The Struggle for Job Ownership in the Canadian Steel Industry: An Historical Analysis

Robert Storey

Volume 34, 1994

URI: https://id.erudit.org/iderudit/ltt34art03

Résumé de l'article

Ce texte est axé sur les luttes qui ont opposé les syndicats et le patronat au sujet du contrôle des emplois, luttes qui ont profondément contribué à modeler, voire à remodeler l'industrie canadienne de l'acier au fil du XXe siècle. Au cours de la première étape de l'évolution de cette industrie (de 1900 aux années quarante), le patronat contrôle complètement l'organisation du travail. Pendant la deuxième étape (des années quarante à soixante-dix), l'arrivée du syndicalisme industriel et l'établissement des régimes d'ancienneté et de traitement des griefs, offrent aux travailleurs la sécurité d'emploi et, graduellement, le sentiment d'exercer un contrôle sur leur travail. La troisième étape (les années quatre-vingt) représente une période de crise au cours de laquelle le patronat du secteur canadien de l'acier s'engage dans une vaste campagne de restructuration de l'organisation du travail. L'une des caractéristiques les plus importantes de l'opération réside dans la détermination des patrons à récupérer à tout prix le contrôle des emplois par l'entremise de l'implantation de nouvelles technologies, de la fusion d'emplois et de l'introduction d'équipes de travail. Dans l'éventualité où le patronat parviendra à récupérer le contrôle des emplois, la recherche conclut à un retour en arrière: les conditions de travail reviendront à ce qu'elles étaient avant la syndicalisation des travailleurs de l'acier, alors que le patronat créait et abolissait à loisir les emplois.

Citer cet article

The Struggle for Job Ownership in the Canadian Steel Industry: An Historical Analysis

Robert Storey

THE 1980S HAVE WITNESSED massive transformations in the world of work. During this period employers have set in motion changes in labour processes that are tearing at the heart of workplace social relations developed since the end of World War II. After years — in some instances, decades — of working in jobs the contours of which were familiar and even ‘designed’ by them, workers are being informed that they must work faster, harder, and differently. To facilitate these new levels of intensity and changes of style, they must open up their jobs to new technologies and work processes which promise or threaten to alter daily tasks and responsibilities sometimes beyond recognition. Moreover, in the midst of these disruptions, workers in all sectors are being told that if their employers — and, indeed, entire national economies — are to become efficient producers, they must ready themselves to make the supreme sacrifice: accept the possible loss of their jobs.

Each of these developments has been the subject of intense analysis by scores of investigators — some interested in promoting such alterations, others warning of their dire consequences. For those who either favour these forms of change, or who see no other viable alternative, the solution lies in adopting “post-Fordist” modes of production, whose core resides in technologies and organizational practices and procedures that allow for the maximum utilization of each of the essential ingredients of the labour process.¹ Under “flexible specialization,” as the concept and sets of practices have come to be known, adaptable and highly sophisticated technologies will replace single purpose machines thus allowing for rapid turnarounds and higher product quality in a volatile marketplace; and, as significantly, the rigid utilization of labour is to be superseded by new organiza-


tional forms such as workplace "teams" that dissolve dated and inflexible barriers between jobs while simultaneously promoting the upgrading of workers' skills and responsibilities. In the phrase that has come to typify "quality of working life" programmes that incorporate these and other workplace innovations, this new scenario is one where both management and workers are "winners." Management wins by streamlining its operations to become "lean and mean," thereby better positioning their company to compete successfully in the new global economy. Workers win by being invited into their company's decision-making processes even as they labour in jobs that reunite conception and execution — the original separation of which was occasioned by the adoption of policies and practices integral to Fordism and scientific management.

This prescriptive scenario is contested by writers such as Andrew Sayer and Richard Walker who argue that the changes that are taking place in workplaces are more apparent than real.\(^2\) That is, the new "lean and mean" model of North American "Toyotaism" is nothing more than an extended form of Taylorism or, as Mike Parker and Jane Slaughter describe it, "management by stress."\(^3\) On this side of the "flex spec" debate, then, management interest in workplace teams, just-in-time inventory and delivery systems, and pay-for-knowledge payment schemes, is not seen as being based upon a search for solutions to the ills experienced by industrial workers in contemporary capitalist societies. Rather, they are perceived as simply the most recent variation on a theme that has been in existence since the arrival of capitalist forms of production: the efforts of capital to wrest control of work processes from labour. In this latest incarnation management is analyzed as developing strategies aimed at completing the job begun by scientific management by using computer technologies to subdivide further the skills of workers, and, as crucially, to appropriate the knowledge of factory and office workers through organizational forms that encourage workers to trade their knowledge of the labour process in order to boost the competitive edge of their company while simultaneously helping to secure their own jobs. Although perhaps not objectionable in principle, the fear is that management will use this new-found knowledge not just to improve the efficiency and productivity of the company, but to divide workers from one another and to aid them in their efforts at persuading their employees that their interests can be accommodated by a firm that is free from the encumbrances concomitant with unionism.\(^4\) In the present context, these obstacles are identified

\(^4\) For elaborations of this argument, see Donald Wells, *Soft Sell: Quality of Working Life Programs and the Productivity Race* (Ottawa 1986); James Rinehart, "Improving the Quality of Working Life Through Job Redesign: Work Humanization or Work Rationalization?" *Canadian Review of Sociology and Anthropology*, 23 (1986), 507-30; and Canadian Automobile Workers, *CAW Statement on the Reorganization of Work* (Toronto 1990).
by management as elaborate job classification plans and entrenched seniority systems that operate together to prevent individual workers from developing their careers at a pace commensurate with their abilities.

It is this contest to shape and control industrial jobs that is the central focus of this paper. More specifically, this paper will analyze historical and recent struggles between labour and management in the Canadian steel industry over job ownership — an important concept and critical workplace reality that has gone almost completely unacknowledged in recent discussions of industrial restructuring. Indeed, this paper will show how the ongoing struggles between workers and their employers for control and ownership of jobs has been a central dynamic of the Canadian steel industry in each of three permeable, but nevertheless distinct phases: the 1900s to the 1940s, the immediate post war years to the late 1970s, and finally the 1980s to the present. From the early 1900s until unionization took hold in the 1940s, management exercised almost complete control in this domain. As in every other major mass production industry, management — in the person of foremen and superintendents — had the absolute power to hire and fire, place workers in specific jobs, determine and alter the content and wages for those jobs, and the like.

Unionization curbed some of the harshest features of management control through the entrenchment of seniority systems which specified rules and procedures for promotions, lay-offs, and recall. The whole system was policed by a grievance procedure that involved the union in each step and could culminate in an arbitrator making a ruling that was binding on each party. Thus ended employers’ much cherished “employment at will” policies: in the future, they would have to show “just cause” for worker dismissals. Industrial workers in the 1940s and beyond had gained an employment security unknown to their predecessors.

These forms of job-control gains, achieved in the 1940s and 1950s, encouraged steelworkers and their union (and unionized workers in other mass production industries) to press further into management’s domain. High on the priority list were calls for a job classification system which would clearly outline the tasks, responsibilities, and expectations associated with each job. Opposed by most of the major trades and industrial unions before the 1930s,5 job evaluation and job classification schemes in the Canadian steel industry (and in other industries and locales) served primarily to smooth out a multitude of wage disparities and provide mutually understood lines of advancement and promotion which, over time, evolved into recognized and legitimated — and discriminatory — internal labour

However, having secured the job controls outlined above, this intricate system of classification was also utilized by steel and other workers to lay ownership claims to their jobs. In short, these workers came to feel that they had a "right" to their job — a right based on their placement in a specific job or occupation that was acknowledged contractually by their employer, and given "subjective" content in the "working knowledge" invested in actually doing and particularizing the job.


relations and workplace restructuring by virtue of collapsing the latter concept into the former. What is missing in this more narrow conception, however, is the sense that workers have of their right to their particular job. To be sure, this sense of right was often riddled through with rules and regulations and ideologies that excluded other groups of workers such as women. Nevertheless, a complete picture of this relationship must encompass the understanding that job ownership originates not only in the defensive desire of workers to end forms of employer discrimination, but is at once an affirmative right that informs and sparks various types of worker resistance — from the formation of unions to their unwillingness to support technological change or larger and different forms of work reorganization. It is, then, the final argument of this paper that job ownership by workers — rooted in a seniority system and backed by the power of the union — is a central target of the current phase of workplace restructuring in the Canadian steel industry. According to employers, job ownership — although rarely, if ever, mentioned in these terms — has introduced inflexibilities into the labour process which obstruct the path to efficient and profitable production. For their part, workers and their unions have attempted to resist the restructuring plans of their employers. For various reasons, including the reality of job loss which has undermined worker solidarity by decimating the workforce and pitting one worker against another, weakened unions, and union policies that have left rank-and-file workers to fend for themselves, this resistance has proven largely unsuccessful. As we move further into the 1990s, Canadian steel management thus has an increasingly free hand to implement fully programmes designed to recapture the ownership of jobs from their employees.

