

# Les transformations technologiques et conventions collectives de travail

## Technological Change and Collective Agreement

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### Article abstract

#### GENERAL STATEMENT

The following remarks are intended to show, by way of examples, that to provide a useful assessment of the impact of technological change on collective agreements, the statistical analysis or the mere reading of collective agreement provisions is insufficient; this analysis and reading must be supplemented by field research conducted at the place of employment. It is our belief that such research is necessary to determine: (a) to what extent do collective agreements protect workers whose jobs are affected by technological changes; (b) to what extent are collective agreements facilitating the adaptation of workers to technological changes.

#### THE READING OF COLLECTIVE AGREEMENTS IS OFTEN A SOURCE OF USEFUL, BUT INCOMPLETE INFORMATION

Let us illustrate the above statement by recalling here that during the preparation of the study on *Collective Agreement Provisions in Major Manufacturing Establishments (1963)*,<sup>1</sup> it has discovered that the problems resulting from technological changes and automation were too vast and too complex to be examined meaningfully on the basis of an analysis of collective agreements alone. It would indeed appear that technological change can, in fact, lead to the formulation of numerous agreement provisions that will not necessarily make an open and obvious reference to the problems with which they deal.

For example, there could be in collective agreements notices of lay-off that can be granted in cases of « changes in methods of production ». When one reads such provisions, one is bound to ask certain questions: What kind of changes in methods of production are dealt with in such provisions? Are these changes of a technological nature, or are they of a general nature? For example, do these changes refer to the closing of a department of the plant, or to the installation of new equipment which would result in an increase in the volume of production while resulting at the same time in a decrease of personnel? It can easily be seen that the collective agreement itself does not generally contain the answers to those questions. It is rather in the establishment where the agreement applies that such information will be found.

Incidentally, certain collective agreements might also contain special provisions dealing with the employment of older workers, provisions that could very well be the direct result of technological change without containing any reference to these changes.

The two observations that have just been made indicate that it is not only by reading collective agreements that research workers will always be in a position to determine whether the establishments in which these agreements apply have been subject to changes in technology. But another observation ought to be made. Even when collective agreements do contain specific provisions concerning problems resulting from automation or technological change, the mere reading of such provisions will not always provide sufficient information as to the effect that these provisions might have.

For example, a provision such as the one which follows is of great interest in today's context of technological change. However, the mere reading of this provision cannot satisfy research workers anxious to know what kind of impact it has. Here is the provision in question: « In the event of technological changes which affect the employees, management will inform them in advance of such changes. The company will consider present employees for new jobs arising out of such technological changes before hiring from outside. — Present employees who are offered and accept such a job created by technological change and who require training in order to perform the new job effectively will be provided with such training by the company. It is understood that employees selected for such training must be willing to take the required aptitude test ».

Another example. When a collective agreement clearly and specifically provides that employees will receive straight time pay for time spent in a vocational school of recognized standing for the purpose of learning new industrial techniques, techniques which are the result of changes in technology, it can be expected that those who read such provisions will know how to apply them. Which are the workers who benefit from it? How are these workers selected? Which are the reactions of workers who are requested or who decide to take the courses? Which are the teaching methods followed in these schools? Finally, what kind of impact and benefits do these provisions have on the qualifications of the work force in a given establishment? Here again, it must be pointed out that collective agreements do not generally contain the answers to these questions.

#### COLLECTIVE BARGAINING SETTLEMENTS RESULTING FROM TECHNOLOGICAL CHANGES OR FROM THE EXPECTATION OF SUCH CHANGES

By way of new examples, let us now have a brief look at recent collective agreements in Canada, agreements which have been obviously affected by technological changes or, at least, by the expectation of such changes. A brief reference to some of these agreements follows.

Example A: In a large firm in Western Canada, management has agreed to provide the union with as much advance notice as possible of any intention to introduce automation, new equipment or new procedures which might result in the displacement of personnel. Under the terms of this agreement, employees becoming redundant due to automation, new equipment, or new office procedures, shall be eligible for training to equip them either for the operation of new equipment or for qualifying in new positions. General retraining shall also be made available to such redundant personnel who are able to qualify for other vacancies available in the firm.

Example B: Still in Western Canada, a press agency has recently concluded a three-year agreement. It includes a clause ensuring that during the life of the agreement, there will be no lay-offs for economy reasons, or as a result of new automated processes or of a publication in sold or discontinued. Under the agreement, provisions will also be made for a joint standing committee to study the effects of automation in the company and to make recommendations for possible relocation and retraining of employees affected by new processes; the company will provide the money for retraining employees.

