Rural and Urban Labour Processes: A Comparative Analysis of Australian and Canadian Development

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Introduction

"MODERN ENVIRONMENTS and experiences," as Marshall Berman aptly stated, "cut across all boundaries of geography and ethnicity, of class and nationality, of religion and ideology."¹ It should not be forgotten, however, that people form distinct societies and that past generations of Australian and Canadian peoples have not simply lived and worked in replicas of major industrial centres such as the British Midlands or the American Midwest. The main difficulty in comparing how Australian and Canadian workers have been socialized to and disciplined by conditions of capitalist production, arises from the perennial issue of first determining what can be considered representative work settings in both countries. Addressing this issue is anything but a simple matter, for as David Harvey contends, it pertains to "one of the more startling schisms in our intellectual heritage concerning conceptions of time and space."²

Traditionally, labour process analysis has been guided by a social theory of progress which downplays, and often disregards, spatial realities (that is, *being* a woodsman, a rural labourer, a mill town worker, an urban factory employee) to emphasize temporality (that is, *becoming* a skilled craft worker, a semi-skilled operative, a de-skilled industrial wage-earner). In seeking to outline how work has evolved in the capitalist economic system, the traditional labour process perspective has reduced people's many and shifting spatial realities (city, countryside and

¹M. Berman, All That Is Solid Melts Into Air (New York 1982), 15.

²D. Harvey, The Condition of Postmodernity: An Enquiry into the Origins of Cultural Change (Cambridge, MA 1990), 205.

Jacques Ferland and Christopher Wright, "Rural and Urban Labour Processes: A Comparative Analysis of Australian and Canadian Development," *Labour/Le Travail*, 38 (Fall 1996)/*Labour History*, 71 (November 1996), 142-69. wilderness, metropolis and hinterland, region and nation, core and periphery) and largely rendered "space a contingent rather than fundamental aspect to human action."³ By concentrating upon how management converts men's and women's potential for work into actual work effort, labour process writers have further focused our attention on the more manageable work settings of well-circumscribed, closely monitored units of production. For writers such as Braverman, Edwards, and Burawoy, an analysis of the capitalist labour process to a large extent entailed a depiction of the development of the US factory system as a general phenomenon.⁴

A perspective in which space is "treated as the dead, the fixed, the undialectical, the immobile," however, is likely to mirror the social alienation of the countless men and women whose work experience was characterized by transitoriness, ephemerality, and fragmentation.⁵ In tracing the many paths of commodity production in Australia and in Canada, during the late 19th and early 20th centuries, one is struck by the varied, changing, and contrasting ways and means by which human activity was set to work as labour power. In many cases such labour processes are simply too diverse and fragmented to be bound and contained by evolutionary landmarks such as the heyday of "craft-based production," the "factory regime," or the "era of scientific management." While such typologies of labour process development capture trends and tendencies in certain segments of working life. they also seem an evasion of reality, an intellectual construct of selected, but disconnected fragments of the social processes by which nature has been transformed to fulfil human needs.

This paper seeks to confront some of these limitations by highlighting the diversity of labour processes experienced by Australian and Canadian workers during the late 19th and early 20th centuries. The paper begins by outlining the context of economic development in the two countries and their place in the broader international economy. We then go on to examine the nature of work and employment, firstly in rural and then urban environments. A key argument of this paper is that a comparative analysis of labour processes in Canada and Australia highlights the need to examine the varied experiences of workers in different spatial contexts. Such a view we believe contrasts with traditional labour process accounts which

³Harvey, The Condition of Postmodernity, 205.

⁴Principal examples of the labour process perspective include H. Braverman, Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century (London 1974); R. Edwards, Contested Terrain: The Transformation of the Workplace in the Twentieth Century (New York 1979) and M. Burawoy, Manufacturing Consent: Changes in the Labour Process Under Monopoly Capitalism (Chicago 1979). For a review of the labour process literature see P. Thompson, The Nature of Work: An Introduction to Debates on the Labour Process (2nd. edn., London 1989). Australian and Canadian overviews are provided by G. Patmore, Australian Labour History (Melbourne 1991), ch. 5 and C. Heron. and R. Storey, On the Job. Confronting the Labour Process in Canada (Montréal 1986).

⁵Harvey, Condition of Postmodernity, 10 and 205.

have tended to over-emphasize the generality of formalized systems of managerial control in modern urban work settings.

Australia and Canada in the International Economy

Australia and Canada have occupied mostly marginal, yet substantially different places within the world economy. From the 1870s until after World War I, both countries were largely located at the margin of an industrial core "roughly bounded by Chicago and St. Louis in the west, by Toronto, [Montréal], Glasgow, and Berlin in the north, by Warsaw, Lodz, and later Budapest in the east, and by Milan, Barcelona, Richmond, and Louisville in the south."⁶ As a relatively small northern extension of this core, Canada projected three different faces internationally, while Australia and New Zealand conveyed the more distinctive impression of new pastoral economies whose people were evolving under a "tyranny of distance."⁷

First, it is true that the southern fringe of central Canada was "throbbing with manufacturing activity" to the extent that, by 1913, the country ranked third in the world in manufacturing output *per capita*, and "by the end of the Second World War ... ranked second only to the US" in this measure of industrial progress.⁸ Paradoxically however, Canada's metropolitan development failed to provide adequate employment in the country's oldest provinces, and the massive exodus of eastern Canada's French and English-speaking residents to the US resulted in a relatively slow growing industrial workforce.⁹ While the US manufacturing labour

⁶D. Montgomery, *The Fall of the House of Labor: The Workplace, the State, and American Labor Activism, 1865-1925* (Cambridge, MA 1989), 70. Montgomery's inclusion of Toronto and exclusion of Montréal does not accurately reflect the northern boundaries of North America's industrial core.

⁷This expression is drawn from G. Blainey, *The Tyranny of Distance: How Distance Shaped* Australia's History (Melbourne 1966).

⁸D. Kerr, "The Emergence of the Industrial Heartland, c. 1750-1950," in L.D. McCann, ed., *Heartland and Hinterland. A Geography of Canada* (2nd edn., Scarborough 1987), 89; A. Maizels, *Industrial Growth and World Trade* (Cambridge 1963), 31 (our emphasis).

⁹For different overviews of this phenomenon, see: Y. Lavoie, L'emigration des Canadiens aux Etats-Unis avant 1930: mesure du phenomene (Québec 1979); R. Vicero, "The Immigration of French Canadians to New England, 1840-1900: A Geographical Analysis," PhD thesis, University of Wisconsin, 1968; Y. Roby, Les Franco-Americains de la Nouvelle-Angleterre, 1776-1929 (Sillery, 1990); B. Ramirez, On the Move: French Canadians and the Italian Migrants in the North Atlantic Economy, 1871-1914 (Toronto 1991); A. Brookes, "Out-Migration from the Maritime Provinces, 1860-1900: Some Preliminary Considerations," in P.A. Buckner and D. Frank, eds., Atlantic Canada After Confederation. The Acadiensis Reader: Volume Two (Fredericton 1985); G. Wynn, "New England's Outpost in the Nineteenth Century" and M. Conrad, "Chronicles of the Exodus: Myths and Realities of Maritime Canadians in the United States, 1870-1930," in S. Hornsby, Victor A. Konrad and James J. Herlan, eds., The Northeastern Borderlands: Four Centuries of Interaction (Fredericton 1989). force expanded fourfold during its industrial "drive to maturity" (growing from 1.5 million workers in 1860 to nearly 6 million in 1900), manufacturing employment in Canada's heartland only doubled during the 40 years following the National Policy (1879). In comparison to the US, employment in Canadian secondary industry increased modestly from 400,000 wage-earners in 1891 to around 1 million blue-collar workers in 1929.¹⁰

Second, as was the case with European "peripheral" countries, during the closing decades of the 19th century, eastern Canada's primary export to the world-system was cheap labour. Hundreds of thousands of Canadian men, women, and children found their guiding light in the US rather than in Toronto, Hamilton, or even Montréal. At the same time, central and western Canada attracted their share of Europe's "proletarian globe-hopping" so that, in spite of the massive expatriation of English-speaking Maritimers and of seventh-and eighth-generation Acadians and French Canadians, the average net migration for the whole country surpassed Australia's average of 65,000 people per year between 1901 and 1910.^{f1} By this time, Canada's third and more widely perceived image, of a resource-based economy mythically portrayed in virgin landscapes bridged by transcontinental railways, was finally paying dividends in muscle power for both hinterland expansion and heartland development. The country became even more addicted to staple export, and while the independent commodity production characteristic of much old staple production during the 19th century persisted in wheat-growing, fishing, and some logging, modern wage labour relations spread to mines, ranches, meatpacking plants, pulp and paper mills, and aluminium towns.¹² As a result of this industrial landscape of contrasting realities (a growing but increasingly clustered industrial core, a versatile but depopulating eastern periphery, and successively booming and busting staple-producing hinterlands), it was Canada's paradoxical

¹⁰Data on the United States labour force drawn from S. Brier, ed., Who Built America? Working People & the Nation's Economy, Politics, Culture & Society. Volume Two: From the Gilded Age to the Present (New York 1992), 12. Data on Canada's workforce drawn from McCann, Heartland and Hinterland, 16 and 91.

