scheme he received not seven, but so many, that he tore the list up in disgust. It was in the individual's interest to work on incentive, but it was not in the group's interest. A further meeting of the joiners rejected incentives. At last, in 1952, the main joiners' shop was persuaded to agree to a trial of an incentive scheme. Breaking this initial resistance led to a general gang by gang approach; only one gang refused to accept a scheme. This last gang worked in proximity to a large group of general workers who consistently refused to accept an incentive scheme. Perhaps this had something to do with their obstinacy. With this exception, the joiners worked under incentives although they never collectively assented to the introduction of incentives.

Sec. 3. The Printing Trades Unions.

Like the other crafts the printers were traditionally opposed to incentive schemes. In 1949 the printing unions entered into an agreement with the Scottish Alliance of Employers in the Printing and Kindred Trades that their members would co-operate 'in experiments designed to establish the suitability of individual and group bonus schemes in industry'. The Ardeer management was not a party to this agreement, but by convention, conditions of the outside printing industry applied to a considerable extent in the factory. Management sought to bring the printing trades on to an incentive scheme in the following year. The local chapels of the Scottish Typographical Society and the National Union of Bookbinders Paper Workers both refused to entertain the idea of an incentive scheme.

The type of scheme proposed to the printers was different to those offered to other craftsmen. In the first place management proposed altering work practice by reducing the number of assistants that tended the machines. The S.T.A. representatives refused to agree to this proposal. Secondly, management proposed a scheme involving displacement of labour. The General Secretary of the S.T.A. said that it was contemptible for anyone to increase his pay while another man was displaced from a job. The local chapel was empowered to accept incentive schemes, but not one involving redundancy. It was pointed out to the union that productivity came about in two ways: by the existing number of workers producing more articles, or by reducing the number of workers and producing the same number of articles. The schemes offered to the rest of the craftsmen were primarily of the first type, whereas those offered to the printing trades were primarily of the second. The latter type was very much less attractive to the operatives than the former.

Sec. 4. General workers' complex reactions.

Payment by results for general workers in Ardeer was not uncommon. The female operatives employed on production of explosives had been paid by piecework from the inception of the factory. Many other workers were on some form of piecework during the history of the factory. The Bedeaux engineers visited Ardeer before the Great Depression to introduce time and motion study to fix incentives. Very few operations were at this stage placed on incentive. After the depression time and motion study was used to fix the basis of piece work rates to pay the female operatives. During the second world war several thousand general workers were placed on incentives. Some of these schemes survived until the post-war period. It was in this last period that management attempted to place as many general workers as possible on incentive schemes.

(1) Acceptance of a group bonus scheme.

Perhaps the most significant event which occurred in the post-war period at the factory was the building of a mechanised plant to produce blasting explosives. It brought many industrial problems. On a sectional basis it was responsible for a large share of the post-war union-management disputes. No resistance was offered to the introduction of incentives by the men manning this particular plant. The scheme applied was a group one, based on tonnage output, and to some extent calculated by work measurement. It was the only group scheme, covering a large number of personnel, which was not initially rejected by the workers in the post-war period. On close examination there were found special reasons for this behaviour.

The personnel for manning this plant was based to a large degree on seniority; the men were selected from those who worked on the old section of the department. This section, producing explosives by traditional methods, was not covered by an incentive scheme. Management made it clear to the men transferred to the new mechanised plant that it required them to work on an incentive system. This proposal was never questioned by the workers or their union. The team which finally came into existence was a new social grouping. In particular the norm of production was greatly changed, and the new team showed a willingness to set their pace in order to benefit from the bonus scheme. The section gradually built up its own entity, its own leadership and strived to improve the details of the incentive scheme by further negotiations.

Another reason which explained why this particular group scheme was accepted, was the absence of a redundancy problem. As the team was new, no one was faced by redundancy. The number of workers for the new team was set in relation to anticipated output. If output was reduced for any period of time then the normal seniority clauses governed the transfer of excess personnel. Workers were temporarily transferred to the older section, where with their long service, they promptly 'bumped' someone with less seniority. To the workers there appeared to be none of the usual uncertainty that shrouded the introduction of an incentive scheme into a well established section. The technical details of the scheme were worked out in advance, sent on paper to the local union official, and explained to them by management officials, including no less a person than the Chairman of Directors of the Nobel Division. In subsequent years there followed a great deal of negotiations over the operation of the scheme, which due to certain technical reasons was amended from time to time. Only once in six years after its commencement, did the workers seek to return to a system of payment, and that action was taken only after a nerve-shattering explosion, followed by a strike.

(ii) Initial rejection of group schemes.

The more or less perfect conditions, which prevailed when the group incentive scheme detailed above was introduced, did not exist in other departments in the factory. Opposition to the introduction of group schemes was the rule, not the exception. The following three examples took place in chronological order, and subsequent to the events described in the preceding sub-section. Three departments in which management sought to introduce incentives had somewhat different patterns of social relations. The first department was mainly staffed by women and girls, the other two by men. The first and the third were relatively new departments, having been transferred to Ardeer from other parts of the country shortly after the depression. The second was an original part of the factory. From the viewpoint of union membership the first was weak, while the other two were strong, particularly

the third, which gave the T. & G.W.U. its present branch secretary. The processes in the first and the third were moderately dangerous, but working conditions were generally more odorous in the second. The reason for the initial rejection, and subsequent reversal of the workers' decisions, did not lie in the department's social or physical environment.

The groups of general workers, with the important exception of the traditional blasting workers, changed their minds to accept incentives. The local official of the T. & G.W.U. went through the motions of negotiating over the terms of the scheme. Usually the branch succeeded in reducing the numbers of workers to be displaced. Sometimes it obtained improvements in the incentive rates. Probably the most important feature about this situation was the existence of genuine negotiations, to convince rank and filers that, under the scheme, they secured beneficial rights, as well as the obligation to work harder. Workers saw that they were given 'safeguards', and so they accepted the scheme. The piece workers and those on the mechanised unit made considerable bonus earnings. The T. & G.W.U. was not opposed in principle to incentives, and the local branch was able to negotiate a good agreement.

There was one common characteristic of the schemes offered to the workers. All schemes were based on the principle of reducing the number of existing number of personnel. Fear of displacement was clearly the reason for initial resistance by workers. Other reasons were secondary in importance. For example, the first department was offered its incentive scheme when the union sought an increase in time rates. This was not a particularly favourable atmosphere for gaining acceptance for an incentive scheme. The workers apparently had second thoughts, and in the following year reversed their decision - much to the astonishment of the local union official. Similarly, after a time lag the other two departments reversed theirs. There appeared to be comparatively little change in the details of the schemes offered to the first and the second departments. In the case of the third department there was some union-management bargaining about the numbers to be displaced, and the scheme was made more attractive. Despite these minor factors the workers' decisions to accept the schemes were related to their new assessment of the displacement of labour.

(iii) Refusal to accept incentives.

One important group of general workers steadfastly refused to accept an incentive scheme. This group worked in the oldest section of the factory producing explosives. Their reaction was one of the most puzzling features of the whole study at the factory. Management was unable to fathom why the workers continued to refuse incentives. The scheme was based on a large cut in personnel. This explained a good deal of the opposition. The bonus earnings possible under the scheme were not large. A maximum bonus of less than one-third of hourly rates was proposed due to the technical nature of the

plant. After negotiations it appeared as if the workers would follow the course of reaction of other departments. The workers had second thoughts and agreed to a trial of four weeks. The men temporarily displaced were deployed from the department according to their seniority. The men worked on incentive for a week longer than the trial was authorised, when it came to a grinding halt due to one of the shifts refusing to work at all - until the incentive scheme was withdrawn. The violent end was easily explained. The workers thought there was a breach of faith in allowing the scheme to continue for the extra week. Union and management had agreed that in the event of the men rejecting the scheme the method of production would revert to that existing prior to the introduction of the scheme.

Table VIII

Table of Bonus Earnings under Proposed Incentive Scheme

Ardeer Gelatine SectionBlasting Department

Weighted Average Job Basic Rate - 3/2¹d per Hour.

<u>Man Hours per Short Ton of Packed Explosive</u>	<u>Bonus/operator/shift</u>	<u>Bonus as % of Average Job Basic Rate.</u>
16.8	7/3d	27.8
17.0	6/10d	26.0
17.2	6/5d	24.8
17.4	6/-	23.3
17.7	5/7d	21.5
17.9	5/3d	20.3
18.1	4/11d	19.0
18.3	4/7d	17.5
18.5	4/3d	16.0
18.7	3/11d	14.8
18.9	3/7d	13.3
19.1	3/3d	12.5
19.3	2/11d	11.0
19.5	2/7d	10.0
19.8	2/3d	8.5
20.0	1/11d	7.5
20.2	1/7 ¹ d	6.3
20.4	1/4d	5.3
20.6	1/- ¹ d	4.2
20.8	-/9d	3.2
21.0	-/6d	2.0
21.2	-/3d	1.0
21.4	Nil	Nil

Source: Division Work Measurement Section, Ardeer, March 1952.

The workers then voted to return to the old method of working and be paid by time. When the old complement came to be restored it was found impossible to reallocate the actual individuals who were originally displaced. During the course of the trial these had taken jobs in other departments according to the 'turn list'. The apparent interest in keeping one's personal job was not therefore of any great influence in the workers' decision. At the same time this group of workers was large, and it probably took a longer-run view of the situation than a smaller group. Where would displacement lead in the future? Where would they, their sons and friends secure jobs if the factory did not increase its intake of labour? In short, there

was an objection to the introduction of incentives on principle, as there had been for many years by the whole of the trade union movement.

There were perhaps contributory reasons. Earnings under the scheme were not particularly attractive compared to the bonus earned on the mechanised section of the same department. The men also complained that they were forced to work too hard under the new scheme. Work in this section was never at a particularly fast rate. The original manufacture of explosives did not lend itself to speed. A non-monetary incentive scheme existed in the section before the last war. Workers were allowed to leave the factory when they finished their task for the day. This privilege was withdrawn by management when the department went on shift work to meet increased production requirements. Workers did not altogether applaud this change in working conditions - and it did not increase the rate of work. A small bonus was paid for producing an extra batch of production.

The original idea for a monetary incentive scheme came from the national official of the T. & G.W.U. in 1950 when management refused to concede an increase in the time wage. The men turned down the idea. The local union official did not bring the trial period in 1952 to an end, for he believed his members would gain by working on incentives. The informal group, although it never challenged the official leadership, had their way. From time to time management attempted to introduce the scheme again. The local union official was in favour of dropping the idea for fear of accentuating the members' difference of opinions. A ballot was held amongst the membership but the majority, 154 to 37, were clearly against incentives. In 1954 when the question was discussed again, an explosion occurred in the mechanised section. The latter decided to forego working on bonus, so the older section promptly rejected any introduction of an incentive scheme. The men on the mechanised section went back to work on bonus, but the others did not reconsider their decision. So the disparity of earnings remained between the two sections.

(iv) Acceptance of individual schemes.

There was no resistance to the introduction of individual or small group schemes. Between 1948 and 1954 no less than twenty-five schemes were introduced to cover groups of workers of less than ten. A further ten schemes were introduced to cover groups of workers of between eleven and thirty. These schemes tended to fill in the gaps left by the application of the larger group schemes. The number of workers covered in a particular group scheme was to a large extent dictated by the technical facts of production. Not one of the group schemes covered the total personnel in a department. Although the Central Work Study Department of I.C.I. (F)

(F) See B.I.M. 'Conference on Work Study', p. 36.

favoured the introduction of the individual scheme it was found impossible to apply this principle in Ardeer, simply because of the difficulty of separating and measuring the content of each job in a production line.

Of the individual and small group schemes introduced, twenty out of thirty-five involved some displacement of labour. The prospect of increased earnings overrode the fears of redundancy. In any case, general workers, unlike the draftsmen, had a well established system of seniority to deal with problems of displacement and demotion. General workers were well-conditioned to accepting degrees of redundancy, for it was taken care of in an equitable fashion. To them, removal of personnel due to the introduction of an incentive scheme was no different to any other change in the production schedule. The craftsmen had no such protection. They did not know who would be displaced or where they would find a job. The general worker simply went back to the labour pool and was re-allocated to another turn-list when the opportunity presented itself. This job security agreement was sufficient to dispel the fears of general workers.

Conclusion

What motivated the reactions of the groups towards the introduction of incentives? Given their respective terms of reference, particularly the mores, traditions, rules and policy pronouncements of their unions, only two assertions were possible. Those who accepted incentive schemes saw in them a way to increase their pay packets. For this reason individuals or small isolated groups usually accepted incentive schemes. Those who rejected incentives did so, not because they did not want an increase in their pay packets, but on the conditions proposed by management. Fears about job security dominated their behaviour. Group schemes or individual schemes offered to a medium or large group, were usually rejected.

There was some difference in the behaviour of crafts and general worker groups who generally changed their attitude and later accepted the schemes. This was due to two factors. The general workers were well-conditioned to accepting displacement of labour; it was handled by the demotional rules. The craft groups were not covered by those rules, consequently they did not have job security and fears about redundancy remained dominant in their minds. The T. & G.W.U. applied its experience gained from negotiating over piece rates to the new incentive schemes; in particular negotiating over the target at which bonus was to commence, and over the number of personnel to be displaced. The craft unions, with one exception, did not attempt to negotiate improved conditions of the incentive scheme offered; consequently the craft groups did not change their behaviour.

The reaction of some of the work groups to management's proposals to instal incentives schemes indicated another form of breakdown in union control over its members, more subtle than an unauthorised stoppage, but every bit as ominous for the future of union-management relations. When an agreement allowed management to introduce an incentive scheme, the particular details of which were negotiated by the officials of the union, and a group of employees refused to accept the scheme, there was a prima facie case that union authority had broken down; the power of decision-making had moved from the official governing body to the leadership of the informal groups. The behaviour of the men on the old side of the blasting department and the maintenance fitters appeared to fall into this category. Another prima facie case of breakdown occurred when a group accepted an incentive scheme without approval of their governing body, which opposed incentives on principle and refused to negotiate the details of a scheme. In this situation the informal group defied the authority of their governing body.

Introduction

The last chapter attempted to explain the behaviour of the various worker groups towards incentive schemes. The reactions of each group were considered against the background of the rules and policy on incentives of their respective unions. The unions did not go out of their way to persuade their members to accept the schemes. Unions were generally opposed to incentives. They believed that incentives caused redundancy, and this impaired the strength of their organisations. They were suspicious of incentives because they felt the employer obtained an undue proportion of savings resulting from the application of incentives. Incentive schemes were a major source of trouble to the union officials. They had to watch against so-called 'rate' cutting. They were particularly opposed to incentive schemes based on time study because it adversely affected the bargaining function of the unions.

I.C.I. attempted to obtain the national unions' support for work measured incentive schemes it was attempting to introduce in its factories. It invited various union officials to attend an appreciation course on 'Work Study'. Then followed a series of conferences in 1950-51 between the Signatory Unions and I.C.I. to consider the implications of work study. These conferences were a lamentable failure for they did not help the acceptance of incentives on the work shop floor. The intrusion of the term 'work study' was a mistake, and the unions were bewildered by it. They did not seem to know how to bargain with the Company over its introduction. The latter was also at fault as it did not really seem to want an agreement on work study. The conferences were ineffectual as a means of communication. From an analytical point of view the conferences provided important data for deducing principles about fundamental union-management relations. (F)

Sec. 1. National conferences on work study

Work study was a term coined by I.C.I. to describe techniques of management used to improve the overall efficiency of production. According to one expert it was 'the systematic and objective examination and improvement of the factors which directly governed the productive or operational

- (F) The author was indebted to Mr. E. Higgins, Secretary of the Signatory Unions for supplying him with records of the negotiations on Work Study; to Mr. L. Gale, formerly Personnel Director of Nobel Division for arranging for him to attend the I.C.I. Work Study Conference called by the B.I.M. in 1954; and to Mr. E. Fletcher of the T.U.C. for allowing him to attend an appreciation course on Work Study for trade union officials in the same year.

efficiency of any specified activity'.⁽¹⁾ It had two main aspects. The first was 'Method Study' which aimed at improving the effective use of materials, plant, equipment and manpower. This was to be achieved by better layout of plant, by selecting the most economical working procedures and by making more efficient use of human and material resources. The second aspect was 'Work Measurement', which was designed to establish an allowed time to perform a task in order to improve manning, planning and control. It was also to be used as a basis for sound incentive schemes.⁽²⁾ The techniques used in both method study and work measurement were essentially the same as those known as 'motion' and 'time' study.⁽³⁾

There was a good deal of confusion on the part of the unions as to whether work study was something new or not. According to one authority the origin of I.C.I.'s own work study programme dated from the post-war period. The Company initiated a deliberate long term policy of educating management in the techniques of work study. I.C.I. adopted the term 'work study' to cover interrelated techniques and gradually built up a functional headquarter's department to co-ordinate its application.⁽⁴⁾ Although work study, in so far as it was the intensification of good works management, was not technically new, in its public relations aspects it certainly was. It might have assisted the Company in winning over sceptical managerial officials, but the use of new terms did not help union-management relations. One prominent union official claimed that work study looked more like a slogan⁽⁵⁾ than a scientific approach to management. The I.C.I. Chief Labour Officer admitted that the new terminology was not easily understood by the uninitiated.⁽⁶⁾

I.C.I. in its conferences with the Signatory Unions made the point that work study was useful in raising productivity even when incentives were not included in any specific programme. But, contended the Company, the greatest advantage followed from the application of method study, work measurement and incentives. While I.C.I. stated that incentives were not new to the organisation, many union officials suspected that incentives were being sold under a different name - work study. Indeed, I.C.I. told the Signatory Unions that it was its policy to offer incentive schemes to as many of its employees as possible. These conferences discussed incentives, not work study. The unions raised only one point regarding method study. That concerned the use of slow motion films. It was only a minor point.

(1) 'Conference on Work Study', B.I.M., Harrogate, 1954; Introductory talk by Sir Ewart Smith.

(2) J. Grange Moore - 'The field of work study', *ibid.*

(3) P. J. Torrie - 'Method study techniques', *ibid.*
S.L.G. Humble - 'Work measured techniques', *ibid.*

(4) Sir Ewart Smith - 'Introductory Talk', *ibid.*

(5) E. Fletcher - 'Work Study and the Trade Unions', *ibid.*

(6) E. T. Grint - 'Work Study and Labour Relations', *ibid.*

Apart from the confusion which arose over the use of terminology there were other reasons why the conferences on work study were ineffective. The timing of the conferences was important in so far as the case study of Ardeer was concerned. Most of the craftsmen had made up their minds what their attitudes were to incentives. By the time the last conference was held in September 1951, the craftsmen had all held second meetings and decided either to reverse or endorse their original decisions. There was not one shred of evidence which showed that the conferences held nationally on work study had any effect on the behaviour of the workers on the plant at Ardeer. The conferences were neither useful as negotiations nor as consultations in removing workers' objections to incentives. Although the Company stated that it was prepared to consult with the unions over the application of work study, as one union official pointed out, this was a little late as incentives had already been offered at factory level. One union official even expressed surprise that his members were working on incentives, although he had no complaints about them.

The final resolution adopted by the Signatory Unions on Work Study was full of loopholes and did not even refer to incentives:

"The Signatory Unions note the safeguards contained in the agreed document (which summarised the conclusions reached in the discussions) which have met some of the objections raised by the Signatory Unions. It is noted that the extension of Work Study is a matter for local agreement, and is subject to the rights of constituent unions to negotiate on matters which contravene their separate constitutions or national policies. Subject to these reservations this meeting of representatives accepts the general principles of Work Study".

It was obvious from this resolution that the Signatory Unions did not wish to force their constituent unions to accept incentives. Indeed provision was made in the resolution to recognise the right of the local negotiation machinery to deal with problems associated with work study. In effect this recognised the right of groups of workers to decide whether or not they would accept incentives. The resolution did not change the status quo. Only some of the objections of the unions were met by the Company. Broadly speaking, the acceptance of the general principles of work study was meaningless.

When the unions first met I.C.I. to discuss work study they mentioned the possibility of having a national agreement on the subject. They did not quite see how it was to be accomplished. I.C.I. then pointed out that existing agreements already covered the position: (1) under the agreement relative to working conditions provision was made for submitting incentive rates to workers; (2) under the 1947 negotiation procedure workers were empowered to reject the rates offered and bring their union officials into the discussion; (3) schemes affecting large numbers of workers were usually submitted to the local union officials according to the negotiating procedure; (4) bonus payments were made in accordance with the agreement on working conditions; (5) the latter also defined the circumstances by which it was permissible to alter rates.

A few minor points were agreed to during the conferences on work study. On the whole there was no positive bargaining and so no positive resolution. The Company attempted to explain technical points which it hoped the unions would use to persuade the members to accept incentives. The unions, who were divided amongst themselves in these conferences more than usual, did not seem to know how to bargain over work study.

Sec. 2. Displacement of personnel.

I.C.I. took the view that there would be some initial displacement of labour due to work study. According to a Company spokesman history showed that such displacement was temporary, and in the long run benefited the community's standard of living. It drew on a T.U.C. report by a team of British trade unionists who investigated the role of unions in increasing productivity in the U.S. This report stated that a rising standard of living was obtained from labour-saving machinery, technical progress and skill. Redundancy of workers was an inevitable consequence unless increased production enabled the immediate re-absorption of displaced workers. The report contended that redundancy was not unemployment where full employment existed in the economy. Unions were called to recognise the need for taking a flexible attitude towards the mobility of labour. I.C.I. hoped that these broad arguments might have won the unions' support for work study in its factories.

The arguments were not only profound, they were also irrelevant. So far as Ardeer was concerned there was no evidence, as seen in Chapters V and VI that unions opposed the introduction of new machines or technical improvements. They sometimes opposed changes in work practices and work loads. From management's viewpoint a saving in labour cost due to the introduction of a new machine was much the same as a saving on the wages bill due to the introduction of an incentive scheme. For the workers there was a vast difference to being paid by time rates as compared to incentives. For the health of the British economy any improvement in productivity was desirable. As the last Chapter showed, many workers accepted displacement of labour in their sections, but on certain conditions. Those who rejected incentives did so, not to hurt national production, but because they were dissatisfied with the particular working conditions the management proposed introducing.

It was the fear of being declared redundant that motivated the employees on the workshop floor to refuse to accept incentives. Opinions expressed by the various union officials at the national level substantiated this conclusion. The A.E.U. representative felt that while workers took into account the probability of higher earnings, against this had to be set the possibility of certain numbers of them losing their jobs. The representative of the T. & G.W.U. believed that the workshops rejected the incentive

schemes because there was no national agreement governing the displacement of labour. The Signatory Unions wished to know whether I.C.I. proposed finding suitable alternative employment for those displaced, and whether this would be accomplished without loss of earnings. This latter question was not pursued by the unions during these conferences.

In its reply I.C.I. stated that it was taking all reasonable steps to avoid discharging workers due to the introduction of work study. Because of the normal rate of turnover I.C.I. believed it was generally possible to re-absorb any displaced labour, although in some circumstances a certain amount of redundancy was possible. It proposed that any displaced workers be found alternative work in other departments of the same works or in other I.C.I. establishments. It also stated it would not replace personnel on a particular operation immediately preceding the application of work study. But no agreement was concluded on these items. So far as Ardeer was concerned general workers had some control over the deployment of labour, so these 'undertakings' - as they were called - had little or no effect on the workshop behaviour. The undertakings certainly did not have the same effect as a union-management agreement. The Ardeer workers in the blasing department obtained the local management's assurance that it would not remove any of the personnel before the department went on to incentives.

The Company also proposed that where an individual worker lost his job through the direct result of the introduction of work study 'he or she would be eligible for consideration for the payment of a gratuity'. For many years I.C.I. stated that it gave sympathetic consideration to the payment of gratuities to individuals who lost their jobs on account of the permanent closing of plants, or the introduction of new methods in the interests of efficiency. Such payments were designed to reduce hardship. No payment was made to workers due to a recession in trade or for other reasons outside the Company's control. The representatives of the unions at the time of the discussions about work study wanted to know whether there was a definite scheme. This could have been a negotiable issue.

The Company was opposed to writing this matter into an agreement. Payments were to be made on the merits of each case, and were to be related in particular to the possibility of finding suitable employment in the locality. In this way the payment was to be a windfall at a time of need. This proposition had some attraction for the individual from a taxation viewpoint. The Chief Labour Officer of I.C.I. stated in 1954 (7) that it had not been necessary to make one payment. Whether he was entitled to

(7) E. T. Grint. B.I.M. Work Study Conference, Harrogate, 1954.

conclude that widespread publicity of this promise fostered a favourable atmosphere for the workshop to accept incentive schemes was seriously open to doubt. When a payment of this type was left solely within management's discretion the more cynical unionists were inclined to doubt the whole idea. It smacked too much of paternalism.

Sec. 3. Distribution of savings.

It was apparent to the workers that when they accepted incentives the Company saved the wages of those removed, saved a considerable amount of overheads, and at the same time had the benefit of increased production. According to the representative of the T. & G.W.U. 'certain inconsiderable' increases in earnings then followed which gave little satisfaction to the workers. The rest of the workers then quipped: 'Well, if that was what work study meant - you've had it'. The workers also wanted to know what happened to the saving in costs. The unions were not able to tell them. On receiving a copy of the Company balance sheet they showed it to the union officials and commented: 'Well, that was where it went'. The workers were primarily concerned with their pay packets and pressed their unions to obtain higher wages for them. While union officials saw it was their role to improve wages, they were bewildered as to how work study fitted into the bargaining relationship.

The company labour officials were very surprised that these questions were being asked. They acknowledged that sometimes groups of workers did see savings effected by a particular scheme, which were considerably in excess of the bonus earnings paid to the workers. But the Company representatives contended that no improvement in efficiency was possible if unit costs were increased all the time. One union official had a hedonistic reply to this: 'The individual tried to take advantage of the position to get more'. The Chief Labour Officer of I.C.I. asked: 'Was this purely a selfish approach on the part of the individual?' Another representative of the Company was astonished that these questions were asked by workers in the year 1950. 'Had not the unions the lead of the T.U.C. who were fully aware of the state of the economy? Was it not possible to educate union officials who would inform the workers of the answers to these questions?' But the age old argument over the distribution of industry's receipts was not solved by an appeal to national economic patriotism. The spokesman for the Signatory Unions replied that the questions about the distribution of savings had been raised ever since he worked, and obviously the answers given by employers were unsatisfactory, or otherwise they would not be still questioned.

Because the union officials did not understand the impact of work study on union-management relations they did nothing to bring reality to the situation. The discussion of these conferences dealt a great deal with academic arguments in the sphere of labour economics. These did not solve the problems which confronted unions. The Company should have given

attention to formulating additional terms for working conditions created or altered by the introduction of work study. The unions thought the answer lay in persuading the Company to adopt a formula which would have apportioned the savings to a general improvement of wages, additional capital expenditure for mechanisation and reduction of consumer prices.

To be fair to the Company representatives, they told the unions that the problem was being looked at the wrong way. Various agreements already governed the payment of wages. Under the 1938 agreement relative to working conditions, the method adopted provided that incentive rates were to be so fixed as to give workers of average ability a third bonus of their hourly rates. The hourly rates were subject to national bargaining. In determining hourly rates, such things as skill required to perform the job, working conditions, cost of living and the overall prosperity of the Company were considered. Incentives were intended to recompense the individual worker for additional effort which resulted in increased output. According to the type of scheme, direct labour savings were shared equally between the employees and management, as in the standard hour plan and piecework. In other schemes, workers shared at a less than proportionate increase with management in the increase in production. Savings in indirect costs, which were considerable when many workers were placed on incentives, accrued to the Company.

If the unions thought that the above conditions were unsatisfactory then they should have bargained for an improvement in these national agreements, or insisted on a higher rate of sharing in direct labour savings or even in indirect savings. But they did not do this. They did not try to improve the bargain, so the conferences lost direction. The union officials stated that it was a little difficult to convince workers that the position, as outlined by the Company, was already covered by existing agreements. The real trouble was one of terminology. Workers were asked to accept incentives. When work study was also mentioned they became confused. The workers were quite justified to demand the establishment of some principles to cover the use of work study, for example, by asking what happened to the savings. It was the union officials who were at fault for not perceiving the true nature of the problem; and the Company confused matters by introducing the term 'work study'.

This last mistake could have been rectified at the factory floor had the union officials simply reported back that the position was satisfactorily covered by existing agreements. Workers would then have known where they stood in regard to existing rights and obligations laid down by these agreements. The situation was made still more confusing by the distribution of a pamphlet which set out a rather elaborate account of the 'capitalist' method of production. This pamphlet was entitled 'The Implications of Work Study'. Although it contained some interesting information on some aspects of work study, as a means of communication on the distribution of savings, it was misdirected and was probably incomprehensible to the average worker.