Steel Jobs in the Non-Union Era

THE CANADIAN BASIC STEEL INDUSTRY began to take shape near the end of the 19th century. Confronted with small domestic markets and no tariff protection, the owners and managers of the country’s fledgling steel companies developed and followed a programme that involved four basic strategies to build a productive industry. Importantly, each tactic was premised on constructing a particular kind of labour process and workforce. First, each of the companies — the two Ontario mills: the Steel Company of Canada (Stelco) in Hamilton and Algoma in Sault Ste. Marie, and the Dominion Iron and Steel Company (Disco) in Sydney, Nova Scotia,


10For an excellent analysis of the origins and development of the Canadian steel industry, see Craig Heron, *Working In Steel: The Early Years, 1883-1935* (Toronto 1988).
began installing new machinery, the main point of which was to establish a more integrated flow of materials from the blast furnaces where iron was produced, to the open hearth furnaces where the steel was made, to the rolling mills where the finished product was turned out. This drive toward mechanization had some positive benefits for the great majority of workers already seasoned in making steel. That is, in place of lifting and carrying heavy materials, shovelling raw material into blast and open hearth furnaces, or manually passing red-hot ingots and blooms back and forth in the rolling mills, workers now operated overhead cranes that moved materials weighing hundreds of pounds throughout the mills, drove charging machines that fed the roaring furnaces and manipulated electrically-powered "tables" that raised and lowered the ingots and blooms in and out of the rolling mills. Critically, however, the basic object of "all of this mechanization was not to save sweat, but to cut production costs." The new machinery allowed for this by the more efficient integration of the various stages of production, and, as importantly, by the direct elimination of large numbers of labouring jobs.

The second tactic encompassed the tactics and policies used by the companies to put together a labour force that worked hard. The solution they devised was composed of two essential elements: incentive systems based on the amount of steel produced and close and arbitrary supervision. With regard to incentive schemes, the companies hoped to increase production by tapping into the supposed basic and sole concern of such workers for more money. According to Craig Heron, however, "[t]he carrot" of incentive wages could never have been enough alone to keep the steelworkers working. What was required was the "stick" of ever-increasing numbers of foremen and supervisors exercising almost limitless powers in their day-to-day running of the mills. From the early 1900s until the end of World War II, these men had the power to hire and fire, promote, determine who would get the "good" jobs and set individual wage rates within limits established by supervisors and the works manager. (This practice of allowing foremen to set individual wage rates resulted sometimes in wildly different earnings for men in the same job in the same department and was a source of deep frustration and complaint among workers.) Moreover, foremen used these powers to instill deep fears into the men who worked under them: a day's absence from work due to sickness, or even looking at the foreman the wrong way, could result in the loss of one's job. They were critical as well in fashioning a workforce that was divided by skill, race, and ethnicity. That is, during the first three decades of the twentieth century, each of the companies developed informal hiring policies that saw the

---

12 Craig Heron, Working In Steel, 93.
most dangerous and low-paying jobs go to workers with southern and eastern European backgrounds, while the more skilled, higher paying jobs that held open the promise of advancement became the preserve of Anglo-Celtic workers.\textsuperscript{14}

A "good" job in a steel company was, however, a relative concept. At some point in their work day, all steelworkers confronted dirty and dangerous conditions which provoked a range of responses from on-the-job resistance to outright exit. Consequently, a third tactic evolved whereby employers introduced a series of welfare measures such as pension plans, profit-sharing schemes, housing and recreation programmes, and company magazines and picnics which were intended to soften the harsher edges of working in the mills and promote the long-term identification and loyalty of workers — particularly anglophone, skilled workers — with the companies. In some instances, notably Dominion Foundries and Steel (Dofasco) in Hamilton, a combination of such welfare capitalist measures were a critical factor in the defeat of industrial unionism at that company in the 1930s and 1940s.\textsuperscript{15} For the most part, though, such measures were ill-conceived and not thoroughly implemented. Indeed, whenever the steel economy took a downturn, these plans were immediately abandoned.

Far more successful in winning the long-term attachment of workers to the steel companies was gradual progression of the final management policy: the establishment of job ladders whereby workers in the less skilled jobs gained the opportunity to advance upwards to those that were more skilled. Adopted in large part as a response to the complaints of unskilled and semiskilled workers that favouritism and fraternal lodge membership were more important in promotion decisions than merit, such more-formalized internal recruitment policies were also encouraged by the fact that as individual workers accumulated months and years of service in the employ of one of the companies, they began to establish economic, social, and cultural ties to their local communities which precipitated a new set of dynamics regarding their tenure as steelworkers. That is, while the starkly inhospitable conditions of a steel mill may have been sufferable to a worker who saw himself as ready to exit at a time of his choosing, these same circumstances became obstacles to overcome once the decision was made to maintain his employment as a steelworker.\textsuperscript{16}


\textsuperscript{16}For a discussion of this process in the United States, see Sanford Jacoby, "Industrial Labor Mobility In Historical Perspective," \textit{Industrial Relations}, (Spring 1983), 261-82.
Although there were still no inscribed promotion procedures or written job descriptions, this mild codification of the occupational hierarchy over time, did provide workers with a set of benchmarks against which they could launch grievances of inequity or discrimination. But, they also provided employers with certain gains. For example, a more stable workforce held open the potential for the development of informal apprenticeship systems whereby one worker could acquire the knowledge and skills of another simply by watching and helping. As importantly, the “disciplinary power of this system became apparent over time, as supervisors exercised their discretionary power. The internal job ladders over which the foremen and superintendents presided certainly encouraged men who hoped for advancement to stay in their jobs, to curry favour, and to avoid any challenges to managerial authority (like discussing strikes or unions).”

Together, then, these strategies were the key elements in the formation and consolidation of the labour process within the Canadian steel industry. It was, thus, a labour process quite unlike those in the 19th century where craftworkers, through their unions, had control over the major terms and conditions of their employment. The overwhelming majority of Canadian steelworkers had never experienced the forms of job control enjoyed by skilled craftworkers. These forms of job control — setting the pay rates and the length of the working day, establishing the amount of product to be turned out as well as the number of apprentices — were completely unknown to mass-production steelworkers. The tasks and responsibilities they inherited at the turn-of-the-century did not recompose into skilled jobs. As importantly for our present purposes, early 20th century steelworkers could claim virtually no “rights” to their jobs — rights that evolved, in part, from rights to ownership of land to ownership of one’s job once it was established that wage labour was a fact of “modern” societies. In other words, while skilled craftworkers “owned” their practical and intellectual skills, the steelworker owed his employment to a more powerful employer and his specific job to the whims and dictates of the foreman or superintendent. To be sure, steelmaking technology was not so sophisticated that the multiplicity of skills and knowledge associated with making and rolling steel were made redundant. Indeed, it was industry-specific technical

17Heron, Working In Steel, 99.
18The term “mass production steelworkers” is used as 19th century iron workers did, in fact, exercise this kind of craft control. However, the dominance of iron puddlers and other skilled workers over the iron and steel making processes came to a halt when the development of new technologies allowed steel owners and managers to challenge this control. The classic confrontation took place in Homestead, Pennsylvania in 1892, when steel baron, Andrew Carnegie, decided to run Homestead Works as a non-union plant. Carnegie was victorious in his quest and the craft unions lost their central place in the industry. Hence, when the industry came to Canada at the turn-of-the-century, it arrived as a non-union mass production industry. For the latest discussion of the events at Homestead, see William Serrin, Homestead: The Glory and Tragedy of An American Steel Town (New York 1992).
and processual expertise gained by production workers that provided them with a modicum of employment security in the years leading to the depression of the 1930s. Developments such as these were not, however, sufficient for the great majority of steelworkers to advance successful claims of ownership and control over their jobs. Quite simply, to make such claims stick they would first need to gain greater employment security.

Unionization and Worker Job Ownership

It would take the combination of the Great Depression and World War II to set the forces in motion that were to alter this configuration. In 1935, a group of skilled workers in Stelco’s sheet mill in Hamilton stirred the calm of management by forming a union in their department and going out on a ten-day strike that ended in partial victory. More significantly, in 1937 steel workers in Sydney took the occasion of the passage of a trades union act in Nova Scotia to form a local of the Congress of Industrial Organization (CIO) Steel Workers Organizing Committee (SWOC), and to press Dosco for changes in local conditions. They were joined in 1940 by Algoma workers who signed into the union in numbers that shook the company and, along with the SWOC local in Sydney, helped secure the financial base of the union in Canada and the United States.