Example C: Another important company located in Canada has recently signed a collective agreement containing a clause providing that employees with ten or more years of service will not be demoted by more than one labour grade by reason of technological change.

Example D: In a large plant located in Eastern Canada, there is a collective agreement containing a retraining provision. The following information could be obtained concerning the application of the provision in question:

- The plan was developed jointly by the plant management and the union over a period of eight to ten months, away from the bargaining table.
  - According to one company official, the intent of the plan is to upgrade workers so that they could hold their jobs as technological changes and the resulting changes in job content went forward;
  - In addition to on-the-job training, maintenance workers may take related courses in the evenings at the local vocational schools. The company pays tuition fees and half of the textbooks, and shift workers enrolling in these courses are assigned to day work during the school term;
  - In 1963, 88 employees took the courses, and only three dropped out. (It might be noted here that for many years, similar arrangements had been made for apprentices as well.)
- It would indeed be superfluous to ask again with respect to the provisions that have just been briefly described, the questions that were asked at the beginning of this paper concerning other labour management arrangements.

#### ROLE OF SENIORITY PROVISIONS UNDER CONDITIONS OF TECHNOLOGICAL CHANGE

Before concluding, let us consider briefly the role played by seniority provisions — provisions which are closely related to job security — under conditions of technological change. It will be recalled that seniority provisions on lay-off were found in almost all of the establishments covered by the study to which reference was made earlier in this article. Some of these provisions were formulated in this manner: « In the event of reduction of staff and rehiring of employees, seniority shall apply, provided the employee with the greater amount of seniority can satisfactorily perform the job he is assigned to, or can learn the job within a reasonable time ». This type of clause was, of course, classified as one which provides that the senior employees will be retained provided their qualifications for ability to perform available jobs are sufficient. However, one might wonder what is the real impact or meaning of such a provision in a context of technological change? What would be management and union policies followed in applying the seniority provision in cases of technological change? And in the provision itself, what would « reasonable time » really mean? Would « reasonable time » be defined by management alone? Or by both union and management? Also, in cases of changing occupational requirements, would it be the policy of management to give an advance notice to the employees who may become affected by these changes so as to give these workers « reasonable time » to learn the new jobs to which they would be assigned? (One can immediately realize that these questions, as vitally important as they are, cannot be usefully answered on the basis of an analysis of collective agreements only. It is only through an analysis of agreements supplemented by field research that meaningful information could be supplied.)

#### WHY FIELD RESEARCH IN INDUSTRIAL RELATIONS?

In the preceding paragraphs, we have attempted to show, with a degree of insistence, that to assess in a useful manner the impact of technological changes on collective agreements, and vice versa, an analysis of collective agreements — as important as this analysis is — must be supplemented by field research. It might, of course, be asked at this point: Why this insistence? Personally, we are convinced that the reasons why research in the field of labour-management relations should now be intensified or even reoriented in part, are very important indeed. For unions, industrial firms and for public services, it is certainly useful to know of the existence of agreement provisions which are intended to protect workers under conditions of changes in technology, or are intended to facilitate the adaptation of industrial firms to automation. But it might also be useful to unions, industrial firms and public services to know which are the principal reasons that can be drawn from the application of some of these provisions. In more concrete terms, it would seem that a company and a union which are about to develop a joint program for the retraining or readaptation of employees, would have nothing to lose by learning how similar programs are working out in other firms. This company and this union might also benefit from learning which kinds of obstacles have to be overcome; which are the training or retraining methods that are most successfully applied; which are the kinds of training officers that are most appreciated by the workers subjected to these retraining or readaptation programs, etc. etc. It is also our belief that the knowledge of such detailed information might save time, efforts and money. This example, selected from among many others, shows clearly that research work conducted with respect to specific and concrete situations in which labour and management have jointly faced technological change and automation through their collective agreements, can be extremely useful indeed to industry in general. It is also our belief that such research is important not only to discover the ways in which automation can be met in a positive manner, but also to determine what kind of changes could be brought to our industrial relations systems so that technological change and automation can really be a source of economic expansion and increased human welfare.

#### CONCLUSION

By way of conclusion, it will be mentioned here that the Economics and Research Branch of the Federal Department of Labour is now engaged in a detailed study of the effects of technological change on industrial relations: this study is covering certain aspects of railway operations. We are told by the author of the study, Mr. John Milsons, that the study is not only based on a careful analysis of collective agreements but also on carefully planned field work which, it is expected, will provide a general description of the adaptation of the industrial relations framework to conditions of technological change. The study will also illustrate, by way of practical examples, the ways in which specific agreement provisions have affected the work histories of men displaced through technological changes. The nature of the methods followed to prepare this study is, we believe, a significant development in the field of industrial relations research in Canada. For the good of our economy, it is to be hoped that this study will be followed by others.