¹¹As noted by Montgomery in *Fall of the House of Labor*, Frank Thistlethwaite should be credited for the expression "proletarian globe-hopping" in his influential study, "Migration from Europe Overseas in the Nineteenth and Twentieth Centuries," in *XI Congres interna-tional des sciences historiques. Rapports* (Stockholm 1960), 32-60. Comparative data on net migration in Australia and in Canada are drawn from: M. Waters, *Strikes in Australia:* A Sociological Analysis of Industrial Conflict (Sydney 1982) and McCann, *Heartland and Hinterland*, 48.

¹²W. Clement, "A Political Economy of Resources: Debates and Directions in Canada," *Australian-Canadian Studies*, 4 (1986), 51-64; G.W. Bertram, "Economic Growth in Canadian Industry, 1870-1915: The Staple Model," in W.T. Easterbrook and M.H. Watkins, *Approaches to Canadian Economic History* (Toronto 1967), 74-98.

position to become a "mature branch-plant society," and to serve both as "quasimetropolitan nation" and the "economic hinterland" of the US.¹³

By comparison, Australia's situation was simultaneously more peripheral to the industrial core and lacked any comparable out-migration of its working population. It was, however, even more reliant than Canada upon the export of primary produce, and its economic development was more closely tied to the needs of British finance and industry. Australia's dependent relationship with Britain retarded industrialization. Income earned through the export of wool, coal, and minerals was used to pay for British manufactured imports. As a result, manufacturing industry in the Australian colonies during the later 19th century was limited to the production of simple consumer products (clothing, food, and drink), building materials, and some metal fabrication particularly in the servicing and repair of agricultural machinery. Reflecting the weaker nature of industrialization, while Australia's manufacturing workforce grew at a somewhat faster rate than Canada's, it did so from a far lower base. In 1891, approximately 180,000 were employed in Australian manufacturing, expanding to 490,000 by 1929.¹⁴ Despite the growth of secondary industry during the early decades of the 20th century, the Australian economy continued to rely upon primary production. Not only did Australia's rural industries of the 1930s provide nearly a quarter of male employment, but they also contributed three-fifths of national production and three-quarters of export income. Like other primary producing settler economies, such as Argentina, Australians built upon this resource base to achieve greater urbanization, to improve production infrastructure and communication, and gradually to overcome the dependence on imported goods. Nevertheless, the limits to industrialization posed by prior colonial relations, geographic distance, and the limited size and scale of domestic markets reinforced Australia's "semi-industrial" status.¹⁵

There were also important differences between Canada and Australia in terms of the ethnic composition of the workforce and the extent and nature of collective worker organization. In contrast to Canada's fluid, ethnically-fragmented and

¹³McCann, Heartland and Hinterland, 39; W. Clement, Class, Power and Property. Essays on Canadian Society (Toronto 1983), ch. 3; G. Williams, Not For Export: Toward a Political Economy of Canada's Arrested Industrialization (Toronto 1983), ch. 1.

¹⁴P. Cochrane, Industrialization and Dependence: Australia's Road to Economic Development, 1870-1939 (St.Lucia 1980), 3-6; Waters, Strikes, 91-6; E. Boehm, Twentieth Century Economic Development in Australia (2nd edn., Melbourne 1979), 162-3; G. Withers, A. Endres and L. Perry, "Labour," in W. Vamplew, ed., Australians: Historical Statistics (Sydney 1987), 149.
 ¹⁵Waters, Strikes, 115; C. Forster, Industrial Development in Australia, 1920-1930 (Can-

¹³Waters, Strikes, 115; C. Forster, Industrial Development in Australia, 1920-1930 (Canberra 1964), 104; N. Butlin, "Some Perspectives of Australian Economic Development, 1890-1965," in C. Forster, ed., Australian Economic Development in the Twentieth Century (Sydney 1970), 312; The world trade economist Alford Maizels divided countries into "industrial," "semi-industrial," and "non-industrial" economies on the basis of the value of manufacturing output per capita and the proportion of finished goods they exported, see Maizels, Industrial Growth. "border-hopping" labour force, Australia's population remained dominantly British. The Australian workforce therefore lacked any equivalent regionally-entrenched minority group such as the French Canadians, included few Mediterranean immigrants in comparison to countries such as Argentina, had a small aboriginal population compared to South Africa, and a declining number of Chinese and Kanaka workers at the very edge of the world's greatest pool of cheap labour. Such an ethnically homogenous population was the product of a deliberate policy of exclusion instituted by colonial and later Federal governments and backed by labour's fear of "cheaper" foreign workers under-cutting existing wages and conditions, as well as more general racist views throughout Australian society. Australian legislators therefore sought to avoid the kind of massive influx of people which brought over two million new citizens from varied ethnic backgrounds to Canada between 1903 and 1912.¹⁶

Australian workers also appeared more widely unionized than their Canadian counterparts. Such differences were most pronounced in industries such as shearing, meat slaughtering, coal and mineral mining, railways, and maritime and road transport where workers extended trade unionism beyond traditional craft bounds. Despite a major set-back during the 1890s depression, union membership recovered strongly during the early decades of the 20th century, buoyed in part by the legal recognition granted to unions under compulsory state industrial arbitration. Whereas the unionization rate in Canada roughly followed American trends, dropping for example to about 11 or 12 per cent of the non-agricultural workforce in the mid-1920s, Australia's union membership expanded from 8 per cent in 1891, to 25 per cent in 1911, and to about 42 per cent throughout the 1920s.¹⁷ While Australian rural workers such as shearers, meat-workers, and miners, engaged in collective bargaining with employers over wages and work effort, and often succeeded in enforcing more negotiated outcomes, similar practices were often lacking amongst Canada's agricultural workforce.¹⁸ The concept of a "semi-pro-

¹⁶M. Willard, *History of the White Australia Policy* (Melbourne 1967); W. Forsayth, "The Australian Population Problem," in G. Wood, ed., *Australia. Its Resources and Development* (New York 1947), 39-51; Patmore, *Australian Labour History*, 184-99; Waters, *Strikes*, 71-2, 77-9, 96-7, 100, 105, 107, 109 and 119-20. Figures on Canadian immigration drawn from B. Palmer, *Working-Class Experience: The Rise and Reconstitution of Canadian labour*, 1800-1980 (Toronto 1983), 142.

¹⁷Details of the rise of the so-called 'new unions' and the effect of arbitration are outlined in Patmore, *Australian Labour History*, 56-65 and 120-6 and Waters, *Strikes*, 98 and 120-3. For Canadian unionism see B. Palmer, *Working-Class Experience*, 149, 189-90.

¹⁸Such collective bargaining was often institutionalized via Australia's compulsory industrial arbitration system. For examples of collective bargaining see E. Willis, "Trade Union Reaction to Technological Change: The Introduction of the Chain System of Slaughtering in the Meat Export Industry," *Prometheus*, 3 (1985), 51-70; K. Tsokhas, "The Shearing Labour Process, 1900-1914," *Labour History*, 59 (1990), 87-103; J. Hagan and C. Fisher, "Piece Work and Some of its Consequences in the Printing and Coal Mining Industries in Australia, 1850-1930," *Labour History*, 25 (1973), 19-39.

letariat," equally applicable to the class experience of small farm-holders, agro-forest workers, sojourning immigrants and many "frontier" labourers, might be a more accurate way of characterising the material practices and *petit bourgeois* aspirations of a significant stratum of Canadian agricultural workers. Canada's uneven development and especially its regional underdevelopment implied that, "rather than having been absorbed by wage labour relations," numerous independent commodity producers were "perpetuated as a class in ever more marginalised and economically dependent forms."¹⁹

How then can Australia's and Canada's respective positions in the international economy meaningfully inform labour process analysis? With respect to the nature of industrial work, neither country fared well in marketing producer and consumer goods to the rest of the world; both Australian and Canadian industry remained principally focused upon the production of basic and intermediate goods (food, shelter, clothing, etc.) for domestic consumption.²⁰ Of course, capitalist promoters and politicians did induce several rounds of "import-substitution" by sheltering local manufacturing through tariff protection and other forms of industry assistance.²¹ But out-migration in late-19th century Canada and limited immigration prior to the 1950s in Australia's case, seriously hindered any possibility of matching the economies of scale of American, British, and German mass production. In spite of the emphasis on "heavy" industries in both countries' economic and labour histories, the fact remains that "light" industries — always more statistically fragmented than "iron and steel products" and "transport equipment" — long dominated as sources of employment and value added.²²

²⁰In 1955, Australia's and Canada's export of finished manufactures accounted respectively for 6 and 11 per cent of their total exports. Comparative data for other industrial countries are: Japan (64 per cent), Italy (47 per cent), Federal Germany (65 per cent), Sweden (33 per cent), the United States (48 per cent), Great Britain (62 per cent), and France (38 per cent). Figures drawn from Maizels, *Industrial Growth*, 59 and 64.

²¹Williams, Not For Export, ch. 2; G. Linge, "The Forging of an Industrial Nation: Manufacturing in Australia 1788-1913," in J. Powell and M. Williams, eds., Australian Space, Australian Time: Geographical Perspectives (Melbourne 1975); and G. Linge, Industrial Awakening: A Geography of Australian Manufacturing 1788-1890 (Canberra 1979).