Given the existence of a large reserve army of labour and the relative ease which most jobs performed by steelworkers could be learned by raw recruits, each of the companies could easily dismiss the complaints of their workers and the demands of the SWOC. By the middle of the war, however, a labour surplus had turned into a labour scarcity, placing workers in a bargaining position that required the attention of employers. Yet, even as they scrambled to address the pent-up frustrations of their workforces, these same workers turned towards the United Steelworkers of America (USWA) — SWOC changed its name in 1942 — and its

20 For descriptions and analyses of this strike, see Robert Storey, "Workers, Unions and Steel"; Wayne Roberts, Baptism of a Union: Stelco Strike of 1946 (Hamilton 1981); and, Bill Freeman, 1005: Political Life In A Union Local (Toronto 1982).
21 Paul MacEwan, Miners and Steelworkers: Labour in Cape Breton (Toronto 1976); and, George MacEachern, George MacEachern: An Autobiography (Sydney 1987).
promise to bring them higher wages, and, as significantly, employment security through the establishment of seniority and grievance systems.\textsuperscript{23}

The end of the war brought the much-feared but inevitable confrontation between an industry determined to remain union-free and thousands of workers at each of the three plants equally determined not to return to the conditions of the 1930s. One worker, active in the organizing campaign after the war, complained that "[s]eniority didn’t mean anything down there. It just mattered the colour of your eyes. If the foreman liked you, you were alright. That was one of the big grievances of the union."\textsuperscript{24} Another activist bridled at the authoritarian ways of management: "I thought to myself ‘I don’t want to live under any kind of tyranny where a company is the sole arbiter of anything ... I felt that there was need for some kind of representation by the men themselves.’"\textsuperscript{25} A three-month strike in the summer and autumn months of 1946 ended in the workers winning recognition of the union at each of the plants and the concomitant introduction of seniority and grievance systems that promised to greatly attenuate, if not eliminate, much of the despotism of shopfloor management.

After nearly 40 years, Canadian steelworkers were to have a standard set of rules and regulations — a “rule of law” — that would govern those day-to-day and longer-term decision-making processes that directly affected their lives. At each of the companies promotions were to be handled — with variations in the weight given to each factor at each of the companies — according to the three conditions found in their respective collective agreements: “(a) knowledge, efficiency and the ability to perform the work; (b) physical fitness; (c) length of continuous service.”\textsuperscript{26} That the length of continuous service became operable only after the companies had decided on the former two unquestionably was a setback for the union and its position that it be the prime consideration. So, too, the general rules for seniority rights failed to encompass the trades, crafts and technical personnel as they fell under provisions requiring special training or educational qualifications. Missing as well was the union demand for equal seniority for men and women: “male seniority [superseded] female seniority.”\textsuperscript{27} Nevertheless, the institutionalization of

\textsuperscript{24}Robert Storey, “Workers, Unions and Steel,” 367.
\textsuperscript{25}Wayne Roberts interview with Jake Isbister. Quoted in \textit{ibid.}, 365.
\textsuperscript{26}Contract between Steel Company of Canada and Local 1005, United Steelworkers of America, 1 March 1947.
\textsuperscript{27}The issue of job ownership and women is a difficult one — related, as it is, to the issue of masculinity. As in other mass production industries after World War II, returning veterans claimed their jobs back and the steel companies obliged them. Small numbers of women were relegated to the tin mills where they inspected tin sheets prior to shipment. Working in a steel mill was clearly understood by male workers as being “man’s work.” See, Livingstone and Luxton, “Gender Consciousness at Work,” for a more contemporary analysis of this perception. It took a campaign in the late 1970s to get women “back into
even these minimal seniority provisions gave unskilled and semiskilled steel-workers insurance against unilateral decision making, thereby increasing the sense and the fact of employment security and stability.

Despite these important alterations in the mechanisms that went into determining who could be fired and promoted, it was still the case that establishing the content of an individual worker's job remained outside the domain of the worker or the union: the company, in the person of the foremen, remained in charge of setting and altering the tasks, responsibilities, and rates of remuneration for the great mass of production workers. Settling these issues became the next major project of the union. Responding to growing pressure from their membership — especially the skilled tradesmen who believed they had been disadvantaged by the union's wartime economic programme that called for increases to the base rate in the steel industry as well as greater percentage-increases for those at the bottom of the wage scale — the USWA approached Algoma management in the early 1950s to discuss the implementation of a job classification scheme similar to that which had been worked out in the American industry.

Management reaction to the union initiative was both tentative and full of suspicion. For companies such as Stelco, the events surrounding the unionization of their employees had stiffened their resolve not to make any more "concessions" in the areas considered to involve management rights. As well, the owners of each of the companies worried about the increased payroll and other costs that could eventuate from such a process. Workers had won higher wages in the US steel industry with the implementation of job classification; there was no reason to assume that it would be different in Canada. Finally, there was the "conservatism" of management who feared the "durable, 'once-and-for-all' nature of [job classification]." Once jobs had been evaluated, these steel executives worried, it would be difficult if not impossible to modify them should conditions warrant.

These reservations notwithstanding, Algoma led off the experiment with job evaluation and was quickly followed by Stelco and later by Dosco and Dofasco. Throughout the early 1950s, separate management and union committees (with the exception of non-union Dofasco) set about classifying jobs and setting their wages, each borrowing heavily from the "Co-operative Wage Study" (CWS) programme to highlight the discriminatory hiring practices of management, and the reluctant and hostile attitudes of male workers towards working with women. See Luxton and Corman, "Getting To Work." For an examination of related issues in the Canadian automobile industry, see Pamela Sugiman, Labour's Dilemma: The Gender Politics Of Auto Workers In Canada, 1937-79 (Toronto 1994) (In press.). For examples among American printers, see Baran, "An 'Other' Side of Gender Antagonism at Work;" and, for the American auto and electrical industries, see, respectively, Ruth Milkman, Gender At Work: The Dynamics of Job Segregation By Sex During World War II (Urbana 1987), and Ronald Schatz, The Electrical Workers.

28Ronald Bean, "Cooperative Wage Study and Industrial Relations," 120.
developed for American steelworkers. Under this programme, jobs were graded and ranked according to 12 "factor requirements:" Pre-Employment Training; Employment Training And Experience; Mental Skill; Manual Skill; Responsibility For Materials; Responsibility For Tools And Equipment; Responsibility For Operations; Responsibility For Safety Of Others; Mental Effort; Physical Effort; Surroundings; and Hazards. In turn, each of these factors was assigned a range of "point values" — up to a designated maximum — that were held to correspond to the increased level of responsibility, skills, hazards, and so on, which characterized jobs in a basic steel plant. To determine the level of classification, the point-values arrived at for each factor requirement were simply added together. (See Appendix, Table 1) In this way, workers doing very different jobs were slotted into the same job class, the actual wage-value of which was arrived at through collective bargaining. In the end, the actual number of job classifications did not match the maximum achievable points as no job was deemed to require the full value accorded in each of the categories. When Stelco and Local 1005 completed their cws programme in 1956, for example, the highest job class was 27.

The importance of the CWS to the USWA, the workers and the companies cannot be overstated. Certainly, the USWA understood its significance, stating in the Handbook For C.W.S. Committees that "The work of the Job Classification Committee will constitute what is probably the most important undertaking ever embarked upon by your Local Union." This ranking of job evaluation by the USWA stemmed from perceived advantages to itself and its members, including the ability to establish rate relationships that were consistent within and across different steel companies, and, as crucially, it satisfied the discontent of the critical groupings of tradesmen within the union by providing for a distinct rating schedule that reasserted and enshrined the wage gap between them and production workers. For their part, production workers also benefited from the new plan in that most received wage increases. Indeed, any potential problems with the membership over the implementation of the cws were headed off by the agreement between the union and the companies that no worker would suffer a reduction in wages.

As with the more modest job ladders instituted in the previous decades, steel management secured important gains in the over-all administration and operation of their companies. First, the enforced survey of job content and wage rates "brought more sharply into focus earnings relationships and job responsibilities of which management had previously been unaware. The result was in some instances a tightening and greater systematisation of the administrative organization of the enterprise." Second, the programme "resulted in greater stabilization and manage-

29 Not being organized Dofasco devised and implemented its job classification programme in a unilateral manner. While following the pattern set by the American and Canadian CWS plans, Dofasco did utilize fewer classifications, thereby giving them greater flexibility in organizing their workforce from the outset.

30 Ronald Bean, "Cooperative Wage Study and Industrial Relations," 79.
management control of work ... Management now knows its labour costs on a particular job more exactly, and, more important, the reasons why one labour grade receives greater or less remuneration than another." Third and, according to Ronald Bean, the most important improvement secured by the companies, was that in a short time the "complaints centring on alleged injustice of individual wage rates ... [were] ... virtually eliminated."

Where those still exist the employees are usually trying to claim that their job duties have altered since the inception of the programme. Thus, in companies employing CWS procedures it is stipulated by agreement between the parties that, with the exception of new and changed jobs, "no basis shall exist for an employee, whether paid or on incentive or non-incentive, to allege that a wage rate inequity exists, and no grievance shall be filed or processed during the term of this agreement." This type of grievance which had existed prior to CWS was troublesome and time-consuming to investigate, and management was glad to see such grievances ended.