Sec. 4. Safeguarding bonus earnings.

In the I.C.I. agreement management was forbidden to alter incentive or piece rates except under three well-defined conditions: an error in calculating the rate, a change in wages and working conditions declared to affect piece rates, and a change in material, means or method of production or otherwise in the specification of the job. It was only in the case of the third conditions that discussion arose over the application of work study.

The Company defined the ways in which changes in jobs arose. These were changes introduced by management, changes improvised by workers, and an accumulation of minor changes due to management and workers. The unions agreed to the right of management to re-assess the rates for a job when it was changed. The national agreement provided that rates were not to be altered so as to reduce the bonus earnings of the workers employed on the same jobs. Yet it was these changes, introduced by management, which caused the greatest number of disputes at Ardeer. It was impossible for the parties to resolve these issues at the national level, for every dispute involved factors which were closely related to the particular workshop.

The improvisations introduced by workers gave little practical difficulty at the factory level, but caused considerable controversy in the national discussions on work study. The principal union objection to the alteration of rates following an improvisation by the worker was that it robbed him of the fruit of his ingenuity. The work study engineer did not always perfect a method; the worker sometimes found a more efficient way of doing a job. As the incentive rate was fixed on the basis of rewarding the worker for additional effort, it was easier for him to earn a given bonus after improvisation than before. This meant that he was able to earn more than his fellow workers. The Company considered this inequitable, and thought that this was one of the reasons why incentive schemes became unpopular. I.C.I.'s scheme aimed at a fair day's pay for a fair day's work.

The Company proposed rewarding the operative who made the improvisation a lump sum under its Awards Scheme, which was not subject to negotiation. The unions generally opposed this as the worker got a short term benefit while the Company received the benefit for all time. The unions claimed that under these proposals the intelligent worker was penalised while a worker with brute strength was able to earn as much as he wanted. This was one of the fundamental problems of paying incentives on effort exerted, rather than on value produced. There were no schemes in Ardeer based on this latter principle.

I.C.I.'s proposal to alter incentive rates as a result of accumulated minor changes introduced by management and workers, was also challenged. The E.T.U. representative complained that the Company intended to keep a close watch on the workers in order to exploit their initiative. The Company denied that it wished to re-assess rates immediately there was some increase in operator efficiency. It merely wanted to secure the right to alter rates when they ~~were~~ manifestly out of line for some time. I.C.I. pointed out that it was not always possible to study the effect of every small job change in order to arrive at a new rate. It did not wish to add to the burden of union-management negotiations by arguing over inconsequential changes in incentive rates.

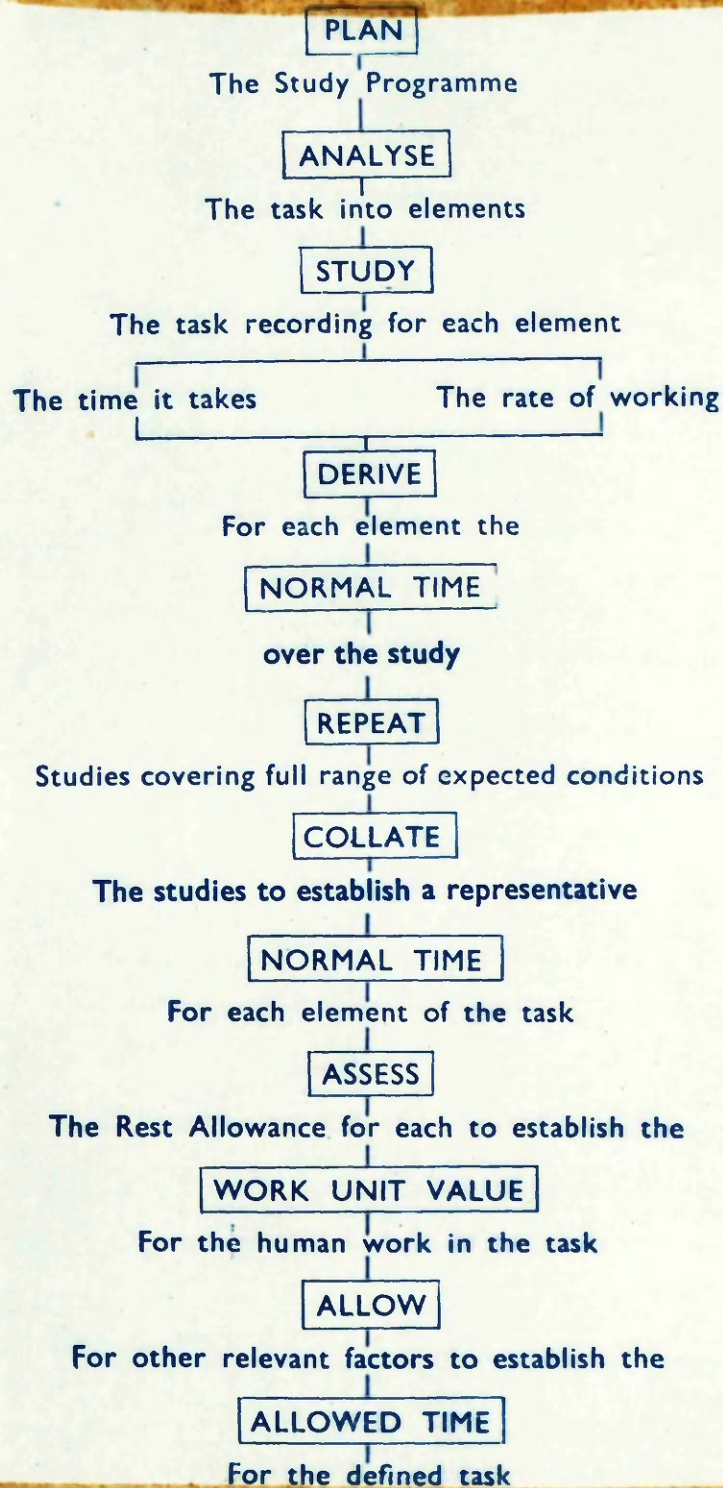
The Company then offered to allow all incentive rates to remain unaltered for two years from the time of their assessment. The unions did not seem to think that this offer was quite good enough. The Company then offered to compensate workers by paying them a lump sum equivalent to the difference of earnings under the old and new rates multiplied by six months. This was accepted by the unions and was one of the few - if not the only negotiated point - in the whole of the national conferences on work study. Only once did a local dispute at Ardeer make reference to this principle - so the fears of the unions were not substantiated in fact.

Sec. 5. The technique of rating.

I.C.I. used work measurement in the determination of allowed times for the workers to complete their tasks or targets. In order to determine a time schedule for paying bonus it was necessary to determine a 'normal' time for doing a particular job. The most direct way of doing this was to stop watch an operative in the performance of his task. Such a method was subject to two types of errors. Firstly, the number of timings were not always sufficient to eliminate errors made during the study. Secondly, the sample of times taken were not necessarily representative of the overall work performance of the operative. Given sufficient readings it was statistically possible to correct the first error. It was only possible to tackle the second error through a technique known as 'rating'. A subjective assessment was made of the speed with which the operative performed his task so that account was taken of slow, average and quick workers. Individual judgment frequently differed over the speed of an operative's work. There was no scientific way of avoiding the problem of rating. In addition to these two problems, allowance for compensatory rest and personal needs had to be made in the allowed times. It was not possible to come to an exact method of determining these allowances.

Figure 3.

SEQUENCES IN A DIRECT TIME STUDY.



Source: B.I.M. Conference on Work Study.

Any mistake made in the reading of the times, the rating of the speed of work, and the allowance made for compensatory rest had a direct bearing on the ability of the worker to earn sufficient bonus. A time allowed which was too 'tight' made operatives work too hard, or they did not earn their customary bonus. A time set too 'loose' had the reverse effect. In the conferences dealing with work study the unions were of course interested in preventing the setting of tight times. In this they concentrated their attention to one aspect of time study - the technique of rating. They did not attempt to argue about the number of readings that were to be taken, nor did they attempt to set some formula for determining allowances for compensatory rest. The argument which developed over rating arose late in the course of the conferences. It was obvious from discussions that some union officials did not understand the nature and defects of time study.

Most, if not all union officials understood that there was some subjective element involved in the technique of rating. For this reason they stated quite categorically that they regarded the times set by the time study engineers subject to negotiation. (8) The unions elaborated their objections to time study by concentrating their attack on rating. Some felt that in a cost squeeze the time study engineer might be tempted to make times tighter by rating the operatives at a lower performance level than was actually the case. Using a change in the job as an excuse the times could then be altered and the bonus of the workers cut. For these reasons the E.T.U. in particular urged that the old-fashioned method of timing the average worker to do the job, was a more satisfactory way of tackling the problem.

I.C.I. in its reply admitted that an element of judgment was involved in assessing the speed of an operative's performance. It was therefore prepared to negotiate over the times assessed by its work measurement sections. Timing an average man was not a solution to the problem. Picking an 'average' man was practically impossible. I.C.I. claimed that the techniques it used were superior to the old ones. A great deal of data was being collected and analysed, and through this approach the margins of error of time study were considerably reduced. Work study was an improvement on previous practices, and was more likely to result in fixing equitable incentive rates. I.C.I. certainly did not attempt to circumvent the problem of bargaining.

- (8) The most thorough analysis yet made of time study concluded that modern industrial time study had no claims to scientific accuracy. At best time study was an empirical guide to set up a range of values within which collective bargaining could take place. See William Gombert: 'A trade union analysis of time study'; (Science Research Associates, Chicago, 1948).

Sec. 6. Piece work -v- incentives.

Groups of workers were hesitant about accepting incentive schemes because they feared for the security of their jobs. Incentives were also unpopular because workers claimed that they did not receive a satisfactory share of the increased production or savings in costs. This latter reason was secondary. It was possible for the unions to improve the bargain and obtain a larger bonus for their members, and also safeguard this bonus against fluctuations by improving working conditions. Although the Signatory Unions did not succeed (they really did not even try) in obtaining any worthwhile improvements in the conditions applying to incentives, at the local level the T. & G.W.U. at Ardeer did obtain substantial improvements in individual incentive schemes. Local T. & G.W.U. officials had experience in dealing with piece work. They applied this knowledge to bargaining over incentives, and so a lot of hostility by general workers to incentives was reduced. Most craftsmen were not won in this way, for they saw no improvements being bargained by their unions - so their fear of redundancy remained dominant.

The craftsmen were not encouraged by their unions to drop their opposition to incentives. The craft unions, as institutions, and distinct from their member groups on the factory floor, were generally opposed to payment by results. Paying by results gave the unions more bargaining troubles than did time rates of pay. It was relatively easy to settle on a figure by which the hourly rate for a given category of workers was to be changed. Once this amendment to an hourly rate was agreed all workers understood exactly, within the limits of interpretation, the wage rate that they were to be paid. While it was possible to lay down general conditions surrounding incentives each scheme needed particularisation because of the difference in the physical methods of production. This meant less control by union officials over the working conditions of their members, which in turn implied less control over the bargaining situation. Incentive schemes based on work measurement were considered by many unions to be a threat to their central function of negotiating. Piece work, although not as desirable as time rates of pay, was not considered by the unions to be quite so dangerous to their functions as were incentives.

The hostility to incentives per se became very evident in the series of conferences on work study. The E.T.U. in particular argued that the system of piece work was a better method of payment than a work measured incentive scheme. It was for this reason that it proposed timing an average man to do the job. This argument was misinterpreted by the Company representatives. The union was referring to a system of union-management relations. In contending that work measured schemes were better than piece work, I.C.I. was referring to the accuracy of the techniques used in assessing the work content of a job. This was a qualitatively different argument. As neither side seemed to realise this distinction, feelings became heated. I.C.I. accused the E.T.U. of suspecting its whole scheme of

work study. The union cried that the Company was trying to turn its workers into robots. These emotional overtones, coupled with a lack of direction of the conferences, did not assist the Company in breaking down union resistance to its incentive schemes.

Piece work was generally more attractive to unions than were incentive schemes based on work measurement. The unions were familiar with bargaining over piece rates. Bargaining over the so-called 'scientific' schemes was unknown to many of the officials. The scientific schemes were inherently more difficult to understand. The unions felt that the Company had a definite advantage in using time and motion study. The unions did not have the staff resources to make their own studies. Accordingly they did not know all the facts in the situation. It was possible for them to be dazzled by science. Under the piece work system the workers merely complained that they did not earn sufficient bonus and they demanded a re-assessment of the piece rates. They were not concerned with arguing about the work content of the job, the validity of the time study or the amount allowed for compensatory rest. The piece rate structure was primarily built from negotiations. The incentive schemes based on work measurement appeared to the unions to be determined by management alone.

To some extent the unions were correct in their attitude. The development of the piece rate structure at Ardeer was more favourable to the operatives than were the work measured incentive schemes. The Company argued that work measurement allowed workers to be paid according to the effort they put into the job. It contended that even with its technical deficiencies work measurement produced more equitable results in wage payments than did traditional piece work. To the unions the use of work measurement tied the negotiations down to narrow limits. This was not necessarily an impairment to the unions' central function of bargaining. In the final analysis all disagreements, whether over incentives or any other question, had to be ultimately resolved in narrow limits. Given reasonable militancy on the part of their members in the workshop, and a general competency of their local officials, there was no reason why the terms of work measured schemes could not be made just as favourable as the piece rate structure. The basic consequences of either method of paying by result were substantially the same.

Conclusion

The conferences on work study were largely ineffective for they reached no positive agreement about the way incentives were to be installed and maintained. Only one or two minor points were negotiated; and even here there seemed to be doubt in the union officials' minds as to whether they had really negotiated some new conditions. The trouble lay in the behaviour of the representatives of unions and I.C.I. The union officials did not present any claims to the Company, partly through ignorance, and

partly through confusion due to the tactics of the Company. Work study was a confusing term, and by nature difficult to understand. The Company attempted to get the best possible terms, and gave virtually nothing away; the unions gave in return a hazily worded resolution which did not bind the Signatory Unions nor their local organisations.

The Company officials believed that the existing agreements already covered the position; in actual fact the agreements appeared inadequate to the groups on the factory floor. As no new agreement came into effect the governing bodies of the Signatory Unions their branches or members were not bound to change their attitude to incentives. An agreement setting out rights for employees would have helped to change the attitude of the craft groups on the factory floor towards incentives. If behaviour was to be changed, then the governing bodies had to do this by formal means not by mere consultations with their rank and file.

The conferences on work study were consultations rather than negotiations. The Company officials hoped that the union officials would persuade their rank and file to accept incentives by using the arguments that were advanced by the Company and ultimately printed in pamphlet form for distribution to union members. Their hope was incapable of achievement for two reasons. Firstly, because they made no decisions consultations were inherently ineffective by comparison with negotiations which came to decisions about rights and obligations of the parties. Secondly, informal means of communication in the union organisation were less effective in changing member behaviour than the formal lines of authority that laid from the governing body to the union members. The terms of a new agreement were transmitted along the formal lines of communication. News about the conferences on work study only filtered through to the rank and file and made no definite impression on their conduct.

Introduction

In 1948 17 percent of male and 68 percent of female workers at Ardeer were paid by result, most of the females being paid by traditional piece work. By 1955 the respective percentages had risen to 35 and 80. Most of the operatives paid by result were general workers, although there were some craft groups on incentives. These included the painters, joiners, boiler-makers, blacksmiths, and fitters in the engineering toolroom and general workshop.

The two groups of workers responsible for more than half the disputes about payments by results were the female pieceworkers and the men on the mechanised unit. The piece rate structure reached a complex and sophisticated stage of development in the post-war period. The incentive scheme which covered the mechanised unit required a considerable amount of adjustment after it was introduced in 1948. The group schemes which were introduced into other departments did not cause a great deal of trouble. The schemes which covered craftsmen were relatively trouble free.

The clauses which were included in the I.C.I. agreement relative to working conditions were comparatively simple. They laid down rules which governed the ratio of the bonus earnings to the hourly rate of the job, and the procedure to be followed when rates were re-assessed due to change in job methods. These provisions were left intact by the conferences on work study, although there were one or two modifications of provisions in the earlier agreement. The installation and maintenance of incentive and piece rates were basically problems for the factory management and for negotiations at local level. Each scheme had to be built up separately, and for this reason many conferences were called to discuss piece work, and incentives at Ardeer in the post-war period.

Sec. 1. The spread of payments by results in Ardeer.

The installation and maintenance of incentive and piecework schemes transferred much of the power of settling union-management relations from national to factory level. Incentives and piece rates at Ardeer were largely fixed through the use of time study. Both incentive and piece rates, of which there were over two hundred in the factory, were built up from an analysis of the jobs. This was done by the special work measurement section. The formal negotiations with the union were conducted by the factory management on advice from the labour office and the work measurement section. Negotiations on piece work were over monetary rates, while those on incentives were supposedly over the allowed times to perform given tasks, but there was little difference in the process of the negotiations.

Under the I.C.I. schemes the operations of jobs had to be analysed; on some occasions extensive modifications were made to plant and equipment. Group schemes in particular required a considerable amount of study, even individual operations needed some study in order to determine the time to do a specified task. It was impracticable to apply the same scheme to jobs which were slightly different in methods, or produced somewhat different products. The technical facts of production determined the nature of the scheme. Group schemes were used to cover large numbers of workers where the operations were inter-locked. Even piecework was performed on a small group basis because of certain characteristics of the lay-out of the operations. The extension of incentive schemes proceeded somewhat spasmodically, depending on the ability of the work measurement section to study the job, the nature of the job and the reaction of the operatives to the details of the incentive schemes proposed. Even when the operatives agreed to the principle of study, it was still necessary for the details to be negotiated with the union.

The most important incentive scheme introduced in the post-war period was that covering the mechanised unit in the department producing blasting explosives. The unit commenced operations in 1948. The unit was staffed by male workers selected from the old gelatines section of the department. Until the incentive scheme was prepared the men were paid an interim bonus. Such a payment was not a normal feature of Ardeer incentive schemes, but in the mechanised unit some relatively senior operatives had taken lower paid jobs in order to participate in the bonus earnings later to be won. The scheme provided for a bonus of forty-two percent of job rates. The union succeeded in securing a reduction of the target at which the operatives commenced to earn bonus. Work measurement was not used to determine these targets as information concerning output levels was available from other countries where similar plant was in use. There were subsequent negotiations concerning the targets of the scheme to allow larger earnings.

A separate scheme was formulated for the packing operations in the mechanised unit however as the result of production there was considerable modification of the number of personnel originally required to man these operations. Disagreement arose, and the operatives agreed to the use of work measurement to study the ratio of personnel to output. Difficulties arose with packing operations, and bonus earnings were not high. A considerable time was spent studying the operations. In 1949 management offered a scheme which permitted the packers to earn bonus at a slower pace of working. Although the bonus for packing operations was originally kept separate from the bonus earned on other operations, the two were ultimately pooled. In 1953 the pooled bonus was approximately forty-two percent of average jobs rates.

Most of the female operatives employed in the department producing blasting explosives were paid by piecework. These operatives were employed on cartridging and packing of explosives. Cartridging was the operation by which the mass of explosives material was cut into sticks of gelignite and dynamite. Various methods were used; some machines were worked by hand, others driven by power. Packing operations were also performed by female operatives on the old side of the department. On the mechanised unit both the cartridging and packing operations were performed by men. It was the threat of loss of employment through the use of mechanisation and the replacement of females by males that led to difficulty in adjusting piece rates in the post-war period.

The piece workers at Ardeer had a distinct social history. The female operatives were paid by piece from the time the factory commenced operations. The men who worked on the old side of the department were paid by time rates. The female operatives developed their own set of attitudes and social leadership. For many years they conducted negotiations through an oligarchy which was composed of the most senior workers. The oligarchy's hold was broken by the recognition of the shop stewards. Few piece workers were members of the general worker union until the days of the second world war, and they did not become completely organised until the explosion of 1950.

Strong informal group behaviour persisted despite union organisation. Groups of pieceworkers were extremely earnings' conscious and any factor which interfered with their capacity to earn bonus was strongly resented. When there was a production hold-up or a breakdown in machines they demanded special compensation. When they were paid a composite rate for products of various sizes, which required different efforts to produce the same amount of bonus, they urged a re-assessment of the rate. When the targets were reduced they demanded the removal of excessive personnel. When the pieceworkers felt that the task was too hard they demanded additional help, at the same time demanding an upward re-assessment of rates to permit them to earn as much bonus as before. When the work team included learners, instructresses and inspectors they secured special rules to govern their payment. When the differential job rates were altered they demanded a re-assessment of rates. The piece workers at Ardeer succeeded in obtaining very favourable conditions which allowed them to earn high average bonuses, higher in the main than those earned under the newer incentive schemes.

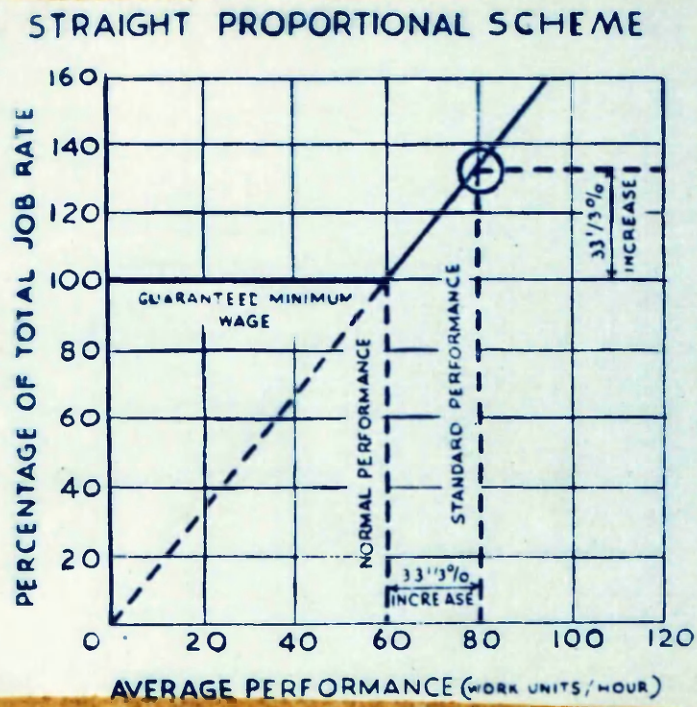
Sec. 2. Factors determining the size of the bonus

The principal provision, which governed the determination of piece rates and allowed times to do a task, was contained in the 1938 agreement relative to working conditions; these were to be so fixed that workers of average ability were to earn a bonus of not less than one third of their hourly job rates. This clause was a very general one and had to be given interpretation at factory level. It was a permissive clause in the sense that it did not preclude operatives earning more than one third. The effective limits of the earning power of the operatives were set by the details of the various schemes installed. Group schemes which set targets for sections or departments were largely dictated by the technical details of the production line. Operatives were freer to vary their effort when placed on individual incentives or piecework when the pace of their work was not dictated by a machine or process. There were natural human limitations on the earning capacity of operatives.

At the conferences on work study there was considerable discussion about the sharing of the savings or additional output due to incentive effort. No national decision was reached on this question. The allocation of fruits of increased output varied according to the nature of the schemes. For example, the straight proportional scheme, either standard hour plan or piece work, provided that the operative be paid in proportion to the increase in additional output. Other schemes, such as the geared or the variably-geared, shared the fruits of operative performance in different proportions according to the level of output. The straight proportional schemes were used on direct production, the geared schemes were much more applicable to non-repetitive jobs such as maintenance work, or activities ancillary to production, or for learners. Usually, these schemes favoured the interests of operatives at the lower levels of output, and favoured those of management at higher levels. These schemes allowed workers to earn bonus with less effort at the lower levels of production than did the straight proportional schemes. Bonus was earned at forty or forty-five unit hour instead of at the customary sixty unit hour for the straight proportional schemes. The straight proportional schemes placed no limit on the amount that could be earned, while a limit was placed on the variably geared schemes when applied to maintenance work. Both the straight proportional and geared schemes were based on the theory that a bonus of one third of the hourly job rates was earned when the operatives' effort reached an eighty unit hour, one third over the normal pace of working. (1)

(1) B.I.M. : 'Conference on Work Study' (Harrogate, 1954).

Figure 4.



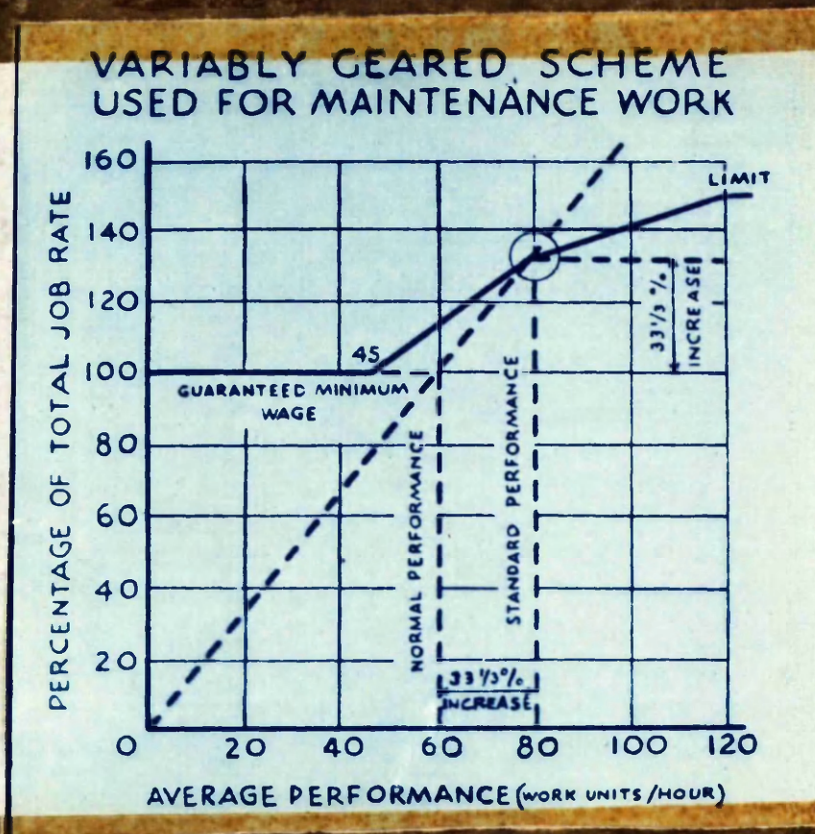
Source: B.I.M. Conference on Work Study

Different sorts of incentive schemes assumed certain facts of human behaviour. For example, it was presumed that the straight proportional system was superior to other types of incentive because the distribution of the fruits of incentive labour was fairer. In light of the findings at Ardeer there was little evidence to substantiate this assumption. At the time the schemes were installed at Ardeer there was no discussion about the method of sharing the fruits of incentive labour. The operatives were interested in the amount of their bonus earnings, and if this was unsatisfactory they complained. There were more complaints over the straight proportional piece work schemes than there were over the geared schemes applied to maintenance or non-repetitive work. There was no formal dispute over the geared schemes with a maximum bonus of one half of the hourly job rates in the engineering toolroom, boilermakers, blacksmiths, woodcutting machinists' and joiners' shops. The operatives were obviously interested in actual earnings, not their theoretical limit.

A good deal more interest was displayed in the lower limits for earning bonus. If operatives failed to reach the lower limit proposed by the particular scheme they were paid by time rates of pay, according to the job rate that applied. The lower limit usually became one of the bargainable issues at the time a scheme was installed. For example, the level of output at which operatives on the mechanised unit commenced earning bonus was dropped below the standard (sixty unit hour) normally set by work study. Although the work study specialists seemed to resent this concession made by the factory management, it really did not matter once the operatives were able to increase their production and earn good bonus of over one third the average hourly rate. It was the level of bonus earnings on a week to week basis that concerned the operatives. Because they had family commitments, which were clearly influenced by the level of their earnings, they wanted a reasonably stable bonus.

All conditions which affected the capacity of operatives to earn bonus had to be laid down at the time of the installation of the incentive or piece work scheme. Although some of these conditions could be theoretically defined, each incentive or piece rate had to be built up separately so that there was an appropriate ratio between effort of operatives and their reward. If machines, methods or materials differed between jobs, then account had to be taken of these differences in fixing the piece rates or the times allowed to do a task. Even though the ratio of effort to output was determined by work measurement the times to do a task were frequently questioned by the operatives. They complained that the times were set too 'tight' and consequently they could not earn their expected bonus. Management claimed that the times were set fairly, and that the operatives were not exerting themselves sufficiently to reach the necessary outputs to earn satisfactory bonus. It was the aim of work measurement to solve the relationship of effort to output, but due to the limitations of

Figure 3.