Note 1: *Collective Agreement Provisions in Major Manufacturing Establishments (1963)* Economics and Research Branch, Department of Labour, Canada, pp. 71.

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# Les transformations technologiques et conventions collectives de travail\*

Félix Quinet

*L'auteur démontre, au moyen de clauses significatives, que la seule lecture du texte des conventions collectives ne permet pas de connaître toute la portée des transformations technologiques sur les relations de travail. Une recherche menée sur le terrain s'avère nécessaire à cette fin. L'auteur étudie également le rôle des clauses d'ancienneté en cas de transformations technologiques.*

## Énoncé général

Dans les paragraphes qui suivent, l'on essaiera de montrer, à l'aide d'exemples, que pour évaluer d'une façon utile la portée des transformations technologiques sur les conventions collectives de travail, une analyse statistique, ou la seule lecture, des clauses de conventions collectives est insuffisante. Il faut en effet que cette analyse et cette lecture soient complétées par une recherche menée sur les lieux mêmes du travail. Une telle recherche est en effet nécessaire pour déterminer jusqu'à quel point les conventions collectives protègent les travailleurs dont les emplois sont touchés par les transformations technologiques, et pour déterminer aussi jusqu'à quel point les conventions collectives facilitent l'adaptation des entreprises industrielles aux changements technologiques.

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\* Les remarques présentées ici sont personnelles et ne reflètent pas nécessairement les vues du ministère du Travail du Canada.

### **La lecture des conventions collectives est souvent une source de renseignements utiles mais incomplets**

Illustrons cet énoncé général, en rappelant ici que lors de la préparation de notre étude portant sur les conventions collectives en vigueur dans des établissements importants de l'industrie manufacturière du Canada <sup>1</sup>, l'on s'est rendu compte que le problème des transformations technologiques ou de l'automatisation était à la fois trop vaste et trop complexe pour pouvoir être examiné avec utilité sur la base des seuls textes des conventions collectives. Les transformations technologiques peuvent, en effet, donner lieu à de nombreux articles de conventions collectives, articles qui ne feront pas tous nécessairement allusion aux problèmes qui sont leur raison d'être.

Par exemple, lorsque la convention stipule que les travailleurs pourront bénéficier d'avis prolongés de licenciement en cas de "changements dans les méthodes de production", on se posera naturellement certaines questions: De quels changements de méthodes de production s'agit-il? Sont-ils d'une nature technologique ou bien d'une nature générale? S'agit-il, par exemple, de la fermeture d'un département d'une usine donnée ou bien de l'installation d'une nouvelle machine permettant le maintien ou même l'accroissement de la production tout en occasionnant une contraction dans les effectifs du personnel? On se rendra facilement compte que la convention collective elle-même ne contient pas de réponses satisfaisantes à ces questions. C'est plutôt dans l'établissement où cette convention est en vigueur que l'on découvrira ces réponses.

Signalons aussi en passant que certaines conventions collectives peuvent contenir des dispositions spéciales visant au maintien en emploi des travailleurs âgés, dispositions qui peuvent résulter directement de transformations technologiques tout en n'y faisant aucune allusion.

Les deux observations qui précèdent indiquent clairement que ce n'est pas en lisant une convention collective que l'on s'apercevra toujours si l'établissement où elle est en vigueur a, oui ou non, été le théâtre de transformations d'une nature technologique. Mais une autre ob-

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(1) *Clauses de Conventions Collectives de Grands Etablissements Manufacturiers*, (1963), Direction de l'Economique et des Recherches, Ministère du Travail, Canada, 31 pp.

servation doit être faite. C'est que là où une convention collective concernant certains problèmes résultant de l'automatisation ou des changements technologiques, la seule lecture de cette clause, aussi précise et claire soit-elle, ne peut pas toujours fournir des renseignements suffisants concernant les effets de la clause en question.

