

Pressurized Timber: Occupational Health and Safety Prevention Initiatives in BC

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Introduction

This paper studies the dramatic recent emergence of new occupational health and safety (OHS) governance mechanisms specific to tree-falling (or logging) operations in British Columbia (BC). It is a preliminary effort to summarize and then analyze these developments to date, first by means of the methods of contemporary historical narrative, and thereafter by means of a theoretically informed hermeneutic or interpretive method. It is written in anticipation of a further round of elite interviews in the coming months that will aid in the accuracy and relevance of both the history and the interpretation. It is also written as part of a larger collaborative project on new dimensions in BC forest policy since the rise of the Campbell government.

The BC Forest Safety Task Force (founded 2003, BCFSTF) and its more permanent successor organization, the BC Forest Safety Council (founded 2005, BCFSC), have emerged as fora in which government and industry stakeholders debate, develop, and oversee strategies for sharp reductions in work-related deaths and injuries. This move towards performance-based initiatives and active prevention measures mirrors initiatives in many North American jurisdictions (Bronsard 1998; Brun, Loiselle et al. 1998; Navarro, Neis et al. 2004). But the BCFSTF and the BCFSC were forged in an atmosphere of crisis specific to tree falling, in a jurisdiction in which the forest industry has been exceptionally important. Institutionally, the sectoral nature of the new arrangements is noteworthy and a departure from the historic norm. These changes have meant equally noteworthy changes to the contemporary provincial forest-policy subsystem: OHS questions have taken their place there as a fundamentally new subfield, albeit one organized at arms' length from the Department of Forestry.

Alongside the BCFSC, the combined workers'-compensation and OHS system continues to operate for the economy as a whole. The body that houses them, the Workmen's Compensation Board (WCB), was founded in 1917, became known after 1974 as the Workers' Compensation Board, and since 2005 has been called WorkSafeBC. This organization embraces a more traditional combination of policy instruments for this field: an assessment-based no-fault compensation programme, occupational health and safety (OHS) worksite inspections and penalties, and safety education and training programmes aimed at workers, supervisors, and management.

But these special institutions for BC tree-falling operations emerged after much of WorkSafeBC's wider inspection and penalty apparatus had been sharply reduced. The BCFSTF and BCFSC are meant to improve overall rates of work-related injury and death by means of a new palette of active-prevention policy instruments. These initiatives recognize an interest and an obligation of government and other stakeholders to alter the processes and context of work. This commitment was formalized in the sector's "Health and Safety Accord", a tripartite agreement the BCFSTF had identified as a crucial step towards effective prevention (Forest Safety Task Force 2004; WorkSafeBC and BC-FSC 2004).

The Costs of Deaths and Injuries in BC Forest Industry

That tree falling is a “good” way to get killed or injured had been one of the seeming constants of the British Columbia (BC) forest industry,¹ notwithstanding secular trends in production techniques that have both altered and (very broadly) reduced the dangers. This workforce still faces some of the harshest health and safety conditions in BC’s economy (cf. Rajala 1998; Hayter 2000; Rajala 2006). In recent years, premature deaths and injuries have stood at more than twice the BC average. Average death tolls amongst fallers, in combination with allied occupations such as truck haulers, stand at some 25 persons per year. Annual serious injury levels typically stand several times higher (Forest Safety Task Force 2004, i). Different but real costs are also imposed on the firms in the sector, through assessments paid to a common pool of funds under the provincial compensation agency. But even this captures only part of the full impacts, especially for the workers themselves, their families, fellow workers, and friends.

For those bearing the costs, the dangers of logging must seem compelling and unchanging. But significant longer-term changes are evident in levels of death and injury, of compensation claims received and accepted (Sloan 1952, 279; Tysoe 1966, 85-95, 397, 136; WorkSafeBC 2007), and of the policies and politics addressing both. Explaining the causes of change in the fundamental rates of death and injury on the strength of these figures is more than scientific problems: they are institutionally structured as semi-routinized agenda-setting mechanisms. The statistical figures that provide more scientific insights into the causes of accidents have engaged labour, contractors, and large firms in tense and highly politicized debate.

Wider Implications

The human, social, and economic costs of high death and injury rates provide compelling reasons to understand these changes and the politics that mediate them. But there are additional reasons to study them, and to study them in relation to BC tree-falling operations in particular. In the first place, “Accident-prevention” has historically stood, in BC and elsewhere, on the twin pillars of education and training programmes for the workforce and management, and of state-led enforcement of workplace safety norms (Sloan 1952, 217). In a concerted attempt to reduce death and injury rates at work, many jurisdictions are now determined to add a third pillar, active prevention strategies to reduce injuries and death. BC’s workplace health and safety and compensation régime provides a unique institutional context to study this international policy transition: both compensation and OHS enforcement are organized under a single agency (WorkSafeBC) and OHS standards are handled by regulation rather than by statute. This context provides a unique angle from which to examine the political dynamics of such a transition.

A second reason for studying this process, and for studying it in historical context, lies in the contemporary implications of the extensive theoretical literature on policy routinization, depoliticization, and the constitution of autonomous administrative tribunals in the light of legal sociology (Selznick 1949; Teubner 1986; Kirchheimer and Neumann 1987; Kettler 2001). Two relationships have a bearing on the constitution of

¹ Sloan, G. M. (1952). Report of the Commissioner relating to the Workmen's Compensation Act and Board. D. o. Labour, Don McDiarmid, Queen's Printer: 443, Forest Safety Task Force (2004). A Report and Action Plan to Eliminate Deaths and Serious Injuries in British Columbia's Forests (Final Report of the Forest Safety Task Force). Vancouver, BC, BC-FSTF: 102, Western Fallers Association (2005). Report on Contributing Factors to Faller Accidents in British Columbia and What Must Be Done to Bring Them Down: A View from the Field: 92.

autonomous institutions of this kind. In the light of the international literature of institutional autonomy, the most obvious relationship exists between the compensation and OHS policy subsystems, and the realms of both partisan politics and the law. A relationship that is considered less often is the one between core forest industry compensation and OHS issues and the WCB régime as a whole.

Since the economic and ideological crises that date from the early 1970s, BC WCB policy has been re-politicized, even as pressures mounted to separate the handling of these issues for the forest industry from their handling in other BC workplaces. The intense work-related dangers to tree fallers in particular, but also their employers' peculiarly high assessment rates, have been as difficult for elected politicians to ignore as they have been to reconcile to each other. Scholarly analysis of OHS and compensation reform can draw advantageously here from studies of the work process and of the division of labour as sites of social and political power, rather than as sites of efficiency and functionality alone (Braverman 1974; Burawoy 1985; Rueschemeyer 1986). In the concluding section, I will show that the tree-fallers' case may be interpreted helpfully in terms of both class and gender assessments of power at work.

For now, it is enough to note that a theoretically informed literature in this tradition of analyzing the work process has now built up around the labour history of Canadian tree-felling operations (Radforth 1987; Rajala 1998; MacDonald and Clow 2006). This literature emphasizes 20th century Taylorist deskilling (and its limits) as a labour-control strategy of forest-industry management. Any new chapter in this tradition will have to compare this older device with the more recent strategies of "flexibilization" and outsourcing (cf. Hayter 2000; Prudham 2005, 35-43). Another analytical parallel is the exceptional historic role that piece-work has played for this workforce, even under the influence of the postwar SER (cf. Radforth 1987), relative to contemporary just-in-time contractual arrangements (Norcliffe and Bates 1997).