Source: B.I.M. Conference on Work Study

the technique the times established to do a job were subject to negotiation. (F) As there were over two hundred piece and incentive rates in Ardeer it was only natural that the number of conferences called to discuss the consequences of payments by results was correspondingly large.

Although negotiations took place over monetary rates work measurement was used for determining times for the payment of piecework. A standard was adopted which equated a given number of work units to an average earning per shift. This standard was designed to re-imburse operatives for the same physical effort. The earnings were based purely on physical effort and did not take into account value produced by the operations. The average bonus earnings of piece workers were usually greater than a third of the hourly rates. On several occasions when the union requested some adjustment of piece rates management found that there were no jobs where earnings were less than one third.

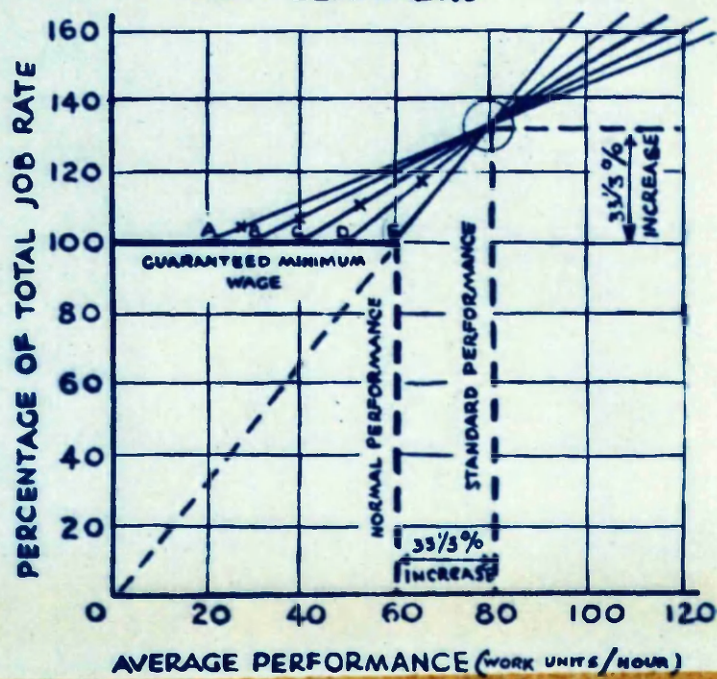
A good deal of trouble occurred over the build-up of composite piece rates. Every operation did not have a separate piece rate. Jobs which were similar in method and produced similar items were often grouped. A composite rate cut down clerical problems and simplified the piece rate structure. Usually explosives of smaller size required greater effort to produce than did explosives of larger size. When the smaller sizes grew in proportion to total output for the period, the operatives complained that their earnings were reduced. When the proportion of larger sizes to total output increased, bonus earnings were inflated without effort on the part of the operatives. There was no easy way out of this problem while there was a composite rate. Sometimes the union argued for the separation of rates, at other times for the consolidation of rates. Management, too, found itself in this dilemma. Towards the end of 1954 management attempted to separate three main categories of jobs in one of the most important sections of the department in order to eliminate minor adjustment problems which inevitably occurred due to alterations in production schedules. Subsequent negotiations set up a comprehensive rate to cover a large range of jobs, but the problems of composite rates remained.

Another technical difficulty that confronted payments by results was the degree to which operatives were free to exert themselves in attempting to earn adequate bonus. If the pace of a machine set the rate of working for a considerable period of time there was little that the operative could do to increase his bonus. Similar problems arose where the technical nature of the plant forced the operatives to remain idle for a period of time.

- (F) In passing it was interesting to note that the craftsmen did not object to the use of analytical estimating and synthetic time study, although unions at national levels frequently criticised these techniques.

Figure 6.

A SET OF GEARED SCHEMES USED FOR LEARNERS



B.I.M. Conference on Work Study.

Obviously, it was in the interests of the operatives for the total working time to be taken into account when building up incentive rates in such a way as to allow them to earn one third of their hourly rate. It was not in management's interest to recognise that the operatives were free to earn bonus over the entire working day, when in fact they were prevented from doing so, by technical facts of the job. This issue soon found its way to intermediate conference.

Negotiations took account of the conferences on work study which apparently stipulated (by virtue of the memoranda submitted by I.C.I. to the Signatory Unions) that incentive rates were to be set so that operatives could earn one third bonus of their hourly job rates 'while on measured work'. This last phrase was a modification of the older provision in the I.C.I. agreement relative to working conditions which related the fixation of piece rates to the hourly job rate. The ruling was given at intermediate conference that incentive schemes were to be based on the time operatives could work at incentive effort. A scheme installed on these conditions did not return operatives one third bonus of their time rates. This decision did not increase the popularity of incentives in the factory. For example, the scheme on the old side of the blasing department, rejected in 1952, offered a maximum bonus of only 27.8 percent of the average job rate.

A distinction was made between 'unproductive' and 'waiting' time. Unproductive time covered periods spent waiting during normal batch production or for machines to complete a process. 'Waiting' time occurred when operatives were prevented by exceptional factors, such as the breakdown of machines or the non-arrival of materials, from working at bonus speed. The recognition of waiting time, usually for periods over fifteen minutes, encouraged operatives to work at bonus speed for the rest of the work-day. If waiting time was not recognised, and operatives were prevented from earning bonus for a period, there was little point in their trying to reach their targets, for no matter how hard they worked they would be unable to make up for the time lost. Waiting time was paid at the hourly rate for the job of the operative. Operatives had an interest in obtaining the shortest period possible for calculation daily as opposed to weekly, in order to prevent subsidisation of effort.

Once an incentive scheme was installed any conditions - human, material, contractual, organisational - which affected the earning capacity of the operatives became a legitimate subject of discussion between the management and the union. On the mechanised unit some very detailed questions were raised. For example, it was claimed that materials re-worked were rejected by the machines; this prevented operatives from earning their customary bonus. The union wanted certain adjustments to machines and operations done outside the normal work period to allow the operatives more time to earn bonus. The meal time was discussed. So were the duties and job rates of ancillary workers. A formula was also laid down for remunerating operatives when they went on vacation. Operatives were paid

more than their hourly rates; they had their vacation on incentive earnings. Usually group schemes led to more discussion than individual schemes because there were more technical factors to discuss.

Special conditions covered learners. These could be paid either by time rates for the learning period, or part thereof, or by the use of a variably geared scheme. When learners had to be instructed by qualified persons, as they were on many of the piecework operations, special conditions governed the remuneration of the instructor. On the cartridging operations the instructor was paid the same bonus as the highest average earnings of any group of workers in the same section on the same shift. The same method of payment was used for inspectors on these operations. This method of payment was introduced so as not to penalise these operatives who were required to inspect or instruct. In later years management was not so happy about this method of payment, but to change to an hourly rate with a fixed percentage of bonus would have reduced the earnings of inspectors and instructors. Consequently the union opposed the change. These problems arose where instructors and inspectors worked alongside operatives earning large bonus.

Sec. 3. Reasons for altering the incentive rate.

The I.C.I. agreement relative to working conditions attempted to safeguard piece and incentive schemes from 'rate-cutting'. Piece rates and allowed times to do a task were permitted to be altered in three circumstances: firstly, when an error was discovered in the original scheme; secondly, when national negotiations specifically declared them to be altered; thirdly, when there were changes in the methods, materials, means or specification of a job. As a source of dispute at Ardeer the first was unimportant, and few adjustment difficulties arose. The second led to disputes at factory level and involved interpretations of the national agreement. It was about the third condition that the great bulk of disputes occurred at Ardeer and caused the greatest trouble in negotiations.

It was usual for national negotiations to specify the percentage by which piece rates were to be adjusted. This pronouncement was made at the same time as a new agreement came into force with respect to hourly rates of pay. On two occasions the method of adjusting piece rates was left to local negotiations; once in 1947 when the standard working week was reduced to forty-four hours, and the other in 1950 when the war supplement was merged with the minimum hourly rate. The war supplement paid from 1942 until 1950 and had not been taken into account when calculating piece rates. In 1950 a local conference was called to determine the method of adjustment. The union wanted to increase piece rates by the same percentage as the war supplement bore to the hourly rate. Management refused to agree to this formula, as it would have increased piece earnings well over the one-third standard. The piece rates were finally adjusted by a formula which took account of average earnings.

In 1953 job differentials covered by the I.C.I. job evaluation scheme, were increased by national negotiations by twenty-five percent. This was the first time wage rates were adjusted by this method in Ardeer. No declaration was made by the national negotiations that piece rates were to be adjusted. The local branch immediately filed a claim for an increase in piece rates based on the increase in the differentials. Management declared that it had no power to alter piece rates as the national negotiations had not declared them to be affected by the alteration in differentials. The female operatives threatened direct action and the dispute went to intermediate conference. Management stuck by its previous interpretation of the national agreements and no alteration in job rates was made. It offered to consider adjusting any piece rate which was not returning operatives an average of one third bonus over time rates. No such rates were found in the factory.

Hourly rates of pay were not of great importance to piece workers as they did not have a great deal of influence on total earnings. When production was interrupted time rates were used to calculate waiting time, and they were used for paying the meal break on shift work. Until 1953 the piece workers had never been particularly interested in their differential payment. A very small differential of one penny had been paid for many years; subsequently increased in 1938 by nine-sixteenths of a penny per hour when the qualifying rate was merged with the differential paid to the lowest job in the department. The differential was increased by local negotiation in 1949 following the installation of job evaluation, and in 1953 when the twenty-five percent increase was announced. The rate was further increased by local negotiation in 1955 when male workers in the blasting department received additional rates for danger hazard. No increase was made to the piece rates; average earnings above base rates were somewhat reduced, although they were still more than a third.

An inherent advantage of a work measured incentive, scheme based on allowed times to do a task, was its capacity to take account of changes in hourly rates without altering the scheme. It was not necessary to re-negotiate these types of incentive schemes as the workers received the benefits of all increases in hourly rates of pay. There was some dispute about the classification of some group tonnage schemes. The branch succeeded in classifying all but one scheme as a work measured type, and accordingly incentive earnings were indirectly increased by an alteration of hourly rates. The scheme covering the mechanised unit was not considered to be based on work study, although it was used in fixing the targets, and consequently incentive rates had to be re-negotiated ad hoc. This led to some uncertainty and possibly to discontent for the loss in relativity, although the men still earned high bonus.

The I.C.I. national agreement relative to working conditions precluded the alteration of allowed times to do a task or piece rates unless the job was altered. Although this provision was designed to give some security to employees in maintaining the permanence of rates it was an illusory clause. Alterations in jobs and methods were bound to occur which necessitated the re-assessment of allowed times and piece rates. In particular the mechanised unit at Ardeer was new, and many alterations were made on the job and hence in the incentive scheme. Some of the other group schemes did not cause a great deal of trouble as they were installed in departments which did not change their methods a great deal. Consequently, these schemes did not lead to disputation in union-management relations. But change was bound to come, and once it did there was the problem of re-assessing rates. Even where piece work operations were basically the same for many years alterations in jobs were inevitable.

When jobs were altered management assessed new times, targets or rates depending on the type of scheme and submitted them to the operatives or the union. Quite frequently the operatives claimed that the new rates did not allow them to earn their customary bonus. Such a claim invariably led to a dispute. Did the operatives give the altered rates or times a fair trial? Did they put forward their customary effort, or did they hold back for some psychological reason? The operatives claimed the rates were too 'tight', while management claimed that they were 'fair'. This was the problem which work measurement, by relating effort to time, tried to solve. As it was not indisputable, the times were not an objective measure which could satisfactorily resolve union-management disputes. Arguments over the re-assessment of rates were one of the reasons why incentives and piece work were a frequent source of trouble in Ardeer.

There was another clause in the I.C.I. agreement relative to working conditions which was material to the resolution of disputes over changes in allowed times or piece rates. When a new rate or allowed time was offered it had to be such that it would not reduce the earnings of the operatives. In the case of jobs for which piece rates or incentives were being offered for the first time, the sole provision governing their fixation was the necessity that a worker of average ability could earn at least one-third bonus of the hourly rate. As many piece workers earned a great deal more than one third bonus, it was material for the operatives to question whether or not the job was in fact a new one, or merely altered. While there appeared to be general agreement that bonus earnings were not to be reduced when piece rates were altered, there seemed to be less certainty about the right of management to alter allowed times to reduce earnings of operatives on incentive schemes. For example, there was dissatisfaction when management made a slight alteration in method so that a very 'loose' rate could be adjusted to reduce considerably the percentage earnings of the operatives.

This uncertainty arose from the confusion that took place at the conferences of work study, and to the general lack of agreement on the subject. For rates to remain equitable 'loose' rates had to be eliminated, but as the I.C.I. agreement relative to working conditions stood, the right of management to alter the rate for this reason was in doubt.

Besides the changes made to jobs by management there were other reasons why jobs were altered. Inadvertent changes were introduced by bad maintenance of machines or faulty materials. Both these held up operatives or made it impossible for them to reach their bonus. Even if waiting time was allowed, this reduced the size of the bonus. In some cases the machines broke down for short intervals which were not recognised for paying waiting-time, and these reduced the bonus earned. If management was satisfied that conditions were beyond the control of the operatives, it offered special rates or allowances to give the operative some incentive to try for a reasonable output.

The most disastrous changes were those which occurred accidentally through explosions which destroyed equipment and adversely affected the morale of the operatives. The operatives were unable to earn their customary bonus through no fault of their own, as management was responsible for the safe working of the plant. On two occasions special 'make-up' payments were made, one to pieceworkers and the other to the men on the mechanised unit. Both groups of workers had low morale as several of their companions were killed in the explosions. The 'make-up' pay relieved some of the private financial worries of the operatives when their earnings fell to the standard hourly rate.

Changes were also introduced by operatives. Sometimes operatives found a quicker way to do the job. This allowed them to earn higher bonus than predicted by the work measurement section. This problem caused considerable discussion at the conferences on work study, although in the light of the Ardeer experience the agreement was a little academic. The number of alterations made by operatives were few. During the conferences on work study I.C.I. stated that operatives would be compensated for their ingenuity by an award under the I.C.I. Suggestion Scheme. No conference was held at Ardeer to consider this problem. (F) The conferences on work study also offered to 'buy-out' a loose rate due to a number of minor changes of unknown origin. Only one conference considered this problem at Ardeer.

- (F) Perhaps the Suggestion Scheme would have then become subject to union-management negotiations.

Sec. 4. Difficulties in altering rates or targets

Altered piece rates, allowed times or targets were usually submitted to the operatives. This procedure was laid down in the I.C.I. agreement relative to working conditions. Under the 1947 negotiating procedure the shop steward was responsible for representing the operatives, and if the issue remained unresolved then the dispute went to local conference between factory management and the union branch. Many alterations to times and rates were accepted by the operatives, but in the case of pieceworkers, the problem of gaining their acceptance of altered rates became increasingly difficult in 1949 and 1950. The female operatives were anxious about their job security, and consequently claimed that most rates offered to them were 'tight'. In some instances, they refused to give the altered rates a trial. Management, and even the union, were unable to persuade the pieceworkers to give the altered rates a trial. The operatives simply stated that they could or would not be able to earn their customary bonus and refused to accept the rates.

The real trouble was not the formal method of negotiating altered rates following job changes, but the total human relations situation pertaining to the sections employing female piece workers. Nevertheless, the problem had to be solved by some formal means, and in 1950 management proposed to the union a new procedure for adjusting piece rates. Management undertook to notify the local union official and shop stewards of details of the proposed rates, the suggested trial period of the rates, and a sliding scale to cover the training period when the rates were to be reduced. If the shop steward objected to the equity of the rates the matter was to be discussed at local conference. Readjustment of rates would be retroactive to the date of trial, a condition which had the effect of lengthening the trial period as the operatives had little to lose by holding back agreement. This new procedure was accepted in principle, although the branch maintained the right to challenge any rate which it considered inequitable. Introduction of the procedure followed the relaxation of tension amongst pieceworkers, so its importance for settling conflict was not entirely estimable.

When management proposed to alter the scheme covering the mechanised unit the suggested changes were submitted to the union for discussion at local conference. A trial period was arranged, but sometimes not before some items were negotiated, for example, the maintenance of earnings of operatives and the reduction targets to earn bonus during the trial period. At another conference the number of personnel was fixed for the trial period, and the union agreed to consider the reduction of personnel at the end of the trial period. Sometimes there was argument over the rates to be re-studied; the union proposed that 'tight' rates be re-assessed, while management countered with the proposal to re-study all jobs including those that were 'loose'.

The purpose of the trial period was to keep negotiations open while the operatives worked under the new rates. No obligation was incurred by working under the rates. During the trial the operatives watched their earnings closely, and frequently complained that the new rates were fixed too 'tight' and they were not able to earn their customary bonus. The trial period was usually continued to determine whether the operatives could earn a higher bonus. If the issue remained unresolved a production study was made by management. This study aimed at finding reasons for the operatives not earning sufficient bonus. Such a study was more systematic than the normal time studies. It was customary at Ardeer to permit the local union official, the president of the branch or a shop steward to be present while the study was in progress. This did not mean that the branch was committed to accepting the literal findings of the study for the errors of time study persisted regardless as to how thorough the study might be. On occasions the union claimed that a study was too short, or that it was made in ideal circumstances which did not correspond to practical working conditions.

The findings of the study were considered at local conference. Sometimes management found that rates were set too high, in which case the resolution of the dispute was made more difficult. Sometimes the studies revealed why the operatives did not earn satisfactory bonus. For example, it was found after one study that men on the mechanised unit did not earn satisfactory bonus because of bad time-keeping, non-uniform types of packing, lost time due to mechanical failure and ill-balance in the packing teams. When management was satisfied that the operatives had put forth an intelligent and genuine effort it agreed to some 'make-up' being paid to the operatives during the trial period when a satisfactory bonus was not earned. Management opposed such an allowance to cover the trial period when it felt that the operatives had not really tried.

The difficulties encountered in adjusting piece rates on altered jobs were not met to the same extent on some of the newer incentive schemes. On one or two occasions the operatives refused to allow the work measurement section to re-study a job. The union officials soon overruled this, and the studies were submitted. The real problem was to secure operative approval for new times or targets. Although production studies were used on incentive as well as piece work ultimately the issue had to be resolved at local conference, and the recommendations of the conference endorsed by the operatives. Sometimes the dispute remained unresolved for one, two or even three conferences. Where the technicalities of the job were in dispute, and the argument was over whether or not the times or targets were 'fair', the resolution had to come from local negotiations. Referring the dispute to intermediate conference was only possible when some interpretative issue was at stake; this situation did not usually arise in cases of arguments over changes in allowed times. The resolution of differences of opinion

over the fairness of the ratio of effort to time were easier to resolve when the total human relations state in the department or section was favourable. If morale was low the resolutions of differences did not come easily.

The operatives frequently complained that they could not earn their customary bonus when methods were altered. This complaint was usually a justification for their low earnings. Operatives then demanded higher rates to bring their bonus up to their expectations. A change was bound to upset the operatives and they seemed naturally suspicious of the new rates or times offered by management. The operatives were not concerned whether motion study was used in determining the method; their sole interest was to maintain their earnings. They were conditioned to receiving a certain weekly pay-packet and they had adjusted their lives to that pay-packet. The pressures generated by their failure to obtain that customary bonus were sufficient to cause them anxiety when methods were changed. On only one occasion did the operatives demand to return to the old method rather than be compensated by higher incentive rates. The operatives demonstrated to the satisfaction of management that this new method was physically impossible of accomplishment.

The alteration of piece rates, allowed times or targets was always subject to approval by the union, which generally backed the demands of the group of workers who were affected by the change. A real threat arose to union-management relations when operatives refused to accept the altered rates or times. Only once at Ardeer did management reduce rates after the pieceworkers refused to agree to their modification. This drastic action was taken after a series of abortive conferences had failed to resolve the issue. The union strongly protested against the breach of the status quo, but as the job was shortly going out of existence the matter was dropped. It was clear that once an incentive or piece work system was introduced management's prerogatives were limited. For example, the men on the mechanised unit were offered alterations and refused to accept them for a time. Management made no attempt to introduce the changes until it secured the approval of the men. In the final analysis both sides had one important sanction: they could resort to working under time rates instead of under incentives or piecework.

Sec. 5. Special problems of group schemes.

By far the most important effect of the introduction of a group incentive scheme was the extension of union control over the deployment of labour. Before incentives were introduced the union had virtually no control over the deployment of personnel. The determination of the number of personnel to be employed on a task was within management's prerogatives. Once an incentive scheme was introduced a contractual relationship was established between output and the operatives' effort. For different outputs there was a definite schedule which laid down the number of workers to

be employed. Any change in methods or materials in the way a job was performed, involved an alteration of effort in relation to output, which frequently necessitated a re-deployment of labour. Fixing the number of personnel to work on a given operation or within a section or department, was one of the most contentious issues in union-management relations. There was no scientific method of assessing whether or not the operatives were working at the required pace to reach the group target or earn the customary bonus. Negotiations were the means by which union-management arguments were resolved.

One of the reasons why bonus earnings were relatively low on some of the newer group schemes, introduced in the post-war period, was due to the retention of more personnel on the operation than was fixed by the work measurement section. The group frequently refused to permit the removal of excessive personnel due to the desire to protect the jobs of its members. The workers were given the choice, through negotiation, of accepting a lower bonus or maintaining their work force intact. Usually, workers on the newer schemes decided to keep the numbers; then they attempted to force management to re-assess the targets so that bonus earnings would be increased. This was a difficult problem to resolve as earnings on some schemes were so low that the bonus was hardly an incentive to stimulate greater work effort. Other groups acquired reasonably favourable rates which permitted the workers to earn bonus. On a number of occasions a production study showed that additional personnel were needed for an operation.

Piece work at Ardeer was frequently performed by small groups. As with the tonnage output schemes it was necessary to fix the ratio of personnel in relation to the task performed. Problems arose over the calculation of this ratio as they did over incentive schemes. There was one important behavioural difference between the pieceworkers and the workers on the newer incentive schemes. The pieceworkers wanted to get rid of excess personnel. In this way they protected the earnings of the more experienced and faster groups by avoiding rationing of material. They were particularly opposed to the dumping of personnel temporarily short of a job. They favoured use of the demotional rules to reduce the number of personnel in their sections, even to the extent of management dismissing the most junior workers. They wanted to exclude from sharing in the total bonus earnings any workers who contributed indirectly to their effort. Sometimes this had unfortunate repercussions; on one occasion a group of female operatives bitterly complained about a male worker, paid by an hourly rate, who did not work hard enough to permit the female operatives to earn larger bonus. Sometimes the groups demanded that their team be increased in size, but they also wanted management to pay higher piece rates to compensate them for sharing their bonus with another person.

There were considerable difficulties in fixing the ratio of personnel to output for the piecework schemes. Each operation had to be individually assessed; for example, a team packing explosives into cartons and wooden boxes was larger than one bulk packing fibreboard cases. This was due to differences in sizes of the packages and to the way the jobs were performed. The aim of work study was to fix a schedule which set out the ratio of personnel to output. Such a schedule was possible where there were definite production targets. Where there was no fixed production target the operatives watched their bonus earnings with some uncertainty and anxiety. The method evolved to meet this problem was to calculate a 'normal' days' earning based on existing piece rates, and then allocate personnel to the operations performed so that reasonable bonus could be earned. In theory, this was fixed so that the average operative would earn a bonus of one third above the hourly rate; but in practice earnings of pieceworkers was frequently higher than this. There was constant pressure by the operatives working in those sections with no fixed production schedules, to take steps to push their earnings higher than those proposed by management.

The problem of subsidisation was accentuated by a group scheme. As it was already noted subsidisation occurred when bonus earned on one operation was offset by loss on another. In order to safeguard their incentive effort operatives demanded that the time for calculation of bonus be kept as short as possible, for example on a daily as opposed to weekly basis. They wanted management to recognise the shortest possible periods, for calculating waiting time in the event of breakdowns. Materials difficult to process did not have to be shared amongst the operatives when a group scheme was in existence. But if a difficult process was not included in a composite rate, the group was quick to react once their bonus earnings fell. On the mechanised unit it was not unknown for the men on one machine to work at less than incentive rate in case they subsidised the work of those on another which was either faulty or difficult to work. If management set times too 'tight' on one machine then this discouraged men on another machine from incentive effort.

The problem of subsidisation was likely to arise when a group scheme covered a section or department which did not have fixed technology and schedules of output. This was one of the main reasons why some departments gave almost no trouble, while the scheme covering the mechanised unit needed considerable adjustment. If the department worked on shift then the operatives on one shift demanded that their earnings be separated from those of another shift. Subsidisation also took place when some men worked at a slower pace than others, due to the nature of the work or the human factor. Somewhat different behavioural patterns were seen in respect to these cases. If the cause lay in management's influence, including the technology of the plant, the men on the group scheme attempted to be recompensed for factors which limited their bonus. On the other hand

the group on the mechanised unit and in the non-piecework sections seemed to protect those workers who did not work as fast as many of the other operatives. Frequently, the work study specialist wanted these workers excluded as additional personnel reduced the average bonus earned by those setting the pace. There was a limit to this process of exclusion, and anyone fitting logically within the work group was protected by his fellow workers.

In group schemes the bonus was divided equally. This principle was applied to both incentive and pieceworkers. A number of schemes, when first proposed, included a provision which would have distributed the bonus earned in proportion to job rates. This provision was dropped, partly because it was opposed by the union, and partly because of the complex clerical calculations involved. The effect of equal distribution was to reduce the status of the higher rated jobs and to emphasise the importance of the group incentive scheme. There was some justification for this system as group, and not individual effort produced the additional output. Group schemes were clearly more satisfactory where co-operation was the keynote of the production line. One had only to see the men at work on the mechanised unit to realise the importance of co-operation amongst the group. These men worked hard, helping each other out if production difficulties arose in order to keep the bonus high. Their average earnings were amongst the highest for operatives in Scotland.

Groups paid by piece also shared equally in the total bonus earned. Group piecework tended to reduce the discriminatory nature of incentives as variation of individual output tended to be ironed out. The piecework groups urged their members to work faster as there appeared to be some competition amongst the groups to be the highest earners. At the same time the groups were very careful to see that they had equal opportunity to earn bonus. For example, some materials were harder to produce than others, and the groups sought a fair distribution of these materials so that some groups would not be penalised. A constant watch was kept on the earnings of groups, sections and shifts to detect discrimination.

Another problem of group schemes was the inclusion of special categories of personnel who were unable to work at full incentive effort. Such personnel were learners and instructors. Special provisions to cover the training period were included in the scheme covering the mechanised unit. During the training period the trainee was not paid by result but was reimbursed by hourly rates, plus a fixed bonus. As the inclusion of a learner obviously affected the ability of the group to earn bonus, some adjustment in target rates was also allowed. Special provisions related to the training of a new shift.

The determination of the training period, the method of remuneration, and the adjustment of targets for the trained operatives had to be assessed for each operation. The rules varied from section to section. For example, on the cartridging operations female learners were segregated from experienced piece workers. They were taught by an instructor who was paid by reference to the earnings of the group with the highest output in the section. If it was necessary for a learner to be included in a group, the learner's work was credited to the group's output. The learner was paid by time rates. After a learning period the trainee was reclassified as an improver and allocated amongst experienced operatives in accordance with a strict ratio. Improvers shared in the group's bonus earnings. These rules protected the earning capacity of the more experienced workers.

Sec. 6. Comparison with the I.L.O. statement by experts

The subject of payment by results was one of the most controversial in industrial relations, both at the practical and theoretical levels. A large amount of literature was published on the subject in the ten year period after the war; much of it was conflicting and confusing. With its extensive use and experience of incentives Ardeer was a giant laboratory in which to check the validity of many of the assertions made about payments by results. For this purpose the I.L.O. statement by experts (2) - one of the most authoritative ever made - was compared with the findings at Ardeer. The Ardeer study confirmed the general principles laid down by the I.L.O., but it went a long way further to explain many of the problems that arose in union-management negotiations.

A good deal of the I.L.O. statement was devoted to the effects of payments by results on the quality of production and the health and safety of workers. These problems were not specifically examined at Ardeer for they did not become formal items of dispute between union and management. While it was probable that some fall-off in quality was to be expected with extensive payments by results, the problem was met at Ardeer by more effective inspection and supervision. Although the piece work was probably introduced at Ardeer because it was difficult to supervise the operatives in their huts scattered over the factory area, supervision and inspection were still necessary. In their efforts to secure higher earnings there was a temptation on the part of operatives to produce inferior articles, to take risks, and to work harder than they should. The two explosions which led to much industrial trouble in 1950 and 1954 occurred in sections working on piece work and incentives. At the same time poor quality control, ineffective supervision, accidents, and poor morale were

(2) I.L.O. 'Payment by Results', 1951, especially Chapt. VIII.

not necessarily connected with incentives and piecework; they were just as likely to occur in sections paid by hourly rates. However, like all problems associated with incentives and piece work they tended to be magnified and to be made more articulate. The factory management was constantly on the watch to forestall technical and human problems.