²²Industries involved in the production of basic consumer goods constituted about 64 per cent of total manufacturing employment in Canada and about 60 per cent in Australia during

¹⁹B. Fairley, C. Leys and J. Sacouman, eds., *Restructuring and Resistance. Perspective from Atlantic Canada* (Toronto 1990), 11. For other empirical and theoretical perspectives on the *petit bourgeois* aspirations of workers "captivated by the agricultural dream," see J. Parr, "Hired Men: Ontario Agricultural Wage Labour in Historical Perspective," *Labour/Le Travail*, 15 (1985), 91-103; R. Sacouman, "Semi-Proletarianization and Rural Underdevelopment in the Maritimes," *Canadian Review of Sociology and Anthropology*, 17 (1980); F. Albert, *Immigrant Odyssey. A French-Canadian Habitant in New England* (Orono 1991); G. Burrill and I. McKay, *People, Resources, and Power* (Fredericton 1987).

Both countries' peripheral location to the industrial core thus serves to accentuate the significance of human consumption of nature's economy. By physical definition, the labour process encompasses all human activity, or labour, set to work as labour power on any given object and by whichever means along the path of commodity production.²³ Basic commodities such as food, textiles, clothing, footwear, printed matter, furniture, building materials, and housing were not just made in the city, as is often suggested in the historical literature. More accurately, they were made by all those who devoted time and energy to commodify value stored in nature: as members of the agricultural and non-agricultural workforce, as "resource proletariat," "industrial proletariat," and transportation workers, as "common," seasonal and transient labourers, and as waged and unwaged individuals. However classified by social scientists and reconstructed by historians, basic commodity production began away from the city, with the human exploitation of "autonomous ecological processes."²⁴ Accordingly, and more typically for Australia and Canada than for the US, labour process developments extended well beyond the urban/metropolitan stages of commodity production to the physical labour of men and women whose role was to extract value from nature's economy, as well as to preserve, partly process, and convey this stored value within the bounds of denser human communities.²⁵

the 1920s and 1930s. Canadian manufacturing industries associated with the basic necessities of daily life — exclusive of wood products, fuel, and shelter — accounted for about 40 per cent of manufacturing value added in the first 4 decades of the 20th century. Similar to the forest-related industries (wood products, paper products, and "printing, publishing, and allied industries"), the "heavier" metal industries ranked far behind at about 20 per cent of manufacturing value added. See Bertram, "Economic Growth in Canadian Industry," 86-7 and Withers *et al.*, *Labour*, 149.

²³The labour process has been defined very differently by various authors. Patmore, for example, argues the "essential question of labour process analysis is how management transforms the potential for work (labour power) into work effort (labour)." By contrast, Harvey seeks to expand the conceptual boundaries of labour process analysis when he states that it entails "in the first instance, some mix of repression, habituation, co-option and cooperation, all of which have to be organized not only within the workplace but throughout society at large." For their part, Heron and Storey choose to emphasize the physical nature of the labour process referring to work as "a process whereby flesh-and-blood human beings actively transform raw materials into finished products or perform vital services within a complex social setting." See Patmore, Australian Labour History, 131; Harvey, Condition of Postmodernity, 123; Heron and Storey, On the Job.

²⁴W. Cronan, Nature's Metropolis. Chicago and the Great West (New York 1991), 149.

²⁵For a masterful example of "the linkages between the commodities of our economy and the resources of our ecosystem" see Cronan, *Nature's Metropolis*.

Rural Itineraries to Basic Commodity Production

The complexity of extracting value from nature's economy resulted in a wide range of work settings in Australian and Canadian rural society. Instead of toiling in a systematically-controlled environment, workers in agriculture, mining, fishing, and forestry were exposed to a variety of elemental forces, where accidents and fatalities were a common occurrence.²⁶ Rural workers were further expected to cope with sharply fluctuating business cycles and the seasonality of nature's economy. Responses included the adoption of pluralistic work patterns in fishing,²⁷ transient labour in logging,²⁸ shearing and slaughtering,²⁹ and brief, but hectic periods of work in harvesting and gathering.³⁰ Unlike the urban factory employee, these rural workers' experience of "industrial time" was often dictated not so much

²⁶To our knowledge, there exists no Australian or Canadian study comparing industrial accidents in urban and rural, or heartland and hinterland contexts, perhaps because statistics in industries such as railways, transportation, and the building trades are difficult to disaggregate. Nevertheless, despite high accident and fatality rates in certain sections of manufacturing, rural and outdoor workplaces were a source of constant danger. Principal examples included hypothermia, drowning, forest fires, heat strokes, and mine collapse. In 1904, for example, about 80 percent of Canada's non-fatal work-related accidents and 55 percent of its work-related fatalities occurred in railway and general transportation, lumbering, mining, woodworking, agriculture, fishing, and among the unspecified occupations of unskilled labourers. See, Robert Babcock, "The Hartz-Lipset Thesis Reconsidered: The problem of industrial accidents in the United States and Canada," paper presented at the biennial conference of the Association for Canadian Studies in the United States, November 1993, 4-5.

²⁷M. MacDonald and P. Connelly, "Class and Gender in Nova Scotia Fishing Communities," in *Restructuring and Resistance from Atlantic Canada*, 152-70.

²⁸Ian Radforth, Bushworkers and Bosses. Logging in Northern Ontario 1900-1980 (Toronto 1987) and R. Rajala, "The Forest as Factory: Technological Change and Worker Control in the West Coast Logging Industry, 1880-1930," Labour/Le Travail, 32 (1993), 73-104.
 ²⁹Willis, "Trade Union Reaction"; Tsokhas, "The Shearing Labour Process."

³⁰While it is often argued that the introduction of grain reapers and harvesters greatly lowered seasonal farm labour requirements, it is important to note that with the advent of mass consumerism, an increasing variety of fruits and vegetables had to be harvested or gathered. In Canada, see for example, M. Conrad, "Apple Blossom Time in the Annapolis Valley, 1880-1937," Acadiensis, 9 (1980), 14-39; T. Murphy, "Potato Capitalism: McCain and Industrial Farming in New Brunswick," in Burrill and McKay, eds., *People, Resources, and Power*, 19-29; M. Bunce and M. Troughton, eds., *The Pressures of Change in Rural Canada* (Toronto 1984); G. Haythorne and L. Marsh, *Land and Labour. A Social Survey of Agriculture and the Farm Labour Market in Central Canada* (Toronto 1941); J. Thompson and A. Seager, "Workers, Growers, and Monopolists: The 'Labor Problem' in the Alberta Beet Sugar Industry During the 1930s," *Labour/Le Travailleur*, 3 (1978), 153-74. The itinerant and casual nature of agricultural labouring in Australia is also outlined in C. Fox, *Working Australia* (Sydney 1991), 36-7.

by the punching clock or the steam whistle, as by ecological processes beyond human control.

The case of boot and shoe making provides a good example of the linkages between rural labour and urban manufacturing, as well as the varied nature of such rural labour processes. Contrary to common belief, urban shoe factories did not produce consumer goods; more accurately, they cut, assembled, designed, and fashioned pieces of leather whose production had been initiated several months before in less populated rural settings.³¹ Such leather production involved a range of rural occupations: hunters and slaughtermen, who provided the skins and hides; bark peelers employed to extract tanbark to cure the leather; and tannery workers who oversaw the tanning process. While such work differed greatly from the technical wonders so often celebrated in contemporary descriptions of urban industrial shoe production, the fact remains that all of these work settings formed integral dimensions of the commodity-producing system that yielded leather footwear well into the 20th century. To view bark peelers, slaughtermen and hunters, and tannery hands, alongside urban shoe makers, as having all been involved in the same societal contribution, represents a necessary step toward perceiving basic commodity production for what it has generally been historically: a process of destructive creation. Nor were such rural linkages unique to Canadian manufacturing. For example, in Australia during the 1910s and 1920s, as Melbourne shoe workers assembled pieces of leather with modern machinery supplied by the United Shoe Machinery Corporation. Australian hunters were involved in a trade that garnered up to a million and a half kangaroo skins per year, chiefly exported to the US for "high-grade athletic and sporting shoes" and "women's high-grade walking shoes." At the same time, Australia's slaughtermen contributed millions of sheepskins and up to two million cattlehides annually, most of which were earmarked for the domestic and overseas production of shoe soles, stays, facings, and linings.³²

³¹The historiographical legacy of research on boot and shoe making perfectly illustrates the "intellectual schism" between conceptions of time and space. Almost invariably, scholars have projected the urban shoe factory as a model of the early transition to industrial capitalism while neglecting to look at its backward linkages in the countryside, at the periphery, and in the wilderness. Knowledge, thus circumscribed, is essentially temporal as it matters little whether the impact of the industry's universal machinery and division of labour is felt in Boston, Lynn, Montréal, Toronto, Melbourne, or Sydney. Relevant works include: G. Kealey, Toronto Workers Respond to Industrial Capitalism (Toronto 1980); A. Dawley, Class and Community: The Industrial Revolution in Lynn (Cambridge 1974); M. Blewett, Men, Women, and Work: Class, Gender, and Protest in the New England Shoe Industry, 1780-1910 (Chicago 1988); R. Frances, The Politics of Work. Gender and Labour in Victoria 1880-1939 (Melbourne 1993); M. Bluteau et al., Les cordonniers: artisans du cuir (Montréal 1980). ³²J. Arnold, *Hides and Skins* (London 1925), 262 (table 6), 303-5, 372 (table 12), 414-7 and

513-8.