Both Taylorist and "flexible" strategies shed jobs in core firms and make others more precarious. They both achieve disciplinary effects by shedding both financial and OHS risk in the process. In many Canadian working forests, they have been the exceptionally "domineering" bookends to a distinctive period of quasi-Fordist labour norms. However, from the point of view of political economy, outsourcing notably achieves these effects that it shares with Taylorism without necessarily the side-effect inherent to Taylorist deskilling, an accelerated capital-intensification of the work process (or a localized rise in the organic composition of capital) (cf. Harvey 1982).

The question of policy interest today is how very recent (early 21st-century) transformations affect the effective construction of multi-stakeholder governance mechanisms for the WCB and other, similar institutions. To name one central instance, organized labour has been an essential element to the institutionalization of the WCB, and more recently of active accident-prevention strategies: they have been able to channel the interests of business in reducing the economic costs of workplace deaths and injuries away from merely externalizing them. But powerful union representation in an agency dedicated to active prevention policy is surely a matter of signal concern to management, since a robust, active prevention strategy interferes directly with management control over the work process. Moreover, the recent transformations have converted many unionized tree-fallers into independent micro-firms. Secondly, any turn to active prevention has a necessary moment when it must be organized on a sectoral basis:

contemporary active-prevention policy depends on a close statistical analysis of compensable incidents arising from similar work processes, and then on detailed agreements for acting collectively to reshape those work processes.

The recent institutional transformations I am studying in BC have been shaped in important ways by pointedly class-based conflict that centred on the forest policy subsystem. A shift in union WCB policy and the related rise of separate sub-contractor representation appear to have been important contributing factors to the institutional solutions that were found. However, the result was not a BCFSC that satisfied the United Steelworkers (USW), the leading tree-faller union.

To defend these two leading propositions, this paper puts the key turning points of this story into a wider historical context, and then points to some theoretical frameworks that could enrich further research into the contemporary period. A male-dominated, resource-extractive activity like tree-falling, widely viewed to be exceptionally and inherently dangerous and occurring in remote, rugged terrain, provides distinctive problems for worker compensation and OHS governance.

Basic Concepts, Institutions, and Relationships

Like other jurisdictions, compensation for individual deaths and injuries on the job has been handled on a no-fault, pooled basis in BC since 1917. Over time, employer pools were differentiated by sector or work activity, varying assessment rates in order to account for variations in historic rates of death and injury in different parts of the workforce. To what extent individual firms should be rewarded or penalized through these assessment rates for their death and injury rates has been highly controversial. This differentiation has accelerated significantly since about 1987.² Some rate differentiation would seem to be morally justified, and to create incentives for individual firms to improve. But high differentiation of individual rates undermines some of the ongoing logic behind pooling these risks.

By contrast with the risk-sharing principles of workers' compensation, OHS rules have been enforced by inspecting firms and their workforces individually. Where it has been deemed appropriate, fines, compliance orders, and even orders to stop production ("stop-orders") have been applied. Together with health and safety education programmes for workers, supervisors, and management, these enforcement mechanisms historically constitute the "accident-prevention" side of the overall regimes governing work-related death and injury.

Over most of the twentieth century, these interconnected but contrasting regimes have been institutionalized in BC in a distinctive way. First, many other jurisdictions have legislated workers' compensation arrangements through an arms'-length regulatory agency, while handling occupational health and safety (OHS) regulations through an ordinary department, typically a department of labour. By contrast, BC has maintained both tasks under the Workmen's (later Workers') Compensation Board, now WorkSafeBC. In addition, WorkSafeBC stands apart from similar agencies in other jurisdictions in handling OHS rules by regulation rather than by statute. One consequence of this arrangement is that the application and enforcement of OHS rules are more subject

² http://www.worksafebc.com/about_us/history/statistics_and_chronology/

to the discretion of minister and staff (Tucker 2003, 403). In short, OHS enforcement has been handled through an unusual emphasis on “soft law”.³

Critics of this arrangement have suggested that wide executive discretion in OHS rule-making works to the detriment of workers, on the general grounds that the government has a fundamental interest in the economic strength of industry and because unusual political strength tends to accompany that economic strength (cf. Lindblom 1977). Another important implication of this degree of discretion in OHS rules has been a relatively strong tie between OHS enforcement practice and the policy of the government of the day. Since the early 1970s, it has closely, if imperfectly followed partisan politics. Both in 1972-4 and in 1993-2001, BC NDP governments initially increased OHS inspections, expanded the resources available for enforcement, and raised penalties for employers (Tucker 2003; Contant 2006; Pollock 2006). In each case, the Bennett Social Credit and Campbell Liberal governments that succeeded NDP governments introduced reductions in all these measures.

By pooling compensation costs amongst employers with similar work processes, this close arrangement between compensation and highly discretionary OHS enforcement creates a kind of collective action problem for the employers. Low “settings” for inspection and enforcement policy instruments are often perceived to be in employers’ immediate interests in traditional accident-prevention policy. This is particularly true in “inherently” dangerous sectors of the economy, and particularly true for firms and sectors (such as resource sectors) that are highly exposed to international markets as price-takers (Tysoe 1966, 19-20).

But at the same time, high average death and injury rates across a given pool of employers also raise the assessment rates for all participating firms. Small wonder, then, that employers have instead tended historically to emphasize health and safety education for workers (and sometimes supervisors) as the primary policy instrument for “accident-prevention”. Secondarily, it also makes sense for employers to lower these costs by the alternate means of high “settings” for the screening of individual compensation claims.

From this conflict of interest arises a second tendency at the level of policy problem-definition: a tendency for employers’ organizations to stress the role of employee error in explaining incidents and moral hazard in providing no-fault compensation. Trade union representatives, by contrast, have tended to emphasize the constraints that management control over the work process puts on worker discretion. Without such discretion, workers cannot easily put health and safety training into action. They will work in environments where health and safety concerns must be weighed against powerful counter-incentives and penalties that encourage risk-taking as the price of job and wage security. In the terms of contemporary polemics over workers compensation and OHS issues for tree fallers, these conflicting interests have been expressed in terms of a “culture of risk” (WorkSafeBC’s Tanner Elton) versus a “culture

³ For a brief but useful review of Hepple’s concept of soft law as it applies to precarious work and legislation, see Fudge, J. and R. Owens (2006). *Precarious Work, Women, and the New Economy: The Challenge to Legal Norms*. Precarious Work, Women, and the New Economy: The Challenge to Legal Norms. J. Fudge and R. Owens. Oxford and Portland, Oregon, Hart Publishing: 3-27.. Soft law and the discretion it provides the executive in a Westminster system is not controversial for OHS regulation alone. For one hostile view of leaving such a large discretionary role to the executive – both public officials and cabinet -- see Boyd, N. (2003). Unnatural Law: Rethinking Canadian Environmental Law and Policy. Vancouver, BC, University of British Columbia..

of desperation” (USW’s Steve Hunt) (USW-Canada District 3 2005; Little 2006; Pollock).