Par exemple, une clause du genre de celle qui suit ne manquera pas de susciter beaucoup d'intérêt à l'heure des transformations technologiques. Cependant, la seule lecture de cette clause ne peut satisfaire toute la curiosité du chercheur. Voici une traduction française de la clause en question. <sup>2</sup>

« Au cas où des changements technologiques affecteraient les travailleurs, la Direction fera part de ces changements aux représentants locaux du syndicat. La Compagnie considérera les travailleurs actuels pour de nouveaux emplois résultant de ces transformations technologiques, avant de procéder à l'embauchage de travailleurs venant de l'extérieur. Les travailleurs actuels à qui l'on offre de tels emplois résultant de transformations technologiques, et qui acceptent ces emplois, et qui ont besoin d'entraînement afin d'accomplir avec efficacité les tâches de ces nouveaux emplois, bénéficieront d'un tel entraînement, et ce dernier leur sera fourni par la Compagnie. Il est entendu que les travailleurs sélectionnés pour subir cet entraînement doivent être disposés à se soumettre aux tests d'aptitude requis. »

Voici une autre clause au sujet de laquelle on pourrait répéter les remarques qui ont été faites au sujet de l'article précédent:

« La Compagnie doit, si elle entend faire des changements technologiques susceptibles de réduire la main-d'oeuvre, avvertir le syndicat aussitôt que possible. Ce dernier pourra faire des suggestions à la compagnie sur les moyens à prendre pour pallier les inconvénients qui pourraient en résulter pour les employés au travail. »

« La Compagnie donnera la préférence à ses employés permanents qui possèdent des aptitudes pour remplir les nouvelles occupations créées par les améliorations technologiques, dans le champ d'application prévue à l'article 2. »

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(2) Voici le texte original, en anglais, de la clause dont la traduction française figure ci-haut : « In the event of technological changes which affect the employees, management will inform local union officials of such changes. The Company will consider present employees for new jobs arising out of such technological changes before hiring from outside. — Present employees who are offered and accept such a job created by technological change and who require training in order to perform the new job effectively will be provided with such training by the Company. It is understood that employees selected for such training must be willing to take the required aptitude tests ».

Un autre exemple encore. Si une convention collective stipule clairement et spécifiquement que des travailleurs recevront leur salaire régulier pendant les heures qu'ils consacrent à l'étude de techniques nouvelles dans des institutions reconnues, techniques nouvelles qui sont le résultat direct de transformations technologiques, il est normal que ceux qui lisent cette clause se posent certaines questions. Quels sont les travailleurs qui en bénéficient? De quelle façon ces travailleurs sont-ils choisis? Quelles sont les réactions des travailleurs qui sont appelés ou qui décident de suivre ces cours? Quelles sont les méthodes que l'on suit dans ces institutions fréquentées par ceux qui désirent se perfectionner? Enfin, quels sont les effets de cette clause sur les qualifications de la main-d'oeuvre de l'établissement en question. Ici encore on se rendra tout de suite compte que la convention collective ne contient généralement pas les réponses à ces questions. C'est plutôt dans l'établissement où la convention est en vigueur que l'on obtiendra les renseignements utiles.

### **Dispositions patronales-ouvrières résultant de transformations technologiques ou de l'éventualité de ces transformations**

Ouvrons ici une parenthèse et montrons à l'aide de quelques exemples qu'il y a, de fait, au Canada plusieurs conventions collectives récentes dont le contenu a été, d'une façon évidente, affecté par les transformations technologiques ou, du moins, par leur éventualité. Faisons brièvement allusion ici à certaines de ces conventions collectives.

*Exemple A :* Dans une grande entreprise de l'ouest du Canada, la direction s'est engagée à avertir le syndicat le plus tôt possible de toute intention qu'elle aurait concernant l'introduction de procédés automatisés, l'installation de nouvelles machines ou l'application de nouvelles méthodes de production qui pourraient causer un déplacement de personnel. La convention collective en vigueur dans cette grande entreprise stipule également que les travailleurs devenant superflus à la suite de l'introduction de procédés automatisés, de nouvelles machines, ou de nouvelles méthodes de travail dans les bureaux, pourront bénéficier d'une formation qui les rendrait capables d'utiliser les nouvelles machines ou d'occuper de nouveaux emplois. Cette formation ou ce réentraînement sera aussi disponible pour les travailleurs affectés par l'automatisation ou les changements technologiques, travailleurs qui sont capables de se qualifier pour d'autres emplois vacants au sein de l'entreprise.