The I.L.O. statement made it clear that the application of incentives was to be only one step in a programme designed to raise productivity. A system of payments by results yielded full benefits only if human steps were taken to improve the production process, lay-out of equipment and the utilisation of human and material resources prior to and during the application of incentive and piece work schemes. The work study section at Ardeer attempted to do this. The ability to secure adequate response on the part of the operatives was to a large extent influenced by the technical facts of production and whether or not the machines or plant affected the pace of working. This was seen very clearly at Ardeer in the conferences dealing with the period during which operatives could work at incentive rate.

Although the I.L.O. report described the characteristics of a number of incentive schemes - piecework, standard hour plan, the Halsey, Rowan, Taylor and Beduax schemes - it came to the conclusion that there was no marked advantage of one over the other. The choice of a particular type of scheme depended on the technical and human facts of production. The piece work and the standard hour plan had certain advantages in that the operatives were paid in proportion to their increased output and this appeared fairer to them. It warned that the successful application of piece-work and standard hour plans had to be based on studies of the job and accurate rate fixing, otherwise disparity of earnings resulted from disproportionate applications of energy and skill on the job due to differences in machines and methods.

At Ardeer all operations were studied whether they were covered by piece work, standard hour plans, geared schemes, or group bonus schemes. Work measurement was used in fixing rates or the number of personnel on operations. The most difficult rates or targets to fix were for those operations which were subject to alteration or produced different products by different means. The group bonus scheme covering the mechanised unit caused as much trouble as the piecework operations. The operatives at Ardeer did not seem to be greatly concerned with the type of scheme offered them; if they did not earn sufficient bonus they protested. They were interested in the lower limits at which they could earn bonus; they were disinterested in the ceiling, but they were most concerned about average earnings - it was to the level of earnings that they adjusted their lives.

The chief deficiency of the I.L.O. statement lay in the fact that it did not outline the extensive conditions that had to be defined by union-management negotiations. It mentioned the need for guaranteeing workers their hourly rate of pay. At Ardeer operatives demanded more than this; they wanted a special rate when circumstances prevented them from earning their customary bonus. Their recognition of waiting time did something to prevent the subsidisation of effort but the operatives still received less bonus than they would normally have received. The I.L.O. report stated it was desirable to measure incentive effort over as short periods as possible to avoid subsidisation of effort. The problems of subsidisation went further than this. Subsidisation occurred in a number of forms; when there was a composite rate, when different machines or materials were used, or where learners or ancillary workers were included in the scheme. Subsidisation was a bigger problem for group schemes than it was for individual schemes. Any factor that affected the ability of operatives to earn bonus was likely to lead to disputes.

The I.L.O. report referred to the need for safeguarding against rate-cutting and to permit the re-assessment of rates in certain circumstances. At Ardeer the alteration of jobs rates due to clerical errors and to worker improvisations was unimportant. Alterations in hourly rates and the standard hour week sometimes led to some adjustments at the local level. The real trouble lay in re-assessing rates after there was a change in the job content. Despite the use of time study, production studies, trial periods, provisions to prevent a re-assessment of rates which led to a reduction of earnings of the operatives, and the calling of local and intermediate conferences, one ultimate difficulty remained: the operatives complained that the rates set were too 'tight', while management claimed that the rates were equitably set. Management was not permitted to instal the new rates without the union's approval, and that was bound to be withheld if the operatives were convinced that the rates were too 'tight'. It was the task of union and management to resolve the dispute by formal means and this was no easy task. The I.L.O. statement, like many other publications, understated the problem with respect to altering rates.

The I.L.O. report stressed the need for the development of good industrial relations before introducing incentive schemes. Introduced into an atmosphere of hostility incentives and piece work imposed an intolerable strain on union-management relations. The validity of this principle was well demonstrated at Ardeer; incentives and piecework required so many negotiations that any background of general friction between union and management led to immediate difficulties in resolving disputes over incentives and piece work. A sharp drop in morale amongst the operatives due to some factor, not necessarily associated with the incentive or piece work schemes, was usually followed by some formal dispute about the bonus earnings. This was seen in two classical incidents

following the explosions in 1950 and 1954. Formal negotiations were made extremely difficult because of strong informal behaviour. As incentives and piecework encouraged informal group formation and gave many opportunities for the groups to express their dissatisfaction about their earnings the formal lines of authority, both in management and the union, had to be kept working with utmost effectiveness.

Ardeer also offered some interesting data on the behaviour of groups when not unionised, and where the piece rate structure was not subject to collective bargaining. As it was seen the female piece workers were capable of striking even though they did not belong to a union. Because no formal organisation regulated their conduct they built their own social system to cope with grievances and complaints about their piece rate structure. The leaders of the oligarchy were not as effective as the formal union organisation when negotiating with management over piece rates. Before 1947 when shop stewards were unrecognised, the procedure for adjusting workers' grievances about piece and incentive rates was inadequate. There was no indication that operatives were hostile to working on piece work, as the I.L.O. report suggested, because of the absence of collective bargaining. Unions, however, as institutions were opposed to payments by results because they were frequently excluded from bargaining over incentives and piece work. They believed that the unity of their organisation was destroyed by payments by results. In this contention, they were partly correct because of the strong informal reactions; but management, too, was likely to be caught up in industrial anarchy if operative grievances about payments by results grew to serious proportions.

Although the piece workers at Ardeer never wanted to change their method of payment to hourly rates with less earnings, the absence of adequate 'safeguards' - as the I.L.O. report chose to call them - led many other workers at Ardeer to reject management's offer to put them on incentives. These workers were conscious of the many abuses that were associated with incentives in industry generally; they wanted explicit rights with respect to earning capacity, the fixation of rates, times and targets, the deployment of personnel, changes in work practice and jobs and the re-assessment of rates. The operatives did not trust management to unilaterally determine these rights; this was a function of collective bargaining, and if the formal union organisation chose not to exercise its rights of negotiation its members usually rejected management's offer to put them on incentives as did many of the craft groups. Operative's suspicion of incentives diminished when their unions intervened to negotiate details of the scheme offered. When management went into a conference determined to stick to the exact figures compiled by the work measurement section, it overlooked an important industrial relations mores, that it had to negotiate with the union, not dictate to it.

Once incentives were accepted by the operatives, the role of the union was to control the system of payments by results by negotiating any change in details with the management. At Ardeer, the union did not participate in the timing of jobs, in fixing production standards, or setting rates, save through negotiations. The local T. & G.W.U. official was not trained in time study, nor had he attended any course on work study. He deliberately refrained from interfering in management's prerogatives. Consequently, he did not confuse his role, and for this reason was responsible for negotiating one of the most sophisticated piece and incentive rate structures in the United Kingdom as this chapter amply demonstrated.

Conclusion

The parties found it difficult to establish suitable sets of reference to guide their negotiations about incentives and piece work. By comparison to the provisions which set out the hourly wages structure in all its facets there were few 'statutory' conditions; this meant that the piece and incentive rate structure had to be determined by a case to case approach. A rather vague clause existed in the national agreement relative to working conditions which ostensibly fixed the relationship between bonusearnings and effort; in actual fact there were considerable disparities between earnings under the various schemes due to a variety of conditions. Unfortunately, the conferences on work study did not clarify many of these problems, and local negotiations were left to work out the detail as best as they could. Sometimes it was possible to resolve an interpretation dispute by referring it to an intermediate conference, but in the main, disputes about incentives were not resolved by reference to an overall statutory condition. Precedents were reached for establishing conditions relating to the measurement of bonus earning time, waiting time, and the alteration of incentive and piece rates when there were changes in minimum or job evaluated hourly rates.

Many issues associated with piecework and incentives were not easily resolved by reference to a principle in the same way as were disputes over promotion, demarcation, and job rates. This was due to the technical nature of the production line which necessitated the building of incentive and piece rates on an individual basis. The operatives frequently complained that they were unable to earn sufficient bonus and that the rates were too 'tight'. As time study was not a completely acceptable measure to resolve the disagreements, reference had to be made to the fairness of the rates. Union and management frequently had divergent ideas as to the equity of rates and times, thus disputes were difficult to settle. Where the ratio of personnel to task had to be fixed, when a composite rate was paid for several sizes, when there was some form of subsidisation of effort, then the determination of equitable incentive or piece rates was complex.

The problem of installing and maintaining incentive and piece rates was affected by the strong disposition for informal group behaviour. Although the groups did not necessarily have their entire origins in the incentive or piecework schemes they had an obvious interest in them, and a natural inclination to protect their job security and raise their earnings. The disposition for informal group behaviour was to some extent encouraged by management by dealing directly with the employees rather than with the union. This position continued under the agreement relative to working conditions which permitted management to offer new or altered rates to the employees concerned, who then had the right to take the matter to the shop steward under the negotiating procedure. When conditions changed, such as when a job was altered, the union sometimes found it extremely difficult to persuade the operatives to accept the new rates. The task of negotiations was made extremely difficult. It was found necessary to introduce additional terms of reference to govern a trial period as the negotiating procedure did not appear to be adequate as a set of references. There appeared to be a prima facie case of breakdown in union authority when the operatives refused to give altered rates a trial or resorted to direct action.

PART III IMPLICATIONS AND CONCLUSIONS

CHAPTER XII

THE NATURE OF COLLECTIVE BARGAINING

Introduction

What conclusions can be drawn about the general relationship of union and management from the Ardeer case? There is considerable evidence for postulating principles concerning the nature of collective bargaining. Negotiations were a law-making process. The parties legislated rules to cover certain matters such as the negotiating procedure and the national wages structure, they interpreted those laws when determining specific cases, they created, interpreted and observed precedent, and they invoked the standards of equity when the case did not fall within mutually accepted rules. The end result of negotiations was an agreement set out in rights and obligations to be observed by union and management and their members.

The parties used the same method of negotiations to resolve disputes both over wages as well as non-wage matters. One of the important conclusions of the Ardeer case is that the system of industrial jurisprudence, said to cover only non-wage matters,⁽¹⁾ governs the relations of the parties with respect to wages and payments of results. This principle appears to be true of union-management relations both in Britain and in the United States. Having clearly established this principle it is then possible to define collective bargaining accurately in terms of purpose, function and process. This definition is the central proposition from which other principles are deduced to present a theory of collective bargaining.

(1) cf. Slichter: 'Union Policies and Industrial Management', (Brookings) 1941.
Dunlop & Healy: 'Collective Bargaining; Principles and Cases', (Irwin) 1953.
Fländers and Clegg: 'The System of Industrial Relations in Great Britain', (Blackwell) 1954.
Chamberlain: 'Collective Bargaining', (McGraw-Hill) 1951.

Once the essential nature of collective bargaining is established other questions, such as peace and conflict in industry, can be properly defined and classified. When negotiations are effective, peace reigns in the workplace. When negotiations fail conflict between the parties persists. Evidence of the Ardeer case suggests that negotiations fail because of a number of factors, the most important of which are the separate interests of the parties. Negotiations are only effective if the parties behave judicially, in the sense that they try to find a solution to the dispute in terms of rules, precedents and equity. This view does not overlook the importance of the social and economic environment, which is of particular significance to the adaptive behaviour of management. The final section of this chapter brings out the difference between the nature of collective bargaining and that of joint consultation.

Section 1. Elements of Effective Negotiations

Disputes between union and management occurred over three types of subject matter. Firstly, disputes involved the general inter-institutional relationship such as negotiation rights and the policy of management towards union membership of its employees. Secondly, there were disputes over the security of employment of union members; these included disputes relating to demarcation, dilution, manning, work practices, demotion, promotion and transfers. Thirdly, there were disputes relating to the fixation of wages, hours and similar working conditions. The disputes relating to piecework and incentive payments fell into both the second and third categories.

The common method by which disputes were resolved was through negotiation. Negotiation ended with an agreement set out in terms of rights and obligations for each party to observe. The discharge of these rights and obligations was the responsibility of union and management. It is the task of this section to examine the characteristics of the method of reaching agreement in negotiations. In this connection the following hypothesis is advanced: that negotiation resulting in agreement is a similar process to that of law-making as this is commonly understood in society at large. This hypothesis may need some refinement at a later stage of the analysis.

Negotiations at Ardeer were conducted within certain terms of reference set out in the national agreements relating to the negotiating procedure, minimum wage rates and working conditions. These agreements set out the jurisdiction of 'local' negotiations, which involved factory management and the local union branch, and 'national' negotiations, which involved I.C.I. and the various headquarters of the unions. The national level had the right to reserve certain matters for its exclusive consideration, to

withdraw matters previously reserved for negotiation at the factory level, or to establish a new set of references in which local negotiations were to take place. Within their competent jurisdiction at each level of the framework of collective bargaining the parties were free to resolve disputes and lay down rules to regulate their conduct with the respect to certain matters.

It was usual for agreements reached at national level to be printed and distributed on a wide scale. This was so of the agreement relative to the negotiating procedure, the agreement setting out working conditions, and the agreement relating to the minimum wage rates. The reason for setting out these agreements in explicit terms was obvious. The employees needed to know their rights - that they were entitled to so much and no more - while management and union officials in widely scattered geographical areas had to know what responsibilities they were obligated to discharge. It was not usual for local agreements to be set out in writing in quite the same way; the conference proceedings were recorded in a minute agreed between the parties. While this minute recorded the decision of the negotiations, the same format was not used in setting out the rights and obligations. These were implicitly laid down, but the parties recognised them in the same way as they did the explicit rights and obligations contained in the national agreements.

The traditional role of a union was to challenge management's prerogatives, and to intervene in order to see that its members were treated fairly by management. No better illustration of this role was to be seen than in the T. & G.W.U.'s relations with Ardeer management over the promotional and demotional system. Management used the criterion of seniority in making its promotions and demotions, a system which was extremely fair to its employees. At first the union was content to see that

this policy of promotion and demotion was administered in an equitable way by management officials in the sense that there was regard for the rights of individual employees. Anomalies were challenged as these appeared to the union to be departures from general rules, and were expressions of either favouritism or victimisation by management. The standardization of conditions, with departures for specific cases which deserved special treatment in order to be fair, was an important basis for common rules to be applied in the workplace.

The union also sought the extension of the promotional system to departments which were not originally included. This piece-meal approach laid down certain precedents which had the effect of modifying the rules relating to the system. Finally, in the post-war period the parties negotiated a complete agreement on promotion and demotion. This agreement took into account the various precedents that were previously agreed, so in a sense there was a codification of the previous decisions. Codification was nothing less than a legislative act.

The demarcation and manning practices were established by a 'case by case' approach. Precedent was the basis of demarcating the work prerogatives of the various crafts. Difficulties arose over the interpretation of precedents due to the overlap of criteria in fixing the demarcation lines. The protesting union argued that management had broken practice, while management argued that it had not. Several unions drew up demarcation agreements and this codification of rules prevented disputes arising. Dilution disputes were virtually eliminated by 'statutes' - agreements negotiated at a national level. Other work practices were settled by a case by case approach and by reference to standards of equity. When an incentive scheme came into being manning ratios were established by agreement.

Negotiations about incentives and piecework were conducted within a rather vague framework of a national agreement. For this reason there was a case by case in the introduction of incentive schemes, the details of which had to be negotiated with respect to every scheme. The agreement relative to working conditions set out the theoretical relationship between effort and the size of the bonus. This clause was subject to considerable interpretation, particularly in relation to the time on which operatives could earn bonus. A precedent was established in this regard, as others were in relation to alteration of incentive rates after there was a change in hourly rates, including both minimum and differential rates. Indeed, the whole of the piece rate structure was said to be preferable to incentive schemes because it was built up through the use of precedent. However, the distinction was slight for some 'statutory' conditions existed for both piecework and incentive schemes, and precedent was just as important to the maintenance of incentive schemes as it was for piecework. The final resolution of any differences lay in involving standards of equity. Such disputes occurred over the claim by operatives that they were unable to earn sufficient bonus, while management claimed that the rates, targets and work teams were fixed fairly.

At Ardeer there was no general agreement which covered the determination of job rates or wage differentials for non-skilled jobs. Job rates were laid down in a case by case approach; the parties proceeded to adjust job rates when a claim for an increase was submitted by the union. There was no accepted standard to resolve the differences in the sets of references of the parties with respect to the fixation of wage differentials. Job evaluation was introduced to try to resolve this problem of deciding standards by which wage differentials could be set equitably.

Due to the fact that the parties at national level did not 'legislate' for a general agreement, its installation and maintenance was achieved by a case by case approach, using interpretation and precedent. Each job was analysed, and using the objective criteria laid down in the scheme, and an interpretation was made to classify the job under certain headings. Certain key jobs were used as precedents in the way they were analysed and interpreted. From this data it was then possible to determine the hourly rate of pay.

The case by case approach which was used to determine rates of general worker jobs was in sharp contrast with the rules contained in the national agreements which set out the rates for all skilled and semi-skilled jobs covered by the various craft unions. The national agreements also made provision for the payment of an additional hourly rate in accordance with a grading scheme. The unions did not participate in the installation or the maintenance of the grading scheme which was based on a merit rating principle. In 1954 the grading of craftsmen became subject to appeal by the union, in accordance with the negotiating procedure, but the details of the merit rating scheme were not subject to general 'legislation' of the two parties.

The use of job evaluation, merit rating and work measurement schemes, although relatively new in union-management relations, was designed to solve an old age problem, namely, the establishment of standards to resolve differences over wage fixation. Although criticised by both unions and some theoreticians⁽²⁾ the use of these personnel techniques, as they were known, offered an objective measure towards settling the vexed problem of wage

(2) See Wootton: 'The Social Foundations of Wage Policy', (Allen and Unwin), 1955, particularly pp.68, 161, 163.

differentials. Under a job evaluation scheme the parties tried to assess a claim in the light of accepted job factors. If the job factors, or their weightings did not reflect the actual characteristics of the jobs surveyed, then the scheme was bound to lead to difficulties. Similar arguments applied to merit rating schemes. If the personal characteristics named in the scheme did not correspond to those actually determining personal performance the scheme was unfair. These criteria, objective in the sense that they were accepted by the parties prior to their use in resolving a dispute, were in the final analysis based not on industrial engineering, but on equity. Under the merit rating scheme individuals were graded in accordance to their 'worth' on the job, while under the job evaluation scheme jobs were ranked in accordance with their 'worth' to the organisation. Provided the individuals and the jobs were graded properly and fairly the grading conformed to the ideas of equity held by management, union and their members.

Incentive and piecework schemes based on work measurement were designed to reimburse operatives with the same amount of bonus for the same amount of effort exerted. Used in this way work measurement was an attempt to reduce differences of opinion about the amount of work that had to be produced to return the operatives an equitable bonus. In short, the use of work measurement tied negotiations to very narrow limits. In the final analysis, negotiations over any issue whether incentives or not, had to be resolved within narrow limits or otherwise there was no meeting of minds of the parties. The difficulties of incentive and piecework lie not in the use of work measurement, but in defining the circumstances in which the effort is to be exerted and the bonus is to be paid. Frequently the decisions reached by the parties were based on the general notion of equity, rather than on simple interpretation of existing rules and principles.

The standards of equity did not always remain the same for either party or both parties when resolving disputes related to the fixation of wage rates. For example, at one time the general worker unions appeared anxious to introduce a general levelling up of wage rates; by the post-war period adjustments to job rates included in the job evaluation scheme were amended by a percentage increase which had the effect of increasing the differentials between the job rates. In the same way the local union organisation sometimes argued for the improvement of rates for special categories of jobs; at other times it wanted 'down-the-line' or 'across-the-board' increases in all job rates. These ideas about the equity of a particular method of adjusting wage rates arose from different circumstances and they tended to upset the terms of reference which the parties had for resolving disputes about wage fixation. The determination of alterations in the national agreements covering minimum wages for general workers and the wage rates of the craftsmen were sometimes difficult, for accepted standards of reference were absent. Nevertheless, wage rates were not fixed in an ethical vacuum; the parties had their standards to judge good and bad wage claims.⁽³⁾

Over time the parties were seen to be making tremendous efforts to find suitable terms of reference for resolving disputes over wage rates. In the early period of the factory the parties tried to dodge the issue by tying Ardeer wages to those found in other collective bargaining frameworks. This was not always successful. New collective bargaining frameworks were erected to solve the problem of wage fixation by introducing uniformity both on a regional and occupational basis. The erection of the

(3) See generally Wootton: *Loc.cit.* and the review of her book in Industrial and Labour Relations Review, April, 1956, p.487.

I.C.I. frameworks were designed to insulate the Company managements from conflict which flowed from disagreement over the national fixation of wage rates. Since 1936 wage rates were settled through multi-union negotiations, and without one stoppage. Obviously so-called 'bargaining power' was not used in these negotiations for neither party knew how 'strong' each other was. Wage rates were not settled by some form of power conflict but by reference to equitable standards, and this was a very different process of fixation of wages by the 'laws' of supply and demand.

The union-management relations at Ardeer were characterised by a dispute which was then resolved by negotiation. The process of negotiation included the settling of general rules, the interpretation of these rules, and the establishment and the interpretation of precedent. When the parties legislated they set out in detail the rules in an agreement. When they did this they took account of past precedent; in the case of the promotional and demotional system the rules were codified from existing precedents. For their agreement to be effective the rules had to be such as to cover future contingencies. Where the clauses were vague, or were designed to cover only the most general of rules, it was necessary for the parties at the local level to interpret. These interpretations sometimes laid down precedents; at other times precedents were established by a case by case approach. In turn, these precedents were subject to interpretation. When the parties had no recourse to statute or precedent the parties resolved their differences in accordance with the notion of equity. The case by case approach was by far the most important at Ardeer, and this process of negotiation was similar to the method used by the common law courts. The process of negotiation was the same regardless whether they dealt with the general inter-institution relationship, job security or wages and working conditions.

Section 2. Definition of Collective Bargaining

Originally conceived as a method by which individuals joined together in a trade union, and hence 'bargained collectively' with their employer,⁽⁴⁾ collective bargaining is now a very ambiguous term. In his essay "collective bargaining" Flanders concludes that it means 'different things to different people'.⁽⁵⁾ For example, 'many look on it as the best way of keeping peace in industry. More than a few take the opposite view; for them it is the expression of a class struggle with the overthrow of capitalism as its ultimate goal'. In his own essay it is not clear whether Flanders thinks of collective bargaining as the general union-management relationship (the framework of collective bargaining), the negotiating procedure (rules relating to the conduct of the parties engaged in collective bargaining) or the wages and condition structure (which comes into existence as the result of collective bargaining).⁽⁶⁾

Flanders then quotes the American authority, John T. Dunlop,⁽⁷⁾ who states that collective bargaining fulfils three purposes: firstly, it establishes the price of labour services; secondly, it provides a system of industrial jurisprudence by establishing and administering conditions, other than wages (my italics), under which wage

(4) See Flanders: 'British Trade Unionism' (1948), where he defines collective bargaining as the process whereby workpeople, instead of settling individually with their employers the conditions of their employment, do so jointly through the agency of their trade union.

(5) Flanders and Clegg: 'The System of Industrial Relations in Great Britain', p.316.

(6) See Routh: 'The Structure of Collective Bargaining' Political Quarterly, Jan. 1956, which deals with aspects of wage fixation.

(7) Dunlop and Healy: *loc.cit.*, pp.27-28. (Actually Dunlop's ideas are very similar to Slichter - see later in this section).

earners render their services; and thirdly, it provides a mechanism by which employees may be represented in decisions that affect their individual and group interests. The last statement is not an accurate description of the process as the individual and group do not directly participate in collective bargaining; only the trade union is engaged in collective bargaining, and this state of inter-institutional relations is different to one involving the relations of a group with its employer. Nor is Dunlop's distinction between first and second situations correct. As the Ardeer case study shows, no distinction in principle can be drawn between the fixation of wages and other working conditions; both are consequences of collective bargaining and both are determined by the same process. Management has no more prerogative to set wages than it has working conditions; the 'rule of law' applies equally to all aspects of union-management relations.

Probably the most exhaustive analysis and complete synthesis of collective bargaining is made by Chamberlain.⁽⁸⁾ Chamberlain is concerned with the definition of collective bargaining as it is presently found in the United States. As there is a certain amount of state interference in that country, which is absent in the United Kingdom, it is material to test whether the theories of collective bargaining hold true on both sides of the Atlantic, or whether the social mores are such in each country that there is a distinctive set of characteristics of collective bargaining. For example, in America most collective agreements are in written form, they are 'contracts' between the parties for a specified duration, and they establish in detail the rules which govern the specific working conditions and wages. While written agreements

(8) Chamberlain: loc.cit.

are known in Britain (for instance, the I.C.I. negotiations procedure, the agreement relative to working conditions, and the minimum wages agreements covering craftsmen and general workers,) it is not usual for all union-management rules to be spelt out in a written document. It is unusual for a written agreement to have a specified life, and most agreements are altered at conferences called for that specific purpose, and are not subject to full-scale bargaining conferences as are known in the U.S.

Chamberlain deals with three theories of collective bargaining, which he believes are not mutually exclusive, but are inter-related because they all describe some aspect of the bargaining process as it developed or exists at the moment. 'The marketing theory looks upon collective bargaining as a means of contracting for the sale of labour. Its justification is its assurance of some voice on the part of organised workers in the terms of sale. The governmental theory views collective bargaining as a constitutional system in industry. It is a political relationship. The union shares the sovereignty with management over the workers, and as their representative uses that power in their interests. The management theory regards collective bargaining as a method of business management. It is a functional relationship. The union joins with the company officials in reaching decisions on matters in which both have vital interests'.⁽⁹⁾

Chamberlain then considers the nature of the collective agreement. When the collective agreement is viewed as a contract, the same objective rules which apply to the construction of all commercial contracts are invoked, since the union-management relationship is conceived as a commercial relationship. If a situation is covered by the

(9) Chamberlain: loc.cit., Chap.6, especially pp.136-137.
(exact quotes).

terms of agreement, the answer to the specific problem is logically derivative from the agreement. When the agreement is regarded as a matter of industrial jurisprudence, its application is governed by a weighing of the relation of the provisions of the agreement to the needs and ethics of the particular case. Interpretation of the terms follows from the logic of experience and morality, so that the agreement becomes in fact moulded to the dominant operational needs of both parties and their social setting, rather than the reverse. When the agreement is looked upon as a set of administrative standards providing guidance in areas of managerial discretion, its application proceeds from the intent to accomplish certain jointly conceived objectives. This is a functional conception, and when the terms of the agreement fail to achieve that function in a particular case, it is the joint objective and not the terms which must control.⁽¹⁰⁾ In describing differences between these descriptions Chamberlain appears content to treat them as distinctions of emphasis, rather than of kind. This view is open to question, as one theory should explain the entire phenonema of collective bargaining.

Chamberlain points out that those who follow the contractual interpretation of an agreement are generally reluctant to process grievances which fall outside the scope of its terms; for the contract represents the whole of the bargain struck, and the employer retains the undiluted discretion in, and control over, other matters. To submit under union pressure to negotiation or arbitration on other issues than those embraced in an agreement would be to surrender more than the bargain calls for.⁽¹¹⁾ At

(10) ibid: pp.156-7 (exact quotes)

(11) This is of more than academic interest; in Canada the law draws a clear distinction between the bargaining of a new contract, and the interpretation of terms in an existing contract; it allows strikes under certain conditions in relation to the former, but prohibits strikes while an agreement is in its currency; see Logan: 'State Intervention and Assistance in Collective Bargaining', (Canadian Studies in Economics, No.6) 1956, and Woods: 'Canadian Collective Bargaining and Dispute Settlement Policy', Canadian Journal of Econ. & Polit. Science 1955.

once it becomes apparent that the marketing theory and its corollary of the agreement as a commercial contract does not explain the process of collective bargaining in the United Kingdom, ~~generally~~ for there is no comprehensive written agreement. Nor are the many agreements reached in operation for a specified period of time.

It is open to question whether or not there is such a thing as 'bargain' as it is used in the economic or legal sense. Do union and management bargain, as do parties in arriving at a commercial contract? In every commercial contract one party agrees to do something or desists from doing something in return for consideration. Consider the case of a trade union, when it negotiates an alteration of wage rates in a national agreement (such as occurred in I.C.I. agreements), what does a union give management in return for a increased scale of wages rates? It does not offer labour, only its members do this, in any case all existing employees are already under individual contract with their employer when an agreement comes into effect.