In recent years, active prevention policies have marked a potentially distinctive attempt to overcome these collective action problems, and thereby work to reduce shared assessment rates. This requires suspending key competitive pressures on employers to maximize production and to minimize other immediate production costs, and also requires pooling some management control over the work process with labour and compensation agencies. Effectively, all parties commit to joint alterations of the work process, in order to reduce injury and death rates for shared work categories. Standard procedure in directing these changes depends on an “evidence-based” decision-making model. An initial stage in this model involves careful statistical analysis of incident reports (typically compensation claims to the WCB or similar institutions) and complementary interview data provide a limited range of accident-types, and specific insights into leading correlates and probable causal forces (Cloutier 1989; Navarro, Neis et al. 2004). Stakeholders then agree to education, enforcement, and work process changes to reduce key causal factors contributing to injuries and death. Looking forward, the long institutional history of unified management of compensation and OHS-regulation functions presents BC with the possibility of avoiding some important institutional impediments that have affected other jurisdictions in introducing effective prevention strategies. But since a multi-stakeholder negotiating structure oversees the final outcomes, it remains to be seen whether the substance of the BC policy innovations, especially for tree-falling, deviates as sharply as claimed from the historic norm of “soft law” in OHS and passive workers’ compensation.

Historical Overview

Workers’ compensation in BC was initially designed, as it was elsewhere in North America, to compensate for the devastating individual impacts of workplace accidents in modern industrial society. Much of the workforce was already mobilized and militant. But compensation for work-related deaths and injuries was available primarily through the charity of well-disposed employers, or through the vagaries of court remedies. The latter were typically based on common-law findings of tort, or legal liability, within “master-servant” relations (cf. Hurst 1956; Lowi 1987). One estimate later put the success rate of such court cases in BC at some 20-30% (Tysoe 1966, 17).

Workers’ compensation was also intended, in BC as elsewhere, to spread the uncertain, but potentially devastating economic risks of such suits for employers (Pineo, Robertson et al. 1916; cf. Lowi 1987, 24-30; Keelor 1996). The legislative record in the run-up to this reform is replete with evidence that this question was of concern to industry. The evidence also shows how tightly these compensation issues impeded the introduction of effective health and safety regulation. For instance, the 1908 *Factories Act* had created a safety inspections system that in broad terms encouraged officials to search out and identify instances of employee error in explaining individual incidents. The *Factories Act* remained a dead letter until 1910, when inspectors were explicitly barred from testifying against employers in any court proceedings following injury or death at work (Keelor 1996, 1, 26). This opened up workplaces to enforcement of early OHS rules, but it left factory inspectors engaged primarily in preventive and educational activity.

The “historic compromise” of workers’ compensation has been described in at least two ways. The Sloan (1942, 1952) and Tysoe Commissions (1966) presented it in terms of the benefit of no-fault insurance for labour, in return for business paying only for part of lost wages. (Tysoe 1966, 17-19) In their own time, this compromise appeared threatened by consistent pressures from organized labour for 100% compensation. Later, in a more individualizing neo-liberal climate, the Gill Commission (1999) presented the compromise as one that traded the benefits of no-fault insurance, against the loss of workers’ civil rights to sue individual employers at common law (Gill, Exell et al. 1999, xviii).

The transition to a fully-autonomous no-fault compensation system required a significant break with well-entrenched notions of liability and fault, and of the wider rule of law (cf. Lowi 1987). However, with modern corporate structures, individualistic common-law principles appeared increasingly burdensome and implausible. This was a particularly sensitive matter in BC’s often violent and dangerous resource sectors. The appeal of having a right to sue in court for especially egregious injuries long impeded a complete transition to an autonomous workers’ compensation model. Before even the Factories Act, BC had the *Employer’s Liability Act* (1897), an attempt to curb the legal defences available to employers facing such suits (cf. Lowi 1987). With support from his coal-miner constituents, Nanaimo-area Socialist MLA JH Hawthornwaite sponsored British Columbia’s first Workman’s Compensation Act, 1902. This act provided for a separate arbitration process and compensation scale, but allowed for appeals to the ordinary courts. Consequently, the dysfunctional dynamics continued between workers and firms (Ormsby 1958, 331-2; Keelor 1996, 1).

From tort law to workman’s compensation

The introduction of the workers’ compensation system in 1917 would address these dysfunctional conditions more thoroughly. Superficially, the step was taken for partisan reasons, building up labour support for the weakened provincial Conservative government, the first in BC to be formed along clearly partisan lines (Robin, Ormsby, and Woodcock, separately quoted in Keelor 1996, 7-8). The McBride government decided in 1915 to move towards a no-fault compensation scheme, cut off from common-law courts and from direct partisan control. A bill to this effect, Bill 26, had been presented in the foregoing legislative session, specifically on the grounds that higher rates of serious work-related injuries and death had become “natural” to modern industrial activity (Keelor 1996, 2). The government commissioned Avar V. Pineo, David Robertson, and James H. McVety to develop a more carefully considered proposal.

The 1916 Pineo report backed the general concept of a no-fault workers’ compensation system, providing partial compensation to workers and their families for industrial injuries and deaths (Pineo, Robertson et al. 1916). The new system was commended to the government in the hopes it would improve working conditions, improve general labour relations, and contribute to accident prevention through public education and safety inspections. Workers’ compensation had already become a significant trend across North America, and the Commission was able to consult much more widely, drawing inspiration from many existing models.

Pineo called for sharp or complete restrictions to appeals to the ordinary court system. Medical and compensation findings were to be made in a non-adversarial, professionalized procedure. The board itself was to be led by three commissioners on

rotating ten-year terms, thereby protecting it from political influence. Administrative costs were to be covered under the province's general revenues, compensation from business premiums, and after negotiations with labour and business, a premium on workers' wages was agreed for the foundation of a fund for medical costs.

Based on some American models, the Report also proposed that safety inspections and OHS education be handled under the same Board. Business and labour were both to have representatives on sectoral advisory committees to set safety standards. The Commissioners argued that the uneven development of the BC economy at the time would make it impossible for all branches of industry to self-regulate effectively. Because accidents would also have to be inspected by the Board, this arrangement would also represent an efficiency gain. Despite opposition from a relatively small domestic insurance industry, it also concluded in favour of a single, State-administered insurance fund, and drew up scales for compensation, including a minimum floor for the poorest workers. Finally, special provisions were made in handling premiums for large rail companies, who had made strong representations that their injury rates differed substantially from smaller, more recently established lines.

The Workman's Compensation Board of BC broadly reflected the report findings. Worker safety committees were founded in 1920, an early Canadian initiative favouring worker participation in OHS processes (Tucker 2003, 403). But the fixing of rates of compensation and the funding of compensation out of general revenues guaranteed that the compensation system would only partially insulated from political activity and periodic review. In 1926, aging Liberal premier John Oliver extended the range of benefits under the plan (Ormsby 1958, 426); rates were extensively reviewed and adjusted by both the Sloan Commissions and by the DesBrisay/Tysoe Commission.