While Bean's assessment is convincing, it overlooks the other significant, long-term advantages that accrued to management from the weighting of the different factor-requirements in the CWS system itself. That is, a combination of those categories which relate directly (and indirectly given management's control of training) to the "human capital" of the worker (Pre-Employment Training, Employment Training and Experience, Mental Skill, Manual Skill Mental Effort and Physical Effort) account for only 36 per cent of possible point values. On the other hand, the four categories pertaining to workers' "responsibility" to the capital of the firm constituted 52 per cent of the maximum point value. (Interestingly, one of these categories, "Responsibility For Materials," had a specific dollar amount, or the value of the potential monetary loss, attached to each of the 32 gradations that ran from the base to the maximum of ten.) The remaining 11 per cent — Surroundings and Hazards — were conditions that confronted the individual worker — he could do little to enhance his "human capital" in these areas except volunteer to work in the most dangerous and unhealthy jobs and areas of the factory.

In sum, the long-awaited system of job classification placed greater value on the workers' responsibility to raw materials and technology than on their skills, knowledge, or experience. As such, it made concrete the firmly-held management view that their physical plant was of more intrinsic importance than their employees. Certainly, this was an essential part of the rationale behind their willingness — even eagerness — to do away with the multiplicity of incentive programmes in the wake of the CWS programme: machines controlled and directed the steelmaking process, not the worker. At the same time, in placing numerical values on the various categories which composed the requirements of a job, the final assessments regarding the value of each requirement took on the patina of

31 Ibid., 114.
32 Ibid., 113-4.
objective fact. Additionally, when these same values were attached to actual job descriptions as opposed to the generic factor requirements, it became difficult, if not impossible, for individual workers to argue for a higher wage for their particular job even when the nature of their job changed — for example, from a primarily manual exercise to a largely "mental" one. Under the CWS system both were accorded a low point-value. The circle was real and it could prove vicious.  

Still, the CWS system did hold out benefits to steelworkers apart from the wage gains they received in the immediate wake of its implementation. The detailed descriptions that now accompanied each job in the plant (2700 arrived at in Stelco from 1952 to 1954 without a single grievance), provided workers with an exact understanding of the features and parameters of their jobs. They knew what their jobs entailed and what was outside their job descriptions. Hence, with union support they could refuse to carry out tasks that were not part of those descriptions. The answer "That's not part of my job description," was now both legitimate and supportable. On the other hand, when applying for a promotion, a worker could reference his job description in potential conflicts with management over his abilities to perform a job superior to his in the job-class hierarchy.

However, the success workers had in asserting and defending themselves in these ways rested on the presence of two forms of job control, both of which themselves were based in the seniority and grievance systems set-up consequent to union recognition. First, because of the grievance procedure wherein the decisions of management could be contested formally and legally, workers had some protection from outright dismissal from the company. Second, the combination of grievance procedures and seniority provisions gave workers recourse against being replaced in their jobs by another worker. Critically, these job

33This is an especially important point in the current context where the more physical aspects of working with steel are being replaced by sophisticated technologies and instrumentation which remove workers from the handling of steel and require them to operate computer keyboards and monitor instrument panels. While they may, and do, argue that such changes do not fundamentally affect the content of the job, it is now the pattern of companies to acknowledge such changes but to rely on the 1950s CWS manual and its point values to argue their case for no or small changes in job classifications and thus wage rates.

34Seniority, as workers came to realize, was a two-edged sword. On the one hand, it did cut away the worst forms of managerial abuse in the realm of promotion. On the other hand, in a mass production industry like steel where the actual differences in most production jobs were minimal and the turnover in the "good" jobs likewise small, advancement via seniority meant that the "good" jobs were inaccessible to all but a few. Given the loopholes in the seniority clause whereby years of service came into play only after the company determined on the categories pertaining to the abilities of the worker to perform the job, these "good" jobs continued to be filled largely without primary recourse to years of service. As Bean notes, once a company introduces a CWS system all grievances about wage rates are precluded. "For the minority who still feel inequity grievances, therefore, discontent is no longer aimed so much at management as at union officials. It may well be said, then, that in
safeguards provided for job tenure previously unknown to steelworkers. In essence, by virtue of having some control over access to their jobs, and by performing the tasks associated with them over a lengthy period of time, workers began to view their jobs as their property.

It was this newly-won employment security and occupational stability that laid the bases for steelworkers' claims to job ownership. Steelworkers' proprietorship over their jobs was, however, different from that of turn-of-the-century craftworkers described earlier. While an increasingly defined and rigid job classification system served to ensconce the operation and legitimation of internal labour markets, the property that steelworkers came to define as their own was not so much a "job territory," as a bundle of contracted rights to promotion, transfer, and recall. Indeed, the right to recall by seniority—a contract provision won in the 1950s—illustrates in graphic fashion the extent to which workers had separated control of jobs from employers: not only were workers with years of service protected from competition within and outside the company, but they had priority rights to employment should their employer start hiring again. Certainly, workers and their union did not exercise complete control and ownership over jobs as indicated by the fact that the management rights clause in all collective agreements between basic steel companies and the USWA acknowledged the companies jurisdiction over the organization and pace of work. Management could unilaterally introduce changes to the work process such as new technologies that would alter on the content of a particular job or jobs. In this instance, however, it was part of the agreed procedure that the company would submit any such alterations to the union CWS committee which was charged with the task of negotiating new job classifications and associated wage rates if the union believed the changes altered workers' jobs in a substantial or fundamental manner.

From the immediate postwar years to the 1970s, though, changes in steelmaking labour processes at each of the three unionized steel plants were minimal. As a result, workers became accustomed to working at a job—or a set of jobs—as this case CWS has burdened the union with additional responsibilities." Bean, "Cooperative Wage Study," 106. Herding makes a similar point when he writes that "through seniority as a job-control device, the employees take full responsibility for an issue that can in fact be unilaterally manipulated by management." Herding, Job Control and Union Structure, 23.


For a British study of job property rights that points to similar claims by workers, see Peter Armstrong, John Goodman and Jeffrey Hyman, Ideology and Shop Floor Industrial Relations.

The exception here was Dofasco. In the early 1950s Dofasco introduced the Basic Oxygen Furnace (BOP) method of making steel to Canada. The was a transformative technology in that it reduced the time to make a "heat" of steel from the standard open hearth six-to-eight hours to under one hour. Dofasco had also pioneered in making tin in Canada by installing the first tinning machinery in the mid 1930s.
they progressed up the occupational hierarchy. Again, as in the earlier period, this accumulated but little recognized on-the-job experience was central to the smooth functioning of steel plants. But, it was also crucial to the gradual identification of the worker with his job, and, subsequently, his claim to ownership of it. That is, the more time workers spent on a particular job performing the tasks as outlined in the CWS manual, the more likely they were to alter the content of that job. Personalizing the job could take many different forms — from simply doing their own tasks in their own way, to developing ways to perform their jobs more efficiently than would be the case if they followed established procedures. In the case of steelworkers, it meant finding production shortcuts with the aim of achieving more production bonus, making the work safer, or building-in time for longer breaks and lunch. It meant, in other words, not only making the time spent at work personally more profitable but also more “humane.” Taken together, each of these processes culminated in a worker staking a proprietorial claim to their jobs that is best illustrated in the phrase — at once defensive and assertive: “That’s my job.”

Working in a specific job over a period of time had the effect, then, of adding a “personal” dimension to the more technical characteristics of job ownership and control contingent on strong seniority and grievance procedures. Seeded in contractual rights to promotion, transfer and recall, and allowed to flower in an era of almost uninterrupted economic expansion, job ownership was also predicated on the confident assumption that there would always be a Stelco, Algoma, or Disco, and, hence, there would always be that job. And, if that job was eternal, so too was the worker’s claim to it.

Crisis and the Remaking of Jobs

In 1956, STELCO PRESIDENT, HUGH HILTON, appeared before the Royal Commission on Canada’s economic prospects, and, while stressing the pitfalls of making projections, nevertheless forecast a strong demand for steel until 1980. Subsequent events proved Hilton largely correct: the 1950s through the 1970s were good decades for Canadian steelmakers. Buoyant demand, protective tariffs, and favourable tax laws that allowed companies to write off major investments in plant and technology in two or three years, were all factors in making Canada’s steel industry a profitable and expansive one. Indeed, in the 1970s strong profits and

---

41 Steel Company of Canada, Statement to the Royal Commission on Canada’s Economic Prospects (Hamilton 1956).
a "critical shortage of steel" prompted Stelco management to earmark "600 million to make an early start on its mill near Nanticoke on Lake Erie." Whatever the production variable — technology, markets, state policies, labour costs, or their close relative, unionization — there was every reason to believe that the prosperity of individual firms and the industry as a whole would continue unabated.