*Exemple B :* Encore dans l'ouest du Canada, une agence de presse a récemment conclu une convention collective d'une durée de trois

ans. Cette convention contient une clause stipulant et garantissant que durant la durée de la convention, il n'y aura ni mise-à-pied pour des motifs d'économie, ni mise-à-pied causée par l'introduction de nouveaux procédés automatisés. Le contrat stipule également qu'il n'y aura aucune mise-à-pied si une publication est vendue ou interrompue. Une autre clause de cette convention stipule qu'un comité patronal-ouvrier sera établi afin d'étudier les effets de l'automatisation dans la compagnie et pour présenter des recommandations en vue de la réinstallation (relocation) ou du réentraînement des travailleurs affectés par les nouvelles méthodes de production. Dans la convention également, la compagnie s'engage à payer les frais occasionnés par le réentraînement des travailleurs.

*Exemple C :* Une autre compagnie importante située au Canada a récemment signé une convention collective contenant une clause stipulant que les travailleurs ayant dix années de service ou plus, ne pourront être « dégradés » de plus d'un palier (labour grade) dans l'échelle de classification du travail, par suite de l'introduction de transformations technologiques.

*Exemple D :* Dans une grande usine située dans l'est du Canada, il existe une convention collective contenant une clause concernant le réentraînement pour les travailleurs. Les renseignements suivants purent être obtenus concernant l'application de l'article en question :

- a) Ce plan de réentraînement a été développé conjointement par la direction de l'entreprise et le syndicat durant une période de huit à dix mois, au cours de séances qui, paraît-il, furent loin d'être des séances de négociations au sens traditionnel de l'expression ;
- b) L'objectif du plan c'est de fournir un supplément de formation aux ouvriers d'entretien (maintenance workers) de façon à ce que ceux-ci puissent continuer à occuper leurs emplois, emplois dont les fonctions deviennent de plus en plus complexes suite à certains développements d'ordre technologique ;
- c) En plus d'un entraînement qui se donne sur les lieux mêmes du travail (on-the-job training), les ouvriers d'entretien peuvent suivre des cours du soir dans les écoles techniques locales. La compagnie paye les frais de scolarité et assume la moitié du coût des manuels ; la compagnie a également pris des dispositions pour que les travailleurs prenant ces cours soient assignés à des travaux de jour pendant toute la durée du programme des cours ;
- d) En 1963, 88 travailleurs ont pris les cours en question, et il n'y en a que trois qui les ont abandonnés en cours de route. (On notera aussi que depuis nombre d'années des dispositions semblables à celles qui viennent d'être décrites avaient été prises pour les apprentis.)

Il serait tout à fait superflu ici de poser à nouveau au sujet des dispositions qui viennent d'être brièvement décrites des questions auxquelles la simple lecture de ces dispositions ne peut évidemment fournir de réponses.

### **Rôle des clauses d'ancienneté en cas de transformations technologiques**

Avant de conclure, évoquons brièvement ici le rôle que les clauses d'ancienneté — clauses qui sont étroitement liées à la sécurité de l'emploi — peuvent jouer en cas de transformations technologiques. Rappelons à nouveau que des clauses stipulant que les licenciements de main-d'œuvre seraient effectués suivant l'ancienneté ont été trouvées dans les conventions collectives de presque tous les établissements visés par l'étude à laquelle l'on a fait allusion au début de cet article. Quelques-unes de ces clauses se lisaient comme suit:

« En cas de réduction de personnel, dans le réembauchage des travailleurs, on appliquera les règles de l'ancienneté, pourvu que le travailleur qui possède le plus d'ancienneté puisse accomplir, d'une façon satisfaisante, l'ouvrage auquel il est assigné, ou puisse apprendre cet ouvrage au cours d'une période de temps raisonnable. »<sup>3</sup>

On considéra évidemment ces clauses comme des dispositions stipulant que le travailleur le plus ancien serait maintenu en emploi à condition que ses connaissances, ou aptitudes, eu égard à l'emploi disponible soient suffisantes. Toutefois, quelle est la portée réelle d'une clause de ce genre en cas de changements d'une nature technologique? Quelles seraient les dispositions prises par le patronat et le syndicat en ce qui concerne l'application même de la clause? Dans la clause elle-même, que voudrait réellement dire "période de temps raisonnable"? Est-ce que "période de temps raisonnable" serait défini par la direction seulement, ou bien par le syndicat et la direction? Enfin, dans des cas où des travailleurs anciens devraient être transférés dans de nouveaux emplois, serait-ce la politique de la direction d'avertir ces travailleurs de façon à leur donner une période de "temps raisonnable" durant laquelle ils

(3) Voici le texte original, en anglais, de la clause dont la traduction française figure ci-haut : « In the event of reduction of staff and rehiring of employees, seniority shall apply, provided the employee with the greater amount of seniority can satisfactorily perform the job he is assigned to, or can learn the job within a reasonable time ».

pourraient apprendre les tâches nouvelles auxquelles la compagnie les assignerait? On comprendra immédiatement que ces questions, aussi importantes qu'elles soient, ne peuvent pas être utilement examinées sur la base d'une analyse des seuls *textes* de conventions collectives. Ici encore, on se rend compte que seule une analyse de conventions collectives *complétée* par une recherche menée sur les lieux du travail pourra fournir tous les renseignements que l'on désire.