A brief word on the forest sector to close out this subsection: the provincial economy was exceptionally oriented to the resource industries, coupled with the extreme danger of primary and secondary wood processing. This combination ensured that business and labour forest organizations would play a significant role in the WCB régime. This fact was driven home in the midst of the Great Depression of the 1930s. BC was intensely affected by the collapse of consumer demand and competitive national protectionism in its major export markets. A group of forest firms on the verge of bankruptcy sought an injunction at the Supreme Court in 1932, in order to gain relief from WCB assessment levies. This court action single-handedly drove the WCB system to near-collapse. In 1946, tree-falling issues again dominated the WCB's agenda (Sloan 1952, 317).

Royal Commissions and Postwar Restructuring

However, action on many key headings in WCB affairs was delayed until the war was drawing to a close, and a wave of labour unrest broke out. In 1944, penalties for OHS infractions were suspended by the WCB, apparently because the chief accident prevention officer believed that fines against individual workers under these regulations would contribute to the mounting unrest (Sloan 1952, 279-282). In 1944, BC innovated further in worker participation by forming Joint Health and Safety Committees (JHSCs) with inspection and recommendation powers (Tucker 2003, 403). In 1946, following up on Sloan's war-time recommendation, the costs of medical aid were transferred from worker to employer contributions (cf. Sloan 1952, 212; WorkSafeBC 2007).

The forest industry's leading union, IWA Canada, was a powerful presence again at the second Sloan Commission hearings in 1952. As Sloan indicated then, the IWA pressed the Commissioner above all to create an appeals process for medical rulings on individual cases. Its evidence and its agenda -- that an overly restrictive slant had developed in these rulings, and also that occupational health and safety standards were being poorly enforced -- dominated the hearings (Sloan 1952, 215). Sloan also defended the compensation system against demands that it cover the whole workforce, or that it be integrated into the emerging Canadian healthcare system or into a comprehensive welfare system. The latter moves, he argued, would present a moral hazard to industry in handling health and safety issues.

Chief Justice Sloan was at pains to reject these criticisms of the WCB's record in "prevention", or enforcement and education (217-254, 261). Notably, however, his evidence emphasized the educational or "spiritual" dimension of prevention, rather than the enforcement or "material" dimension (e.g., 264): his principal enforcement recommendation was to require labour representatives accompany during WCB inspection tours. And in reviewing a file of 28 logging accidents presented to him by the IWA, he found that the courts and the police could and should charge supervisors who breached OHS regulations that contributed to severe accidents, even if coroners' investigations turned up no grounds for criminal charges (280-282).

The DesBrisay/Tysoe Commission⁴ was the last Royal Commission to investigate the WCB or to provoke major WCB reform initiatives until 1999; it was also the first major commission to work under a Social Credit government. Tysoe evidently felt himself to be in the shadow of Sloan, and emphasized that he himself would not be guided by either models from other jurisdictions or by past royal commission findings (e.g., 17, 364).

Another point about the DesBrisay/Tysoe commission that deserves further research and explanation is the relative silence of unions. While the Sloan reports had been preoccupied with direct and vociferous union pressures, especially from the IWA, Tysoe's final report specifically noted the weakness of organized labour representation. No labour group was available to reply to lengthy summations presented by industry, the forest industry, and the WCB. On the side of business, only COFI, the forest industry's trade association, was represented throughout the process by what Tysoe considered "competent counsel" (Tysoe 1966, 21-22). The policy area in which this representative imbalance appears to have affected recommendations most clearly, was Tysoe's sharp rejection of union and NDP demands for compensation at 85% or even 100% of wages. This marked a break with the periodic increases in the base coverage of lost wages from an original 55% to 75% at the time. Significantly, Tysoe pointed out IWA representatives who had been willing to accept his position on this point (24).

The two Sloan reports, like the DesBrisay/Tysoe report, were heavily preoccupied by the recalculation of allowances and benefits, in part because the latter had been fixed in law, and had not kept up with rising costs of living and of medical costs. In 1965, following the DesBrisay/Tysoe Report, the government linked WCB benefits and allowances to the cost of living (Tysoe 1966, 51, 58, 64; WorkSafeBC 2007), and made a modest increase in the basic percentage of lost wages covered. Notably, however, the DesBrisay/Tysoe Report linked this reform, not to a new funding structure, but to an

⁴ DesBrisay took most commission evidence, but died before reporting. Tysoe authored the final report.

accumulated surplus in the existing fund. Tysoe broadly found this surplus to be the result of false economies (441). Above all, he called for administrative overhaul and expansion (441), citing lower-level staff complaints against the economies of senior management. Expansion and enhanced funding were justified precisely to maintain the credibility of the board, especially in the eyes of labour. In other specific matters, Tysoe was far less inclined than Sloan to mandate specific reforms in areas of controversy, and instead reserved decision-making to the discretion of the WCB, even when he had important concerns.

NDP Reforms and Their Reversal

By all accounts, OHS and worker compensation matters were initially exceptionally sensitive features of BC industrial relations. Perhaps unsurprisingly, the WCB was originally designed as a regulatory agency, standing apart from direct cabinet control – this was true of most such agencies, and reflected a core value of the Progressive Era. But this depoliticization was extended even with respect to OHS regulations. As Sloan and DesBrisay demonstrate, the nominally non-partisan bench of the BC Court of Appeal provided early and ongoing leadership for drafting WCB reforms. Coroners' inquiries were often channels for diverting calls for policy reform that arose from especially egregious individual incidents.

But from the early 1970s onward, the BC system's depoliticization approached collapse. Under the Barrett NDP government, the WCB chair and board were entirely replaced. Chair Terrance (Terry) Ison presided over several important changes. Additional inspectors were hired, and individual premium increases were instituted for individual firms who fell short on inspection. These changes undermined a central component of the historic compromise inherent in no-fault, partial compensation with no resort to the courts; and in historic levels or "settings" for enforcement of OHS regulations (cf. Ison 1977, 6).

When Social Credit government returned in 1975, Ison was quickly dismissed, and health and safety regulations were again substantially revised. The right to refuse work was restricted to conditions of "imminent danger", and the rules provided no effective immunity from employer reprisals. The transition from the NDP administration was abrupt, with the removal of Ison from office. Instead of a commission drawn from the bench, inquiries were conducted under the aegis of management consulting firms brought in by the incoming government. Ison heatedly and vehemently attacked the review process as partisan and ill-informed (Ison 1977).

Some of these abrupt shifts of direction lagged in the policy instrument "settings" for compensation screenings, OHS enforcement measures, and the balance between enforcement- and education-based prevention. For example, logging assessment rates continued to rise during the early 1980s, reaching the top assessment rates for the whole economy.⁵ After the Socred's neo-liberal turn in 1983, Eric Tucker could describe BC OHS procedures in terms of "mandated partial self-regulation" for industry, with little worker participation or protection (Tucker 2003, 403-4).