The economic crisis of the 1970s tarnished this bright picture in fundamental ways. As in other sectors, the formerly-secure steel markets of North America, Britain and Europe began to suffer from lower-cost, higher-quality steels made with cheap labour and modern technologies in countries such as Japan, South Korea and Brazil. At the same time, the minimill was proving an aggressive innovator as its product made incursions into markets formerly the sole preserve of the major companies. Together with a general increase in world capacity — which meant the solution could not be increased exports — these changes in the nature of steel production precipitated a crisis within the international steel industry itself.

Although they were not hit as soon as steel companies in the United States and elsewhere, the reaction of Canada's primary steel producers to the changing context followed the pattern set outside its borders. First, they announced the layoff of thousands of workers. In 1981 approximately 56,000 workers were employed in the entirety of the iron and steel industry. By 1990, this figure had fallen to around 44,000. Over the same time period employment at each of Stelco, Dofasco, Algoma and Sysco (as Dosco was renamed when taken over by the Nova Scotia

43 Institute For Iron and Steel Studies, Steel Industry in Brief, (Green Brook 1975), 6.

44 A minimill makes steel by melting scrap steel in electric arc furnaces and then rolling it into finished shapes. They do not use blast furnaces or coke ovens as do the integrated or basic steel companies. Minimills are also different from the integrated firms in that production capacities are smaller and the number of employees usually under one thousand. In the United States, minimills also tend to be non-union with pay schedules far below that of the unionized companies. For an analysis of the minimill in the United States, see Donald Barnett and Robert Crandall, Up From the Ashes: The Rise of the Steel Minimill in the United States (Washington 1986). For a somewhat adoring treatment of the latest in minimill technology and organization, see Richard Preston, American Steel: Hot Metal Men and the Resurrection of the Rust Belt (New York 1991).


46 In 1980, Stelco employed approximately 14,000 workers, Dofasco around 9,000, Algoma 10,000, and Sysco (the renamed Disco after the Nova Scotia government took it over from Hawker-Siddeley in 1967) in the vicinity of 4,000. This total of approximately 40,000 was down to — as a best estimate — 21,000 in July 1992. (Author's figures.)
government in 1967) dropped from a total of approximately 28,000 to around 17,000. The decline in employment was precipitated by a number of factors — including the permanent downsizing of production facilities due to the decreasing size of steel markets. Whatever the causes — and they varied somewhat from company-to-company — the shedding of thousands of workers from payrolls introduced a period of high insecurity for unemployed and employed workers alike.

Yet, even as steelmakers were ridding themselves of both young and seasoned steelworkers — some with up to 30 years of seniority — they announced a series of ambitious modernization plans. In 1984, Dofasco announced it would spend upwards of $600 million to install continuous-casting facilities and a new sheet mill. Algoma laid out its plans for a new seamless tube mill and other additions that would cost in the vicinity of $400 million. Sysco followed suit with a revitalization scheme that totalled just under $100 million. And, Stelco, stung with a mammoth debt load accumulated in large part as a result of the untimely coming-on-stream of its one-billion-dollar, state-of-the-art steelmaking facility at Nanticoke, reversed its intent to eventually locate the bulk of its steelmaking operations at the new plant and instead undertook “a major refurbishing of [its] flagship steelmaking plant in Hamilton, involving the installation of continuous casting and modernized bar and cold rolling facilities .... ” Altogether, the cost would be over one-half billion dollars.

Author's calculations.

While all of Canada's basic steel companies suffered from the economic recession and troubles with their major trading partner, the United States, Stelco's financial woes were more severe than Dofasco, for example, because of the debt load it carried from the construction of Lake Erie Works. For its part, Dofasco rebounded from the recession (the company laid off and rehired some 2,200 workers from 1981 to 1984) the quickest of all of the integrated firms as the market for its principle products — flat rolled steel for the auto and “white goods” markets — returned more rapidly than did demand for rail and tubular products — the major products of Algoma and Sysco.

For an excellent analysis of the difficulties workers have had in adjusting to periods of unemployment and recall, see Matthew Sanger, "Transforming the Elements: The Reorganization of Work and Learning at Stelco’s Hilton Works," MA thesis, University of Toronto, 1988.


Robert Heneault, The Competitive World — Is Canada A Fit Or A Mis-Fit? (Kingston 1989), 2. As referenced earlier, Stelco made the decision to build Lake Erie Works in the mid-to-late 1960s when demand for steel was high and projected to continue. Although this point is contentious, it is arguable that management decided on a greenfield site only after it concluded that a full-scale modernization of the Hamilton plant would not bring the benefits in increased labour flexibility that could be achieved in a new location without the history of labour-management conflict that characterized relations at Hilton Works in Hamilton since the arrival of the USWA. In fact, with a proposed capacity of twelve million tonnes, there is strong speculation to the effect that Lake Erie Works was intended to totally
Contrary to statements issued by each of the manufacturers that money for wages and benefits was in short supply, then, significant funds were available for revamping their productive processes. Unlike the case during the 1950s and early 1960s, however, the new technologies and processes now being put in place were not intended to add to productive capacity. Instead of output, the focus shifted to "competitiveness" — a goal which has as its primary management objective the reshaping and reclaiming of jobs from their workforces. This process and struggle is best illustrated and understood through a case study of Stelco's Hilton Works — both because various investigations of this plant make it the most accessible of Canada's steel plants, and, more importantly, because Stelco's Hilton Works, once unchallenged as the nation's most efficient and profitable steel producer, is struggling to survive.

One of the most dramatic changes at Hilton Works during the 1980s was the decline in the number of workers. In 1980, just prior to a bitter three-month strike, the unionized payroll stood at approximately 12,300. By mid-1991, again after an equally hostile four-month strike in late summer and autumn 1990, the USWA permanent workforce hovered in the range of 4,500 men and a few women. Without question, the bulk of this dramatic fall-off in employment is due to the downsizing of annual productive capacity from over five million to three million tons. According to company officials, the move to eliminate 40 per cent of capacity was due to general factors relating directly to the decreasing size of steel markets, such as the substitution of products like plastics and aluminum for steel, as well as the loss of market share to both domestic and foreign competitors as a result of the long strike of 1980. Whatever priority is to be given to these factors, it is nevertheless the case that Stelco does not require the same number of workers to produce two million tons less steel. Indeed, the cuts that have been made in supplant Hilton Works. In any event, this scenario did not materialize as the bottom fell out of steel markets and refitting Hilton Works became the cheaper strategy.

One of these studies — an investigation into the impact of technological change on work and industrial relations — was carried out by James Peterson and the author in the mid-to-late 1980s. In that study James Peterson developed the idea of job ownership which is being further elaborated upon in this paper. I wish to fully acknowledge his very important contribution to this part of the analysis. For other analyses see, John Bradbury, "Technical Change and the Restructuring of the North American Steel Industry," in Keith Chapman and Graham Humphreys, eds., Technical Change and Industrial Policy (Oxford 1987), 157-73; and, L. Anders Sandberg and John Bradbury, "Industrial Restructuring in the Canadian Steel Industry," Antipode, 20, 2 (1988), 102-21.

Prior to the strike the workforce stood at approximately 6,800. In late 1993, there are around 5,000 workers in the Hilton Works.

Heneault, The Competitive World.
productivity capacity (for all of the above reasons) account for approximately one-half of all job losses.\textsuperscript{55}

A second and more dynamic component of restructuring concerned the widespread and systematic automation of steelmaking and finishing processes. After a decision was made in the early 1980s to mothball the remaining open hearth furnaces, the company began a “modernization programme in the BOF [Basic Oxygen Furnace] shops that increased the number of heats per day from a maximum of 66 (seldom achieved) in the 1970s to a maximum rate of 70 per day. This was largely accomplished by new instrumentation and an increased use of computers to improve the link between steelmaking and metallurgy.”\textsuperscript{56} Similar “instrumentation” changes were made throughout the remaining rolling mills. Steelworkers who formerly worked close to hot steel out of furnaces and along the “beds” of the rolling mills, now pushed buttons and monitored computer display terminals in the comfort of air-conditioned pulpits. Each of these changes, however, paled beside the decision to install continuous casters (“concast”) whereby molten steel is poured into sizes and shapes that can be rolled directly into finished products without having to first pour molten steel into large ingot moulds, strip the ingots from their moulds, transport the ingots on railway cars across the plant to different rolling mills, reheat the ingots and press them down to the sizes that are now achieved immediately from the concast.