### **Pourquoi une recherche menée sur les lieux mêmes du travail ?**

Dans les paragraphes qui précèdent, l'on a essayé de montrer, avec une certaine insistance, que pour étudier d'une façon réaliste la portée des transformations technologiques sur les conventions collectives de travail, et vice versa, l'analyse des conventions collectives — aussi importante que soit cette analyse — devrait être complétée par des travaux de recherche menés sur le terrain. On pourrait évidemment nous demander ici: Pourquoi cette insistance? Personnellement, nous sommes convaincu que les raisons pour lesquelles il faudrait actuellement intensifier, ou peut-être même *réorienter* en partie le travail de recherche en relations industrielles, sont impérieuses. Pour les syndicats, pour les entreprises et pour les services publics, il est certainement utile de savoir qu'il existe des clauses visant à protéger les travailleurs en cas de changements dans les méthodes de production, ou visant à faciliter l'adaptation des entreprises industrielles face à l'automatisation. Mais il semble qu'il leur serait aussi utile de connaître, en termes pratiques, les leçons que l'on a pu tirer de l'application de certaines de ces clauses. Pour citer un exemple, il semble qu'une compagnie et un syndicat qui sont sur le point de développer un programme de réadaptation des travailleurs, n'auraient rien à perdre en apprenant comment des programmes similaires fonctionnent dans d'autres entreprises. Il pourrait être utile à cette compagnie et à ce syndicat de savoir quels ont été les obstacles qu'il a fallu surmonter; quelles sont les méthodes d'entraînement ou de réentraînement qui ont été appliquées avec le plus de succès; quels sont les genres de moniteurs qui sont les plus appréciés par les travailleurs qui sont soumis à ces programmes de réentraînement et de réadaptation, etc., etc. Nous croyons aussi que la connaissance de tels renseignements peut éviter du gaspillage de temps, d'efforts, de talent et d'argent. *Cet exemple, choisi parmi de très nombreux autres, montre bien, il nous semble, qu'une recherche portant sur des situations précises et concrètes qui ont vu entreprises et syndicats aux prises, par le truchement de leurs conventions collectives, avec des transformations tech-*



nologiques, peut être utile à l'industrie en général. En effet, une telle recherche est extrêmement importante non seulement pour découvrir comment on peut avec succès faire face à l'automatisation, mais aussi comment on pourrait modifier notre régime de relations industrielles pour que les transformations technologiques soient réellement une source de progrès économique et social.

### Conclusion

En concluant, mentionnons simplement que la Direction de l'Économie et des Recherches du ministère fédéral du Travail prépare actuellement une étude détaillée consacrée aux effets des transformations technologiques sur les relations industrielles; cette étude vise l'industrie des chemins de fer. M. John Millons, l'auteur de l'étude, nous communique que ce travail n'est pas seulement basé sur une étude détaillée de conventions collectives mais aussi sur du travail de recherche mené sur le terrain. On s'attend à ce que cette recherche fournisse des renseignements de base concernant l'adaptation des "relations industrielles" aux conditions créées par les transformations technologiques. Mais il faut aussi souligner que cette étude illustrera, *au moyen d'exemples concrets*, la façon dont certaines clauses de conventions collectives ont affecté des travailleurs déplacés par suite de transformations technologiques. La nature des méthodes qui sont suivies pour préparer cette étude est d'une importance indéniable dans le domaine de la recherche en relations industrielles. Pour le bien de notre économie, souhaitons que cette étude soit suivie par d'autres.

## TECHNOLOGICAL CHANGE AND COLLECTIVE AGREEMENTS

### GENERAL STATEMENT

The following remarks are intended to show, by way of examples, that to provide a useful assessment of the impact of technological change on collective agreements, the statistical analysis or the mere reading of collective agreement provisions is insufficient; this analysis and reading must be supplemented by field research conducted at the place of employment. It is our belief that such research is necessary to determine: (a) to what extent do collective agreements protect workers whose jobs are affected by technological changes; (b) to what extent are collective agreements facilitating the adaptation of industrial firms to technological changes.