In sharp contrast to the minute division of labour in modern shoe factories, the processing of hides into leather was gauged in weeks and months. However, rural tanneries were not simply "forest factories." The physical layout of the bark and hide mills, leaches, sweat vaults, tan vats, drying turret, and rolling loft, as well as the man-made hydrographic network of dams, canals, and flumes, are probably better regarded as a peripheral industrial plant designed to harness nature's energy and bio-chemistry on a grand scale.³³ While contemporary observers perceived the essence of industrialization in terms of the dramatic increases in productivity (easily witnessed in the work tempo of factory hands), the output of such rural industries was equally profound. In spite of the months required to transform heavy hides into leather, a single rural tannery could turn out a year's supply of sole leather for several large, urban boot and shoe factories.³⁴

Indeed, boot and shoe manufacture required the mass consumption of the forest well before anyone could contemplate the possibility of mass producing footwear. Growing demand for leather boots and shoes resulted in increasing demands on rural resources. As one observer in the Catskill mountains of New York noted in 1840:

In every hemlock forest, on every falling stream, and accompanying the interior settlements in every direction, may be seen tanneries of the largest structure, giving employment to the wood-cutter, the bark-peeler, the teamster, and the wheelwright; and under the consuming fires of their never-glutted 'leeches'[sic], the forests of hemlock are rapidly giving place for the plough of the husbandman $...^{35}$

The need for large volumes of tanbark resulted in the employment of large numbers of bark-peelers.³⁶ During the latter half of the 19th century the scale of such

 ³³For details of tannery work see G. Zahavi, Workers, Managers and Welfare Capitalism: The Shoeworkers and Tanners of Endicott Johnson, 1890-1950 (Urbana 1988); P. Welsh, Tanning in the United States to 1850. A Brief History (Washington 1964); M. Atkinson, Hinckley Township or Grand Lake Stream Plantation (Newburyport 1921); J. Dupont and J. Mathieu, eds., Les metiers du cuir (Québec 1981); R. Labelle, Tanneurs et tanneries du Bas Saint-Laurent (1900-1930) (Ottawa 1974).
 ³⁴Statement based on research in progress in the state of Maine and the province of Québec.

³⁵Statement based on research in progress in the state of Maine and the province of Québec. ³⁵F. Hunt, *The Merchants' Magazine and Commercial Review*, Vol. 3 (New York 1840), 142-3.

³⁶For details of the bark peeling process see B. McMartin, *Hides, Hemlocks and Adirondack History* (Utica 1992), 45-7; R. Milliken and R. Rogers, *Forest for the Trees. A History of the Baskahegan Company* (np 1983), 37-40; W. Arcouette, "Souvenances de Roxton Falls," *Roxton Falls au fil des ans* (Roxton Falls 1992), 23; State of Maine, *Tenth Annual Report of the Bureau of Labor and Statistics 1896* (Augusta 1897), 72-6. More accurate sources are found in legal publications such as: State of Maine, Washington County, Sup. Jud. Court, January Term, 1884, "John K. Ames vs. Fayette Shaw *et al.*," "Declaration," "Report of Evidence," and "Judge's Charge." harvesting was significant. Throughout the borderlands territory of upstate New York, central and eastern Maine, western New Brunswick, and southeastern Ouébec, between two and three million hemlock trees were "extracted" annually in order to make thicker and harder boot and shoe soles.³⁷ The labour process of bark peeling was based upon hard manual labour in extreme conditions. Bark peelers in Appalachia and the Adirondacks worked in hot and humid conditions and were tormented by clouds of biting insects. To counter the insect threat, workers covered themselves with hemlock pitch, or "slime." As one Maine woodsman stated:

Peeling wood was miserable, damn miserable. All the flies, heat, pitch, everything you touch sticks to you ... I'd get out of my pants and stand them in the corner. You didn't hang them up, you just stood them. Get into them in the morning, it was like shoving your feet into two stove pipes. Pitch was so thick you couldn't wash it off, and no use of trying. You wore the same pants till the legs broke - or you got done peeling.³⁸

Bark-peeling was commonly carried out by a four-man crew, which was often driven at a furious pace by the leader of the gang in order to earn their twenty dollars per month. By relying on the muscle power of men and beasts, on the common axe and other simple manual tools, the work of stripping bark was slow and labour-intensive. With an average daily productivity of "about three-fourths of a cord, peeled and piled, to a man" by the late 19th century, around 25,000 would have been needed to peel 3 million trees during a single month in the borderlands of northeastern North America.³⁹ The employer's command over these workers' capacity to perform under such strain, was exercised through the application of strict contractual specifications, the agency of the sub-contractor and the land surveyor, and the influx of ill-informed, destitute, cheap labour whose "captivity" stemmed from the conventional practice of withholding wage earnings until the season was over.⁴⁰ Many of these workers were young, unattached rural labourers - French Canadians, New Brunswickers, and Prince Edward Islanders, who came

³⁷Estimates for upstate New York are derived from McMartin, Hides, Hemlocks and Adirondack History (Utica 1992), 106. Estimates for Maine are derived from personal research in Maine manuscript census and local newspapers. Contrary to common belief, the "tanbark" period did not simply give way to mineral or synthetic substitutes on the eve of the 20th century. The heavy leather industry migrated to central Ontario, northern Michigan, and Wisconsin where it increasingly imported tannin extracts derived from similar stripping operations at the periphery of the world economy. ³⁸Quoted in Milliken and Rogers, *Forest for the Trees*, 39.

³⁹State of Maine, Tenth Annual Report, 74.

^{40.} John K. Ames vs. Fayette Shaw et al.," "Declaration," and "Report of Evidence." The role of the surveyor is documented in Maine Special Collection, Prentiss and Carlisle Papers (Bills), 1870s-1892, several volumes.

in droves from the eastern Canadian periphery to work at bark-peeling in the Maine wilderness.⁴¹

The other essential ingredients in leather production were skins and hides. Unlike bark stripping, the slaughterman's killing techniques were often sociallyconstructed as a trade worthy of respect. In his highly imaginative depiction of Argentinian pampa society, Ezequiel Martinez Estrada captures the cattle executioner's "art" by drawing a historical parallel between slaughtering and surgery:

To flay, to scarify, and to disjoint the cow was a complicated occupation; the hand rapidly became practiced at using the knife like a bistoury along the tissues to separate the fat, the meat, and the bone. Among the professionals, the delicate art of minimal movements was admired — the anatomical dexterity of the blow.⁴²

An extensive literature exists on the development of the American meatpacking industry. The introduction of chain production in hog slaughtering in the 1840s in Cincinnati, highlights the beginnings of increased mechanization of the industry.⁴³ Such a disassembly line was later adapted to beef production and the Midwestern industrial heartland gradually lost its pre-eminence as new meatpacking plants emerged in Denver, Omaha, Sioux City, Wichita, and elsewhere. Despite a lag of several decades, a similar pattern of work organization developed in the Canadian meat industry. Toronto butchers witnessed continuous hog slaughtering operations in 1874 and chain production was adapted to the city's cattle killing techniques during the 1880s and 1890s. The last decade of the 19th century marked the beginning of the large, efficient meat packer era throughout most of the nation with modern western plants opening in Winnipeg, Saskatoon, Moose Jaw, Edmonton, Calgary, and Vancouver. By the early 1920s, following the construction of several other western plants, the Canadian meatpacking industry reached its point of maturity as its workers hobbled through long periods of productive overcapacity.⁴⁴

Though it remains unclear whether the numerous unskilled positions thus created in Canadian meat packing were filled by successive hierarchies of European immigrants and women, the peculiar value-system of an industry wherein hourly wages could vary from 15 to 50 cents in a "typical crew of cattle butchers"

⁴¹With the exception of a few manuscript nominal census records, (when the bark peelers worked in the vicinity of a tanning community), the evidence is entirely from local newspapers but sufficiently recurrent to assume a migratory trend, especially among French-speaking Canadians.

⁴²E. Estrada, X-Ray of the Pampa (London 1971), 365.

⁴³For a recent publication and overview of the literature, see J. Skaggs, *Prime Cut: Livestock Raising and Meatpacking in the United States 1607-1983* (College Station 1986). Quotation from M. Yeager, *Competition and Regulation: The Development of Oligopoly in the Meat Packing Industry* (Greenwich 1981), 9.

⁴⁴J. Rennies, ed., The Growth and Development of Canada's Meat Packing Industry (Islington 1969), 1-46. and helpers" most likely applies in Canada as it did in the US. As Commons explained, skill had been managerially-constructed "to fit the anatomy." The highest-paid, "50-cent men" in 1904 were hide flayers whose dexterous knife-handling under very intense conditions of work ensured a profitable commodification of hides and skins destined for leather production. Their skill was not acknowledged on the basis of what they made but arose from their ability to avoid inflicting damage to raw material while at work on a killing crew. In a corporate world where meat was said to pay for cows and steers and profits came in the forms of hides, tallow, sinews, bones, glands, and casings, the flayer could still be valued for his surgical attributes. Such high paid workers, however, were a minority. The chain system of slaughtering had not merely suppressed the slaughtermen's control over their pace of work but provided capital with a rationale to devalue almost every specialized task in the performance of which workers were expected to behave like butchers: hacking, cutting, stripping, sawing, breaking, ripping, and trimming.⁴⁵

Moreover, the North American picture contrasted significantly with developments in the Australian meat industry. The fact that the Australian "knights of the steel" somehow succeeded in prolonging their epoch into the 1930s offers a revealing testimony to the importance of place in understanding labour process development. As Evan Willis has highlighted, the sheepskins and frozen meat exported from Australia were produced by itinerant "tradesmen, who had served a three year apprenticeship" and who followed "the seasonal 'killing season' around New Zealand and Australia, as sheep and lambs attained their peak condition." These peripatetic wage-earners all practiced "solo slaughtering" and only worked in the company of union members at a work pace decreed by their union. Similar solo slaughtering practices prevailed in urban abattoirs and in beef freezing plants. In Australia, it was not until the Great Depression that the large multinational meat exporting companies attempted to apply the chain production system. While introduced by employers to break the power of the union, collective worker organization continued to be an important constraint upon the power of employers to speed-up production, and many local abattoirs and beef packing plants continued to rely on the solo slaughtering techniques of skilled cattle butchers.⁴⁶

⁴⁵J. Commons, "Labor conditions in meat packing and the recent strike," *Quarterly Journal* of *Economics*, 19 (1904), 1-32. The top wage-earning tier of the slaughtering crew studied by Commons in 1904 comprised eleven "50-cent men" (flayers and splitters), two and one-half "45-cent men" (back flayers), and two and one-half "40-cent men" (rumper flayers). Well over half of the workforce earned between 15 and 18 cents and the crew's average earning was 21 cents.