The transition to performance-based prevention targets

With the election of the Harcourt government in 1991, some evidence seemed to portend a repeat of the partisan oscillations in the settings of the traditional policy

⁵ http://www.worksafebc.com/about_us/history/statistics_and_chronology/1973-2002/chart_influencing_industry.asp.

instruments. As part of the recapitulation of historic policy positions on policy instrument settings, union representatives called for OHS regulations to be converted to much “harder” statutory law. But an early spike in enforcement orders and penalties was also accompanied by a consensus decision-making arrangement between government, labour, and industry. The latter led to an extensive regulatory review. But the early tightening of OHS enforcement soon corroded the atmosphere for tripartite negotiations, and beginning in 1993, OHS penalties dropped off as well, quickly returning to near-NDP levels. Total OHS inspections also went into a more gradual decline. By 1999, compensation claims had fallen nearly 30% from 1991 levels (WorkSafeBC 2007)

In 1996, the NDP, re-elected under the more pro-union Glen Clark, appointed Judge Gurmail Singh Gill to review the WCB system. Union representatives called for the commission to enhance representation and decision-making participation for organized labour (WorkSafeBC 2007). The Gill Commission reported in November 1997, after the long-awaited comprehensive new regulatory framework was released (Tucker 2003); the final Gill commission report was issued in January 1999 (Gill, Exell et al. 1999). In 2000, the rules governing WCB classifications, rates, and “experience ratings” for individual firms were comprehensively changed (WorkSafeBC 2007).

In 2002, the Campbell Liberal government sharply reduced the overall WCB budget, and once more reformed WCB governance. Under Bill 63, both the Review Division and the external appeal tribunal were altered; a new Board of Directors replaced the Panel of Administrators as the WCB’s governing body. In 2003, Bill 37 altered the calculation of survivor benefits, diagnosis procedures for mental stress, and worker representation in compensation cases (cf. Pollock 2006; WorkSafeBC 2007). On the side of enforcement, 45% fewer overall inspections occurred from 2001 to 2004; these figures reflected staffing reductions and regional office closures. Written orders to correct OHS violations were halved in the same period, and the number of administrative penalties dropped from 182 to 119 (Contant 2006; WorkSafeBC 2007). By 2002, total inspections were at about 40% of their 1993 levels.

But the WCB under the Liberal government was not content merely to lower the “settings” for existing policy instruments of traditional inspection and enforcement. The WCB committed itself officially to a performance-based active prevention policy. Entirely in keeping with the new government’s commitment to New Public Management, the BC initiative was to be based on a partnership model with industry and other stakeholder groups.

The Emergence of Timber OHS as a Special Case

The peculiarly dangerous character of tree falling operations could never be entirely ignored in BC, or submerged in wider OHS issues. Tree-fallers have been a large and prominent constituency, and historically they have been represented by some of the most active and militant labour organizations. They have been officially affiliated both with workers in secondary processing plants, and with the provincial New Democrats, the natural opposition party for much of the twentieth century. On the other hand, successive governments have been politically aligned with business for most of this period, and the forest products industry was critical to the economy and the province’s economic mythology. Beyond the structural linkages between business and government, the BC government could not be seen to be imposing heavy operating costs on the sector,

especially since forest products have been consistently portrayed throughout this period as price-takers on international commodity markets (Tysoe 1966, 19-20).

The business community and organized labour had to be convinced through the post-war period to maintain elements of the WCB system that kept it at arms'-length from both party politics and the rest of the province's labour relations system. Active injury-prevention strategies were logically incompatible with key macro-economic assumptions of the "postwar settlement" between business and labour, particularly with regard to management's right to manage. The WCB system therefore turned on maintaining routinized, no-fault solutions to what amounted to tragic breakdowns in the orderliness of the work process model.

Against the backdrop of successive and contrasting partisan interventions in the WCB system since the 1970s, tree falling and other forest-industry occupations have continued to mark exceptionally high death and injury rates. But until the BCFSTF, these problems were uniformly handled from within the WCB system. The provincial forest industry employers' association, COFI, and its leading trade union, IWA-Canada, had long been crucial intervenors in WCB reforms, as they had been in other key provincial policy matters.

By the early 1990s, several other issues that directly affected the forest industry were converging, producing a period of intense, sustained crisis (Wilson 1998; Cashore, Hoberg et al. 2001). The semi-corporatist province-wide negotiating relationship between COFI and the IWA-Canada was in crisis, along with fundamental underlying elements of the industry's post-war competitiveness. When the NDP government came to office in 1991, a negotiated "peace in the woods" over the pace and terms of timber harvesting would be amongst its very highest priorities. With the IWA-Canada, leading First Nations and their allies, and the environmental movement demanding different directions for change from within the NDP coalition itself, the sensitive multi-party negotiations needed for deep reforms had also become a matter of existential importance for the new governing party itself (Cox 1992). By the end of the century, the place of the forest sector in the wider economy, as well as its organic linkages to the province's major urban centres, was sharply diminished (cf. Hutton 1994).

OHS issues were also under comprehensive review during this period. But they were notable by their marginality in forest-specific negotiations, and they were conspicuously (and it seems, accurately) absent from the many sophisticated scholarly treatments of those debates (e.g., Nemetz 1992; Salazar and Alper 2000; Cashore, Hoberg et al. 2001).⁶ How is this separation to be explained? Certainly, the negotiations and the underlying restructuring forces within the forest policy subsystem were complex enough without adding health and safety issues. Further research is needed on this point, but two other factors deserve attention: first, the distinct professional and academic disciplines at the centre of OHS and forest-policy issues; and second, the functional value of secondary policy areas like OHS standing separate from a highly contested policy subsystem: this logically would allow for side-deals to offset partisan discontent in the core areas (e.g., labour discontent with the forest policy direction of the NDP).

⁶ Perhaps curiously, it was marginal even to the debate over flexibilization of labour and the shifting geography of production in the province Barnes, T. J. and R. Hayter, Eds. (1997). Troubles in the Rainforest: British Columbia's Forest Economy in Transition. Canadian Western Geographical Series. Victoria, BC, Western Geographical Press..

Having said this, the marginality of OHS issues to the forestry debate of this period represents a missed opportunity. Environmentally and economically-driven transformations of both the execution and the regulation of the industry's work processes were integral to the negotiations, and they directly implied important changes to how those activities could be undertaken safely.

In light of its later views, the position of the IWA on OHS issues under NDP government was significant. In 1994, before the Gill Commission was launched, the BC WCB issued a 10-year study of death and injury statistics in the forest sector. It found 93 fallers among the 265 deaths in the sector. Most of those killed were in two logical age categories: young and inexperienced [], or older with over 20 years of experience (cf. Kuruganti 2003). In reacting to the report and to a high publicized coroner's inquest the following August, an IWA-Canada representative called on young forest workers to break with traditional "macho" attitudes that accept and even lionize the risks of the job (Canadian Press NewsWire 1995; Vancouver Sun 1995).