## THE READING OF COLLECTIVE AGREEMENTS IS OFTEN A SOURCE OF USEFUL BUT INCOMPLETE INFORMATION

Let us illustrate the above statement by recalling here that during the preparation of the study on *Collective Agreement Provisions in Major Manufacturing Establishments (1963)*<sup>1</sup>, it has discovered that the problems resulting from technological changes and automation were too vast and too complex to be examined meaningfully on the basis of an analysis of collective agreements alone. It would indeed appear that technological change can, in fact, lead to the formulation of numerous agreement provisions that will not necessarily make an open and obvious reference to the problems with which they deal.

For example, there could be in collective agreements notices of lay-off that can be granted in cases of « changes in methods of production ». When one reads such provisions, one is bound to ask certain questions: What kind of changes in methods of production are dealt with in such provisions? Are these changes of a technological nature, or are they of a general nature? For example, do these changes refer to the closing of a department of the plant, or to the installation of new equipment which would result in an increase in the volume of production while resulting at the same time in a decrease of personnel? It can easily be seen that the collective agreement itself does not generally contain the answers to those questions. It is rather in the establishment where the agreement applies that such information will be found.

Incidentally, certain collective agreements might also contain special provisions dealing with the employment of older workers, provisions that could very well be the direct result of technological change without containing any reference to these changes.

The two observations that have just been made indicate that it is not only by reading collective agreements that research workers will always be in a position to determine whether the establishments in which these agreements apply have been subject to changes in technology. But another observation ought to be made. Even when collective agreements do contain specific provisions concerning problems resulting from automation or technological change, the mere reading of such provisions will not always provide sufficient information as to the effect that these provisions might have.

For example, a provision such as the one which follows is of great interest in today's context of technological change. However, the mere reading of this provision cannot satisfy research workers anxious to know what kind of impact it has. Here is the provision in question: « *In the event of technological changes which affect the employees, management will inform local officials of such changes. The company will consider present employees for new jobs arising out of such technological changes before hiring from outside. — Present employees who are*

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(1) *Collective Agreement Provisions in Major Manufacturing Establishments (1963)*, Economics and Research Branch, Department of Labour, Canada, pp 31.

*offered and accept such a job created by technological change and who require training in order to perform the new job effectively will be provided with such training by the company. It is understood that employees selected for such training must be willing to take the required aptitude test ».*

Another example. When a collective agreement clearly and specifically provides that employees will receive straight time pay for time spent in a vocational school of recognized standing for the purpose of learning new industrial techniques, techniques which are the result of changes in technology, it can be expected that those who read such provisions wish to know how it is applied. Which are the workers who benefit from it? How are these workers selected? Which are the reactions of workers who are requested or who decide to take the courses? Which are the teaching methods followed in these schools? Finally, what kind of impact and benefits do these provisions have on the qualifications of the work force in a given establishment? Here again, it must be pointed out that collective agreements do not generally contain the answers to these questions.

#### COLLECTIVE BARGAINING SETTLEMENTS RESULTING FROM TECHNOLOGICAL CHANGES OR FROM THE EXPECTATION OF SUCH CHANGES

By way of new examples, let us now have a brief look at recent collective agreements in Canada, agreements which have been obviously affected by technological changes or, at least, by the expectation of such changes. A brief reference to some of these agreements follows.

*Example A:* In a large firm in Western Canada, management has agreed to provide the union with as much advance notice as possible of any intention to introduce automation, new equipment or new procedures which might result in the displacement of personnel. Under the terms of this agreement, employees becoming redundant due to automation, new equipment, or new office procedures, shall be eligible for training to equip them either for the operation of new equipment or for qualifying in new positions. General retraining shall also be made available to such redundant personnel who are able to qualify for other vacancies available in the firm.

*Example B:* Still in Western Canada, a press agency has recently concluded a three-year agreement. It includes a clause ensuring that during the life of the agreement, there will be no lay-offs for economy reasons, or as a result of new automated processes or if a publication is sold or discontinued. Under the agreement, provision was also made for a joint standing committee to study the effects of automation in the company and to make recommendations for possible relocation and retraining of employees affected by new processes; the company will provide the money for retraining employees.

*Example C:* Another important company located in Canada has recently signed a collective agreement containing a clause providing that employees with ten or more years of service will not be demoted by more than one labour grade by reason of technological change.