⁴⁶Willis, "Trade Union Reaction," 53-4, 60, 65. For details of the continued shopfloor strength of Australian meat-workers and their union see K. Walker, *Australian Industrial Relations Systems* (Melbourne 1970), 260-7. During the 1940s, meat-workers in combination with steel-workers, coal miners, and waterfront workers, were a major source of industrial militancy, see T. Sheridan, *Division of Labour: Industrial Relations in the Chifley*

The third stage of basic leather production, the tanning of skins and hides, had also gained an unenviable reputation as uncongenial work. In the Australian colonies, tanneries were at the forefront of the so-called noxious trades, providing fluctuating employment and extremely poor working conditions.⁴⁷ The tasks of unhairing and fleshing hides, only partially mechanised late in the 19th century, still called upon the "stout, hard and vigorous arms" of the beam hands whose peculiar knives and work benches long symbolized the trade. Scraping hides resulted in cuts and abrasions which became easily infected.⁴⁸ As one historian noted of the hazards of tannery work:

'Wet work' involved coming into contact with any number of caustic chemicals, heaving piles of heavy hides over wooden 'horses,' bending and scraping flesh and hair, often still infested with the remains of worms or other parasites ... 'Dry work' - sorting, hanging, buffing, or rolling leather — was a bit more pleasant but by no means easy. It often meant breathing large amounts of leather dust. Some jobs, like rolling, were extremely dangerous, and many a roller had suffered the unpleasant experience of watching and feeling a finger crushed beneath the shiny, metal roller that swung back and forth across the leather.⁴⁹

Despite some evidence of growing solidarity among French- and English-Canadian tannery hands during the first decade of the 20th century, in general such workers were weakly organized and hence vulnerable to exploitation.⁵⁰ Following World War I, tanning was depicted in North America as a business which thrived on a rapid labour turnover, a stepping stone for the most recent immigrants. As one trade observer candidly noted:

[T]he new immigrant, not knowing the language nor the conditions, has found employment in leather factories because better labor did not want it. He has, as an individual and as a class, worked in this trade only so long as he can accustom himself to the conditions of the country, the language, and has secured a little cash to go ahead on.⁵¹

Within the course of a few journeys from one source of employment to another, a migrating tannery hand later recalled how individual workers could become

Years, 1945-1949 (Melbourne 1989), 117-24 and D. Blackmur, Strikes: Causes, Conduct and Consequences (Sydney 1993), 38-109.

⁴⁷S. Fitzgerald, Rising Damp: Sydney 1870-90 (Melbourne 1987), 88, 153-4, 213. See also Department of National Development, The Structure and Capacity of Australian Manufacturing Industries (Melbourne 1950), 378-86. ⁴⁸Atkinson, Hinckley Township, 58.

⁴⁹Zahavi, Workers, Managers and Welfare Capitalism, 78.

⁵⁰J. Ferland, "Solidarity and Estrangement among Canadian Leather Workers: Sole Leather Tanning at Grand Lake Stream, Maine, 1871-1880," paper presented at the Australia-Canadian Labour History Conference, University of Sydney, December 1988.

⁵¹United Shoe Machinery Corporation Archives, Folio A, "Hide and Leather Working Machinery," unpublished manuscript, 11-2.

"suckers" who were "thoroughly servile towards the boss"; how these same "beamsters" might also steal the fruits of another person's work; and how bosses were "at liberty to put the wages as low as they liked."⁵²

Clearly, such work differed from the stereotype of factory-based shoe production in major urban centres. In describing the work processes involved in basic leather production, one is struck by the simple nature of workplace control; the hard, manual nature of the work; the poor working conditions; and the relative lack of collective worker organization. Beyond the growing mechanization of certain sections of the meat slaughtering industry, there was little use of the more sophisticated managerial controls so often cited in labour process analyses. Nor were these work settings atypical of other areas of rural work. In both countries, hard physical labour, more than labour-saving machinery and sophisticated human control techniques, characterized the plight of most rural hands who carried forth the preliminary stages of "destructive creation." Indeed, such hard physical labour and authoritarian control was a feature of other unorganized primary industries such as the cattle, pearling, and sugar cane industries of Australia's northern regions.⁵³ Where there were differences, these typically concerned the ability of particular workers to organize collectively and challenge managerial authority. Australia's coal-miners, sheep shearers, and meat-workers provided examples of such working-class organization. We will return to possible reasons for such variations.

Urban Labour and the Limitations of Modern Labour Management

A major theme of labour process literature has been the rise of modern manufacturing industry and parallel changes in the management of production and labour during the first half of the 20th century. For many writers this period has been viewed as a turning-point in the nature of capitalist employment, symbolized by the rise of large bureaucratic corporations, increased market concentration, and formalized attempts by employers to increase their control over labour.⁵⁴ The main focus of such studies has been the manufacturing sector of the US, which in many ways pioneered the development of modern management practice. A major limi-

⁵²Quotations from *Butler's Journal* (Fredericton): "Among the Hills," November 1899, and "My first summer at Jackson Brook, Maine," June 1900.

⁵³If anything, these industries provided even more extreme examples of harsh rural work. The employment of indentured and indigenous labour often meant employers in these industries instituted inhuman working conditions for little if any remuneration. See for example Fox, Working Australia, 45; D. May, From Bush to Station: Aboriginal Labour in the North Queensland Pastoral Industry, 1861-1897 (Townsville 1983); K. Saunders, Workers in Bondage: The Origins and Bases of Unfree Labour in Queensland, 1824-1916 (St. Lucia 1982).

⁵⁴See for example Braverman, Labor and Monopoly Capital; D. Clawson, Bureaucracy and the Labor Process: The Transformation of US Industry, 1860-1920 (New York 1980).

tation of such analyses, however, has been the lack of broader international studies of management strategy.⁵⁵ In this second half of our analysis of labour process developments in Canada and Australia, we focus on the manufacturing sectors of both countries and examine changes in the nature of management control. Rather than replicating the "US model," both Canadian, and to a greater extent Australian industry, differed both in the timing and extent of modern labour management practice. Such comparative analysis serves to re-emphasize the lack of a single, universal model of labour process development and the importance of institutional and economic factors in explaining national and regional differences.

In examining the development of manufacturing in Canada and Australia, one is struck by a number of similarities as well as some important differences. By the turn of the century, both countries had diverse manufacturing operations, but such industries were largely based upon the production of basic commodities for small, protected domestic markets.⁵⁶ During the first two decades of the century, both Canadian and Australian manufacturing underwent significant development, as new, more capital-intensive industries were established. Key examples included the production of steel, chemicals, electrical goods and automobiles, by large, often foreign-owned companies. Tariff protection assisted this process, as foreign manufacturers set up local operations. The industrial structure of both countries also became increasingly concentrated.⁵⁷

Canada and Australia also exhibited differences, however, in the path and shape of industrialization. While both countries clearly lagged behind the example of leading industrial nations such as the US, Canada's geographical proximity to the industrial heartland resulted in closer parallels to the US than was the case in Australia. Canadian workers were increasingly exposed and habituated to US manufacturing practices and human control techniques. Eastern Canadians found employment in some of the largest textile mills and shoe factories of North America. In 1900, French Canadians accounted for one-third of the work force in the New England textile industry, while providing as many as 60 per cent of the workers in the cotton mills of New Hampshire, 70 per cent in those of Maine.⁵⁸ From the early days of Yankee involvement in the New Brunswick sawmill boom,

⁵⁵Important exceptions include: C. Littler, The Development of the Labour Process in Capitalist Societies (London 1982); H. Gospel and C. Littler, eds., Managerial Strategies and Industrial Relations: An Historical and Comparative Study (Aldershot 1983); S. Tolliday and J. Zeitlin, eds., The Power to Manage? Employers and Industrial Relations in Comparative-Historical Perspective (London 1991).
 ⁵⁶Williams, Not For Export; Boehm, Twentieth Century Economic Development, 162-3.

⁵⁰Williams, Not For Export; Boehm, Twentieth Century Economic Development, 162-3.
 ⁵⁷C. Heron, "The New Factory Regime and Workers' Struggles in Canada, 1890-1940," paper presented at the Australia-Canadian Labour History Conference, University of Sydney, December 1988, 6; C. Forster, Industrial Development in Australia, 1920-1930 (Canberra 1964), 37-57, 118-22; C. Haddon-Cave, "Trends in the Concentration of Operations of Australian Secondary Industries, 1923-1943," Economic Record, (June 1945), 65-78.
 ⁵⁸R. Chodos and E. Hamovitch, Quebec and the American Dream (Toronto 1991), 86.

the spill over of American capital into Canada continued its progression, growing from 1,024 "[US-]controlled and affiliated companies" in 1929, and to more than 1,350 companies in 1934.⁵⁹ US corporations such as Singer, Swift, International Harvester, and Goodyear not only carried more advanced technology but also "helped to introduce new methods of managing labour that fell upon the receptive ears of indigenous Canadian capital."⁶⁰ While a similar process of US and UK multinational penetration occurred in Australian industry during the 1920s, the extent of such influence appears far less pervasive.