Does consideration refer to the undertaking by a union that in future it will process further amendments in accordance with a prescribed agreement? If so, this is past consideration⁽¹²⁾ for the union is already bound to observe the prescribed agreement. Even in the case of agreements which call for adaptive behaviour on the part of employees, such as when an agreement allows the introduction of incentives, there is at best only an implied undertaking that a union will try to persuade its members to accept the scheme. If a group of employees refuse to accept a scheme they are simply paid less than the maximum specified in the agreement. It appears that the commercial contract and the collective agreement are not the same type of thing.

(12) See Anson's Law of Contract, (Oxford) 21st Edition.

Although the collective agreement may not be similar in nature to a commercial contract, does the marketing theory of collective bargaining describe the process of collective bargaining? Do the parties haggle in the market place? To the extent that they argue over standards for determining wages and working conditions, there is some similarity between the processes. But if collective bargaining is to realise its purpose of resolving the differences of the parties, and at the same time control the behaviour of the groups of employees, standards of equity have to be introduced. In the case of bargaining over the terms of a negotiating procedure, where there is some element of 'give-and-take', the process is not similar to that which precedes the commercial contract. The process is not 'so much for so much' but which is better or worse in establishing orderly relations between the two parties.

In short, a party is not acting in its own interest if it refuses to concede a point which would improve the operations of the procedure. The idea of 'horse-trading' is quite foreign to the idea of effective negotiations. To achieve their aims the parties must devise a method which is 'right' in the moral sense. There is a process of compromise in negotiations when the parties cannot agree on the standard of equity and they 'split their differences' to reach an agreement. For this to be effective, in the sense that it controls behaviour on the workplace floor, the standard of equity must be acceptable to all concerned.

The development of a theory of collective bargaining as a system of industrial jurisprudence is associated with the name of Slichter. Collective bargaining is a method of building up a system of 'industrial jurisprudence'. Through the institution of the state, men devise schemes of positive law, construct administrative procedures for carrying them out, and complement both statute law and

administrative rule with a system of judicial review. Similarly, laboring men, through unions, formulate policies to which they give expression in the form of shop rules and practices which are embodied in agreements with employers or are accorded less formal recognition and assent by management; shop committees, grievance and other means are evolved for applying these rules and policies; rights and duties are claimed and recognised. When labor and management deal with labor relations analytically and systematically after a fashion, it is proper to refer to the system as "industrial jurisprudence".⁽¹³⁾ Slichter arrives at this conclusion from a study of job security issues including some aspects of incentives and piecework. He specifically excludes consideration of the price or wage-making aspect of collective bargaining as an essentially separate subject.⁽¹⁴⁾ In the light of the analysis of the negotiations at Ardeer this exclusion is incorrect.

Chamberlain develops the ideas of Slichter along the following lines, although he does not seem to hold this theory to the exclusion of the others. 'The law of this system has its several components - constitutional, statutory and common law. Its constitutional law is to be found in the collective agreement and application, its statutory law is in the form of subsidiary or supplementary agreements and their application; and its common law derives in great measure from the decisions of the arbitrators, impartial chairmen and umpires on specific issues not provided for in any written rule, though the parties themselves assist in its formulation'.⁽¹⁵⁾ 'In the constitutional

(13) Slichter: Loc.cit., p.1, (exact quotes).

(14) Ibid.

(15) Chamberlain: Loc.cit., p.148.

or the statutory law of industry the agreement establishes the terms of the employee-management relationship, and individual cases are governed by those terms. In the area of common law, where no written standards control, it is the mutual recognition of the requirements of morality⁽¹⁶⁾ and the needs of operation which provide the basis of decision and ultimately the norms of action'.⁽¹⁷⁾

Chamberlain observes that the distinction between the statutory and the common law systems in industry is very fine. 'For the interpretation and application of the statute must proceed from the same individuals who look to the institutional setting for their cue construing what actions may reasonably be required of people in their relations with each other. The same ethical forces which help to determine the common law continue to operate even when standards of behaviour are reduced to writing, and these serve to hold the law in operation.'⁽¹⁸⁾ 'There are two influences at work, seemingly contradictory in nature: one, the effort to establish the common rule, standards which establish the same liability for reasonable behaviour on the part of all within the social unit; the other, the reliance upon the logic of the situation rather than the logic of the rule to determine cases which seem to warrant special treatment even though falling within the rule. It is the universalizing as opposed to the individualizing principle; with sufficient of the latter - the extraordinary justice which was the basis for the early system of equity - as to make the former more acceptable'.⁽¹⁹⁾

(16) See also Goodhart: 'The English Common Law and Moral Law', (Stevens), 1956.

(17) Chamberlain: Loc.cit., p.151.

(18) Chamberlain: Ibid, p.152.

(19) Ibid.

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This account of Chamberlain is particularly good of the general nature of collective bargaining. Perhaps a more accurate description can be made along the following lines. Given the fact that there is no statute law in the U.K., and that there is voluntary collective bargaining in the laissez-faire sense, collective bargaining can be viewed as part of the same social development that gave rise to the English common law; in other words industrial society is characterised by the same social mores as was in evidence in British society many centuries ago. Thus, 'collective' is only another word for 'common', in the sense that it applies to all, within a group, while 'bargain' is an 'agreement', by which all agree to abide by an accepted standard. This is simply 'law'. That is to say collective bargaining is common law. The bargain establishes on moral grounds certain obligations which each party is required to observe. The adherence to this law relies not the use of power, which is so much belaboured in industrial relations literature, but on the sense of obligation. There can be no doubt that collective bargaining is a system of industrial jurisprudence, that this is so in the United Kingdom or in other parts of the world where it exists. (20)

It is now possible to define precisely the exact nature of collective bargaining. In terms of social theory, (21)

(20) Collective bargaining is not the only system of Union-management relations. In Canada the law greatly modifies the institution of collective bargaining, through compulsory conciliation, and in Australia there is state regulation of industrial relations based largely on compulsory arbitration. See the Author's treatise: 'Canadian and Australian Industrial Relations; A Comparative Study of Half a Century of Legislative and Regulative Interference in Union-Management Relations in Two countries'.

(21) See T.T. Paterson's 'A Methetic Theory of Social Organisation', (University of Glasgow), 1957.

collective bargaining is an institution, which has as its purpose the government of relations between union and management. Its function, through which its purpose is achieved, is to establish rights and obligations for union and management and their respective members. These rights and obligations are set out in explicit and recognisable forms, that is, they are structured in a formal way. The rights and obligations relate to general rules governing the method by which union and management are to lay down future rights and obligations, and to specific rules which cover special subjects such as wages, hours of work, incentives, and other working conditions. The method by which the function of collective bargaining is achieved is known as negotiation. The 'process' of collective bargaining is therefore synonymous with negotiation.

Collective bargaining realises its purpose of resolving the conflict of union and management when negotiation is effective. Collective bargaining fails when it does not achieve its purpose of governing the relations of union and management in an orderly way. Such a breakdown in the institution of collective bargaining is due to ineffective negotiations. Unions and managements then resort to more primitive relations, in the sense that these are disruptive to orderly behaviour. Thus, industrial anarchy is a consequence of a failure of collective bargaining, industrial anarchy takes two main forms, a strike or arbitrary behaviour by management. Arbitrary action by management is in direct conflict with the purpose of collective bargaining, for the latter is largely directed to control the arbitrary actions of management. A strike, on the other hand, can have goal similar to that of collective bargaining, that is, it may aim at establishing a right at the expense of curtailing managerial prerogatives. Indeed, 'the right to strike' is really a corruption of the original cry 'strike for the right' - a right to an

equitable share in society's production, a right to be rewarded for skill, the right to be treated with human dignity and with justice. Although a strike may have a similar purpose to collective bargaining, so far as a union is concerned, it is fundamentally a different state in union-management relations. Although the threat of strike or arbitrary action on the part of management may spur union and management to reach agreement in negotiations, neither can be regarded as part of the institution of collective bargaining.(22)

(22) In their attempt to show that an indeterminate state of industrial relations results from the suspension of the right to strike, some Canadian writers dangerously assert that the strike is inherently part of collective bargaining; this is not so. See Phillips 'Government Conciliation in Labour Disputes', Canadian Journal of Economic and Political Science, 1956, and Woods: Loc.cit.

Section 3 Factors leading to Peace and Conflict

Collective bargaining realizes its purpose when it provides for the establishment of orderly relations between union and management. This eliminates conflict in industry. The question arises: are there any conditions which determine whether or not collective bargaining is a success or failure? This question may be answered from general knowledge of the behaviour of social institutions.⁽²³⁾ A social institution to function effectively depends on the existence of a number of prerequisite conditions: the acceptance of common beliefs, values and definitions amongst the members of the institution, the maintenance of order, the motivation of those who have roles to play in the maintenance of the institution, an adequate communication system, and the protection of the institution against the encroachment of other institutions and forces that may disrupt its work. It is the task of this section to examine all but the last of these prerequisite conditions in relation to the institution of collective bargaining.

The two members of the institution of collective bargaining are union and management. Unfortunately, the history of union-management relations is such that there is a wide gulf between the beliefs of union and management. Many managements regard unions with suspicion, believing that unions are seeking to limit managerial prerogatives, and even to eliminate management itself. Unions tend to regard managements with distrust due to past events which were characterised by injustice and arbitrariness. Managements tend to favour the liberalism of laissez-faire, while unions tend to support collectivism. Managements are production-centred and unions are orientated to social relations.

(23) Schnieder: 'Industrial Sociology' (McGraw-Hill) 1957.

Some of the beliefs held by union and management are due to the inability of each to perceive their's and each other's roles in the industrial system. This is a consequence of the failure of those who determine policies in union and management to see the true purpose and function of collective bargaining as an institution. Some of the beliefs are the reflection of a real difference in the interests of union and management. For example, a union is necessarily interested in increasing wages and improving working conditions, both of which are bound to lead to some increase in labour cost - a situation which does not usually meet with management's approval. This does not mean that management is bound to oppose every demand for increased wages or improved working conditions. But there is a propensity for the interests of the parties to conflict.

It is worth noting, however, that there is a natural limitation to the demands that a union can make on a management. If its wage demand is too high then the security of the jobs of its members is endangered, and this is detrimental to one of its main goals. A union may not see the consequences of its own actions; this is likely to happen when there are wide, rather than narrow collective bargaining frameworks.⁽²⁴⁾ Where a single management and a single union make up the collective bargaining framework, there is much greater likelihood that the parties see that their interests are mutual. For example, the collective frameworks established by I.C.I. did a great deal to reduce the conflict of interests of the parties engaged in negotiations. The wider frameworks, particularly those established in the period after the first world war, led to greater uniformity in wage

(24) ^{Roberts:}
For some problems of the width of bargaining frameworks, see Roberts: 'National Wages Policy in War and Peace' (Allen & Unwin) 1958.

rates and working conditions. To this extent the reduction of inter-regional and intra-occupational wage differentials provided for greater wage justice on a national plane. At the same time the wider frameworks intensified the conflict of interests of the parties, and destroyed the mutual interests that could exist between managements and their employees.(25)

In the final analysis the point of union-management conflict and mutual interest lies in the employment of union members by management. Indeed, the only common interest that binds union and management in the institution of collective bargaining is the need to establish a social order which allows production and employment to take place. Conflicts of interest arise over the details of the social order, that is over the terms of employment. The question immediately arises: is it possible for two institutions, union and management with substantial conflict in interests, and with concern for the material outcome of the negotiations, to sit down and behave judicially as is required if negotiations are to be effective? In many union-management relations collective bargaining fails because the parties allow their conduct to be influenced by their separate, rather than their mutual interests. However, the Ardeer case proves - after examining over two hundred disputes - that the parties can behave judicially. In other words, it is possible for the parties to overlook what appears to be their short-term interests in favour of long-term interests of building a stable social order in the workplace.

(25) There is no rule as to the width of the collective bargaining framework should be. Relations between union and management are sometimes peaceful when the framework is industry-wide, for example, the clothing industry in Quebec, Canada. The failure to create a reasonably wide collective bargaining framework in the construction industry in British Columbia led to industrial discontent. See Woods: 'Patterns of Industrial Dispute Settlement in Five Canadian Industries', (McGill University) 1958.

An institution to function effectively depends on the maintenance of order; this is dependant on an appropriate authoritarian structure, a system of division of labour, definition of differentiated roles, and a status system for the positions of authority in the institution. The peculiarities of collective bargaining becomes apparent when it is realised that the elements of this formal structure appear to be absent. In the main collective bargaining relies on the formal structures of two other institutions for maintaining order, particularly in regard to the discharge of the obligations laid down in the agreements.

The agreements reached by negotiations which set out the rights and obligations of the parties, are the formal arrangements which contain the instrument of authority of collective bargaining. The importance of the negotiating procedure to the process of collective bargaining immediately becomes apparent. The negotiating procedure lays down rules as to how the two parties are to behave in the event of conflict arising between them. The existence of a well-structured negotiating procedure is of vital importance to the maintenance of order in the relations of the parties. It is essential that the parties allow their conduct to be regulated by law. The negotiating procedure for this reason has to be detailed. There is no reason to suppose that the legalistic nature of the negotiating procedure tends to confuse the parties in solving the problems that are found in the workplace.⁽²⁶⁾ The existence of a negotiating procedure is prima facie evidence that the parties intend to act according to rules. The negotiating procedure does not, of course, set out all the rules relating to the conduct of negotiations, many other rules are laid down in the agreements on specific subjects such as incentives, piece work, promotion and demotion.

(26) cf. Sharp: 'Industrial Conciliation and Arbitration' (Allen and Unwin), 1950, p.445; and, Golden and Parker: 'Causes of Industrial Peace', (Harper), 1955, p.47.

The institution of collective bargaining has little or no control over the human officials responsible for carrying on the work of collective bargaining. Agreements reached by collective bargaining usually lay down rights and obligations with respect to union and management, and not in relation to their officials. There is an exception to this in the negotiating procedure which specifies differentiated roles for certain officials, such as the labour officer and the local union official, but if the particular personalities fail to cope with their tasks, they are punished not by collective bargaining but by their respective organisation. However, other officials in union and management, not mentioned in the negotiating procedure, have roles to play in the maintenance of the work of collective bargaining. Thus, the full structure of division of labour is not to be found in any of the formal arrangements of the collective bargaining institution itself. The division of labour and the role structure are to be found in union and management. In a not dissimilar manner, the status of officials engaged in collective bargaining derive their formal status principally from their own organisation. Sometimes, the status of a particular group of officials, may originally come from collective bargaining, for example, the recognition of shop stewards in the I.C.I. agreement. The general improvement of status of the personnel officer in management is largely attributable to the development of collective bargaining.

Collective bargaining does exert some direct control over the behaviour of the officials who take part in the actual negotiations. Apart from the specific provisions laid down in the agreement the officials observe certain conventions. These conventions may be such that they are almost part of the formal arrangements of collective bargaining. For example, the way the parties sit in conference and argue may be sufficiently standardised as to be almost rules to regulate their conduct. There are

many informal relations between the officials, for example, the personal relations between the parties, whether or not they engage in off-the-record discussions, and whether they know that they can rely on each other's word. Collective bargaining may even become an informal method for removing officials either in management or union by the inter-play of politics. Informal arrangements may in some cases disrupt the work of collective bargaining, at other times the informal arrangements may help collective bargaining.

For collective bargaining to function effectively in laying down rights and obligations for union and management, the latter institutions must perceive their own roles and those of each other in such a way that the roles are effectively discharged. Thus, a management which perceives a union's role as an intervenor, and not as a participant in formulating rules relating to working conditions, may frustrate the union in its purpose, and may cause it to be aggressive in its behaviour towards management. In some situations, however, it is often desirable for a union to remain an intervenor, rather than a participant; for example, when a job is evaluated or timed for work measurement purposes.⁽²⁷⁾ A union's legitimate role may change from situation to situation; for example, it may challenge work assignments and loads when time rates of pay are in force, but as soon as incentives are introduced it has to participate in the fixation of those assignments and loads. However, a union, by its very nature, cannot take over the task of supervising, this is clearly a function of management. In other words there are limitations to which roles each institution may play, and these limitations must be recognised by both, if collective bargaining is to succeed.

(27) cf. Harle: 'The Role of Trade Unions in increasing Productivity', Political Quarterly, January, 1956.

An adequate communication system is needed to allow collective bargaining to function effectively. The negotiating procedure is not only an orderly way of conducting the process of collective bargaining, it is also a communication system. If the rules are carefully laid down there is less likelihood of the parties falling into communication pitfalls. For this reason the I.C.I. agreement set the steps of the procedure out clearly and in detail. Emphasis was placed in resolving the disputes as near to the workplace as possible; and for stating the problem clearly, and for transmitting the resulting agreement to the attention of the work force. The most effective messages were conveyed when these were in terms of rights and obligations. Messages were much less effective when they were in general terms of information, such as the brochures on job evaluation and work study, because they were less meaningful to union members.

In order for communication to be adequate, for institutional roles to be properly perceived, and for effective means to be determined for reaching the objectives of particular negotiations, the personalities involved in the bargaining process have to be competent to cope with their roles. The importance of personalities in the union is mentioned in the concluding chapter, particularly in relation to the law-enforcement function of a union. The Ardeer case study suggests that management officials determine to a considerable extent the success or failure of the particular series of negotiations. A management negotiator to adequately discharge his role needs to have considerable knowledge of union-management relations in general, a specific knowledge of the history of relations on all subjects likely to come into dispute, a general knowledge of trade union behaviour and of informal group behaviour of employees, and an ability to foresee the repercussions of his arguments and joint decisions on the behaviour of work groups, union and management officials. Although

no doubt there are many successful negotiators with varying personalities, certain qualities such as basic honesty to inspire confidence are essential for the management official to perform adequately in his difficult task of persuading his counterparts in the union to come to agreement. In the final analysis the principal management official must personify and uphold the principle of rule of law in industry.

Summing up, it appears that collective bargaining lacks certain well defined prerequisite conditions which permit a social institution to reach its goals without disruption and instability. In the first place, far from having common beliefs, values and definitions its two members, union and management, have separate interests, different norms of behaviour and suspicions of each other's intentions. In the second place, while there is an authoritarian structure in the form of agreements reached in negotiations, the institution of collective bargaining has no officials to enforce its orders. It has no way of punishing those humans responsible for not maintaining it. The division of labour, differentiated role and status structure are generally absent from the formal structure of collective bargaining; instead collective bargaining relies on the formal structures of union and management to maintain it. The communication system is likely to be fouled because of the failure of the parties to perceive their roles in collective bargaining. It follows that collective bargaining is difficult to maintain, and, functions effectively only in special conditions, which are defined at the end of the next section.

Section 4 Difficulties in the Negotiating Process

The Ardeer case showed that many difficulties beset the negotiating process. Some negotiations were characterised by strain which hindered the objective of negotiations being reached. Some negotiations were disrupted, in the sense that the negotiations collapsed or were unable to make progress for an interval of time. Finally, some negotiations broke down, in the sense that they did not reach agreement, or reached an agreement which was unacceptable to the groups in the factory. As these negotiations were ineffective it followed that collective bargaining failed to achieve its purpose. Was there one dominant reason for the ineffectiveness of the negotiations? It is the task of this section to explore this question.

Negotiations became strained and disrupted when the parties failed to communicate. For example, in 1951 the parties discussed certain amendments to the negotiating procedure, and the Company agreed to certain proposals of the Signatory Unions, only to find that a mistake had been made in the original claim. Negotiations were disrupted, and the parties were forced to retrace their steps when they learnt of the error. Again, in the negotiations with the A.E.U. in 1935 the Company mistook the proposal of the union; the A.E.U. wanted a negotiating procedure to process disagreements about wages claims, and was offered instead a national wages agreement. The negotiations would have broken down entirely had the delegates of the A.E.U. refused the Company's offer - its proposal was accepted by a majority of one vote. The minority of delegates saw the Company's proposal as not being in their interest.

Negotiations became subject to strain when one of the parties failed to realise the consequences of its or the other's parties proposals. In the case cited above, the A.E.U. signed its wages agreement in company with other engineering unions. But it did not discover the consequences of this until the following year when it sought an alteration in the rates. It found that it did not have an exclusive agreement with I.C.I. At the time of the signing of the agreement the union officials had told their delegates from I.C.I. factories that their wages were not tied to any other craft, when in actual fact they were. No disruption occurred over this mistake for the A.E.U. agreed, after one Gilbertian act, to join other unions in negotiations with the Company. Had the A.E.U. decided that it was not morally bound to accept the agreement, because it did not understand its full implications, negotiations would have been abortive. This example was more than the result of faulty communication; it clearly involved conflicting interests of the parties.

Negotiations about the negotiating procedure were also subject to strain and disruption because of the refusal of the unions to recognise the Company's works council scheme. This strain and disruption was a direct result of the development of a status situation. In 1938 the Signatory unions had rejected a negotiating procedure proposed by the Company because it included works councillors and works councils and did not recognise shop stewards. In 1947 the Company demanded the acceptance of the works council scheme, not because it added anything to the proposed negotiating procedure, but simply as a 'price' for recognising shop stewards. This was negotiating for the sake of status, rather than for establishing the best possible negotiating procedure. Consequently, the signing of the negotiating procedure was held up for another six months - after six years of frustration by the Company. The issue was unresolved in

1938 because the Company officials did not make a clear distinction between joint consultation and the negotiating procedure, so their methods of reaching objectives were astray.

The most fruitless series of conferences were those relating to work study. Part of the trouble lay in faulty communication; the union officials did not really understand how work study fitted into the union-management pattern, while management talked of work study instead of incentives. Part of the trouble lay in the negotiators failing to decide a means to reach an end; the unions did not make any specific claims, and the company did not assist them in realising their aims. Most of the trouble lay in the conflict of interests; some of the unions did not want their rank and file to accept incentives, and the Company did not want to concede any fresh terms for workers accepting incentives. As a consequence the parties did not really negotiate, they did not try to lay down rights and obligations for introducing and maintaining incentives. In a sense they did not genuinely negotiate, they did not reach their real points of disagreement, and hence they did not reach agreement. As a result the Company conceded practically no real conditions, and the unions in turn gave a hazily worded resolution which did not obligate members of unions to accept incentives based on work study. In short, these conferences were not negotiations, but consultations. Consultations did not involve decision-making on the part of union and management and for this reason were completely ineffective for they did not change the refusal of workers to accept incentives.

Negotiations, when they resulted in effective agreement authorised those in formal positions of authority in both union and management to do certain acts. This authorisation not only gave certain officials the right to act, it also obligated them to act in a certain way. Thus, the terms of the decision reached at negotiations

were transmitted by the formal organisations of management and union to their members at the workplace and it was this transmission of authority that controlled the behaviour of the union members, who were also the employees of management, In the case of consultations, such as occurred over work study, these were not transmitted by way of the formal lines of authority of union and management. The Company produced a brochure, which was distributed to its employees, but this did not have the same effect on their behaviour as when union officials reported on the terms an agreement. The union officials did not report their consultations to their members in order to persuade them to accept incentive schemes.

Evidence at Ardeer suggested that negotiations were subject to disruption and breakdown due to the fact that there had been no previous negotiations on a subject. For example, the absence of rules to cover possible displacement led the craft groups to refuse incentive schemes. The failure of unions and Company to arrive at a national agreement which installed job evaluation as a method for determining job rates led to the rejection of this method at Ardeer. The fact that job rates had remained unaltered in the blasting department for many years led to discontent amongst the men on the old side, which was one of the underlying reasons for the 1950 strike. The absence of job evaluation as an accepted method of settling wage differentials was a prime reason why negotiations were strained and disrupted after the 1950 strike and the 1954 'go-slow'. In short, the failure of the parties to set up adequate terms of reference led to strain, disruption and breakdown in negotiations at a later stage.

The triggering of the actual stoppages on the old side in 1950 and on the mechanised in 1954 were not directly the result of underlying dissatisfactions. The triggering took place because of emotional tension generated by accidents and breaches of faith by management, as the

employees saw them. The actions of the men were in defiance of the provisions of the negotiating procedure. While the negotiating procedure was of the utmost importance for establishing orderly conduct between the parties, it was by no means the total set of references for the parties. If there were no sets of reference for specific subjects, such as on job evaluation or for regulating changes in work load, the rules were insufficient for regulating employee conduct. When employees were required to make considerable adjustment in their behaviour the provisions of the negotiating procedure were insufficient to control behaviour. Observance of provisions of the negotiating procedure in the minds of the employee groups were too distant as a means of settling their grievance. Thus, it was possible for short term conduct to be disorderly, while in the long term behaviour was conditioned to observance of the negotiating procedure.

The 'go-slow' on the mechanised unit in 1954 was the result of disorganisation in management; line management promised something to its employees when it had no authority to do so. The maintenance of collective bargaining as an institution lay in the hands of those not directly involved in the negotiating procedure. Those directly responsible for negotiations were then required to restore the authority of collective bargaining; this they found was extremely difficult to do, partly due to conflicting methods of achieving ends, and to a clash of interests between the parties as management did not wish to concede a wage increase which paid jobs more than rates assessed by job evaluation.

The subsequent 'go-slow' on the old side occurred under different conditions; it was directly attributable to the decision of those directly involved in the negotiating process. The negotiators did not see the consequences of their own actions; the conflict of interests, particularly the desire of management to restrict the wage increase, had

a great deal to do with the behaviour of the negotiators. (※)
 Changing the status of the work groups in the management organisation was the trigger for setting off the 'go-slow'; the position was repaired when increased rates were given to improve the status of the men on the old side. Thus the status of the parties, the negotiators and officials of union and management, and the work groups were significant to collective bargaining, even though collective bargaining had no status structure. For this reason the ritual of discussing a seemingly irrelevant matter of work loads to save the face of the men was of considerable importance in restoring the prestige of officials and groups in union and management. For similar reasons it was highly commendable that negotiations were reopened even though the men had not resumed work at the proper pace.

Some of the greatest difficulties that confronted negotiators were over piecework and incentive schemes. The failure of the work study conferences to elucidate the very vague clause in the agreement on working conditions placed considerable strain on local negotiations. This clause ostensibly set out the relationship between earnings and effort, but in actual fact it did little to solve problems both at the time of installation of the schemes and when conditions changed. Time study was designed to solve this problem, but sometimes the studies were not accepted by the operatives who insisted that they were working at a suitable pace. In such a situation there was a clash of interests between the parties, which was only resolvable if the parties made scrupulous efforts to be equitable in their consideration of the dispute.

(※) None of these negotiators were punished by collective bargaining, but some officials may have lost status in their respective institutions. Fear of possible loss of status was no doubt the reason for the emotional behaviour of officials at the time of the stoppage.

The Ardeer case also showed that collective bargaining was disrupted by external factors such as technological change. This was evident after the installation of the mechanised unit which touched off patterns of insecurity particularly amongst the female piece-workers. The piece rates offered were frequently rejected by the operatives, and in the case of one rate management installed it without approval of the union or operatives. This was a breach of the rules of collective bargaining, and as a result, a new set of references supplementary to the negotiating procedure were introduced. This procedure was not adopted in the case of disputes affecting the mechanised unit; the practice was to refer a dispute to another local conference. These procedures did not eliminate a clash of interests between the parties, but mitigated the conflict in so far as both parties strived vainly to find a standard which the other party would find acceptable.

The empirical evidence showed that communication difficulties and failure of the parties to work out an appropriate method to reach their objectives were reasons why negotiations were sometimes rendered ineffective. However, the most important reason was the clash of interests between the parties, and this clash was of such importance that even communication difficulties were sometimes the result of a clash of interests. In other words, the parties saw a clash of interests in situations of bad communication, where in actual fact there was no need to do so. Where a party failed to work out a method appropriate for reaching an objective in negotiations, the resulting confusion was interpreted as a clash of interests of the parties.

How then were the parties to avoid such difficulties? The only method was for the parties to behave judicially, in the sense that they came to an impartial decision, within proper terms of reference previously laid down, which established equitable rights and obligations. This was

attempted at Ardeer, with the result that confidence existed between the parties; as a consequence real and illusory clashes of interests were reduced to a minimum. It made communication easier and the determination of methods of reaching objectives in negotiations more straight forward. If one or both parties allowed their conduct to be governed by their immediate self interests a situation of strain, disruption and breakdown in negotiations became a strong possibility.