To date, my documentary research shows a notable gap in the record that follows.⁷ Only after the defeat of the NDP does IWA Canada take up a prominent intervention on this issue. But this intervention was significant. Its 2002 report, *Coastal Logging Occupational Health and Safety* presents 29 recommendations to address high levels of death and injury in the coastal region's falling operations. On BC's distinctive coastal region, exceptionally dangerous extraction techniques (hand logging, cable yarding, and heli-logging) continued to predominate; during the same period, other forest regions experienced much reduced and altered OHS risks as a result of mechanization (Canadian Press NewsWire 2002; Daily News 2002; IWA-Canada 2002). The coastal forest region also experienced exceptional restructuring pressures during the 1980s and 1990s.⁸ While IWA asserted that workplace pressures were discouraging the reporting of near-miss incidents, it once again gave considerable weight to fostering attitudinal change towards high-risk work practices, and towards enhanced training at the workplace. Beyond calling for more targeted monitoring of high-risk employers, the union called on the WCB to get more involved in worker certification.

In 2003, the BC Forest Safety Task Force (BCFSTF) was formed under the BC Minister of Skills Development and Labour, to investigate causes of occupational injury and death in the sector, and to develop an performance-based action plan to reduce deaths and serious injuries in the sector by 50% in three years (Enns to Bruce, 19 January 2004 in (Forest Safety Task Force 2004; Stirling 2004). The IWA-Canada *Coastal Logging* report was made the BCFSTF's foundational document.

On 19 January 2004, the BCFSTF issued its final report, analyzing the drivers of injury and death in woodwork and issuing twenty recommendations under four "pillars" or commitments: 1) "cultural" transformation organized around the development of a Health and Safety Accord specific to forest operations; 2) health and safety infrastructure

⁷ This may reflect the preoccupation of the relevant stakeholder groups, both with the expanding menu of other forest policy matters and with the Gill Commission, which was the first royal commission on the WCB in some thirty years.

⁸ Other regions of the province have experienced increased precariousness for different reasons. Since the 2002 report, tree-falling in the BC interior was rendered deeply precarious by mountain pine beetle infestations. Not only are work intensified and casual labourers multiple in the large-scale salvage logging taking place there, but the long-term prospects for tree-falling operations are highly compromised. [SFMN website]

sufficient to this task; 3) promotion and implementation of shared responsibilities amongst different stakeholder groups for achieving improvements; and 4) “rigorous implementation”, the latter to be ensured by the formation of a “dedicated implementation team”, as a longer-term joint initiative to realize the proposed prevention strategies. The BCFSC would ultimately depend on the strength of the latter pillar.

Amidst this review process, in 2004, IWA-Canada merged with the USW. The transformation appears to be noteworthy, since it coincides with a major change in union orientation to OHS questions. USW commentary has since emphasized its own extensive OHS experience in other high-risk resource sectors. Pointedly, the USW stressed its work in the wake of the Westray coal-mine disaster, providing strong support for Bill C-45, just passed in 2004. This federal bill provided for penalties under the criminal code for company executives found legally responsible for deaths on the job.

This policy transformation spoke to, and intensified, the long-term commitment of organized labour in BC, frequently reflected in CCF and NDP policy towards the WCB, to put OHS regulations at a stricter “setting”. By involving the federal level through the criminal code, the USW’s support for the bill also echoed what Keck and Sikkink have called the “boomerang effect” in international social movement strategy (Keck and Sikkink 1998; cf. Wilson 1998). This effect denotes social movements breaking out of policy-subsystem exclusion at a local or national level, specifically by drawing more amenable forces and jurisdictional authority at supranational levels.

The merger with the USW also marked an apparently sharp change in the union’s emphasis on its members’ own “culture” surrounding risk. Based on previous IWA statements, Tanner Elton, the new CEO of the BCFSC, might have had reason to expect union support when he invoked a “culture of risk-taking” as a major OHS problem. But USW representatives hotly replied that the intensification and increased precariousness of work during recent restructuring was the issue to track. USW representative Steve Hunt characterized the latter as a “culture of desperation” (Pollock).

During 2005, mounting evidence revealed an important, sudden spike in the levels of death and injury in BC tree-falling operations. By the end of the year, the WCB would report forty-three workers were killed, with another 106 incidents involving severe injuries. These levels of death and injury provoked a province-wide media debate about health and safety in falling operations. As the injury rate worsened over the summer, the USW pressed for a comprehensive strategy to address the structural pressures that make for unsafe work sites.

In response to the USW’s call for quick and decisive policy change, and amidst clear indications of the spike in injuries and deaths in forest operations, the Forest Safety Council (BCFSC) was created in Fall 2005. It was to follow up on BCFSTF final recommendations, charged as custodian of the Health and Safety Accord of the BC Forest Industry (HAS), and initially funded at \$11 million over 5 years (renewable) from forest industry workers’ compensation insurance premiums. Grouping the recommendations of the HSA, four principal objectives were placed under the Council’s mandate: 1) instilling a pro-safety orientation in the industry (“cultural change”); 2) reviewing legislation and regulations to ensure an effective “safety-conscious legal regime”; 3) ensuring proper safety training and certification for all fallers and their supervisors (“competent and confident workforce”); 4) ensuring industry adopts a proactive attitude in creating safe work environments and appropriate, effective training programmes (“qualified

companies”). The emphasis placed on cultural and educational initiatives is striking, especially given the USW’s stated position on these questions (Forest Safety Council 2005, 3-4; Forest Safety Council No Date).

In December 2005, the USW drove home its pressure on the emerging BCFSC system, hosting a tripartite BC forest fatalities summit, presided over by former IWA-Canada President Jack Munro. This meeting arguably marked the peak of the USW’s influence and effectiveness in this policy area. At the summit, the USW strenuously rejected allegations that a “culture of risk-taking” or burgeoning substance abuse among workers underlay the growing losses. The USW’s six-point agenda instead emphasized deteriorating working conditions, living standards, and unionization; longer work hours, intensified outsourcing, and accelerated work rates. Union, industry, and government representatives agreed to explore new OHS initiatives to address the perceived crisis (USW-Canada District 3 2005).

Linking OHS to Re-regulation and Competitive Restructuring

Steve Hunt’s pointed reply to BCFSC CEO Tanner Elton, and the break it represented in union OHS policy, spoke not only to a connection the union was making to the restructuring and decline at work in the forest economy since the early 1980s, but also to a new connection it was making to a new wave of regulatory change set off under the incoming BC Liberals.

In particular, reforms to the *Forest Act* in 2002-3 had permitted major firms to divide up and trade portions of their Crown licenses to cut timber on public land. At roughly the same time, key appurtenancy requirements were lifted from tenure requirements, and firms were granted more flexibility in the annual allowable cut (AAC) rates, allowing them to respond more nimbly to market signals. The USW also argued that the recent turn to “results-based” regulation in the new Forest and Range Practices Act has removed a wide range of specific procedural requirements for logging practices that bear directly on safer work conditions. These moves de-linked cutting rights from obligations both to maintain stable employment in the forest and to conduct secondary processing in nearby mills. They also opened the doors to a much larger “peripheral” sector populated by small tree-falling operations.

Many vertically integrated firms with large tenures have since moved to outsource their cutting rights and woodlands operations, and to vary intake volumes from forest operations depending on final product market signals. Large numbers of newly-minted sub-contractors are micro-firms, many composed of one or two persons. Day-to-day work routines have been disrupted more and more: periods of extreme, back-to-back working days combine with quieter periods when the fine, almost intuitive physical skills that come with routine practice begin to deteriorate (Forest Safety Task Force 2004, 48). In many cases, the traditional “buddy” system of peer-monitoring in the woods has also broken down under these new conditions (Contant). Smaller, non-union firms in the falling and extraction business have disproportionately fewer overall resources to dedicate to health and safety procedures, and less flexibility to adhere to them over economic imperatives.