Canadian and Australian manufacturers also differed in other areas. While the growth of Canadian secondary industry involved the establishment of a range of industry-specific towns and cities across Ontario and Québec, in Australia, manufacturing was concentrated much more within the urban capitals of Sydney and Melbourne.⁶¹ As noted earlier, differences were also apparent in terms of the ethnic composition of the workforce and the role of the state. Canadian employers and those who managed US branch-plants could gain access to far larger labour pools of Italian, eastern European, and Scandinavian immigrants than their Australian counterparts, and some employers developed strategies which sought to play off different ethnic groups against one another.⁶² In addition, despite a common history of state-sponsored tariff protection and other forms of industry assistance, in Australia, the introduction of compulsory state industrial arbitration greatly assisted higher levels of trade union membership and forced employers to abide by minimum wages and working conditions as set down in industrial awards. By

⁵⁹H. Marshall, F. Southard, and K. Taylor, Canadian-American Industry. A Study in International Investment (Toronto 1976); R. Naylor, The History of Canadian Business 1867-1914, 2 vols. (Toronto 1976); M. Wilkins, The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914 (Cambridge, MA 1970); W. Clement, Continental Corporate Power: Economic Elite Linkages Between Canada and the United States (Toronto 1977).

⁶⁰Palmer, Working-Class Experience, 140.

⁶¹Heron notes the geographical concentration of individual industries in Canada, for example, shoe-making (Québec City and Montréal), clothing (Montréal and Toronto), steel and metal fabrication (Hamilton), automobile manufacture (Windsor and Oshawa), rubber goods (Kitchener), and electrical components (Peterborough), see Heron, "New Factory Regime," 9. By contrast, in Australia, Sydney and Melbourne dominated as manufacturing centres, with only the steel, paper, and some food processing industries located in more regional areas, see J. Camm and J. McQuilton, eds., *Australians: An Historical Atlas* (Sydney 1987), 127.

⁶²See for example: D. Avery, 'Dangerous Foreigners': European Immigrant Workers and Labour Radicalism in Canada, 1896-1932 (Toronto 1979); B. Ramirez and M. Del Balso, The Italians of Montreal: From Sojourning to Settlement, 1900-1921 (Montréal 1980); B. Ramirez, On the Move; C. Heron, Working in Steel: The Early Years in Canada, 1883-1935 (Toronto 1988); V. Lindstrom-Best, Defiant Sisters: A Social History of Finnish Immigrant Women in Canada (Toronto 1988).

contrast, in Canada, the state's role in industrial relations remained less ambiguous and revolved solely around the disciplining of militant labour and active support for employers in strike-breaking.⁶³

Given such contexts, how then did Canadian and Australian manufacturers manage their workforces? Once again there are some marked similarities. From the 1880s onwards, employers in both countries had begun to sub-divide and specialize their work processes, relying less upon the craft knowledge and skill of their employees. Such trends were most pronounced in industries such as clothing, footwear, and agricultural machinery manufacture, as employers sought to break the power of craft workers and employ cheaper, semi-skilled labour. While some employers sought to increase their control over the labour process through increased mechanization, others chose to hive off production to sub-contractors or outworkers. Employers were influenced in their choice of production strategies by the availability of cheaper labour, the type of product, prevailing technologies, as well as factory legislation and union-wage pressures.⁶⁴ Such developments, however, were varied in their impact and often cyclical in nature. Indeed, in many instances workers retained significant job control.⁶⁵

During the 1910s and 1920s, the establishment of new industries and larger enterprises resulted in the extension of managerial attempts to control production. In newer industries such as steel, automobile, electrical goods, rubber tire, and armaments manufacture, employers were guided by models of quantity production and systematic management developed in the US.⁶⁶ The automobile industry was

⁶³The "legalisation" of Canadian industrial relations did not occur until the implementation of the Wartime Labour Relations Regulations (Pc 1003) in 1944. Up until this time Canadian employers lacked any legal compulsion to bargain with trade unions in good faith. See J. Fudge, "Voluntarism, Compulsion and the 'Transformation' of Canadian Labour Law During World War II," in G. Kealey and G. Patmore, eds., *Canadian and Australian Labour History: Towards A Comparative Perspective* (Sydney 1990), 81-100. In Australia, state and federal governments also played a crucial role in supporting employers during significant industrial campaigns in the 1890s, 1917 and 1928-9, see Waters, *Strikes*, 124, 126-7.

⁶⁴Heron and Storey, On the Job, 9; E. Fry, "Outwork in the Eighties: An Examination of Outwork in the Infant Industries of the Eastern Australian Colonies, c. 1880-90," University Studies in History and Politics, 2 (1956), 77-93; Frances, The Politics of Work, chs. 1 and 2.

⁶⁵For details of such craft control in the Canadian context see Palmer, Working-Class Experience, 60-135. For Australian examples see Patmore, Australian Labour History, 56-8 and N. Butlin, "Collective Bargaining in the Sydney Printing Industry, 1880-1900," Economic Record, 23 (1947), 206-26.

⁶⁶For an Australian perspective on the new industries and management control see C. Wright, "The Formative Years of Management Control at the Newcastle Steelworks, 1913-1924," *Labour History*, 55 (1988), 55-7 and G. Patmore, "American Hustling Methods' — The Lithgow Small Arms Factory 1912-1922," *Labour History*, 67, 1994. For the US influence in Canada see Marshall *et al.*, *Canadian-American Industry* and Heron, "New Factory Regime," 15.

at the forefront of this trend. US automobile firms were key institutions in the worldwide dissemination of modern manufacturing and management practices. Manufacturers such as Ford and General Motors established Australian and Canadian assembly plants which employed the most up-to-date thinking on shop layout, routing, the use of specialized machinery, and new methods of production flow and material handling (most notably the moving assembly line).⁶⁷

Developments in quantity production also resulted in increased employer interest in more formalized techniques of labour control such as payment by results (PBR) and scientific management. While PBR promised a closer link between employee effort and wages paid, scientific management promised a complete system of labour control based upon a detailed analysis of job tasks and the time taken to complete them.⁶⁸ Such techniques received extensive publicity in both Canada and Australia during the inter-war period and were seen as essential features of modern manufacturing. Once again, it was the foreign firms that were the pace-setters. Beyond the auto companies, Canadian and Australian subsidiaries of US firms such as General Electric, Westinghouse, Goodyear Tire and Rubber, and Standard Telephones and Cables, were leaders in the workplace application of scientific management.⁶⁹ Such a process was supplemented by a range of management consultants and efficiency experts which actively disseminated these techniques within both Canadian and Australian industry.⁷⁰

⁶⁷For details of the international impact of the US automotive industry see D. Nelson, *Managers and Workers: Origins of the New Factory System in the US 1880-1920* (Madison 1975), 23-5 and E. Layton, "The Diffusion of Scientific Management and Mass Production From the US in the Twentieth Century," XIVth International Congress of the History of Science (Tokyo 1974), 380-1. The early years of the Australian auto industry are detailed in Forster, Industrial Development, 38-47 and Sutterby, "Workers and the Rise of Mass Production: Holden's in the 1920s and 1930s," BA (Hons) thesis, School of Social Sciences, Flinders University, 1981. For details on the Canadian auto industry and labour control see J. Manley, "Communists and Auto Workers: The Struggle for Industrial Unionism in the Canadian Automobile Industry, 1925-36," Labour/Le Travail, 17 (1986), 107-11.

⁶⁸F. Taylor, Scientific Management (New York 1947), 46-60; C. Littler, "Understanding Taylorism," British Journal of Sociology, 29 (1978), 189-92; M. Rose, Industrial Behaviour: Theoretical Development Since Taylor (Harmondsworth 1978), 31-41.