Section 5 : External Forces and Collective Bargaining

Collective bargaining is an institution which governs the relations of two other institutions, union and management; thus, three institutions are involved. Due to the type of inter-institutional relationship which exists between union and management, collective bargaining is extremely vulnerable to disruption from external factors. At this stage of the analysis, it is reasonable to assume that either union or management, or both, can upset the institution of collective bargaining. This assumption turns out to be false; it is management's behaviour which determines whether or not the institution of collective bargaining is to function effectively, in the sense that collective bargaining realises its purpose of governing the relations between union and management. It is the task of this section to deal with this very contentious conclusion.

Before proceeding with the analysis it is desirable to define a factor which is endogenous to collective bargaining and one which is exogenous. The formal arrangements of collective bargaining including negotiating procedure and the agreements relating to wages and working conditions are endogeneous factors. If a change is made in the set of references by which the parties conduct their negotiations, for example by altering the method of payment from hourly rates to incentive or piece rates, this is clearly a factor endogenous to collective bargaining. A dispute arises when one or both parties desire to change these formal arrangements. The more stable the formal arrangements the less disputes, and hence the less strain is likely to take place in collective bargaining. At Ardeer, the post-war period was one of considerable change in the formal arrangements and for this reason alone many disputes arose.

The desire of one of the parties to alter the formal arrangements is due to the pressure of some change taking place in its social structure. On the management side one of the most important of these pressures is change due to technological progress. A rapid change in technological progress is bound to be followed by serious adjustment patterns when the security of the jobs or earnings of the employees is threatened. For this reason the most important single event that occurred in the post-war period at Ardeer was the establishment of the mechanised unit in the largest department of the factory. Other departments, which were not drastically re-organised in the post-war period, did not experience the same stress and strain; consequently the work of collective bargaining was not disrupted in these departments.

Both management and the union are forced to adjust to changes taking place in the general economic and social environment. Rising costs of living and rising prices of raw materials are respective stimuli on the social structure of union and management; both are external to union and management, and to the institution of collective bargaining. Their impact is only felt in collective bargaining when a formal dispute arises between union and management and requires negotiation to resolve it. The respective interests of the parties are really external to the institution of collective bargaining, but their method of resolving conflicts of interests by acting judicially through the process of negotiation is endogeneous to the institution of collective bargaining.

It is obvious that many disputes arise because of response in the social structures of one or both parties due to the stimuli of social and economic factors. For this reason narrow, rather than wide collective bargaining frameworks may (but not always) eliminate some of the need for the social structures of the parties to react to external factors. It also follows that when

collective bargaining frameworks are stable for many years the social structures of the two parties supporting the framework of collective bargaining become adjusted to each other, thus giving rise to definite formal and informal arrangements in collective bargaining. The more the frameworks alter the more adjustment is needed in the formal arrangements in collective bargaining, and in the social structures of the parties.

Failure to distinguish between endogenous and exogenous forces tends to cloud some of the controversial issues arising in the studies of collective bargaining. On reflection it soon becomes apparent that the so-called 'socio-economic' environment is of more relevance to management behaviour rather than that of the union.⁽²⁸⁾ For example, the size of the workplace, the production pattern, the degree of technological change, the state of demand, cost factors, location, and the type of labour used, are all directly related to the social structure of management or to its environment. Indirectly, some of these factors may affect the social structure of a union or its behaviour, but the reaction is by way of the behaviour of management. Even the basis of the craft union evolves from the occupational structure found in the organisation of work by management. There are some social and economic forces which call for adjustment of union behaviour, but generally these are fewer and more diffused than those that bear on the social structure of management. For this reason management behaviour is much more responsive and articulate to the external and environment/^{and} is critical in the relation to the source of dispute. This is borne out by experience at Ardeer, where by far the largest number of disputes emanated from pressures on management and the need for it to adjust.

(28) cf. Clark Kerr: 'The Collective Bargaining Environment' in Golden and Parker: loc.cit. See also Dubin: 'The World of Work' (Prentice-Hill) 1958.

It is reasonable to suppose that certain economic environments favour the adjustment of management and hence assist collective bargaining to realise its purpose, while other environments are unfavourable to management's adjustment and hence prejudice the chances of collective bargaining realising its purpose. Empirical evidence does not seem to support these a priori assumptions. For example, different states of union-management relations are to be found in industries characterised respectively by small, medium or large-scale units of enterprise. Different firms in the same industry, or the same industry in different countries enjoy different states of union-management relations.⁽²⁹⁾ Even the employment of casual labour is not always associated with conflict in union-management relations. The N.P.A survey covering a number of companies in the United States concludes that 'external factors do not necessarily predetermine the nature of a collective bargaining relationship; environmental factors set limits, but within these limits the parties are free to create a bad relationship or a good one'.⁽³⁰⁾

It is sometimes asserted that industrial giants, when they set patterns of wages and working conditions, are particularly vulnerable to the clash of conflicting interests. On the other hand it is stated that moderately sized plants and pattern-following tends to dampen the conflict of interests of the parties.⁽³¹⁾ Ardeer was a large factory, for all intents and purposes was located in a one-industry town. It was a pattern-follower of key

(29) See Woods: 'Patterns of Industrial Dispute Settlement in Five Canadian Industries', and compare Walker: 'Industrial Relations in Australia', (Harvard) 1956.

(30) Clark Kerr: Loc.cit.

(31) Golden and Parker: Loc.cit.

wages and working conditions laid down in national agreements; nevertheless it had considerable autonomy to resolve disputes at the factory level. Ardeer was part of a much larger industrial society, I.C.I. This company was a 'pattern-setter', and part of the success of collective bargaining at Ardeer must be attributed to the fact that I.C.I.'s personnel and labour policy was an innovating one. To the date of this research, no national industrial dispute had shaken the Company. Nor did I.C.I. as a monopolist in many parts of the chemical industry 'buy' industrial peace; this was achieved only through collective bargaining. There is therefore no indication that large companies are prone to unsuccessful collective bargaining.

Nor is there any apparent relationship between the state of union-management relations and ownership of the enterprise. The Manchester Ship Canal Company, a public body, did not enjoy peaceful industrial relations, although much of the trouble in the Manchester Docks apparently lay in the dock labour system.⁽³²⁾ London Transport, a public board, did not have markedly different relations to those existing in private industry.⁽³³⁾ In the post-war period, the nationalised railway and mining industries had considerable conflict in union-management relations. The assumption once held by many unions, that the difficulties in union-management relations were to be found in the private ownership of enterprise, was not sustained by the post-war experience in the U.K.⁽³⁴⁾ Indeed, far from solving union-management conflict the nationalisation of industries became dominated by labour troubles.⁽³⁵⁾ By contrast union-management relations in I.C.I. in general, and Ardeer in particular, were good due to the success of collective bargaining.

(32) 'The Dock Worker' (The University of Liverpool Press) (1954).

(33) Clegg: 'Labour Relations in London Transport', (Blackwell), 1950.

(34) Spero: 'Labour Relations in British Nationalised Industry', (M.Y.Uni.Press) 1955.

(35) Baldwin: 'Beyond Nationalisation' (Harvard) 1955; see also Saxena: 'Nationalisation and Industrial Conflict Example of British Coal Mining' (The Hague), 1955.

If the socio-economic factors are not the determinant cause of successful collective bargaining, and hence peace in industry, what is? By far the most important factor is the behaviour of management in respect to the union and collective bargaining, and in respect to its employees. The N.P.A. survey lists the first and most important factor: full acceptance by management of the collective bargaining process and of unionism as an institution. When management refuses to recognise the role of the trade union in collective bargaining conflict in union-management relations is inevitable.⁽³⁶⁾ In such a situation it may be a misnomer to call the relations of union and management as collective bargaining. Collective bargaining only exists where the union-management relationship is characterised by the judicial behaviour of management and union in resolving their differences. This system of union-management relations is dependent on management accepting the obligations laid down by agreement: in short, collective bargaining to work effectively is mainly dependent on managerial behaviour. At Ardeer the unions were accepted by management, thus paving the way for the establishment of industrial peace.

A management does not discharge its entire responsibilities in the field of personnel by recognising a trade union as a participant. It has other responsibilities in the way that it carries out its day to day task. Line management is largely responsible for good leadership of the work groups, and for their high morale. For this reason good 'human relations'⁽³⁷⁾ is an important ingredient for the social structure of management to work in the interests of the enterprise. A personnel programme

(36) See Golden and Parker: Loc.cit. (However, the N.P.A. theory includes other factors which are not crucial in determining the state of union management relations).

(37) See McGregor: 'The Influence of Attitudes and Policies' in Golden and Parker: Loc.cit.

devised and implemented by a special staff department is only a framework within which the work of the human beings in the organisation can be directed and co-ordinated. (38) If by chance supervisors are ill-trained and poor leaders, informal groups may express discontent about their treatment, even to the point of a spontaneous stoppage. In such a situation the union has the task of repairing the damage, and seeing that the obligations of the employees are discharged. Ultimately, management is responsible for seeing that law and order are maintained in its workplaces. This was done at Ardeer.

(38) Pigors and Myers: 'Personnel Administration', (McGraw-Hill).

Section 6 Comparison with Joint Consultation

It is the task of this section to examine briefly the relationship of joint consultation with collective bargaining, in particular to test the contention that joint consultation is complementary to collective bargaining in the maintenance of peace in union-management relations. For this purpose it is necessary to look at the functions of joint consultation and compare them to those of collective bargaining. From this comparative analysis it is possible to assess their relative effectiveness in maintaining peace in industry. As I.C.I. and Ardeer have experience in joint consultation reference is made to the empirical data drawn from those sources.

The I.C.I. Works Council Scheme was established shortly after the Company came into being. This works council scheme provided for joint consultation machinery between various levels of the management hierarchy and representatives elected from amongst the operatives. Works councils were organised in the various factories and workplaces under I.C.I. ownership. The joint consultation machinery also covered the divisions of I.C.I. These divisional works councils were composed of representatives drawn from the works councils under the control of a particular division. In addition, there was a Company-wide works council which was composed of representatives of the divisional councils. Each level of the works council scheme had certain prerogatives and defined jurisdictions. A formal constitution set out the powers, duties and functions of each council.

The objectives of the I.C.I. works council scheme were threefold: firstly, to give employees a wider interest in, and a greater responsibility, for the conditions under which their work was performed; secondly, to provide a recognised and direct channel of communication between the employees and the management on matters directly affecting

their joint or several interests; and thirdly, to promote throughout every works a spirit of co-operation in serving the efficiency of that works and the contentment of the employees engaged therein.

A works council was established in Ardeer a few years after it was taken over by I.C.I. Research at Ardeer⁽³⁹⁾ showed that the first objective of the works council was not realised; the works councils did not deal with many matters which were employment conditions. The works council dealt with relatively minor matters - 'canteens and latrines', as many employees expressed it. The original scope of the works councils was limited by collective bargaining which was responsible for determining most of the important working conditions. Indeed, this limitation was explicitly recognised by the agreement relative to the negotiating procedure. However, collective bargaining could handle only those working conditions which could be expressed in 'legal' terms, and about which explicit rules could be drawn. Where some aspect of a working condition, such as the placement of a drinking tap, was incapable of expression in legal terms - it was left to the determination by management. In this latter situation it was possible and correct for the works council to make its representations on the prerogatives of management.

In other words, under the social system as it prevailed in I.C.I., discussions about employment conditions in I.C.I. factories were limited to those aspects which could not be defined in terms of rights and obligations. These matters were 'welfare' items, as distinct from 'negotiable' items in union-management relations. Most of these 'welfare' items were related to the physical environment of the workplace or to the protective clothing of the employees. When management

(39) This research was done by Mr. Henry McKinlay, the other I.C.I. Research Fellow in Industrial Relations at the University of Glasgow.

'conceded' to some of the 'representations' of the works council real improvements were made to the working conditions of the employees.

While the works council scheme probably stimulated the interest of employee representatives in 'welfare' matters, it was open to doubt whether it gave them greater responsibility. Exacting responsibility was not possible without delegating authority,⁽⁴⁰⁾ and this was not possible under the works council scheme, or any other joint consultation machinery for that matter. A works council had no power to make decisions; it only advised the factory management which was free to reject the advice tendered. Under the work council scheme representations were frequently 'irresponsible', as the representatives had no authority to decide what 'concessions' were to be made. On one occasion in response to pressure for greater clothing allowances the works manager was forced to remark that the Company did not see that it had to provide 'every stitch of clothing for all its employees'.

The situation was very different under collective bargaining. Under collective bargaining there was joint decision-making between representatives of union and management. Although union representatives sometimes made ridiculous demands, a situation of irresponsibility did not develop for both parties had to agree to the final concession made by management. These representatives of union and management, within terms of authority granted to them by their respective organisations, had power to bind their organisations in the agreement reached. Management believed that it was bound by the decisions reached by negotiations. The parties held their respective members responsible for discharging the obligations incurred by previous negotiations.

(40) See Urwick: 'The Elements of Administration', (Harper), 1943.

The third objective of the I.C.I. works council scheme in so far as it referred to the promotion of efficiency, was not realised at Ardeer. Few matters were discussed which improved the efficiency of the works. One reason for this was the existence of a suggestion scheme which tended to channel creative suggestions into another direction. As individuals were rewarded for their suggestions, they were not disposed to give creative ideas to their representative on the work council for him to get the cudos, and for them to remain unrewarded. Another reason for not discussing matters relating to the efficiency of the works was the widespread nature of incentives and piecework. The organisation of work was frequently mentioned at the meetings of union and management when arguing about the fairness of the details of times, tasks and teams. In addition, a system of production sub-committees, established by collective bargaining but ostensibly part of the works council, also discussed various matters that had some bearing on the efficiency of the works.

The third objective also referred to promoting a spirit of co-operation and contentment of employees, but this was so vague, and related to many other factors than to the existence of formal joint consultation, that the contribution of the works council was probably negligible. It was impossible to collect empirical evidence which proved whether or not this purpose of the works council was achieved. Quite clearly the contribution of line management, through good leadership at the supervisory and managerial levels, was the determining factor in securing employee co-operation.⁽⁴¹⁾ General contentment of the workforce was the result of good management generally, including 'good' agreements respecting employment rights, and appropriate welfare items. If the works council gave the employees some feeling that they belonged to the

(41) See J.A.C. Brown: 'Social Psychology in Industry' (Penguin) Bellows: 'Creative Leadership' (Prentice-Hall) 1951

organisation then it assisted the contentment of the work force. On the whole it was unlikely that the works council through its monthly meetings contributed a great deal to this feeling of belonging in a works employing nearly seven thousand.

The realisation of the second objective was incapable of empirical proof: it was not by nature a purpose of the works council, but the method by which it operated.

Prima facie there were reasons for supposing that the method was inherently ineffective in what it explicitly or implicitly set out to do. In the first place as a means of upward communication it was limited and inefficient. It did not provide management with a means of knowing that there was growing industrial discontent in its plant; it was not able to raise the matters which were likely to fall into dispute. Even as a morale indicator it worked less effectively than say the suggestion scheme which could assess a very definite ratio of constructive suggestions to destructive complaints.⁽⁴²⁾ As a means of downward communication the works council did not take the place of the normal chain of authority; and even as a means of communicating information from top to bottom it was inefficient for the works councillors had no formal method of reporting back to their constituency. By contrast the reporting back of shop stewards was much more formal and efficient. If the works councillor failed to report back, he could be removed in the next elections. If the shop steward failed to report back he could be removed immediately by his union. The shop steward's authority and responsibility to his electorate were much more formally defined than were those of the works councillor.

(42) See Davis: Human Relations in Industry (McGraw-Hill) 1956.

Despite the general awareness at Ardeer amongst employees, works councillors and management officials of the shortcomings, if not the general failure of the works council, most opposed its abolition. Why did this seemingly irrational attitude prevail? McKinlay advanced an interesting and unique explanation. Looking at the key role of the factory manager, who presided at the meetings of the works council at Ardeer, McKinlay believed that the works councillors' interest was focussed in him. The factory manager was the supreme authority in that particular industrial society. (*) Under the works council the councillor was able to invoke his authority and appeal directly to it. In short, the works council provided a mechanism by which the operatives at the end of the scalar chain had the right to appeal directly to the fountain of justice without the intervention of intermediary officials. In this way there was a check on the arbitrary authority of other management officials.

This theory of joint consultation also explained why the unions disliked the I.C.I. works council scheme. The unions saw in the scheme one method of protesting the arbitrary use of management's authority. This method was akin to the type used by the serfs. in approaching the feudal lord for justice. If the feudal lord was just then the serfs' position was successful; if he was unjust then the serfs' rights and privileges suffered. The unions saw no reason why the establishment of justice in the industrial society of I.C.I. should be based on the personal worth of its factory managements. Rather they

(*) As far as the downward communication was concerned the works council scheme provided a framework for the use of charismatic authority, an appeal from the supreme leader direct to his followers, and without recourse to intermediary officials. This also was one of the reasons why management did not want the abolitions of the works council.

wanted employees to have common law rights so that justice was dependent on the negotiating process.

Moreover, they did not want management to establish an internal system of processing grievances which took away one of their important functions. The works council scheme belonged to the 'paternalistic' idea, while trade unions represented the 'democratic' ideal. The employees accepted both the works council and also used the negotiating process because they belonged to two societies - the paternalistic factory and the maternalistic trade union.

From this analysis it is clear that joint consultation is neither supplementary nor complementary to collective bargaining. Collective bargaining is an institution which governs the relations of union and management. Joint consultation, the I.C.I. way, is not an institution; it is merely one method by which the Company conducts its business. It is a special communication and participation technique which departs from the normal management bureaucracy found in most industrial societies. The formal authoritarian structure has superimposed upon it an extraordinary set of formal relations, which does not recognise the intermediary levels of authority in the bureaucracy.

This situation does not apply to those joint consultation machineries which are composed of union and management officials; here joint consultation takes the outward form of collective bargaining. Because there is no law-making the union officials frequently confuse their roles; they are never sure whether they are 'negotiating' or 'consulting'. One process ends in effective agreement, the other does not govern any one's actions. Consultations are ineffective for they do not change behaviour. Just what these forms of joint consultation are meant to achieve is in the realm of conjecture.

Underlying joint consultation and similar types of machinery is a false assumption that there are common and mutual problems that fall outside the realm of collective bargaining. Collective bargaining is founded on the assumption that disputes arise between union and management, and by negotiating these disputes are resolved. The mutual problems appear to cover matters such as safety, apprenticeship, training, general health of the industry and operational efficiency. While some 'co-operation', meaning consultation between union and management representatives, is possible joint decision making on these subjects is unlikely. A management cannot dispose of its responsibility for the safe working of its plant, the training of its personnel or the operational efficiency. A union cannot enter into some form of partnership⁽⁴³⁾ with management as the functions of management and union would be impaired. Although the Scanlon plan is evidence of some contribution of a union to operational efficiency,⁽⁴⁴⁾ this is one of the key functions of management. Operational efficiency is to be obtained by dynamic management, such as runs I.C.I., and is to be obtained by research, development, planning and modern technical equipment.⁽⁴⁵⁾ A union is simply not competent to enter this field, if it does then its true purpose is likely to suffer. There is of course no reason why a union cannot criticise a management in the way that it runs its enterprise, and suggest changes in order to secure better wages and working conditions.⁽⁴⁶⁾

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- (43) cf, Roberts: 'Wages and the Railways', Political Quarterly, April, 1955; and Harbison and Coleman: 'Goals and Strategy in Collective Bargaining' (Harper) 1951.
- (44) Lesieur: 'The Scanlon Plan: A Frontier in Labor-Management Co-operation', (Massachusetts Institute of Technology) 1958.
- (45) See Drucker: 'The Practice of Management' (Heinemann) 1955, Davis: 'Industrial Organisation and Management' (Harper) 1956.
- (46) The general failure of joint union-management committees in the U.S.A. and in Australia indicates the instable nature of joint committees. See also J.Mack: 'The Glacier Metal Experiments', Political Quarterly July, 1956, p.318.

Conclusion

Collective bargaining is an institution which has as its purpose the government of relations between union and management. Its function, through which its purpose is achieved, is to establish rights and obligations for union and management and their members. These rights and obligations are set out in explicit and recognisable forms. The method by which the function of collective bargaining is achieved is known as negotiation. The process of collective bargaining is therefore synonymous with negotiation. Thus collective bargaining realises its purpose when negotiation is effective, in the sense that it resolves union-management disputes, and collective bargaining fails to reach its purpose when negotiation is ineffective. In this latter situation there is industrial anarchy, that is, there is the absence of law. Thus a strike is evidence of anarchy, as is arbitrary behaviour by management in the way it treats its employees.

In order to achieve its purpose, collective bargaining as an institution is dependent on its two members, union and management, having a common interest. The only common interest that binds union and management in the institution of collective bargaining is the need to establish a social order which allows production, and hence employment, to take place. Conflicts arise over the details of the social order to be established, and if negotiations are ineffective these conflicts remain unresolved. Empirical evidence suggests that the separate interests of union and management are likely to cause strain, disruption and breakdown of negotiations, and this is so even when there is only faulty communication between the parties. Conflicts of interests are to be resolved by the parties behaving judicially, in the sense that they take account of existing rules and precedents, and by resolving any residual difference by invoking the standard of equity.

Collective bargaining is a somewhat peculiar institution in that it does not directly exert authority over those who are ultimately included within its ambit. It exercises authority over two other institutions, union and management. It is dependent on these two institutions for its maintenance and for enforcing its laws. It is only natural that collective bargaining should be vulnerable to disruption if either party fails to play its proper role. Pressures generated by factors from the environment or within the social structure of management tend to force changes in the terms of reference by which the parties regulate their conduct. The more stimuli there are, the more necessary are changes in the social fabric of the management institution, the larger the number of disputes arise, and the greater the possibility there is of union-management conflict. It is this adaptation of management to external stimuli, and its consequent behaviour in negotiations that determines whether or not collective bargaining succeeds in establishing law and order in industry. It is management behaviour which is the principal determinant of peace in industry. As it is seen in the next chapter, even a union's function to enforce the law of collective bargaining is mainly dependent on how management behaves in respect to its own employees.

Collective bargaining assumes that the union-management relationship commences with a dispute. There is only a limited range of subject matter over which dispute can arise. These are job security matters, wages, hours and similar working conditions and the details of the general relationship of union and management itself. Precisely the same method, that of negotiation, is used to resolve all these type of disputes. Negotiations can only take place over items which can be expressed in legalistic terms, that is rights and obligations.

Union and management can have no explicit authoritarian relations over other subjects. Where consultations take place between union and management there can be no stable relationship as there is no joint decision-making process. Joint consultation is neither supplementary nor complementary to collective bargaining. Joint consultation is not an institution, it is simply one way of carrying on managerial activities, and a union has no basic role to perform these. Thus, union-management co-operation outside the maintenance of collective bargaining is impossible.

CHAPTER XIII

BREAKDOWN IN UNION AUTHORITY

Introduction

The aim of this chapter is to answer the last question posed by the Ardeer study: why do union members refuse to abide by the terms of agreement laid down by union-management negotiations? In order to satisfactorily answer this question it is first necessary to consider some general aspects of trade union behaviour. Rather than proceed empirically, it is desirable to consider some consequences of sociological theory for explaining trade union behaviour. The purpose, functions and structure both formal and informal, of a trade union are examined in terms of industrial sociology. From this analysis certain weaknesses are found to exist in the prerequisites considered necessary for a social system,⁽¹⁾ of which a union is a type, to function effectively. These weaknesses lead to strain, social disorganisation, breakdown or even disintegration when conditions are unfavourable.

A union has many weaknesses in its formal structure: an indefinite status system, inadequate rewards and punishments, a weak authoritarian structure and an ill-defined system of division of labour. Some of the weaknesses can be attributable to the nature of union membership. Union members are also members of another institution,⁽²⁾ management, and this gives rise to weakness. The most important informal groups, which place so much strain on the union structure and are responsible for breaking down the authority of their union, originate in the organisation of work by management. Other weaknesses arise because of the interdependent functions of union and management,⁽³⁾ and if the latter chooses to frustrate the purpose of the union then immediate social disorganisation follows, with possible breakdown and disintegration. Social

(1) Schneider: 'Industrial Sociology' (McGraw-Hill) 1957, p29-26

(2) Miller & Form: 'Industrial Sociology' (Harper), 1951

(3) Moore: 'Industrial Relations and the Social Order' (Macmillan), 1951

disorganisation may also occur when functions are inappropriate for the purpose of a union, when they conflict, or when personalities fail to cope with their roles.⁽⁴⁾

The mere existence of weaknesses in the formal union structure does not necessarily imply that a breakdown in union authority must take place. For example, the failure of a union official to cope with his role may set in train certain consequences which are evidence of social disorganisation. Similarly, social disorganisation takes place when a union fails to discharge its bargaining function. A breakdown in union authority only occurs when an informal group of union members takes overt action to defy the authority of their governing body. There are degrees in the breakdown of union authority, and it is only when there is a drastic shift of power (in the sense of control of member behaviour) to the informal leadership, that there is a serious breakdown. Disintegration may take place when groups of members secede from a union.

It becomes obvious from applying these sociological concepts to the empirical data collected at Ardeer and elsewhere, that a union functions effectively (in the sense that it achieves its purpose) when collective bargaining is successful, that is when a union establishes rights and obligations with respect to its members' employment by management. While other environmental factors may frustrate a union, in the conditions which at present exist in the United Kingdom, it is management which determines whether or not a union is to function effectively. If it co-operates with a union to establish laws of employment to govern the social relations at the workplace there is little likelihood of a breakdown in union authority.

⁽⁴⁾ Schneider: Loc.cit. pp.26-28.

CHAPTER 11

If it decides on a policy of attacking a union, the latter's purpose is frustrated, collective bargaining fails, and informal groups of employees are left to fend for themselves against the inequitable practices of management. In the case of Ardeer, the local branch of the T. & G.W.U. functioned effectively in the post-war period because of the constructive policies of I.C.I. which assisted the union in reaching its objectives of establishing law and order in the factory.

Section 1 The Purpose and Functions of Unions

Every social system has a purpose in the sense that it attempts to achieve certain goals, and it also has functions which are the means of achieving the purpose. Social disorganisation can take place when goals, other than the fundamental goals are superimposed on the primary purpose of the social system. Moreover, some functions exercised by a union, as a particular form of a social system, may be inappropriate for achieving the goals of the organisation. The aim of this section is to determine the true purpose of unionism, and to see whether or not strains leading to social disorganisation take place because of the imposition of other goals on primary goals, or whether some functions are not achieving their goals.

According to the Webbs', a trade union is a continuous association of wage-earners for the purpose of maintaining or improving the condition of their working lives.⁽⁵⁾ This definition has been criticised for being too narrow by Milne-Bailey, who described a trade union as a 'body-having as its purpose the advancement of the vocational interests of its members'.⁽⁶⁾ Such a definition contains ambiguities, for professional bodies which are distinguishable from trade unions would be included.⁽⁷⁾ The improvement of working conditions and remuneration of their members are not the primary purpose of professional bodies.

(5) 'The History of Trade Unionism', Longmans, 1920.

(6) 'Trade Unions and the State', 1934.

(7) J.D.M.Bell 'Trade Unions', Chapter III in Flanders and Clegg: Loc.cit.

In a somewhat clumsy manner Cole described a trade union as a 'body of workers designed to do for its members by combination which these persons, acting in isolation, could not do for themselves'. In present day conditions 'a trade union is a body which bargains collectively on behalf of its members either with single employers of business firms or with an association or federation of employers, or with "opposite numbers"'.⁽⁸⁾ Trade unions also carry on other activities such as education, political action and act as friendly societies, but their main activity is collective bargaining. In his search for an adequate definition Cole mixes purpose with the functions of unions.

These definitions do not contain two important points. The first of these relates to the interdependence of functions of union and management, even though union and management are separate institutions with separate functions. The union's purpose is concerned with its relationship to management. The union is not interested in all management functions; it is only concerned with management's employment function.⁽⁹⁾ The union aims at establishing rights for its members with respect to their employment by management. Without management's employees the union has neither purpose nor life. The union's whole existence relies on the fact that all its members are members of another institution, known as management. The second point is that these union

(8) 'An Introduction to Trade Unionism', Allen and Unwin, 1953.

(9) For this reason the frontier of collective bargaining is unlikely to grow into the field of industrial management; this conflicts with views held by Laski and Cole, and most Fabian socialists; see Laski, 'Trade Unions in the New Society', p.171, and Cole, 'An Introduction to Trade Unionism', p.292.

members belong to management in a very special way, they occupy positions of inferior status to those who direct and control them. It is this particular form of overlapping of union and management membership, plus their separate, but interdependent functions which makes the union-management relationship unique amongst inter-institutional relationships. (10)

A new definition of a trade union is now attempted: a trade union may be described as an institution which has as its purpose the participation with another institution, management, in formulating laws to govern the rights and obligations of its members with respect to their employment by the second institution. Or more generally, a trade union is an institution which has as its purpose the participation in formulating law to govern the rights and obligations of its members with respect to a second institution to which they all belong as subservient members.