Often heavily in debt for the considerable capital investments needed in modern logging, outsourced firms were under sharp new competitive pressures to keep their costs

low and to deliver the contracted product on time in a volatile commodities market. The much-discussed traditional stoicism and bravura of fallers and the already-dangerous and kaleidoscopic work environment now combined with new pressures to cut corners and work longer, less reliable hours for lower and less reliable pay.

The new wave of outsourcing introduced new uncertainties about employer responsibilities. When work is heavy, both the forests and the logging roads are also crowded with many micro-firms. In this crowded forest, each held independent legal relationships and economic obligations to the tenure holder: there are few explicit mechanisms of private or public governance to coordinate the work. While jurisdictions such as Ontario and New Brunswick place equal responsibility on all employers who actually conduct logging operations, regardless of size, BC regulations delegate employer responsibilities for OHS to “prime contractors”. Initially under the new tenure rules, who held this designation appears to have been unclear in concrete situations; so too, was whether new employers were large enough to fulfil these legal obligations (Forest Safety Task Force 2004, 48; Contant 2006).

Building Outsourced Operations into Liberal OHS Policy

In November 2005, WorkSafeBC issued a letter to companies in the sector clarifying the OHS responsibilities for the different parties under the new contracting positions. The letter broadly held the major license-holding companies legally accountable for the safety conditions of contractees as well as direct employees, unless a contract specifically transfers that responsibility. This included broad obligations to coordinate workplace activities, including assumption of responsibility for risk assessment coordination, development of strategies to address hazards, and development of OHS systems over a “potentially large geographic region”. The licensees are to do “everything practicable” to create an OHS system to ensure compliance with OHS regulations (Contant 2006).

In the midst of the debate surrounding the USW-sponsored “fatalities summit”, WorkSafeBC also launched a review of its compliance strategy, based on a recommendation of the BCFSTF and subsequent USW pressure. A pilot project was launched to address relevant areas of supervision, planning, and training. Results were shared with owners, licensees, and OHS officials in May, and a report was issued in June. A study of OHS supervisory arrangements examined three hundred licensee/prime contractor relationships. More than a third of the contracting arrangements studied were not based on written agreements as required. Those presumed to be prime contractors expressed widespread uncertainties and often profound misunderstandings about their OHS responsibilities. The uncertainties were particularly intense for independent workers. In separate findings, nearly one-quarter of workers surveyed considered their training inadequate, and 17% considered themselves unsupervised. A strategy to clarify primary contractor responsibilities was in preparation in summer 2006.

As a result of WorkSafeBC’s new enforcement strategy (Pirs, 23 Jan 2006), ten new prevention officers and seven new investigators were hired for the forest sector. The strategy included a role for the federal Bill C-45 that the USW had championed; one BC case was referred under this law to the RCMP. The Ministry of Forests and Range, BC Timber Sales, and the BC Forest Safety Council joined in a review into the health and safety implications of various legislative and regulatory provisions for the industry

(*Journal of Commerce*, Jan 2006). The Forest Safety Council also undertook to hire safety advocates to aid smaller firms in meeting safety objectives.

In January 2006, Forest Minister Rick Coleman announced that all contractors would now be safety-certified and audited for safety records and training programmes as a condition of access to timber on Crown land. All compliant businesses would enjoy a 5% reduction in WCB premiums. A dedicated safety officer was appointed for the Ministry of Forests and Range, and a senior safety manager for BC's Timber Sales Programme, which oversees conditions attached to small-scale, auctioned timber rights (*Pulp and Paper Canada*, Mar 2006; *Journal of Commerce*, Jan 2006). On 16 March 2006, the BCFSC appointed a forest safety ombudsman, former Liberal forest minister Roger Harris. While the appointment was said to be a response to union members, small firms, and independent contractors concerned that they faced pressures not to report incidents (Forest Safety Council 2006), the USW expressed disappointment in both the role of a separate ombudsman and in the choice of ombudsman.

While these steps marked a notable re-regulation of health and safety for tree-falling operations, the contracting-out that lay at their centre was not contested. Instead it was embedded in the solutions proposed. Along with allied groups, the USW separately lobbied the legislature in March for a forest-safety reform approach of their own, and planned a series of town-hall meetings for the fall. They sought a legal day of mourning for each time a death occurs on the job, mechanisms to require the implementation of coroners' recommendations, a special prosecutor under Bill C-45, and a full, independent review of structural changes in working life in BC's forests. Union representatives and NDP politicians have sometimes alleged that workers' apparent tolerance for unsafe conditions is due to informal blacklisting practices (Contant 2006) and an attitude on the part of employers that recent average death rates are normal or acceptable (Vu, 16 Jan 2006).

A final note is warranted on the place of coroners' reports in OHS policy debate. In the same January 2006 announcement described just above, Forest Minister Rich Coleman announced to the annual Truck Loggers' Association convention in Vancouver that a special coroner would be appointed to the office of BC's chief coroner, to investigate the high death and injury rate in forest operations. Coroners' investigations have been important rallying points for union and subcontractor organizing against OHS provisions they perceive to be inadequate. But several linked factors prevent these often-dramatic and often-revealing reports from stimulating deeper and more general policy change. Coroners' inquests constitute a deeply individualizing process for discussing these issues (Mariga 2006; Vu 2006).⁹ In this light, reforms to emphasize individual tree-faller incidents within the coroners' system suggest a degree of policy continuity, and a further indication that USW claims of marginalization deserve attention.

⁹ Compare the individualizing effects of localized watershed campaigns in environmental protest of BC forest policy Wilson, J. (1990). *Wilderness Politics in B.C.: The Business Dominated State and the Containment of Environmentalism*. *Policy Communities in Canada: A Structural Approach*. W. D. Coleman and G. Skogstad. Mississauga, ON, Copp Clark Pitman Ltd.: 141-169, Wilson, J. (1998). *Talk and Log: Wilderness Politics in British Columbia*. Vancouver, University of British Columbia Press..

Deepening Research: Masculinity, Capitalist Accumulation, and Power

Workers' compensation and OHS stand at a meeting point between public health policy, law, and industrial relations. We have seen how the BC case creates a distinctive institutional and political economic context for the development of these issues, and the emergence of a relatively autonomous structure for handling them in the sensitive area of tree-falling operations.

Recent developments in the relationship between the WCB system and the BC forest industry are notable departures from the twentieth-century pattern. First, the WCB system had previously *responded* to changes in the governance and organization of the workplace and their impact on death and injury rates. Now active prevention programmes were negotiating and *initiating* changes in the workplace to reduce death and injury rates. This intensified intervention in private management rights depended on negotiated partnerships, performance-based targets, and structured incentives for the major stakeholders: notably, these are all key procedural principles of the New Governance or New Public Management that have deeply influenced recent BC governance trends (Osborne and Gaebler 1992; Peters and Savoie 2000)

Second, issues arising from the forest sector were previously handled within the WCB system: indeed forest-industry representation dominated WCB stakeholder debates. By contrast, the BCFSTF and the BCFSC are sectoral initiatives constructed from scratch, institutionally separate from WorkSafeBC. In some respects, the close examination of specific work processes is inherent to active-prevention strategy: the transition in policy instrument requires some degree of institutional devolution to allow these matters to be thoroughly studied and discussed.