Without question the new technologies introduced by Stelco (and each of the other companies) have resulted in job loss. However, the amount of job loss attributable to this factor is difficult to assess precisely because of the dynamics of Stelco’s markets and steel markets in general. In the 1970s when the BOF technology replaced the open hearths, Stelco was concerned with increasing, not decreasing, capacity and the new process “did not so much eliminate labour inputs as it did make them more productive by accelerating the flow of steel through the system.”\textsuperscript{57} However, both the upgrading of the BOFs in the 1980s and the introduction of the continuous casters, were part of the company’s programme to produce less steel more efficiently which, in this instance, translated into fewer workers. Still, this factor accounted for only one-seventh of all job loss at that plant during the early-to-mid 1980s.\textsuperscript{58}

\textsuperscript{55} Petersen and Storey, \textit{Technological Change}. The decision to downsize meant the shutting down of the remaining open hearths and the closing and merging of different rod and bar mills. It also involved shutting down a number of separate finishing plants in Hamilton and elsewhere.

\textsuperscript{56} Petersen and Storey, \textit{Technological Change}, 13.

\textsuperscript{57} \textit{Ibid.}, 19.

\textsuperscript{58} The relationship between technological change and job loss is made more complex when ‘outside’ factors such as the changing nature of product markets is taken into account. But, even apart from this important dimension, there remains the first-order problem of deciding on the definition of technological change — a definition which is always a subject of conflict between labour and management if it involves, as it did in the instance of Hilton Works,
If the direct impact of technological change on job loss is not as significant as one may suspect, the same cannot be said of its indirect effects on the overall reshaping of jobs. It is arguable that the long-term impact of introducing new technologies and deepening processes associated with instrumentation lies in their opening up possibilities for management to embark on a third initiative: the concerted campaign to streamline production through comprehensive organizational changes ranging from the introduction of the 12-hour workday to job amalgamations. Introduced in 1991-92, the 12-hour workday underlines management’s determination to obtain greater worker and workplace flexibility. First, there is a marked decrease in absenteeism: calling in "sick" for an eight-hour shift is less costly than losing twelve hours pay for the same reason. Second, when taken in conjunction with job amalgamation, a reduction in the workforce can be achieved. Finally, it may well be that management secures a more quiescent workforce in that a person working 36 or more hours over a three-day period is both anxious to get the job done while at work and happy to leave their job at the gate when they leave.

The most important component of the campaign to streamline production, however, is the "search and destroy" mission of job amalgamations involving both production and trades workers. According to Matthew Sanger, job amalgamation took two forms in the realm of production: "those in which entire jobs are eliminated and their tasks absorbed into other jobs, and those in which a production job absorbs some of the tasks of a trades job." At the same time, "[t]rades jobs are themselves being altered by reducing the barriers between trades and by assigning individual workers to perform tasks that previously comprised several trades."

One of the most sweeping instances of the first kind of job amalgamation is in the Utilities Department, where the company is in the process of combining 27 different job descriptions into three amalgamated jobs. This change will reduce the number of posted positions in the department from 153 to 126.

With regard to the trades, "[d]uring negotiations for the 1987 collective agreement Stelco proposed introducing the Industrial Mechanic position at Hilton Works. The position described ... would incorporate 12 trades and two production jobs. A training program of 520 hours (a fraction of the standard length for apprentice programs, which require a minimum of 6,000 hours) would be available to bargaining unit workers form both production and trades jobs." Finally, Sanger writes:

monetary compensation for any worker found to be displaced from their job as a result of technological innovation.

59 The phrase “search and destroy” comes from an article by then CWS chairperson, Terry Weymouth. "Job Amalgamation at Hilton Works," Steel Shots, (October 1986), 12.
60 Sanger, Transforming The Elements, 116.
61 Ibid., 121-2.
(There are more subtle forms of multi-crafting which by-pass formal negotiating processes and do not involve formal training programs. This informal kind of multi-crafting has particularly effected electrical and electronics trades, where the proliferation of electronic equipment is blurring the distinction between these areas of expertise. By absorbing a number of previously separate departments into the electrical department, and by assigning the various trades to work together, the company had created a group process that facilitates the interchange of knowledge between workers with different trades. Moreover, these work groups are often short-staffed, which creates pressure for workers to perform the work of other trades.

As the above quotation implies, the move to more generalized jobs follows somewhat from the current logic of automation. That is, "at high levels of automation, most tasks are performed mechanically and labour is confined to monitoring the process and maintaining the equipment." A truly continuous process is not yet the reality in steelmaking; but, with the increased flow of materials and information, and the timing factor taking on heightened importance, "workers must be able to make quick decisions and move across a wide range of tasks. The levels of intra-work-group conflict generated by property lines between many narrowly defined jobs are unacceptable...." But management is attempting to accomplish much more than reducing the number of jobs and aligning workers with more flexible technologies. Consistent with employer efforts in a host of other mass-production industries, Stelco management is attempting to dissolve the central point of inflexibility in the steelmaking labour process: individual job ownership. As the example of the electrical department illustrates, this end can be obtained in a concrete manner through a process of coercive osmosis; that is, the understaffing of a department and leaving the workers no option but to cooperate — rather than compete as may have been the case under a system emphasizing individual job ownership — in order to get their jobs done. In times of economic uncertainty, alternative work forms can also be achieved by presenting their establishment as essential to the viability of the company. This is precisely how the changeover to "teams" is being justified to workers at Hilton Works. In preparation for the start-up of a new galvanizing line, ten workers were sent to Japan to "see for themselves the teamwork, the work methods and the technology needed to operate the mills." One member of the delegation, a man with 23 years seniority, returned from the trip

Ibid., 122.

Petersen and Storey, Technical Change, 42.

Of other mass production industries undergoing restructuring, none has received more attention than the auto industry. For differing accounts of what is transpiring in this domain, see Harry Katz, Shifting Gears: Changing Labor Relations in the U.S. Automobile Industry (Cambridge 1985); Parker and Slaughter, Choosing Sides; Womack, et al., The Machine That Changed The World; and Lowell Turner, Democracy at Work: Changing World Markets and the Future of Labor Unions (Ithaca 1991).
“with a very different feeling about the company. I realize it’s out to make money, and the men have a stake in making sure it does, so we get paid and have a job in the future.” According to the author of this report, “It was precisely such attitudes that Stelco was hoping to develop when it went about recruiting for the plant.” Indeed, while company officials involved in the recruiting process paid attention to the collective agreement with regards to seniority, those chosen exhibited a “willingness to work in a more flexible setting and to learn new skills, such as operating a computer terminal.” With only one in seven of those who applied actually securing jobs, Stelco not only acquired workers who were eager to be flexible, but who also identified closely with their team and the company. As one worker chosen for the new line proclaimed: “We’ve got a good team here, and we’re proud to be picked for this line ... We’re going from the old Stelco to the new Stelco, the Stelco of the future.”

Of all of the above processes, it is the move towards “teams” and “teamwork” that poses the greatest threat to seniority, and, by direct extension, to individual job ownership. In essence, individual ownership of jobs is supplanted by team ownership of jobs when workers become responsible for a number of jobs rather than simply the one they were performing. Under teamwork, any worker can carry out the tasks of any other team member, thus giving management additional means to address the vexing problems of worker absenteeism and excessive overtime. That is, if a worker fails to appear at work, another team member can be assigned to do the job. As significantly, the authority of the seniority system is undermined as teams render promotion based on years of experience superfluous by grouping all the tasks performed by team members under one or very few job classifications. Over time, the “flexibility” of workers in each department of Hilton Works will make it difficult, if not impossible, for workers to transfer to a job in another department as they will be required to have knowledge of many different jobs rather than one. And, finally, teams organized by production division call into question — in the employer’s eyes — the applicability of layoff and recall rights by seniority. Simply, whereas under previous procedures years of service came to be the dominant criterion for layoffs and recall, the presence of teams rejuvenates management’s power in both areas by elevating their cherished clause in the seniority provisions that it is the “ability to do job” that should be the determinant factor in such decisions.

By stripping away the job controls won by workers over the past 30 years, Stelco is seeking to reassert its authority over the labour process by transferring job ownership from workers back to management. As was shown above, the dimensions of job ownership — the technical job controls and the individual claims of Marion Stinson, “Stelco Galvanizes A New Order,” Globe and Mail, 3 June 1991, B1-2. ibid. My thanks to Local 1005 member and former chair of the union’s CWS committee, Alex Auchinvole, for making this point clear to me.
proprietorship that flow from these controls — provided workers with a degree of employment security unknown to steelworkers in previous eras while simultaneously allowing workers to settle into a specific job, personalize it, and make it their own. The ability of Stelco (and the other steel companies) to amalgamate jobs and recast them into new forms cuts deeply into these job controls and severely dilutes workers’ sense of identification with their jobs. In essence, it is the hope of management that along with other programmes designed to promote loyalty and diligence, that teamwork will shift a worker’s identification with a single job to the team and the company. Success in this area will place new powers of maneuverability into management’s hands by creating divisions between workers and, as critically, by weakening the link between workers and their unions. In sum, if seniority becomes a diminished or inconsequential factor in promotions, transfers, layoffs, and recall, workers are likely to look to management, and not their unions, as the main source of job security.