A trade union's purpose may not be realised when management does not allow it to participate in formulating law, in which circumstances the union may call a strike of its members with the objective of disrupting the activities of management. Management may then be forced to allow the union to bargain with it. A union's purpose may also be frustrated by sections of the state by preventing collective bargaining taking place, or by

(10) See Dubin in his 'Discussion' with Moore, 'Industrial Sociology: Status and Prospects', American Sociological Review, August, 1958, in which he argued that union-management relationship is unique because union and management are caught in an involuntary relationship involving overlapping membership and jurisdiction, and separate but interdependent functions. Moore argues that this is true of all collective relations - for example, Church and State, family and school, etc. - where there are separate but interdependent functions; see Moore: 'Industrial Relations and the Social Order' (Macmillan) 1951, p.339. If the peculiar nature of union membership is taken into account then the present Author's views correspond more closely to Dubin's. Dubin does not seem to repeat this interesting contention in his 'Working Union-Management Relations', (Prentice-Hall), 1958.

placing limitations on the existence of the union itself. State intervention may also regulate the terms of wages and working conditions, in which situation a union may function more as protest group,⁽¹¹⁾ rather than as an institution involved in a law-making process. On the other hand, state intervention may possibly assist a union to realise its purpose, when for example it provides legal recognition and makes collective bargaining compulsory.⁽¹²⁾

State intervention may also indirectly assist a union to achieve its purpose when it nationalises a management which has previously denied a union the right to negotiate. In fact, at the present time this is probably the only legitimate argument for the trade union movement to support the policy of nationalisation of the British Labour Party - an argument which does not apply to I.C.I. as this Company permits unions to bargain with it. Environmental factors determine whether or not a union achieves its purpose.

A union carries on a number of activities which are by nature functions to achieve its purpose. The principal function is that of negotiating or bargaining with management. The formal structure of a trade union is constructed to carry out its primary function. Apart from its primary function of bargaining a union also has a function of striking when collective bargaining fails.

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- (11) See the present Author's treatise: 'Canadian and Australian Industrial Relations: A half century evaluation of state intervention into union-management relations in two countries' (to be published), where the author argues that Australian unions function as protest groups because they have little or no authority to participate in the law-making process due to the way the Australian arbitration system operates.
- (12) For example, Canada or in the U.S., see Logan: 'State Intervention and Assistance in Collective Bargaining', (Canadian Studies in Economics, No.6)1956. Jamieson: 'Industrial Relations in Canada', (Cornell University Press), 1957. Reynolds: 'Labor Economics and Labor Relations' (Prentice-Hall).

The strike function is generally used sparingly, for it has many limitations to its effectiveness. Apart from the drain on the financial resources of a union the certainty of winning a strike is often open to doubt. Moreover, it is not possible for a union to continually disrupt the activities of management, otherwise it destroys the job security of its members. If a governing body of a union or a majority of its members come to believe that striking is the main function, the union is bound to disintegrate,⁽¹³⁾ the bargaining function cannot be displaced by the strike function.

A union also performs other functions which tend to support the bargaining function of management. It carries on welfare and friendly society (benefits not gotten by collective bargaining) activities which tend to give members a personal stake in the union. These functions do not come into conflict with the primary function of bargaining. The education activities are also designed to assist union officials and members to understand their environment so that they may become more effective in their roles of bargaining. Some socialist minded persons⁽¹⁴⁾ urge unions to educate their members so that they may lead the unions in their march towards socialism and worker control of industry - a goal which is not necessarily in keeping with the union's purpose. In the main, unions keep their education function to a realistic plane.

Through its political function a union seeks to alter some aspects of the environment in which it operates. It may believe in nationalisation if under state ownership the management allows the union to discharge its bargaining function more effectively. At the same time there are

(13) For example, the Knights of Labour and the I.W.W., see Logan: 'Trade Unions in Canada' (Macmillan) 1948, Dulles: 'Labor in America', (Crowell) 1949.

(14) See Laski, Loc.cit., p.161.

natural limitations in the effective discharge by a union of its political function.⁽¹⁵⁾ It may be successful in making representations to some external body about relative minor matters, but in general it discharges its political function by affiliation to other bodies more suitable for the purpose, in particular, the T.U.C. and the British Labour Party. Social disorganisation or breakdown in union authority rarely occurs with respect to these affiliations. A delegate may fail to vote in accordance with the instructions laid down by his governing body, in which case he can be removed from his office without a great deal of difficulty. A member or group of members may refuse to pay a political levy, which is evidence of some sort of frustration to the union's function. Members may disregard their governing body to vote in a certain way at the time of an election, but in this situation no breakdown in union authority is overtly recorded.

However, in certain situations the political function of a union may conflict with ~~that~~ the function of bargaining. This may occur when a political group is in control of the governing body of a union, and where their political intentions override the effective discharge of the bargaining function. A strike aimed at disrupting the community without the purpose of establishing rights for union members could lead to dissession within a union and possible disorganisation. Communists are not the only political group who upset the stability of the union organisation. A conservative governing body anxious to support the Labour Party, could also cause disruption in a union by failing to discharge its collective bargaining function. Such a situation exists when a governing body refuses to press new claims for its members, when these

(15) The account of the power of the T. & G.W.U. given by Goldstein is extremely misleading and based on false notions of union purpose, functions and structure of a union; see his 'The Government of British Trade Unions: a study in apathy and the democratic process in the T. & G.W.U.' (Allen and Unwin) 1952.

refuses to press new claims for its members, when these earnestly desire the rectification of an injustice or some improvement in their standard of living.

Unions favour the maintenance of full employment because it is a favourable environment in which to operate. It is logical and within the aim of the union for it to consider the consequences of a particular wage demand on employment, but it is unlikely to agree to a voluntary wage restraint which adversely affects its members.⁽¹⁶⁾ Although it may affiliate to an inter-union body, such as the T.U.C. and agrees to abide by that body's rules, a governing body cannot suspend the bargaining function of the union. A governing body has the responsibility of respecting the constitution of the union, and the rights of the members laid down in the constitution, of honouring agreements it has with management, and observing the rules of the bodies with which it is affiliated, and the laws of the State. A breakdown in union authority is possible if a union fails to discharge its bargaining function for that is essential for its purpose.

Apart from its law-making function through bargaining, a union also exercises a function of law-enforcement; it has to see that its members honour the agreements which it negotiates with management. While some breakdown in union authority can occur with respect to its strike function (when members refuse to respond to the call to strike) most instances in breakdown in union authority take place when a group of members go on strike without the approval of their governing body. In such a case there is frustration of a union's law-enforcement function. Frustration of this function also occurs when a union fails to recruit management's employees as members, for until it does it can exercise no authority over them. A union needs to recruit a sizeable proportion of management's employees not only to exercise its strike function but its law-enforcement one as well.

(16) cf. D. J. Robertson: 'Trade Unions and Wage Policy', and Amphlett: 'Employers' Wage Policy', Political Quarterly, Jan. 1956.

Section 2 The Formal Union Structure

A union has a formal structure⁽¹⁷⁾. This structure differs in detail from that of management and it appears more vulnerable to instability than that of a political and elective group of bodies for the purpose of determining policy, while its administrative machinery is more like the conventional form of bureaucracy which is characteristic of an industrial enterprise. In the latter, at the end of the scalar chain of authority there are well defined tasks which gives each a sharply defined role. In a union there is a mass of laity who have no defined tasks or differentiated rules in the formal union organisation. Again the authoritarian structure in a union is less effective than the one that exists in management, as there is no clear chain of command as it is known in a management organisation. The status system does little to reinforce the authoritarian structure in a union, and the rewards and punishments are inadequate to motivate the great mass of union members so as to allow a union to perform in the most effective possible manner. Because of its interdependent functions with management and overlapping union membership, and often a hostile environment, weakness strain, social disorganisation and breakdown occur in the union structure. The hypothesis advanced here is that the union has a very delicate structure which stands up to strain only in special circumstances.⁽¹⁸⁾

(17) See Schneider: Loc.cit., Part Two and Part Three, his excellent empirical analysis of American unionism is followed by a rather trite treatment of the union structure at the theoretical level.

(18) cf. Allen 'Power in the Trade Unions' (Longmans) Chapter V.

The formal organisation, that part of the structure which sets down the functional positions in the union, consists of a series of governing bodies, ranging from the local committee and branch to the national executive and convention. The union constitution defines how these bodies are to function. In most unions there are democratic elections of delegates and representatives to superior bodies. The union constitution sets out the powers, functions, and authority of each body, reserving to the supreme governing body the right to alter the relationship of their inferior governing and policy making bodies. In effect, there is a 'democratic' hierarchy, but its nature is different to that of management. The division of labour of these governing bodies tend to be less sharply defined than they are in an industrial organisation, such as I.C.I. (which through its divisional structure has a hierarchy of governing bodies). Sometimes the inferior bodies usurp powers which are reserved for superior bodies and this causes confusion and disorganisation.⁽¹⁹⁾

There is another side of the union organisation which consists of union officials responsible for implementing the decisions of the governing bodies. In theory, this hierarchy, from the general secretary to the shop steward, has similar characteristics to that of the management hierarchy. There is some evidence of a definition of tasks and duties, the delegation of authority, the maintenance of responsibility, the existence of a chain of command and communication system - all requisites for successful functioning of a management. In practice, this likeness between union and management soon disappears. Especially if union officials are elected, instead of appointed, personal prestige is such that it allows officials to exceed their authority and to step out of their defined roles. They may not confine

⁽¹⁹⁾ For example see Jeffreys' 'The Story of the Engineers'.

themselves to the role of implementing policy, they may actually formulate it. This is also true of the general secretary when his personality is such that he dominates the governing body.⁽²⁰⁾

Unlike management where there is a fine division of labour and sharply differentiated roles of managers, the roles of the union officials frequently conflict. No where is this confusion more pronounced than it is in the local organisation. For example, at Ardeer a member of the T. & G.W.U. can play three distinctive administrative roles, viz., a shop steward, a committee member and a member of a delegation bargaining with management. At the same time he has the right to vote and participate at departmental and branch meetings, and to be a delegate to regional or national policy-making bodies. Such an active official combines the role of seeing that policy is satisfactorily administered, while at the same time carrying out a role of administrator. In such situations clashes of conflicting of roles and clashes of personalities are inevitable; for these reasons, disorganisation is a likely consequence.

Compared to management a union's authoritarian structure is weak. It has recourse to four types of authority - structural, specialist, moral and charismatic. Structural authority is the entitlement, stemming from legal or other contract (the union constitution), vested in a position of an organisation to order and co-ordinate functions pertaining to other positions, and to expect obedience in the ordering.⁽²¹⁾ Structural authority is something equivalent to legal authority.⁽²²⁾

(20) See Allen: 'Trade Union Leadership: based on a study of Alfred Deakin', (Longmans), 1957, especially Chaps. XV and XVI.

(21) T.T.Paterson: 'A Methectic Theory of Social Organisation', University of Glasgow, 1957, (mimeo).

(22) Newman: 'Administrative Action' (Prentice-Hall) see also Koontz and O'Donnell: 'Principles of Management' (McGraw-Hill), 1955, Chap.4.

A management assumes that it has the power to command because of the legal powers delegated to it by the owners of the business. In the same way a union has structural authority over its officials, there is an implied threat that if an official fails to carry out his role satisfactorily he can be removed from office. However, due to the nature of union membership, which is considered in the next section, it may be sometimes impossible for those who have structural authority to secure obedience to their commands.

Specialist authority is the entitlement to be heard by reason of knowledge or expertness.⁽²³⁾ Management relies on this type of authority to carry out its many and varied technical tasks. Due to the absence of a fine division of labour and the existence of a passive mass of laity, specialist authority is not as important to a union as it is to management. When a union provides a number of staff functions, such as education and research, to assist those on 'the line' to carry out their tasks, specialist authority is used. At Ardeer, the regional and national offices of the T. & G.W.U. although in a line relationship, seemed to use specialist authority when they assisted the local official in negotiations with management. In the case of headquarters' conferences the national officer was vested with structural authority as he was the official responsible for the negotiations, regardless of his authority as laid down by the union constitution. The type of authority exercised by an official of a union can be influenced by a union-management agreement which gives certain authority to that official - and it is possible that this might conflict with the terms of the constitution.⁽²⁴⁾

(23) Paterson, loc.cit., uses the term 'sapiental'.

(24) Similarly, the duties and responsibilities of shop stewards defined by the I.C.I. Agreement relative to the Negotiating Procedure, even though the various union constitutions laid down other duties and responsibilities.

By far the most important authority to a union is the use of moral authority. Moral authority is the entitlement to control and direct by reason by 'rightness' and 'goodness' in action in accordance with the contractual system of the institution.⁽²⁵⁾ As moral authority is the entitlement to act, it follows that it may be exercised only by those vested with structural or specialist authority. The exercise of moral authority by a union over its rank and file is extremely important, much more so than the use of structural authority. Normally, the rank and file look to their official leaders for 'orders', However, if the rank and file feel that their leaders are neither 'good' nor 'right' then disorganisation is likely to take place, and the leaders of the informal group exercise moral authority to dissuade the members from following the orders of the official leadership say to desist from striking. For the exercise of moral authority it is important that the officials of a union be free of tarnish of bribery and corruption,⁽²⁶⁾ extremist political and religious views (except where such views correspond to an extremist situation). They need to be responsive to the wishes of their members, whether these wishes to be interpreted by a popular vote, or by empathetic qualities of the leader.

(25) Paterson, *ibid*, uses the term 'enterprise' which appears to be equivalent to 'institution' - see Miller and Form, *loc.cit.* p.229. 'Organisation', as mentioned in the above context refers to the ordering of positions in the formal union or management structure, these positions being defined in terms of tasks, authority and responsibility - see Koontz and O'Donnell: *loc.cit.* Chapter 9.

(26) Ballot-rigging and high-handed actions of full-time officials described by Goldstein has relevance to this problem of moral authority, See Goldstein: *loc.cit.*

In exercising one type of authority a union appears to have an important advantage over management. As a union is an institution which is concerned with ultimate and non-material things - equity, justice and the equality of employees - it may fall under the influence of a leader who has charismatic authority. Charismatic authority is the entitlement to control and direct by reason of God-given grace. In the minds of the rank and file a particular general secretary or president may appear to be all-powerful, all-wise, and the ultimate source of authority in the union for 'rightness' and 'goodness'. According to Paterson⁽²⁷⁾ there is no special system of charismatic authority, but one essential condition appears to be the ability of the leader to appeal directly to the rank and file and to ignore the chain of authority and presence of the intermediate leaders. Such appeals may relate to strike action or to desist from striking; in either situation the stability of the union is assisted by a leader with charismatic authority. So far as the T. & G.W.U. was concerned, Ernest Bevin had some of these qualities which greatly assisted the union but Alfred Deakin was bereft of them, setting clique against clique and faction against faction. His blunt criticisms, especially those openly given to the press, of unofficial strike actions detracted from his role of supreme protector of the entire union. Happily, he rarely interfered in Ardeer affairs.

As in other social systems, management relies on a formal status system to reinforce its authoritarian and role structure. A union is less happily placed; the elective nature of the governing bodies and the democratic ideals conflict with a status system. A national convention is an extremely important body, but union sentiment holds that it is simply 'representative' of the

(27) T.T.Paterson: *ibid.*

rank and file. A general secretary is usually held in high regard, but he is the 'servant' of the union, not its 'master'. A status system relates to the positions held by the officials of the union, but personal prestige is frequently so important that the status system breaks down. In other words, a relatively minor official may wield considerable moral authority in a particular situation. Superior relationships are indefinitely defined, and this contributes to a blurring of the chain of command.

In management there is an appropriate system of rewards and punishments which motivate its managers to carry out their duties efficiently. A union does not have quite as an effective system of rewards and punishments, particularly when considering the motivation of the part-time officials. The full-time officials are not highly paid, promotional opportunities are limited, but they usually have considerable job satisfaction. Power and ideological interests are important motives to union officials. These motivations may be ineffective for the large number of part-time officials including the shop stewards and the local committeemen, who take on thankless and selfless tasks, like many other voluntary workers they are frequently inefficient. No matter how inefficient a union can rarely afford to replace part-time officials. It is here that apathy strikes a serious blow at the effectiveness of a union. Usually a part-time official is removed only when he deliberately and consistently flouts the official policy of the union. It is also rare for a union to remove a full-time official, when that official is appointed and not elected, although as the Ardeer case showed it is not an impossibility. Even elections do not seem to remove ineffective officials, although there is theoretically more chance of changing officials than when they are appointed. (28)

(28) cf. Allen: 'Power in the Trade Unions' (Longmans), 1954.

Management has its problems with communication. So far as downward communication is concerned the authoritarian structure is used to pass orders down the line. Communication downwards in a union depends on the willingness of the officials to report back; due to indefiniteness of the message, such as reports of the progress of negotiations, there is a natural limitation to the effectiveness of communication.⁽²⁹⁾ The union's upward communication line may be more effective than management's, as usually upward communication consists of grievances, claims or resolutions sent to superior bodies for consideration. However, as the Ardeer case showed the rank and file may not understand that no effect can be immediately given to their wishes. If the rank and file are not instructed in the limitations of the union's ability to deal with a claim it is possible that strain and disorganisation may emerge.

(29) See The Dock Worker (University of Liverpool Press) for examples of ineffective communication, pp.210-210.

Section 3 The Nature of Union Membership

Special problems arise due to the nature of union membership. The aim of this section is to examine the nature of union membership to determine whether disorganisation takes place because of torn loyalties,, apathy, compulsory unionism, because the type of authority wielded by unions over their members is ineffective or because there is an inadequate system of rewards and punishments.

All members of a union, with the exception of a few full-time officials, are members of another institution known as management. Why do employees of management join unions? Basically, employees join unions because they desire protection from the arbitrary actions of management.⁽³⁰⁾ These security goals are realised when a union obtains rights for employees under a collective agreement. Except for the active members few individuals realise recognition goals through joining unions, in fact in factories dominated by an anti-union tradition personal prestige may even decline as the result of joining a union. Indirectly, a union may raise the personal prestige of its individual members by collectively improving the status of the occupations it covers. Thus, employees join unions to achieve instrumental goals,⁽³¹⁾ goals which are achieved indirectly. For example, there is a vague hope that their standard of living may be improved by the efforts of the union. If the union performs its bargaining function successfully, membership is meaningful to the employees it seeks to cover. In passing it may be noted that few employees join unions for purely social purposes,⁽³²⁾ or for making up deficiencies of social relations at work.

(30) The present Author does not accept the thesis of job scarcity as the basis of unionism; see Perlman: 'A Theory of the Labor Movement', (Kelly), 1949

(31) See Schneider, loc.cit. p.17, and p.342.

(32) The union is not an organisation which gives satisfaction to its members because they fail to obtain satisfaction at work; cf. Tannenbaum: 'Philosophy of Labor', Knopf, 1951.

Does the union member suffer from torn loyalties between management and his union? This depends a great deal on the effectiveness of collective bargaining. If bargaining breaks down and a strike is called then there is a conflict of loyalties. When union members fail to respond to their governing bodies to strike then a breakdown in union authority occurs. If the union is successful in calling out its members then management's authority breaks down.

Generally, there is no clash of loyalties between the membership of the union and that of management. The reason for this lies in the distinction of employee's role in management and his role as union member. The role of the employee of management actively contributes towards the attainment of that institution's goals. Although satisfaction with his work may be destroyed by arbitrary management, his role as a worker is an extremely satisfying activity. Normally this role does not conflict with the role as union member; he pays his fees, he may vote in elections, he may attend union meetings, and only when he is called upon to strike does conflict in roles take place. For the great bulk of members activity in union affairs is spasmodic and discontinuous. For this reason apathy is a direct consequence of a passive role, both in theory and practice, of union membership. Apathy is not an indication that the social organisation of a union has broken down; usually it is a symptom that it has not. There is considerable membership participation when a union organisation breaks down, during an unofficial strike. (33)

(33) cf. Goldstein: loc.cit. In some situations, when for example there is an unofficial strike apathy of members to official activities of union is an indication of serious disorganisation; see The Dock Worker for an example of this.

Why do employees refuse to join unions? Fundamentally, the individual who refuses to join a union does so because of a divergency of personal interests from those of the union, as he sees them. This may be due to purely selfish interests, to perverse isolate behaviour, to competing moral forces such as religion, to the actions of management to counter the union, and to general community values which disapprove of union membership. Management may effectively limit union membership by the discouragement of union membership, through paternalistic personnel policies or by genuine leadership which makes union membership superfluous (as the individual employee sees it). In some situations employees leave a particular union because they feel that it does not adequately serve the interests of their particular occupational group. A union with a high turnover in membership of employees, remaining within industries covered by the union, indicates a general failure of the individual to identify himself with that union.⁽³⁴⁾ The secession of groups of members is indicative of the failure of a union to satisfy group goals and is a form of social disintegration.

One of a union's fundamental functions is to extend its membership amongst employees. This is not done simply for 'empire-building'. Membership is a prerequisite before a union can wield authority. This is most important for the effective functioning of collective bargaining. As the union is responsible for seeing that agreements are observed by employees, they must first be members of the union. As it was seen in the Ardeer case study considerable anarchy resulted from the direct action taken by employees who were not union members. Indeed, it was one of the essential tasks of the T. & G.W.U. to bring the behaviour of the informal groups of employees under control; it could do so only by recruiting them as union members.

(34) See Goldstein: loc.cit.

In line with the reasoning adopted in the previous chapter on the nature of collective bargaining the issue of the 'union' and the 'closed' shop may be disposed on a priorie principles. For collective bargaining to be truly effective as a law-making institution, it is a necessary condition that must be included in an appropriate union. For a union to exercise its authority over employees to respect agreements reached by union-management negotiations they must first be members of the of the union. One of the notable features of employee behaviour at Ardeer was the fact that groups took direct action even though they did not belong to the T. & G.W.U. In fact, it was one of the essential tasks of the T. & G.W.U. to bring the behaviour of these work groups under control. It follows that a management which prevents its employees joining a union is ipso facto discouraging the spread of law and order in industry, as the union is not only a participant in the law-making process, it is also the law-enforcement institution as well.

This does not mean that a management is encouraging law and order when it rejects particular demands of a union involving some feature of union security. For example, there could be legitimate disagreement between the parties as to how law and order is to be established for example, by rules governing the behaviour of shop stewards. But a management which supports an employee who defies a union with respect to his membership fees, or when he refuses to abide by union rules, or does not accept normal group conduct on the workshop floor, is encouraging disorder. By taking a completely neutralist attitude to a union's attempt to recruit employees in its factory, especially when a group displays a tendency for spontaneous action, management is not assisting the elimination of anarchy. A management which watches a union flounder in membership drives, is by its own default permitting conditions of anarchy to exist in its workplace.

Far from being a prima facie case against the union or closed shop, there is prima facie case for it, for all employees are brought within the ambit of the law-making process of collective bargaining.

There is a mistaken impression that once a union or closed shop is introduced, the nature of union authority exercised over its members is altered. Instead of a union remaining a voluntary society it becomes instead a compulsory one with certain disadvantages for its members.⁽³⁵⁾ A union exercises structural, specialist or moral authority over its members, regardless of the proportion of employees recruited in a single workplace. The real problem of union stability is not the use of structural authority, but its relative ineffectiveness. Although union members agree to contractually pay their dues and abide by the constitution, few believe that their union has the legal right to order them to do or desist from doing something. A few unions try to impose their structural authority on members, by fining them for failing to vote in an election, or not attending a special meeting or for taking part in unofficial activities. But most unions rely not on their right to command, but on their ability to persuade members to conform to rules of the institution.

The rank and file of a union obey their governing body to strike when they believe it to be right and just. Union members disregard a call for strike when they feel that their governing body is wrong. Similarly, a group of union members may refuse to desist from striking if they believe that they are right in their unofficial strike, and they believe their governing body wrong in its order to return to work. Apart from the interests of the group and their sense of injustice, tradition, too, plays a part in their behaviour. Although the legal right

(35) See Allen: 'Power in Trade Unions', pp.56-59.

(structural authority) to call a strike is vested with the governing body most of the rank and file believe that they have the moral right to strike - a sentiment which is a hangover of an earlier period of union development.⁽³⁶⁾

Every social system must have as one of its pre-requisites incentives, rewards and punishments which adequately motivate the members of the social system to perform adequately.⁽³⁷⁾ So far as the great bulk of union members, who are not aspiring to be part of the governing hierarchy, the rewards (compared to those gained as employees of management) are frequently vague and indefinite. From time to time union members may expect to see some improvement in their wages and working conditions; - sometimes, however, only after they have foregone some material gain to strike against management. For this reason striking is not looked with any great eagerness by union members. Yet they respond to the call by their governing body to strike because it is a means to an end - to rectify an injustice. The members would much rather secure a wage increase, a reduction in hours or an improvement in working conditions through effective collective bargaining. A union which is able to achieve these results through collective bargaining satisfies its members' goals much more directly than one that strikes. The provision of an adequate grievance procedure to handle individual members' complaints is also one of the rewards which a union offers employees who conform to the rules and agreements laid down.

Through punishment a social system prevents its members from disrupting its work. Unlike management a union has few penalties which it can impose on its members. It can impose fines on its members, and even expel a members but if management does not then dismiss the person from the workplace, the expulsion is unlikely to be successful.

(37) Talcott Parsons, 'The Social System', Tavistock Publications, 1952.

Union members may refuse to work with the expelled, a course of action which leads to conflict with management. The expelled or a member can be sent to Coventry until he mends his ways and conforms to the forms of behaviour of the workplace. To achieve this form of punishment a union must rely on the behaviour of the informal work groups at the workplace as this punishment cannot be directly imposed by a union. A union is sometimes, but not always, successful in imposing penalties on activists in the organisation, for example, by imposing a ban on Communist Party members holding office. Such action is only effective if those penalised are unable to secure the leadership of the informal groups in the union. It may be concluded that the system of rewards and punishments available to a union are rather weak and inadequate for the purpose of maintaining discipline in the organisation.

Section 4 Informal Groups and Behaviour

A union has an informal as well as a formal structure; such an informal structure consists of those relationships which are not explicitly recognised by the formal structure for advancing the predominant purpose of the union.⁽³⁸⁾ One of the main features of the informal structure is the informal group of union members. An informal group is a section of membership not specifically recognised by the formal union structure, consisting of a number of persons between whom there is a high degree of interaction, and whose interests and sentiments are distinguishable from those of other groups in the union.⁽³⁹⁾ An informal group persists for a time, it has a structure which allocates roles to its members including that of leadership, it prescribes a code of conduct relating to the group's behaviour, both internally and in relation to other groups, including that of management and union.⁽⁴⁰⁾ Informal groups' behaviour is highly significant to a union in times of stress, social disorganisation and disintegration, as power tends to be transferred from the formal to the informal leadership. It is the aim of this section to outline the formation and behaviour of informal groups within a union.

Informal groups tend to behave divergently from the aims of the unions to which they belong when their interests conflict with those of the unions. This takes place when a union membership lacks common beliefs, definitions and values.⁽⁴¹⁾ In such a situation the

(38) cf. Scott and others: 'Technical Change and Industrial Relations', (University of Liverpool), 1956, p.269.

(39) cf. Schnieder: loc.cit. p.20.

(40) Miller and Form, loc. cit. p.274.

(41) Schnieder: loc.cit. p.22.

stability of the formal structure of a union is seriously threatened, because informal group goals take precedence over formal union goals. A union with few common occupational bonds, such as the general worker unions,⁽⁴²⁾ is more likely to be subject to this disruption than a closely-knit craft union organising a single, well-defined occupation. Similarly, widely dispersed sections of a union, with divergent social characteristics, are likely to give rise to informal groups because of the divergence of values. On the other hand, sections of union members may develop common beliefs, definitions and values, as the result of their employment by a large company such as I.C.I., or because their terms of working conditions are fixed by the same collective bargaining framework.

Informal groups which arise in a union may be of several types, namely, friendship cliques, interest or political groups.⁽⁴³⁾ Communist groups are frequently mentioned as being important within the union but this aspect of union life is overstressed. At Ardeer by far the most important were informal groups who originated from some common bond attributable to a feature of the formal organisation of work in the management institution. For example, informal groups grew about differentiated jobs, job rates, seniority, piecework and incentive schemes. The hillmen distinguished themselves from processmen, the processmen were distinct from the runners, and the female pieceworkers had their own group. These groups were not primary groups, as were described in the Hawthorne experiments, but were secondary groups. The men on the mechanised unit were a separate entity even though they had sharply differentiated tasks in the formal structure of management, but the group incentive schemes gave them a common bond. Even the blasting department as a whole was set aside from the rest of the factory because of the way the informal system operated.