Third, these developments have been precipitated primarily by union-based initiatives in the late 1990s and early 2000s, and they were further intensified by an emotionally charged debate about outsourcing, wider restructuring, and a sudden rise in deaths in forest operations. The USW's new policy emphasis contributed to the transition to sectoral prevention strategies, but USW representatives have since spoken critically about the course of BCFSTF/FSC process. For most of the twentieth century, WCB structures implicitly assumed that medium- to large-scale establishments were the workplace norm. In the early 2000s, this assumption has had to be revisited.

The above historical summary suggests three intersecting theoretical issues deserve greater attention for future analysis of the most recent developments in handling OHS and compensation issues for forest operations. These are the intersections of masculinity and class, the changing logic of capital accumulation, and as an overarching theme, worksites and work process as sites of power.

Recall first that the new USW leadership has largely repudiated any emphasis on a macho "culture of risk" amongst workers. Historically, the IWA's previous emphasis on worker culture and worker error as the correctable sources of death and injury was, if anything, shared more intensely by employers organizations such as the forest industry's organization, COFI (cf. Keelor 1996). The union's new and assertive campaign has instead drawn links between OHS issues and the sudden and rapid outsourcing of tree-falling work. These competing historic explanations of leading injury patterns for tree-fallers imply that relatively coherent, competing claims about effective policy responses exist in the policy subsystem (Sabatier 1988; Sabatier and Jenkins-Smith 1993).

Analytically, of course, the multivariate analyses do demonstrate that such a polarized choice of explanations of injury and death is a scientifically dubious proposition in making sense of industrial injuries and death. The two main types of explanation respectively bespeak gender insights (macho, risk-taking culture) and class insights (increased precariousness of work to the benefit of management) that are not only both plausible, but also plausibly linked to one another (cf. Fudge and Vosko 2003; Neis, Cartier et al. 2003; Neis, Binkley et al. 2005; Ommer 2006).

To demonstrate where a gendered *and* classed analysis could lead, consider again the USW's changed orientation to the OHS question for tree-fallers. Its newer emphasis can readily be related to recent scholarly research into the decline of postwar labour norms, and the exceptional growth of precarious work in the post-Fordist era (Quinlan; Quinlan, Mayhew et al. 2001; Fudge and Vosko 2003; Fudge and Owens 2006, 10-2).

The accelerated trend towards greater precariousness in tree-falling work marks a normative and quantitative shift of these jobs away from the so-called Standard Employment Relation (SER) of the postwar period. The class implications of this are clear, at least from within the terms of critical political economy. But this does not lead the analysis away from gender. A male breadwinner and a female homemaker were the pivotal poles in this model, which strictly constrained acceptable patterns of domestic life and social reproduction (Vosko 2000, 15, 21-34).

Class contradictions are obviously embedded in any case that could be made for the causal importance of a macho "culture of risk" – particularly in the common valorization of courage and stoicism before an unchangeable fate. Masculine cultures are reinforced and maintained by both management and the very workers affected, in this case to the primary detriment of the male workers. Note that fatalistic discourses are ultimately necessary affirming the virtues of immediate physical courage and stoicism at work. It is notably rare that such discourses lead to abandoning a particular industry or work practice. Instead, workers exposed to such high-risk settings are called upon to "be men" in the face of an *unchangeable* fate.

If this is so, why would male workers accept and even reinforce a commonsense about masculinity at work that serves them so poorly? In broad terms, these contradictions fit within the characteristic masculine stoicism, as well as the characteristic physical competitiveness, and (of particular relevance in resource industries) man-nature and mind-body dualisms (Marchak 1983, Introduction; Dunk 1994; cf. Braun 2006). Gender analysis also helps to explain why increased precariousness is sometimes politically difficult to discuss in the context of highly masculinised labour like tree-falling. It requires men first to admit to a vulnerability that colleagues may not share, and then to organize around the principle that they have been made vulnerable by their employers (typically, other men). Relative to this problem confronting unionized responses in the sector, the surface attraction of outsourcing tree-falling operations to masculine identities is that the increased precariousness in the work itself can played against the prestige and independence of "being one's own boss". This is reinforced ideologically by the formal equality of parties to what can be strict and highly contingent contracts.

With respect to relating this matter to a gender/class analysis more concretely, it may be said with some justice that in the process of contesting what it viewed as a blame-the-victim strategy, the USW halted its own internal discussion about (gendered) cultures

of risk as a contributing factor in OHS risk amongst tree-fallers. Indeed, it would be understandable if the union felt *obliged* to do so, in the face of contending positions that historically privileged such questions *over against* questions of work place organization and control.

To some degree, of course, there is no ready way to overcome the relative dangers of felling and extracting timber from rugged, remote, and ever-changing environments. The machinery and cutting tools are heavy and powerful; work continues around the clock and in ever-changing weather (cf. Cloutier 1988; Rummer 1995; Carrière and Dionne-Proulx 1998; see esp. Prudham 2005, 31). In BC, death and injury rates and assessment rates for logging stand significantly above the provincial average over the entire history of keeping sectoral records.¹⁰

But under conditions of sudden and highly visible change, this essentially abusive aspect of masculine discourses might appear particularly vulnerable to a critique leading to transformative social change. As one example, individual workers may feel vulnerable when progressive resource exhaustion and capital-intensified extraction drives resource workers into increasingly marginal and risk-laden worksites/landscapes (cf. Neis, Binkley et al. 2005; Ommer 2006).¹¹ As another example of sudden and highly visible change, we have seen that the general move towards workers' compensation systems in the early 20th century was rationalized in terms of a heightened level of workplace death and injury becoming a "natural" (and thus unchangeable) feature of the industrial age.

There is also reason to believe that such a circumstance might suggest an opportunity for organized responses to the forces driving the unsustainable behaviours. A major object of historical policy research during such turning points might usefully inquire into the forces impeding the emergence of alternative, more progressive masculinities. In concrete historical cases, what prevents or interrupts the emergence of such masculinities that would instead mobilize such latent masculinized themes as courage in the face of adversity into a collective movement that asserts and then demonstrates the changeability of adverse conditions?

An obvious answer is that the USW has represented such a force, albeit under conditions that put such class-based organizations under increased pressure due to outsourcing. The slopes may be steep and the trees are enormous, but woodwork does not have to be as dangerous as it has been in British Columbia (Forest Safety Task Force 2004). Neither class nor gender identities can or should be fully disentangled from the collective identities that can articulate a response (cf. Harvey 1996; Wright 2006).

¹⁰ http://www.worksafebc.com/about_us/history/statistics_and_chronology/.

¹¹ Of course, this tendency is partially (but only partially) offset by technological breakthroughs, resource substitutions, and infrastructural investments to access previously untouched or wasted resources.

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