Taken together, these programmes constitute the major dimensions of workplace restructuring at Stelco’s Hilton Works. It is a direction that is congruent with the decisions and choices steelmakers have made across North America and

68 For an examination of this process in a Chicago steel mill, see William Kornblum, Blue-Collar Community (Chicago 1974).

69 For a detailed examination of these initiatives, see D. Livingstone, 1992.

70 This argument is made by Lowell Turner in his study of the American and West Germany auto industries. Democracy at Work: Changing World Markets and the Future of Labor Unions (Ithaca 1991). Turner writes: “Why are team and group forms of organization on and off the assembly line apparently superior, for productivity, quality, and flexibility, to traditional single-job organization in auto plants? ... The answer has to do with the flexible allocation of manpower, the raising of work standards, and a new peer pressure to work harder, smarter, and with greater quality consciousness. When workers are organized in teams or groups, managers usually gain a greater ability to move people around (as job-control unionism begins to break down), thus keeping everyone busy all the time. When several workers and a team leader all know the tasks composing each job, management gets more information and can more easily regularize work standards across jobs and push for the steady and uniform raising of these standards. And when workers can be pulled together in a group responsible for one part of production and the quality of its output, peer pressure can be shifted away from traditional shop-floor "slow down, you’ll work yourself out a of job" consciousness to a new emphasis on collective productivity and quality of output.” (44-5) As Turner goes on to point out, however, there is nothing inevitable about the establishment of management-designed teams. West German unions — notably the metal-workers union — have developed a 12-point program for “group work” which places worker participation directly at the centre of each aspect of work reorganization.

71 For elaborations of this argument, see Donald Wells, Soft Sell; and, Parker and Slaughter, Choosing Sides.
Europe. Indeed, the modernization plans of Canada's two other unionized plants, Algoma and Sysco, have attempted to follow a similar route — albeit with less success. So, too, has Dofasco, although here two factors initially paved the way for a smoother transition. First, the markets for the majority of Dofasco steel rebounded from the recession of the early 1980s much quicker than did the markets for the other companies. Second, the absence of a union has allowed the company to institute changes to technology, work processes, and job content with an unobstructed vision of their bottom line. Indeed, it seems evident that the company has enjoyed this flexibility since the 1950s when, as opposed to the joint process at the unionized firms, management unilaterally designed and implemented a CWS system. Arguably, it is this freedom to manoeuvre and determine job structures that led to a more streamlined labour force and fewer layoffs in the 1980s.

Still, Dofasco has not escaped the 1980s totally unscathed. Apart from its financially disastrous acquisition of Algoma in 1988, analysts are now stating that Dofasco's main Hamilton plant is suffering from an unacceptably low percentage of continuously cast steel — a fact which lowers productivity and raises costs. Further, although this is nowhere to be found in company statements, the current rush to trim its workforce by three-to-five thousand is perhaps being hampered by longstanding public relations policies in relation to its treatment of workers. In short, as opposed to unionized firms that can layoff workers and have the process "handled" by union protests about company profits and the abuse of seniority rights, Dofasco's carefully constructed reputation as a caring and concerned employer is, in this instance, a hindrance to its desire to reduce its employee levels as quickly as possible. Somewhat ironically, then, the flexibility that Dofasco management has enjoyed over the decades now turns around to face them as potentially disruptive industrial relations problem.

73 At the time of writing, the Nova Scotia government is looking for a buyer for its Sysco plant and the prospects for such are dim.
75 Dofasco purchased Algoma with the intent of downsizing its productive capacity and its workforce. For various reasons — including the presence of a watchful USWA local union and a provincial NDP government sensitive to employment levels in the Sudbury region, Dofasco was not able to realize its aims. Fresh from this lesson, company officials have recently announced plans to build a minimill in the southern United States. Whether this development means that sections of the Hamilton plant will be left to deteriorate is open to speculation.
Restructuring and the USWA

The 1980s began with a strike by Stelco workers across the country. Determined to make up for what rank and file workers and a new union leadership thought were a series of backward steps in previous contracts, the confrontation took on dimensions reminiscent of the bitter strike of 1946. Union headquarters were festooned with posters that reminded its membership: "Unity Won in 1946. Unity will win in 1981." After 125 days Hamilton steelworkers went back to work with a contract hailed as a victory by the union. Quickly, however, the company issued layoff notices to thousands of workers and the new reality of steel production in Canada began to take hold.

Crisis in the steel and primary metal industries prompted serious questions about the role of the union. Which strategies and policies best fit the rapidly changing circumstances? Was the fall-off in demand for steel temporary or permanent? Should laid-off steelworkers wait to be recalled, or, should they look for other jobs? Should the union continue to contest company plans to downsize and remodel their workforces? Alternatively, should they take a different path — one that tried to control the pace and nature of changes in the labour process, but which also attempted to ensure some kind of future for those workers who would never again see the inside of a steel plant?

The path eventually chosen involved bargaining technological change at the local level based on policies worked out in national policy conventions. By the mid-1980s the USWA, like other major unions in Canada, was calling for clauses to be inserted in collective agreements that defined technological change as covering both new machinery and changes in work methods, organization, and operations. As importantly, the USWA demanded long-term advance notice and full disclosure of company plans regarding the introduction of technological change, income security for displaced workers, reduced worktime, and the establishment of joint union-management technological change committees charged with giving steelworkers shopfloor involvement in the design and implementation of new machinery, work methods and production processes.

This tactic met with some success. At Stelco and Algoma, for example, USWA Locals 1005 and 2251 bargained improvements in their technological change clauses making the definition of technological change more comprehensive. In addition, at Stelco a technological change fund was created to make up the difference in wages for any workers bumped into a lower paying job as a direct — and, later, indirect — result of any technological changes. Quickly, however, this fund ceased to be of any value to workers affected by this type of change when the union and management agreed to use its monies to add $100 a week to the unemployment benefits of laid-off employees.76

Yet, such additions to collective agreements have held little value in the struggles of local unions to control the restructuring of the workplace as described above. At each of the companies, union officials have attempted — with varying degrees of success — to bargain strict limits to the proliferating use of overtime and contracting out — mechanisms used by the firms to adjust labour force requirements with shifting market demands. More importantly, however, local unions have found their weakened bargaining position a fundamental impediment in their efforts to confront employers' “search and destroy mission” in the realm of job amalgamation. A 1989 arbitration decision favouring Stelco's position on multi-crafting has left the union little plant-wide leverage and influence in decisions pertaining to any form of job amalgamation. In effect, what remains is a delegitimized and virtually powerless CWS system that has proven to be too “antiquated and too inflexible to solve the problem. The result has been that job changes are negotiated piecemeal and the resulting wage structure reflects the relative power of the departments and [shop] stewards rather than the value of the jobs.”

Interestingly, these conditions do not hold at Stelco's plant in Nanticoke. Because of the Nanticoke plant's preeminence in the Stelco chain with regard to productivity and profitability, the union local has been able to successfully confront company rationalization plans by winning contract language that halts the contentious practice of contracting out while giving all workers within one job-amalgamated classification the highest rate of pay for that classification — thereby rendering the CWS all but inoperative at that plant. Given the strong bargaining position of the local union, the diminishing position of CWS may not pose any immediate difficulties for the over-all content of workers' jobs and their ownership of them. However, studies of similar developments in the Italian steel industry warn that monetary gains can come at the expense of shopfloor control and union power: workers may make more money but the company has regained control of key elements of the labour process, including the ability to transfer workers from job to job as the company deems necessary.


78 Petersen and Storey, Technological Change, 43.

Workers at Sysco have confronted similar practices during the 1980s. In their case, however, demands for modernization have emanated from the workforce and the union. The combination of poor management and government indecision have led to a continuous loss of markets and a steady, unceasing decline in the number of jobs — from approximately 1300 workers in the late 1980s to less than 300 in 1992. Moreover, the recent shutdown of the last of Sysco's open hearth furnaces and the concomitant shift to the production of steel via electric arc furnaces means that those workers who laboured in the blast furnaces and coke ovens will never again work for the company. As importantly, this latest transformation of the once-proud Sydney steelworks into a minimill carries with it no guarantees that the problems that have plagued the workforce — the most important being a management that historically has been more interested in draining profits and running down the plant — have been successfully addressed. This is particularly problematical given the obstacles that have been put in the path of government subsidies to industries such as steel by the Canada-United States Free Trade Agreement (FTA).\footnote{Atlantic Provinces Economic Council, Steelmaking in the Atlantic Provinces: A Commentary (Halifax 1974); David Frank, “Report on Sydney Steel,” Canadian Dimension, 14, 4-5 (September 1980), 33-52; Ed Frenette, “Save Our Steel: Cape Breton’s Sysco Strike,” Canadian Dimension, 22, 4 (June 1988), 41-5.}