⁽⁴²⁾ cf. Clegg: 'General Union', Part V.

⁽⁴³⁾ See Sayles: 'Behaviour of Industrial Work Groups, Prediction and Control (Wiley) 1958.

The purpose of informal groups which arose from work was to protect their particular job interests. These job interests took two main forms. Firstly, they attempted to safeguard their job security by marking out demarcation lines, resisting dilution of jobs, challenging manning ratios and work loads, and demanding conditions to protect themselves against the movements in the demand for labour. Secondly, they attempted to maintain or improve their status in the workplace, by trying to increase their hourly wage rate and improving the conditions of their incentive scheme. Sometimes their behaviour was negative in the sense that they protested the actions of management, when for example, it proposed to introduce a job evaluation scheme to determine job rates or when new incentive rates were introduced for altered jobs. Their behaviour was controlled by the formal organisation, when they demanded increased job rates through the lodging of a claim in accordance to the negotiating procedure, or when they went to a union meeting and tried to improve their position vis-a-vis to other groups by constitutional means.

The informal groups at Ardeer tended to confine their activities to the workplace. Only in special circumstances did an informal group apply pressure in the T. & G.W.U. branch, and this was usually due to action taken by union officials. For example, when a spontaneous stoppage occurred at the workplace the local official (in the post-war period) called a special meeting of that section of members to which the informal group belonged. Thus, he brought the informal group behaviour within the framework of the formal union structure. Those groups which did not honour the obligations laid down in the union-management agreements then became subject to formal union pressure, and they in turn exercised a function of pressing their claims within the formal union structure. It was through this mechanism that the authority of the T. & G.W.U. was re-imposed.

This was seen very clearly in the case of the second 'go-slow' towards the end of 1954 amongst the men on the old side of the blasting department. The 'go-slow' was designed to bring pressure both on union and management to repair the deterioration of their status due to increased job rates conceded to the group on the mechanised unit. Subsequently, a strong majority of workers at the meeting called by the union refused to return to work at normal pace. Later, the men at another meeting called by the union were persuaded to return to work. Still later, the final proposals for the settlement of the dispute about job rates, including the acceptance of the principle of job evaluation, were submitted to a formal meeting of the branch and accepted without a murmur of discontent by the informal group. The authority of the branch was completely re-imposed.

The importance of the negotiating procedure was to be seen in relation to the conduct of the informal groups. Before 1947 an informal group had to express itself as in an overt act to secure recognition of their complaint or claim; or they were forced to attend the branch meetings to act as a pressure group to push few of their demands in a constitutional manner. This latter course of action was used to some extent, but not by all informal groups - particularly those in the blasting department. These groups overtly expressed their dissatisfaction with their treatment. Moreover, such actions by-passed the local official (who did not adequately discharge the bargaining function) and allowed the Communist chairman of the branch to step outside his formal role into one which supported informal group activity (for which breach of union discipline he was subsequently removed from his position). After 1947 the negotiating procedure provided a constitutional means for handling more readily informal group demands within the formal system of authority jointly laid down by

union and management, and at the same time avoided taking overt action to do so. The negotiating procedure had a beneficial effect on the behaviour of the informal groups.

The recognition of shop stewards and their role in processing employee grievances was also very important. The shop stewards became the formal leaders of the union in the workplace, and as they had the exclusive right to approach management on behalf of their groups, they were in an advantageous position to take over the leadership of the informal group as well. In the case of the pieceworkers, the shop stewards broke the hold of the oligarchy which had developed as the leadership of the 'girls'. This informal leadership had been selected on the basis of seniority and ability to work quickly. Management had frequently met the leaders of the oligarchy in 'negotiations' and this had stabilised their position of power. Once the negotiating procedure came into effect the pieceworkers became subject to the authority of the shop stewards as representatives of union authority. Although one important stoppage took place in 1950 after a sharp drop in morale due to an explosion, disorder, which had characterised the section in the periods before the war, was generally absent in the post-war period. It was quite possible that persons other than the shop stewards were the real informal leaders, but from the course of events it was reasonable to conclude that the shop stewards were never very far away from the locus of power of the informal group. (44)

Another important example of informal group behaviour which occurred at Ardeer in the post-war period was the reaction of the groups towards the proposal to introduce incentive schemes. These schemes were usually proposed

(44) For an interesting method of indentifying the informal leader, see Paterson: 'Morale in War and Work' (Parrish), p.131.

to the shop stewards, and although management was well within its rights in terms of the negotiating procedure to act that way, it stimulated informal group activity. Most of the decisions which rejected incentive schemes were reached at meetings held within the workplace where the informal groups maintained the greatest power. The groups were anxious to protect the security of their jobs and fears of redundancy clearly dominated their behaviour. These groups only changed their minds on the intervention of their formal leaders, and when these leaders went through the motions of bargaining to make the schemes more acceptable to the informal groups. The behaviour of the informal groups became subject to control by the formal union leadership, and this was accomplished by the process of collective bargaining.

Unfortunately, the events described in the previous paragraph did not take place with every informal group. Several groups refused to accept incentives despite the general approval of their union officials, and the right of management to install incentive schemes in the workplace. In this situation there appeared to be a prima facie case of breakdown in union authority. In many ways this behaviour was similar to that of an unofficial strike for a group refused to honour the terms of an agreement. The similarity was real when a union exercised its bargaining function, and there was a genuine improvement in the incentive rates and reduction of the number of personnel to be displaced. Another case was also to be distinguished. When a governing body of a union failed to discharge its bargaining function, with the result that the informal group had to look after their own interests, there was social disorganisation through the frustration of the bargaining function. The disorderly conduct of the pieceworkers, prior to the post-war period, was an illustration of the dangers of not subjecting payments by results to the strict control of collective bargaining.

In the main the T. & G.W.U. discharged its bargaining function effectively at Ardeer. All but one group, those working on the old side of the blasting department, ultimately accepted incentive schemes. The reason for this change in behaviour was due in part to the existence of rules, themselves subject to collective bargaining, which protected the security of the groups' jobs. The failure of the formal leadership to persuade the men on the old section the blasting department to accept an incentive scheme had disastrous consequences for the union and management. Social disorganisation and breakdown in union authority occurred because two sections of the T. & G.W.U. membership were working under different working conditions and this led to inter-group rivalry and argument over status. Collective bargaining failed to solve both the short and the long term problems caused by this situation, and as a consequence the predominance of informal group pressure remained.

A situation described above differed a good deal from the state of social relations existing in a number of craft unions. These unions, which had strongly opposed incentives for many years, had been forced to change their policy because informal groups had accepted incentives without permission of their governing bodies. Union authority had broken down, and to repair it the governing bodies delegated authority to their district or local committees (or gangs in the case of the joiners) to decide whether incentives were to be accepted or rejected. In this way they avoided the problem of expelling those informal groups who had defied union authority when they accepted incentives. While this seemed to be a sensible solution two problems immediately arose. Firstly, informal groups acquired a great deal of power from such devolution of authority, which detracted from the authority of the governing body. Secondly, informal group behaviour became exaggerated when various sections of union membership worked

under fundamental different conditions, thus destroying common ideals and making the task of future collective bargaining extremely difficult. Indeed, this was one of the reasons for the opposition of some unions incentives.

A number of important points in regard to informal group behaviour should be noted. Firstly, the stimulus for group behaviour usually came from a desire of management to change the terms of reference by introducing an incentive scheme, by trying to change the incentive rate, by using job evaluation to determine job rates, and by changing work practices and loads. Secondly, group reaction was possible because the new conditions of work required adaptive behaviour on the part of the work group, for example, to work harder due to the introduction of an incentive scheme. When an agreement was discharged by management alone no adaptive behaviour was required. For this reason time rates of pay were usually accepted without protest,⁽⁴⁵⁾ so long as employees offered themselves for work they received their rights under the agreement. Thirdly, when an informal group protested about some change by taking overt action, it was not usually associated with a union-management agreement, for example, there was no immediate connection in the minds of the men on the mechanised unit between the events following the explosion and the clauses set out in the negotiating procedure. Thus, a union had little to do with the usual circumstances which led to strong informal group reaction, yet it had the responsibility to bring the informal group behaviour under control.

(45) cf. The Dock Worker, see next section.

Section 5 Examples of Unofficial stoppages

The mere existence of informal groups and competing personalities does not necessarily imply that social disorganisation is bound to occur, nor is this necessarily followed by a breakdown in union authority, whereby members refuse to obey the commands of governing bodies. The aim of this section is to examine the circumstances of the breakdown in union authority, with reference to Ardeer and to comparative research, particularly The Dock Worker.

The most spectacular breakdown of union authority occurs when members strike without proper authorisation of their governing body. Usually, an 'unofficial' strike (46) involves the dishonouring of an agreement reached by union-management negotiations. In most situations it is the agreement relative to the negotiating procedure which is dishonoured; members do not follow the prescribed procedure for filing and discussing their grievance. Some unofficial strikes do not 'get on' to the procedure, some 'fall off' while the negotiating procedure is being used, and some occur after the steps of the procedure have been complied with. In this last situation the governing body of a union may withhold official sanction for its members to strike, even though no dishonouring of a union-management agreement need take place.

Some strikes occur spontaneously, in that they take place so quickly that there is no time for the local union official to intervene. Such stoppages are the result of a sharp fall in morale of the employees; triggering of the strike is usually due to outbursts of fear or anger - such as occurred on the mechanised unit in 1954. It is almost an invariable rule that a 'go-slow' or strike is set off by some managerial act which the employees strongly resent. (47) No formal decision is

(46) See Knowles: 'Strikes: a Study in Industrial Conflict' (Oxford), 1952, for the various types of overt conflict.

(47) Sometimes these stoppages were later made official by the governing body of the union. This did not happen in Ardeer. For the complexities of the problem see Clegg: 'General Union', p.123-130. re the Hotel Savoy strike

usually taken to stop work, the groups just walk off the jobs.

Frequently, it is impossible for a union official to predict when a spontaneous stoppage will take place. However, any sensitive union official knows when there is discontent in the plant. What role does a union official play with respect to action or contemplated action on the part of the informal group? In the first place he cannot openly support an attempt by the informal group to dishonour a union-management agreement, otherwise he may be disciplined by his superiors.⁽⁴⁸⁾ He is obliged to support the honouring of agreements. Yet he may privately agree with the grievance of his members. His subsequent actions depend on his assessment of management's behaviour. Does management know that there is discontent amongst its employees? If a union official believes it does not, can he successfully convey this information to management? Even if management knows that there is discontent in the plant, will it do anything tangible to remove it? If a union official believes that he can communicate the fact that there is discontent in the plant, and he believes that management will concede something to rectify the grievance, he will counsel the informal group against taking overt action. If he believes that management will not listen to him, he may allow the informal groups to take action which will bring pressure on the management.⁽⁴⁹⁾ In such a situation the breakdown in union authority is mild, because there is no real shift in power from the formal to the informal leadership. Even so collective bargaining is ineffective, until negotiation leads to some rectification of the grievance.

(48) See Allen: 'Trade Union Leadership', p.169 for actions of his superiors.

(49) See Clegg: 'Labor Relations in London Transport', p.111.

Unfortunately, for a union official he never really knows the answers to these questions. The power, in the sense that he can secure obedience from his workers, that the union official exercises over the informal group depends a great deal on the actions of management. If management provokes the situation in any way the power may shift drastically to the leadership of the informal group, who may then challenge the formal leadership.⁽⁵⁰⁾ Although a management may honestly believe that a strike may clear the air, and have a therapeutic effect on the social relations in the factory, in the final analysis management is encouraging industrial anarchy if it does not take positive steps to remove discontent amongst its employees. Moreover, a management can hide with propriety behind the provisions of the negotiating procedure, and parade as a paragon of virtue within its rights as laid down by the procedure. It can apply pressure to a local official's superiors who will usually not endorse the actions of the informal group. The governing body may even take action against a local union official and discipline him.⁽⁵¹⁾ To a local union official an unofficial strike may be a hazardous business, which may lead to loss of prestige and position.

Sometimes a group of employees stops work when it feels that the negotiating procedure has already been used. For instance, the men on the old side of the blasting department at Ardeer refused to work until the trial incentive scheme was withdrawn; the men felt that there was a breach of faith on the part of management (connived to some extent by the local official who wanted to see the scheme adopted) as the scheme was not withdrawn on the date previously agreed by negotiation. Again, there was no drastic shift in power from the official to the unofficial leadership.

(50) See Gouldner: 'The Wild Cat Strike', Routledge, Kegan Paul, 1955.

(51) See Clegg: 'General Union', p.124.

A worse example occurred in 1950 when the hillmen's claim for increased differentials was refused after all steps in the negotiating procedure were exhausted. (The governing body of the T. & G.W.U. refused to sanction an appeal to arbitration). There was no doubt that the hillmen's discontent was an important element in the strike of the department which took place at about the same time. In this case collective bargaining was ineffective for it failed to take a realistic view of the hillmen's claim. The strike in 1950 was triggered by a rapid change in working conditions which led to a sharp drop in morale.

The most serious breakdown in union authority which occurred at Ardeer, was the 'go-slow' and subsequent suspension of the men on the old side because they were not given equal treatment by union-management negotiations. Underlying this breakdown in union authority was a long term discontent over the disparity of earnings between the two sides of the department, a problem which collective bargaining had failed to solve. For some time power shifted to the informal group, but no real political challenge was made to the leadership of the local union official. Pressure was put on this official by his superiors to resolve the issue, but for a time the union was unable to persuade the men to return to work at the normal pace. Management assisted the process of readjustment by resuming negotiations even though the men were still technically dishonouring a union-management agreement. To save 'the face' of the men, who had thrown idle a large number of employees just before Christmas and New Year, management and union went through the motions of negotiating over the work load, which had not been met because of the 'go-slow'. Management did everything to start negotiations so that an ultimate solution to the dispute could be found.

The unofficial stoppages amongst members of the T. & G.W.U. at Ardeer contrasted remarkably with those amongst members of the same union at the Manchester Docks.⁽⁵²⁾ In 1951 a short unofficial stoppage was followed by a much more devastating strike, lasting six weeks. The first strike was the result of disappointment over a new agreement which fell short of the expectations of the dockers - expectations which were borne too high by both the formal and the informal group. The second strike was triggered by management's enforcement of a new provision in an agreement to work compulsory overtime, without adequate communication by management, followed by an inequitable (as the men said it) suspension by the local manager of the Dock Labour Board of two dockers for refusing duty. The dockers elected an unofficial committee to represent them 'in their fight against shipowners, the Ship Canal Company, the Dock Labour Board which was supporting the shipowners, and the trade union (T. & G.W.U.) which was afraid of them all.'⁽⁵³⁾

Once the strikes were triggered power shifted rapidly and drastically from the formal to the informal groups. This was partly due to the seeming incompetence of the formal leaders. For example, they lost control of the communication system by cancelling the official meeting of the union because the members were engaged in an unofficial strike. (By contrast at Ardeer, the local official called meetings of those engaged in unofficial activities). The control of the communication network, so important during a strike, passed to the informal group. One key union official had conflicting roles, as he was also intimately associated as chairman of the local Dock Labour Board with the disciplinary body of the Port of Manchester. His

⁽⁵²⁾ The Dock Worker, Appendix I.

⁽⁵³⁾ Ibid: p.242.

moral authority was thus reduced. As his prestige was reduced the informal leaders' prestige was greatly enhanced. Arrest of dockers (not in Manchester) in the first strike consolidated rank and file opinion behind the informal group, while attacks on their behaviour by press, government, management and their own union, greatly strengthened the informal group. The second strike dragged on because neither union, management nor the dock authority did anything to settle the dispute. They had no definable aims, except to discredit and eliminate the informal leadership. (At Ardeer collective bargaining was used to bring the informal group under control). The dual system of management of the docks, with the Manchester Ship Canal Company and the local dock labour board led to a tripartite system which was an unsuitable framework for collective bargaining.

Social disorganisation, followed by a breakdown in union authority, gave way in some instances to social disintegration, when several informal groups left the union to form breakway unions or join other unions. The most famous of these was the defection of some London busmen⁽⁵⁴⁾ and the Glasgow dockers in the period before the war, and various groups of dockers to the National Amalgamated Stevedores and Dockers towards the end of the period covered by the Ardeer study (1954).⁽⁵⁵⁾ Clearly, some groups within the T & G.W.U. did not feel that the union was serving their interests.⁽⁵⁶⁾

(54) See Clegg: 'Labor Relations in London Transport', loc.cit., p.128.

(55) See Allen: 'Trade Union Leadership' pp.59, 72, 206.

(56) See also Clegg: loc.cit. pp.103-112, cf. the conclusions, pp.136-138.

Section 6 Interpretation of the Empirical data

Why did power shift rapidly and drastically from the formal to the informal leadership in the case of the Manchester Docks, while at Ardeer it remained close to the formal leadership at times of unofficial strike? According to the account given by The Dock Worker the breakdown in union authority was the result of incompetent leadership (both in the failure of personalities to cope with their roles and to conflicting roles in the case of one key official), ineffective communication (especially in reporting back), and to an apathetic, if not distrustful membership (due apparently to a failure of the union to fulfil their groups' goals). In the most general terms The Dock Worker asserted that the real trouble lay with the rapid growth and sheer bulk of the union.⁽⁵⁷⁾ If this conclusion was correct then other sections, including that of Ardeer and elsewhere, would have been subject to severe disorganisation and breakdown in union authority. The facts did not support such a contention.

Did the answer lie in the difference in structure of the two local organisations? In the post-war period the Ardeer local organisation had many features which favoured its effective performance.⁽⁵⁸⁾ These included extension of union organisation into the work place, grievance handling by shop stewards, integration of shop stewards into the branch committee (special officers handled the dockers' grievances), rank and file representation at union-management conferences (the dockers had a permanent negotiating committee), a full time official to

(57) See pp.218 and 221.

(58) Cf. some of these with Roberts: 'Trade Union Government and Administration in Great Britain'; (Bell) 1956, Chap.XXI.

handle affairs at Ardeer and an industrial type of branch which only included members employed at Ardeer (these last two features were also present at Manchester). In addition, the branch had direct representation on the T. & G.W.U.'s regional and national chemical committees, when these were established. Due to the fact that the branch dealt with only one employer the goals of the local organisation were easily determinable (this was also the case at Manchester) and there was sufficient autonomy within I.C.I. collective bargaining frameworks to give the local union an active role in collective bargaining (the Manchester dockers probably had less control over their affairs). Whether these differences in T. & G.W.U. organisation between Ardeer and the Manchester Docks were sufficient to explain their respective functioning was open to doubt.

Nevertheless at Ardeer there were few organisational weaknesses, and the strains in the way the local organisation operated were correspondingly less. Grievances were initially handled by the shop stewards. If necessary, meetings of the groups were held at departmental level, particularly when a contentious issue was at stake. The departmental groups were responsible for electing their representatives to the negotiating team when disputes were referred to local conference. These representatives reported back to the departmental groups who then voted to reject or accept the recommendations of the local conference. The planning activity of the local organisation was performed by the branch committee. The plenary branch meeting was poorly attended (indeed, less than one percent of members usually attended the monthly branch meeting), despite the efforts of full and part-time officials to persuade them to come. The plenary branch meeting functioned as 'a court of appeal' where a member, dissatisfied with his treatment by shop steward, committee or full-time official, brought his grievance to the

governing authority under the union constitution for local union affairs. The branch reserved certain rights for its determination, such as members who wished to refuse promotion under the turn-list system. In most matters, however, the plenary meeting was little more than a rubber stamp for the work of its committee and union official. The full-time official was in the post-war period a personality who coped adequately with his role of co-ordinator of the local organisation. He was held in high regard by both his members and the management of the factory. All told the local union organisation operated in such a way that it functioned effectively by achieving its purpose.

The way the local T. & G.W.U. organisation functioned in the post-war period contrasted sharply with its performance in the period before 1948. Before and during the war the local union organisation was subject to strong informal group pressure especially amongst the pieceworkers, but also amongst other sections. The T. & G.W.U.'s authority amongst Ardeer employees was weak, very much weaker than it was amongst the Manchester dockers who were strongly organised. The Ardeer branch had no workshop organisation as shop stewards were not recognised. Its officials were ill-disciplined; a left clique, including at least one Communist, disrupted the work of the branch, the full-time official at the time was incompetent and did not respond to the wishes of his members, and even its delegates to other bodies did not always vote in accordance with the instructions issued by the branch or union. Its function of bargaining with the Ardeer management appeared limited both in terms of subject matter discussed and in the number of conferences held. In short, the local union organisation was not achieving its purpose of participating with management in formulating laws to govern its members' employment at Ardeer.

This picture added up to social disorganisation, which was due to strains appearing in the formal structure of the union. As it was seen in a section of this chapter these strains came about through fundamental weaknesses in the formal union structure - a weak and diffused authoritarian structure, a blurred chain of command, an indefinite status system, inadequate rewards and punishments, little division of labour leading to conflicting roles amongst union officials, a non-active, apathetic membership, and a conglomeration of different occupational interests which assisted the formation of informal groups. In short, the prerequisites for the orderly functioning of a social system tended to be weak leading to vulnerability in the functioning of the union structure. There was some tendency by the left to glorify the political and possibly the strike functions, and the bargaining function sometimes remained undischarged by the conservative, incompetent official.

Why then did the local T. & G.W.U. organisation at Ardeer change from being ineffective to being effective? Was it due to spontaneous factors arising within the union, or was it due to some external force? From the evidence assembled by the case study, 1947 stood out as the year that earmarked the change. In that year the I.C.I. negotiating procedure came into existence. That procedure greatly strengthened the authority of the union with respect to handling grievances, by extending the union organisation into the workshop, and by establishing a machinery for holding union-management conferences. A formal re-organisation of the local T. & G.W.U. followed; (59)

(59) Note also the adjustment to Union structure following the signing of the I.C.I. agreements in 1936-1938 and the emergence of the Signatory Unions as a new confederation as a direct result of I.C.I.'s innovating policy.

shop stewards were appointed, the branch committee was re-constituted to include shop stewards, and negotiating teams were appointed from amongst the branch officials, shop stewards and representatives from the rank and file. The removal of the incompetent and conservative official followed in 1948. Though the left-wing (Communist) part-time official was removed in 1947, the effectiveness of this action was conditional on the elimination of other anarchical elements in the workplace, in particular on the settlement of employee grievances in an orderly fashion. Union membership was extended in the turbulent blasting department, and the oligarchy's hold over the female pieceworkers was broken. Many of the shop stewards became both the formal (and 'democratic') and the informal leaders of the various work and union groups within the factory. At the same time the rights and obligations of the shop stewards were clearly set out, and their conduct was controlled by agreement. Thus the formal union structure was strengthened by the advent of the I.C.I. negotiating procedure.

By far the most important consequence of the I.C.I. negotiating procedure was the explicit recognition of the local branch's function to negotiate with the factory management. The number of union-management conferences rose, for the first time all job rates in the factory were subject to negotiation by the union when the job evaluation scheme was introduced in 1948-1950. Prior to this, job rates were adjusted on an ad hoc basis. New incentive schemes were subject to negotiation, and union-management conferences dealt with many piecework problems. The rules covering promotion and demotion were codified for the first time by union-management negotiations. No limitations were placed on the right of employees and union

to raise any matter over which they disagreed with management, and this permitted the union to negotiate over many of the technical aspects of incentive schemes and work loads. Thus, the local union fulfilled its fundamental purpose of participating in the formulation of rights and obligations to govern its members' employment at Ardeer factory.

Moreover, these negotiations had a direct affect on the behaviour of the informal groups. For example, the job evaluation scheme prevented anomalies and inequities growing around job rates. Informal groups had less chance of exerting pressure on management and union than they had when job rates were adjusted haphazardly. The establishment of rules to govern the behaviour of shop stewards and the method of processing grievances led directly to the dampening of informal group behaviour. The codification of rules to cover job security satisfied one of the most important goals of the informal groups. When negotiations were successful in resolving the many problems that arose over the introduction and the maintenance of incentive and piecework schemes the area for informal group behaviour was drastically reduced. Only when negotiations failed, and there was a situation that required considerable adaptive behaviour on the part of the informal groups, did it succeed in breaking down union authority. The presence of rules mutually agreed to cover the employment conditions of employees at Ardeer protected the T. & G.W.U. from drastic shifts of power from the formal to the informal leadership.

At the Manchester docks the authority of the T. & G.W.U. broke down because of ineffective collective bargaining. A lot of the trouble seemed to lie in the framework for collective bargaining: the management's functions conflicted with and were confused by those of the dock labour board, that management did not have full control over its personnel function. This contrasted with Ardeer where the collective

bargaining framework was simple, and relied to a great extent on local negotiations in a single workplace. This identified the interests of union members more closely with those of management.. Much more important was the general attitude of I.C.I. management, that it was responsible for formulating and administering personnel practices along sound rational lines with regard for the morality of purpose of human conduct. In the final analysis, it was this sound management, which also typified I.C.I.'s progress in commercial and technical fields, that was ultimately responsible for allowing collective bargaining, and hence the union, to function effectively. For the union relied upon I.C.I. management to allow it to bargain, thus permitting it to participate in the establishment of law and order in industry.

Putting the contentions more positively, the real determining factor which allowed the Ardeer branch to function effectively and achieve its purpose was the general union-management relationship. Ardeer management 'co-operated' with the T. & G.W.U. to establish an appropriate system of 'factory law' for governing the employment of general workers. Before the post-war period the union tended to function as a protest group, which sought to modify the arbitrary actions of managerial officials. In the post-war, period, due to the development of I.C.I. personnel policies to a sophisticated stage, the union functioned as a 'law-making' and 'law-enforcing' institution. The loop-holes to industrial anarchy were gradually closed by effective collective bargaining. The breakdowns in union authority were not accompanied by sharp shifts of power from the formal to the informal group, as the Ardeer management helped the restoration of law and order in the factory by setting in motion the process of collective bargaining. In other parts of British industry managements refused to eliminate anarchy by bargaining with the trade unions, hence frustrated their purpose, leaving the way open to the vengeance of the informal groups of employees in their search for equitable treatment from their managements.

Conclusion

A trade union may be described as an institution which has as its purpose the participation with another institution, management, in formulating laws to govern the rights and obligations of its members in relation to their employment by the second institution. Its primary function to achieve its purpose is that of bargaining, that is negotiating and reaching agreement with management over the rights and obligations of the latter's employees. A union's function, and hence its purpose, is frustrated when a management refuses to allow it to participate in the formulation of laws governing the employment of its members. The informal groups which arise from the organisation of work are then left to fend for themselves and spontaneous stoppages are possible. Workplaces characterised by anarchy and disorderly conduct for many years continue to give union and management trouble through informal group activity, even though management allows the union to participate in the formulation of employment laws. Informal group behaviour is gradually brought under control by the establishment of appropriate laws; it soon becomes disorderly when collective bargaining fails.

In addition to its function of formulating laws to govern employees' behaviour, it has a law-enforcement function as well; that function consists of seeing that the terms of agreement are discharged. It once becomes apparent that a union is far less competent to carry out the latter function than the former. Firstly, often it is unable to recruit all employees as its members; consequently, it is unable to exercise discipline over some employees. Secondly, the formal structure of the union is such that is weak in its authoritarian, status and motivational systems which prevent it exercising strong disciplinary controls over its members. Thirdly, the

groups of members who disobey the orders of their governing body have their common bond at the workplace, and a union may not be able to bring their behaviour under control. Fourthly, the triggering of a spontaneous stoppage is usually the fault of management, and not that of a union; the long term disaffection may be due to the general ineffectiveness of collective bargaining, and for this management must also accept its share of the blame. Thus, a union which faces ill-discipline amongst its members is the victim of bad management.

This does not rule out the possibility of internal factors arising in a union which leads to disorganisation. The failure of union officials to cope with their roles, (particularly the one relating to bargaining) the conflict of roles for union officials, the clash of functions, the imposition of less important functions on the primary function of the union, are all responsible for disorganisation and breakdown in union authority. The evidence of the Ardeer case strongly suggests, however, that trade union behaviour in the ultimate is determined by management behaviour, and the very maladjustments and weaknesses, just mentioned, are to be corrected by positive management behaviour through collective bargaining. Thus, where a management co-operates with a union in establishing law and order in the workplace there is little likelihood of union authority breaking down. In short, a union realises its purpose when its bargaining function establishes equitable rights and obligations for its members, this is achieved through effective collective bargaining, and the latter is possible only with the consent of management and its desire to regulate its conduct by respecting the moral law - the law of obligation.

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