⁶⁹For examples of scientific management in Canada see M. McCallum, "Corporate Welfarism in Canada, 1919-39," *Canadian Historical Review*, 71 (1990), 63-4 and G. Lowe, "The Rise of Modern Management in Canada," *Canadian Dimension*, 14 (1979), 35-6. Australian examples of scientific management are outlined in Patmore, *Australian Labour History*, 148 and C. Wright, *The Management of Labour: A History of Australian Employers* (Melbourne 1995), ch. 1.
⁷⁰One of the leading exponents of scientific management during the inter-war period was

¹⁰One of the leading exponents of scientific management during the inter-war period was the French-born American, Charles Bedaux. For details on the impact of the Bedaux consultancy during this period see S. Kreis, "The Diffusion of Scientific Management: The Bedaux Company in America and Britain, 1926-1945," in D. Nelson, ed., A Mental Revolution: Scientific Management Since Taylor (Colombus 1992), 156-74; C. Littler, The

Beyond the control of the production process, during the inter-war period many larger Canadian and Australian employers also developed corporate welfare programs. "Welfarism" sought to gain employee loyalty through demonstrations of employer benevolence, in much the same way that entrepreneurs emphasized their paternal role within the small firm. Examples might include the provision of superior amenities, encouragement of social and recreational activities, educational programs, company newsletters, profit-sharing schemes, sickness and accident benefits, or company provided services and housing. Publicly, managers emphasized that welfarism, far from being a philanthropic gesture, made good business sense. A contented and healthy workforce, it was argued, was also a more productive one.⁷¹ The paternalist attitudes of employers, however, also seemed to play a major role in the adoption of welfarism. This was most pronounced amongst employers of largely female workforces. Managers of these firms commonly emphasized their role as "father" figures and advocated welfarism in order to promote a "family spirit" and increase workforce co-operation.⁷²

Canadian and Australian employers also developed strategies to head-off the threat of labour unrest and unionization. Beyond the simple victimization of trade unionists and black-lists, some employers developed more sophisticated techniques. The introduction of social and sporting clubs, and of magazines and newsletters often aimed at engendering a company spirit amongst the workforce in preference to external affiliations. More directly, a worker's participation in profit-sharing schemes and provident funds was commonly conditional upon the maintenance of industrial harmony. In the Canadian steel industry for example, employee benefit societies, pension and insurance schemes were introduced to reduce labour dissent. The industry leader in this regard, Hamilton's Dominion Foundries and Steel, introduced a profit-sharing scheme that proved pivotal in it attempts to undermine union organization.⁷³ In a similar vein, some employers

Development of the Labour Process in Capitalist Societies (Aldershot 1986), 105-15; and C. Wright, "The Management Consultant and the Introduction of Scientific Management in Australian Industry," in M. Bray and D. Kelly, eds., Issues and Trends in Australian Industrial Relations (Sydney 1989), 229, 232.

⁷¹Advisory Council of Science and Industry, Industrial Co-operation in Australia (Melbourne 1920), 6.

⁷²For Australian examples see G. Reekie, "Humanising Industry': Paternalism, Welfarism and Labour Control in Sydney's Big Stores, 1890-1930," *Labour History*, 53 (1987), 1-19 and "Making Little Things in a Big Way," *Australasian Manufacturer* (AM), 20 April 1935, 158, 168. For a Canadian example see J. Sangster, "The Softball Solution: Female Workers, Male Managers and the Operation of Paternalism at Westclox, 1923-60," *Labour/Le Travail*, 32 (1993), 167-99. The link between welfarism and workforce gender has also been noted in the US context, see S. Jacoby, *Employing Bureaucracy: Managers, Unions and the Transformation of Work in American Industry, 1900-1945* (New York 1985), 51-2.

⁷³R. Storey, "Unionization Versus Corporate Welfare: The 'Dofasco Way,'" Labour/Le Travailleur, 12 (1983), 7-42.

sought to lessen industrial conflict through the introduction of joint consultative arrangements. In Australia, the British war-time example of Whitley councils (joint management-employee committees) was widely publicized and advocated as a remedy to industrial conflict and low productivity.⁷⁴ In Canada similar examples of joint consultation appeared in companies such as Bell Telephone, Imperial Oil, and International Harvester.⁷⁵ Some employers also appealed to loyalist elements within their workforce in order to under-cut trade union organization. Typically, this involved management organizing such loyal elements in direct competition to external trade unions. Such "company unionism" not only simplified bargaining arrangements but also promised more moderate and quiescent labour relations.⁷⁶ Toward the end of World War I, increasing labour militancy in both countries appears to have increased employer interest in welfarism and worker representation schemes.⁷⁷

Despite the academic emphasis such formal techniques of labour control have received, however, in both the Canadian and Australian settings the extent of such formal controls should not be over-stated. For example, the workplace impact of scientific management appeared highly variable in both countries during these years and amounted to far from a universal form of labour control. Australian examples of full-blown Taylorism including time study and related wage incentives were relatively rare prior to the World War II. Even in Canadian industry where such reforms were perhaps more pervasive, as Heron notes, employers were highly pragmatic in their adoption of such techniques.⁷⁸ Similarly, despite widespread publicity, welfarism and joint consultation programs were generally limited to a

⁷⁴Patmore, Australian Labour History, 147, 150; P. Russell, "The Response of Management Policy to the Industrial Conditions of the Later World War One and Reconstruction Era, 1917-1921," BEC Hons. thesis, Department of Industrial Relations, University of Sydney, 1985, 32-45.

⁷⁵Lowe, "Rise of Modern Management," 33-4; B. Scott, "A Place in the Sun: the Industrial Councils at Massey-Harris, 1919-29," *Labour/Le Travailleur*, 1 (1976). For details of state advocacy for joint consultation in Australia see Patmore, *Australian Labour History*, 147.

⁷⁶For examples of Australian company unionism see Patmore, Australian Labour History, 149; Patmore, "American Hustling Methods," and Wright, "The Formative Years of Management Control," 64-7. The links between joint consultation and company unionism are emphasized from a Canadian perspective in McCallum, "Corporate Welfarism," 57-61. ⁷⁷Government and management interest in such schemes increased markedly in Australia and Canada following the 1917 New South Wales General Strike and the 1919 Winnipeg General Strike. See Patmore, Australian Labour History, 146-50, and McCallum, "Corporate Welfarism," 46-7 and 59.

⁷⁸Wright, Management of Labour, ch. 1; Heron, "New Factory Regime," 22. Interestingly, the limits of scientific management as shopfloor practice have also been highlighted in the US context, see, D. Nelson, "Scientific Management and the Workplace, 1920-1935," in S. Jacoby, ed., Masters to Managers: Historical and Comparative Perspectives on American Employers (New York 1991), 74-89.

minority of larger enterprises and varied widely in their impact and longevity. For example, a 1931 survey of Australian labour management innovators found only 76 firms with formal welfare schemes, the majority of which were large employers in the retail and clothing industries. While a greater number of Canadian employers appear to have followed the path of welfare capitalism, these firms were far from typical. For example, one 1926 survey of 300 large Ontario enterprises found only 49 firms with formal pension or retirement plans.⁷⁹ As a result, while advocates in both Canada and Australia were active in seeking to disseminate the message of modern labour management, their success was limited. There were a number of reasons for this.

First, in both countries, the development of more modern manufacturing techniques was limited by the size of domestic and local markets and the continued numerical dominance of small firms. While tariff protection attracted larger, foreign manufacturers to establish local operations, protection also helped smaller manufacturers to compete against cheaper, imported manufactured goods. The extent of small-scale manufacturing in Canada and Australia was pronounced in comparison to US industry. Hence, while the average number of wage-earners per establishment in US manufacturing in 1929 was 41.9, in Canada it was 25.3, and in Australia only 15.6.⁸⁰ In many of these small firms manufacturing remained relatively unsophisticated. In the Australian context, while industry journals advocated the use of new machine tools and repetition methods of production, engineering firms were slow to take up such technological advances and continued to base production upon a batch or jobbing basis.⁸¹ Such limits to mechanization extended across a variety of other industries such as food processing, clothing, wood products, furniture, and other basic commodities which accounted for the majority of manufacturing employment.⁸² Indeed, the survival of apprenticeship in many parts of Australian industry reflected continued employer demand for skilled tradesmen and the limited impact of mass production methods outside of newer industries such as automobile and steel manufacture.⁸³

⁷⁹F. Maukdon, "Cooperation and Welfare in Industry," in D. Copland, ed., "An Economic Survey of Australia," *The Annals of the American Academy of Political and Social Science*, November 1931, 184-7; Lowe, "Rise of Modern Management," 32-3, 38; McCallum, "Corporate Welfarism," 53; Sangster, "Softball Solution," 171.

⁸⁰Official Yearbook of the Commonwealth of Australia, 24 (1931). Canadian and US figures from Heron, "New Factory Regime," 19-20.

⁸¹T. Sheridan, Mindful Militants: the Amalgamated Engineering Union in Australia 1920-1970 (Melbourne 1975), 86-7.

⁸²F. Mauldon, Mechanisation in Australian Industries (Hobart 1938).

⁸³J. Shields, "Capital, Craft Unions and Metal Trades Apprenticeship in NSW Prior to World War II," in D. Cottle, ed., *Capital Essays* (Kensington 1984), 13-5; Sheridan, *Mindful Militants*, 102-9; S. Cockfield, "Arbitration, Mass Production and Workplace Relations: Metal Industry Developments in the 1920s," *Journal of Industrial Relations*, 35 (1993), 26-33; 25 Commonwealth Arbitration Reports (CAR) 364 and 28 CAR 923; J. Shields, "Skill

Such small employers also had little need for systematic forms of labour control. In many small manufacturing establishments, the simple personal controls of the owner-manager or foreman/supervisor proved more than adequate. As US writers such as Richard Edwards have argued, such simple control was based upon a combination of bullying, compulsion, and authoritarian rule — the driving method of supervision.⁸⁴ Supervisors maintained a close surveillance on worker behaviour and instituted a strict discipline aimed at minimizing time-wasting and other unproductive behaviour. Nor was such "simple control" limited to the small manufacturers. Indeed, even within the most modern automobile and steel factories, despite the growth of systematic control over the timing, quantity, and costs of production. Australian and Canadian employers continued to rely upon the simple, personal control of foremen and supervisors in maintaining employee discipline and ensuring workers attained output standards.⁸⁵ In the Australian steel industry for example, mechanization was supplemented by the shopfloor rule of the foreman, many of whom would scream abuse at workers or apply arbitrary penalties in an effort to increase production.⁸⁶ Indeed, in a number of instances larger employers dispensed with formal controls such as scientific management in favour of such simple and less costly personal controls.⁸⁷

Second, the lack of labour market pressures on employers during this period also undermined the rationale for greater formalization of employment. In the Australian case, high levels of unemployment ensured a constant supply of labour and the threat of dismissal remained a powerful motivator of employee performance. While some companies engaged employment officers and kept rudimentary employment records, informalism prevailed in most establishments.⁸⁸ In the Cana-

Reclaimed: Craft Work, Craft Unions and the Survival of Apprenticeship in New South Wales, 1860-1914," PhD thesis, University of Sydney, 1990, 412-6.