The situation at Algoma is equally tenuous. Always a rather precarious perch for a steel mill, the economic fortunes of the Sault Ste. Marie company reached a tumultuous crescendo during autumn and winter 1990-91 when Dofasco, after having purchased the company in 1987, decided to write off its investment, thereby setting the stage for an impending shutdown of most or all of the plant. This potential disaster was forestalled by an employee ownership plan devised by the USWA and backed by the Ontario government. Coupled with the employee ownership component of reconfigured Algoma is a worker participation program based on joint union-management committees and shopfloor teams. According to the document used by USWA and management officials to negotiate the birth of the new company, worker participation in teams and other company committees was to be voluntary, equal with management in terms of numbers, and consistent with the protections offered workers through the grievance procedure and the collective agreement as a whole.\footnote{Recently, the US government found Canadian steel companies guilty of “dumping” their steel in the United States. Prior to this development, US steel manufacturers were complaining of the unfair advantage that accrued to steel companies that receive government assistance. This complaint included steel companies in Japan, West Germany and a host of other countries including Canada. For a discussion of the impact of the free trade agreement on the Canadian steel industry, see Robert Storey, “Making Steel Under Free Trade?”, Relations Industrielles/Industrial Relations 48, 4 (1993), 712-30. Only if the new company offered its employees these safeguards, the document implies, could the goal of redesigning the workplace go}

\footnote{United Steelworkers of America, Algoma Ownership Plan, (Toronto 1992).}
It is premature to evaluate this foray into teams at the "new" Algoma. Whether or not employee ownership and the central role of the union will counteract the dangers to individual job ownership identified with respect to Stelco remains uncertain. Clearly, there is an opportunity, as Italian steel unions attempted and only partially accomplished in the 1970s, for Algoma workers to push for greater collective control over the nature and content of jobs. For such a promise to become a reality, however, the "new" Algoma must first withstand the combined forces of continuing low domestic demand, increased international competition, and the hostile economic and trade policies of the federal government.

Conclusion

The crisis of the contemporary Canadian steel industry is real and the factors that precipitated the twists and turns and the human tragedy of the past decade have not yet been fully played out. As we move further into the 1990s, there continues to be an overabundance of steel capacity and the competition for markets is unrestrained. Analysts of the Canadian situation differ widely in their prognosis of the future viability of steelmaking in Canada: some believe that only a relentless effort for "minimum manning and maximum flexibility" will allow any portion of the industry to survive; others hold out little or no hope at all regardless of the "success" steel management has in cutting payrolls and creating the malleable steelworker.

The contemporary remaking of the Canadian steel industry has resulted in the loss of thousands of jobs and the impending loss of thousands more through possible plant shutdowns (e.g. Sysco), relocation (e.g. Ipsco in Regina, Saskatchewan), new production facilities built outside Canada (for example, Dofasco), layoffs, and the continuing elimination of jobs by job amalgamation. What is at issue is the attempt of Canadian steelmakers to fashion a workplace that returns controls over the labour process lost to workers and unions over the last few decades. Like other North American manufacturers attempting to "Japanize" their work processes, Canadian steelmakers now have as their central target recaptur-
ing ownership of jobs from their employees through technologically-driven programmes which coercively promote cooperation and teams. While by no means a complete process, this is the current terrain of struggle between workers and their employers.

How this contest will proceed depends largely on the policies and actions adopted by the USWA. The local unions representing steelworkers at the plant level have been markedly unsuccessful in stemming the tide of restructuring. Indeed, it was no doubt the small victories and large defeats being suffered by workers in local struggles that precipitated the decision in 1985 by Gerard Docquier, National Director for the USWA, to work cooperatively with steel management in establishing a joint organization — The Canadian Steel Trade Conference (renamed Canadian Steel And Employment Congress [CSTEC] in 1987) — the purpose of which would be the creation of a “shared vision” of trade and employment issues.

Promoted by its member organizations as a singular exercise in labour-management cooperation, USWA members of the CSTEC’s executive board have concentrated their energies on labour adjustment or “re-training for technological change and improving services for laid-off steelworkers.” According to CSTEC reports, the “labour adjustment” programme it has instituted for laid-off steelworkers has proven to be vastly superior to federal programmes when it comes to retraining and placing workers in new jobs. Indeed, at the April 1991 CSTEC conference both union and industry officials prevailed upon the federal government to renew the funding for this programme.

Two important conclusions flow from the CSTEC experience. First, given the content of the remainder of the federal government’s training and retraining programme (Mahon, 1990), it is arguable that Canadian steel workers have been the relatively privileged beneficiaries of a government and an industry only too willing to drain away the potential discontent accruing from the forced redundancy of thousands of workers. Second, even as the union justifiably has concerned itself with the needs of its unemployed members, local union officials and steelworkers remaining in the mills have been left largely to themselves to combat the restructuring thrusts of their employers. This vacuum has been filled by individuals or


CSTEC, Resolution of Canadian Steel and Employment Congress Executive (Ottawa 1985).

In 1988 CSTEC received twenty million dollars from the federal government to operate its own worker adjustment programme. Entitled HEAT: Helping Employees Adjust Together, this programme is touted by CSTEC officials as the model for sectoral retraining in Canada. As the funding for HEAT was to expire in March 1992, a large purpose of the May 1991 CSTEC conference in Ottawa was to proclaim the successes of the operation and begin the process of lobbying for additional funding from the government. As of this writing, the USWA has received government funding for training and retraining, inclusive of workers who are losing their jobs and those who are not.
small groups of workers negotiating with management to strike their own bargains. In place of worker unity stands the company team and the "Stelco of the future."

Yet neither of these outcomes — worker isolation and company identification — is inevitable. Steelworkers and metal unions in Germany have developed their own "work groups" with action programmes designed to foster worker solidarity. Autoworkers in the CAMMI plant in Ingersoll, Ontario, have lost much of their enthusiasm for teams and teamwork as a result of unfulfilled company promises and a notable increase in health and safety problems. So, too, the national leadership of the USWA has recently attempted to fill the policy gap on workplace restructuring through the development of guidelines which outline if, when, and how local unions should participate in such programmes. Adopted at the 1992 policy convention, these guidelines state that "[f]ull equal participation of the union in the conception, development, and implementation of any work reorganization initiatives is essential."

Given the hard realities of making steel in the 1990s, it will be extremely difficult for national and local leaders of the USWA to enforce these guidelines on Canada's basic steel companies. So, too, it seems unlikely that the USWA will be able to secure any significant form of employment security for thousands of its members in basic steel. Workers fortunate enough to remain employed during the next period will face continuous efforts by management to maximize productive efficiency and worker flexibility. Central to such efforts will be the design and introduction of policies and practices aimed at further undermining individual job ownership. For as steel management seems increasingly aware, if workers own their jobs, they can fight both to retain and upgrade them. If the companies own the jobs, as was the case in the first four decades of the century, they can, as the last decade has shown, alter and destroy them as they please.

I would like to thank Pamela Sugiman and members of the Labour Studies Research Group — especially Craig Heron and Kathryn McPherson — for their helpful comments on an earlier draft of this paper.

90Corman, "Dissension Within The Ranks."
91Turner, Democracy at Work.
93USWA, Steelworker Guidelines for Participation in Work Reorganization (Toronto 1992).
94USWA leaders were directly involved in a November 1992 agreement between Stelco and Local 1005 concerning restructuring proposals for three divisions of the company's operations. A key aspect of this agreement was the union's assent to widespread job combinations. See, USWA, Local 1005, Proposal For Restructuring Of Divisions #1, #2 And #6 and — Early Negotiations Agreement (Hamilton, 1992).
## APPENDIX

### TABLE 1

Factor Requirements and Job Classes in the CWS Programme

<table>
<thead>
<tr>
<th>Factor Requirement</th>
<th>Range of Point Values</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre-Employment Training</td>
<td>Base, .3, 1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>2. Employment Training &amp;</td>
<td>Base, .4, .8, 1.2, 1.6</td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>2.0, 2.4, 3.2, 4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>3. Mental Skill</td>
<td>Base, 1.0, 1.6, 2.2, 2.8, 3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>4. Manual Skill</td>
<td>Base, .5, 1.0, 1.5, 2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>5. Responsibility for</td>
<td>Base, 2.3, 3.7, 8.5, 10.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Responsibility For Tools</td>
<td>Base, .5, 1.0, 2.0, 3.0, 4.0, 5.0, 6.5</td>
<td>6.5</td>
</tr>
<tr>
<td>7. Responsibility For</td>
<td>Base, .4, .8, 1.2, 2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Responsibility For Safety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Of Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Mental Effort</td>
<td>Base, .5, 1.0, 1.5, 2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>10. Physical Effort</td>
<td>Base, .3, .8, 1.5, 2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>11. Surroundings</td>
<td>Base, .4, .8, 1.6, 3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>12. Hazards</td>
<td>Base, .4, .8, 1.2, 2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>43.0</strong></td>
</tr>
</tbody>
</table>