*Example D:* In a large plant located in Eastern Canada, there is a collective agreement containing a retraining provision. The following information could be obtained concerning the application of the provision in question:

- a) The plan was developed jointly by the plant management and the union over a period of eight to ten months, *away from the bargaining table* ;
- b) According to one company official, the intent of the plan is to upgrade workers so that they could hold their jobs as technological changes and the resulting changes in job content went forward ;
- c) In addition to on-the-job training, maintenance workers may take related courses in the evenings at the local vocational schools. The company pays tuition fees and half the cost of textbooks, and shift workers enrolling in these courses are assigned to day work during the school term ;
- d) In 1963, 88 employees took the courses, and only three dropped out. (It might be noted here that for many years, similar arrangements had been made for apprentice as well.)

It would indeed be superfluous to ask again with respect to the provisions that have just been briefly described, the questions that were asked at the beginning of this paper concerning other labour management arrangements.

#### ROLE OF SENIORITY PROVISIONS UNDER CONDITIONS OF TECHNOLOGICAL CHANGE

Before concluding, let us consider briefly the role played by seniority provisions — provisions which are closely related to job security — under conditions of technological change. It will be recalled that seniority provisions on lay-off were found in almost all of the establishments covered by the study to which reference was made earlier in this article. Some of these provisions were formulated in this manner : « *In the event of reduction of staff and rehiring of employees, seniority shall apply, provided the employee with the greater amount of seniority can satisfactorily perform the job he is assigned to, or can learn the job within a reasonable time* ». This type of clause was, of course, classified as one which provides that the senior employees will be retained provided their qualifications (or ability) to perform available jobs are sufficient. However, one might wonder what is the real impact or meaning of such a provision in a context of technological change? What would be management and union policies followed in applying the seniority provision in cases of technological change? And, in the provision itself, what would « reasonable time » really mean? Would « reasonable time » be defined by management alone? Or by both union and management? Also, in cases of changing occupational requirements, would it be the policy of management to give an advance notice to the employees who may become affected by these changes so as to give these workers « reasonable time » to learn the new jobs to which they would be assigned? One can immediately realize that these questions, as vitally important as they are, cannot be usefully answered on the basis of an analysis of collective agreements only. It is only through an analysis of agreements supplemented by *field research* that meaningful information could be supplied.

#### WHY FIELD RESEARCH IN INDUSTRIAL RELATIONS ?

In the preceding paragraphs, we have attempted to show, with a degree of insistence, that to assess in a useful manner the impact of technological changes

on collective agreements, and vice versa, an analysis of collective agreements — as important as this analysis is — must be supplemented by field research. It might, of course, be asked at this point: Why this insistence? Personally, we are convinced that the reasons why research in the field of labour-management relations should now be intensified or even *reoriented* in part, are very important indeed. For unions, industrial firms and for public services, it is certainly useful to know of the existence of agreement provisions which are intended to protect workers under conditions of changes in technology, or are intended to facilitate the adaptation of industrial firms facing automation. But it might also be useful to unions, industrial firms and public services to know which are the *practical lessons* that can be drawn from the application of some of those provisions. In more concrete terms, it would seem that a company and a union which are about to develop a joint program for the retraining or readaptation of employees, would have nothing to lose by learning how similar programs are working out in other firms. This company and this union might also benefit from learning what kinds of obstacles have to be overcome; which are the training or retraining methods that are most successfully applied; which are the kinds of training officers that are most appreciated by the workers subjected to these retraining or readaptation programs, etc., etc. It is also our belief that the knowledge of such detailed information might save time, efforts and money. This example, selected from among many others, shows clearly that research work conducted with respect to specific and concrete situations in which labour and management have jointly faced technological change and automation through their collective agreements, can be extremely useful indeed to industry in general. It is also our belief that such research is important not only to discover the ways in which automation can be met in a positive manner, but also to determine what kind of changes could be brought to our industrial relations system so that technological change and automation can really be a source of economic expansion and increased human welfare.

#### CONCLUSION

By way of conclusion, it will be mentioned here that the Economics and Research Branch of the Federal Department of Labour is now engaged in a detailed study of the effects of technological change on industrial relations; this study is covering certain aspects of railway operations. We are told by the author of the study, Mr. John Millons, that the study is not only based on a careful analysis of collective agreements but also on carefully planned field work which, it is expected, will provide a general description of the adaptation of the industrial relations framework to conditions of technological change. The study will also illustrate, by way of *practical examples*, the ways in which specific agreement provisions have affected the work histories of men displaced through technological changes. The nature of the methods followed to prepare this study is, we believe, a significant development in the field of industrial relations research in Canada. For the good of our economy, it is to be hoped that this study will be followed by others.