⁸⁴Edwards, Contested Terrain, 52-4.

⁸⁵Sutterby, "Workers and the Rise of Mass Production," 79-80; Wright, "The Formative Years," 56-7. Patmore's study of the Lithgow Small Arms Factory also highlights how batch production and the simple control of the foreman prevailed over more modern techniques of flow production and time study, see Patmore, "American Hustling Methods."

⁸⁶Anon., "Steelworker 1928," BHP Journal, 2 1978, 54-5.

⁸⁷The practical limitations of scientific management were pronounced amongst firms engaged in batch production. McCallum cites the example of the Knechtel Furniture Company in Hanover, Ontario which dispensed with its scientific management system after two years of experimentation, see McCallum, "Corporate Welfarism," 63.

⁸⁸P. Cochrane, "Anatomy of a Steel Works: The Australian Iron and Steel Company Port Kembla, 1935-1939," *Labour History*, 57 (1989), 67-8; R. Tierney, "The Australian Automotive Industry, 1939-1965: A Sociological Study of Some Aspects of State Intervention, Managerial Control and Trade Union Organization," PhD thesis, Macquarie University, 1991, 85-6. The casual nature of employment was also prominent in stevedoring, see Walker, *Australian Industrial Relations Systems*, 372. dian context, a similar pattern was evident. While a tighter labour market during World War I led some Canadian employers to formalize their employment and labour management practices, high levels of unemployment and declining industrial militancy during the 1930s led many to wind back their personnel and welfare programs.⁸⁹ In the period prior to World War II, high levels of unemployment and seasonal instability in many industries ensured the effectiveness of a policy of harsh-works discipline.⁹⁰

Third, the dissemination of such formal practices also proved problematic. This was particularly apparent in the Australian case, where geographical distance from the industrial heartland of the US, Britain, and Europe limited the spread of modern management practice. The effect of distance was pronounced during World War I. Unlike Canadian industry, which, pushed by the demand for munitions production, underwent significant modernization, the war had little direct impact on Australian industry which was further isolated during these years.⁹¹ During the 1920s and 1930s, despite the example of multinational subsidiaries and the advocacy of management literature and government bodies extolling the virtues of welfarism and scientific management, Australian manufacturers lacked the expertise to implement such techniques. While in Canada the professionalization of welfare work closely followed the US precedent, in Australia the lag was far greater.⁹² Despite the role of management consultants and efficiency experts in both countries, it was not until World War II that a truly international management consultancy industry provided the necessary transmission belts for the worldwide spread of scientific management techniques.⁹³

⁸⁹McCallum notes for example, that by 1937 the chief means of labour recruitment for most Canadian employers remained the arbitrary selection of workers at the factory gate, see McCallum, "Corporate Welfarism," 65.

⁹⁰Cochrane, "Anatomy of a Steelworks," 68-9; C. Wright, "Management Strategies of Control over Labour at the BHP Newcastle Steelworks, 1915-1924," BEC (Hons) thesis, University of Sydney, 1985, 32 and 78.

⁹¹The impact of World War I in modernizing Canadian manufacturing is noted by Heron, "New Factory Regime," 18. For the Australian experience see Boehm, *Twentieth Century* Economic Development, 164-5.

⁹²An Employment Managers' Association was formed in Toronto in 1919 modelled closely on a similar US body. By contrast it was not until 1943 that a similar professional body of personnel and welfare officers was formed in Australia. See Lowe, "Rise of Modern Management," 32; McCallum, "Corporate Welfarism," 47; and C. Wright, "Employment, Selection and Training Procedures in Australian Manufacturing, 1940-1960," *Journal of Industrial Relations*, 33 (1991), 178-95.

⁹³A study by Laloux found 28 companies in Canada and 17 in Australia using the Bedaux system in the late 1930s. This compared with 500 companies in the US, 225 in Britain, and 144 in France. See P. Laloux, *Le Systeme Bedaux Calcul Des Salaires* (Paris 1951), 11, quoted in Littler, *Development of the Labour Process*, 113. For details on the post World War II dissemination of scientific management in Australia see Wright, "The Management Consultant." Fourth, while a variety of literature has emphasized the link between labour militancy and the adoption by employers of formal labour strategies such as welfarism and joint consultation, many employers in both countries chose to resist organized labour through more simple and direct strategies. In the Australian case for example, despite state advocacy for joint consultation via Whitley Councils, employers demonstrated little interest in such bodies.⁹⁴ While compulsory state arbitration forced employers to recognize trade unions in the determination of industrial awards, at the workplace level, employers continued to rely upon simple techniques of victimization of union representatives, black-lists, and strike-breaking. In the years prior to World War II, high levels of unemployment and the active intervention of state and federal governments in assisting employers to break strikes, underlined the efficacy of such simple anti-unionism in many industries.⁹⁵ A similar, if not more extreme pattern, appears to have emerged in Canadian industry, where the lack of any legal right to collective bargaining ensured the dominance of management prerogative, and perhaps weakened the necessity for elaborate techniques of union avoidance.

Added to the above factors, workforce resistance also played a role in limiting the use of formal management practices in particular work settings. In the Australian case, labour resistance was particularly apparent amongst the metal trades, where strong workplace organization and direct action commonly thwarted attempts by employers to rationalize production and introduce PBR schemes and scientific management.⁹⁶ While there is evidence of semi-skilled workers in other industries in both Canada and Australia striking against employer attempts to speed-up work or cut bonus payments, the extent to which such resistance succeeded in thwarting management is unclear.⁹⁷ Certainly, higher trade union density and the legal recognition of trade unions under compulsory arbitration would suggest labour resistance may have had a greater impact on management action in Australia than was the case in Canada. Conversely, the importance significant sections of the Australian labour movement accorded to arbitration and political

94 Patmore, Australian Labour History, 149-50.

⁹⁵Examples of victimization, black-lists, and anti-unionism were common in the steel, clothing, and pastoral industries, see Cochrane, "Anatomy of a Steelworks," 69-70, 77; Wright, "The Formative Years," 69; Frances, *The Politics of Work*, 86, 96-8 and Tsokhas, "The Shearing Labour Process," 94. For details of the state's role in disciplining labour see Waters, *Strikes*, 124, 126-7.

⁹⁶Sheridan, *Mindful Militants*, 54, 103-5 and K. Tsokhas, "Work Practices, Technological Change and Sheet Metal Workers, 1929-1970," *Prometheus*, 7 (1989), 225-38.

⁹⁷For examples of labour disputation over scientific management practices in Canadian industry see McCallum, "Corporate Welfarism," 63-4 and Manley, "Communists and Auto Workers," 117-8.

reform, also resulted in weak workplace organization in many areas of the Australian workforce.⁹⁸

Conclusions: The Labour Process in Comparative Perspective

A key aim of this discussion has been to broaden labour process analysis and highlight the importance of different spatial realities at particular points in time. While much of the labour process literature has been concerned with describing changes in the nature of managerial control within advanced industrial economies. a comparative analysis of Australia and Canada during the late 19th and early 20th centuries emphasizes not only differences in the extent and timing of such systematic controls, but also the critical importance of rural industries in the transformation of natural resources into finished commodities. In contrast to the vision of industrial modernity portraved by many labour process writers, workers in rural Canada and Australia encountered a work environment dominated by hard manual labour, harsh working conditions, authoritarian relations, and limited opportunities for collective action. Similarly within the urban context, despite the emphasis within management literature for the more formalized techniques of corporate welfarism and scientific management, the vast majority of Australian and Canadian factory workers experienced a far simpler regime of rigid discipline enforced by coercive supervisors and backed by the constant fear of dismissal.

Despite such similarities, the organization of work and employment in Australian and Canadian industry also differed in several respects. While Canadian and Australian employers were clearly less effected by the US model of formalized management control, the extent of application of such techniques appeared greater in Canada than Australia. Moreover, in both the rural and urban contexts, Australian workers demonstrated a greater propensity to form trade unions and in a number of cases successfully challenged employers. By contrast, Canadian workers, particularly in rural industries, were less organized and hence far more vulnerable to abuses of employer power. What explains these variations? As we have emphasized throughout, a critical explanatory factor has to be the role of place and location. Australia's isolation and greater geographical distance from the industrial heartland, not only hindered the spread of new managerial ideas and technologies, it also critically affected the size and make-up of the working population as well as placing limits upon the size of the domestic market. While sections of the Australian working class were far better organized than Canadian workers, it should not be forgotten that such organization was based upon active policies of exclusion of both women and workers of other ethnic and racial backgrounds. Differences were also apparent at an institutional level. Despite its

⁹⁸Australian workplace trade union organization remained highly variable during this period, see M. Rimmer and P. Sutcliffe, "The Origins of Australian Workshop Organisation, 1918 to 1950," Journal of Industrial Relations, 23 (1981), 216-39.

short-comings, state arbitration did provide Australian labour with certain basic legal rights as well as an award structure through which minimum wages and working conditions could be disseminated. By contrast, Canadian labour faced a state apparatus more clearly tied to the interests of business and more willing to intervene to support those interests.