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Advances in Water Reuse: Issues for Water Management in Alberta

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ABSTRACT. Recent international advances in the field of water reuse are briefly reviewed in the context of water resource management in Alberta. Categories reviewed include irrigation, aquaculture, industrial and domestic reuse. Water reuse schemes which are relevant to Alberta, as well as policy constraints and water reuse disincentives in Alberta are considered.

RESUME

Des progrès récemment faits sur la scène internationale dans le domaine du recyclage d'eau sont examinés dans le contexte de l'exploitation des ressources hydrauliques en Alberta. Parmi les catégories examinées se trouvent l'irrigation, l'aquaculture, le recyclage industriel et domestique. Des projets pour le recyclage d'eau qui sont pertinents à l'Alberta ainsi que des contraintes de politique et des mesures décourageantes au recyclage d'eau en Alberta sont considérés.

INTRODUCTION

Although Alberta has an overall surplus of water resources, the distribution of population relative to water is not optimal (Figure 1).¹ The largest percentage of population and industrial activity is located in southern and central Alberta, while the majority of the available surface water flows through the unpopulated northern areas of the province. As well, Alberta does not have major groundwater aquifers capable of sustaining large populations or industrial activity. Accordingly, despite Alberta's relatively small population of 2,300,000 occupying 661,000 km², increasing population and concurrent industrial growth will inevitably lead to water supply limitations for the province in the future. In fact, the primary, if not sole justification for the construction of a dam on the Red Deer River (Figure 1) was to alleviate municipal and industrial water use constraints created by the low flows in this river.² Hence, water reclamation and reuse will become more and more relevant to future generations of Albertans.

RECENT ADVANCES IN WATER RECLAMATION AND REUSE

Current developments in water reclamation and reuse have recently been reviewed by Hrudey.³ Highlights of the review will be considered in the context of those developments most relevant to the situation in Alberta.

Irrigation Reuse

The major constraint on water reuse for irrigation relates to salinity and resulting soil structure damage. Svenson discussed the problems of increasing salinity in the Colorado River due to irrigation return flows.⁴ Such problems require significant improvement in

Mean Annual River Discharges

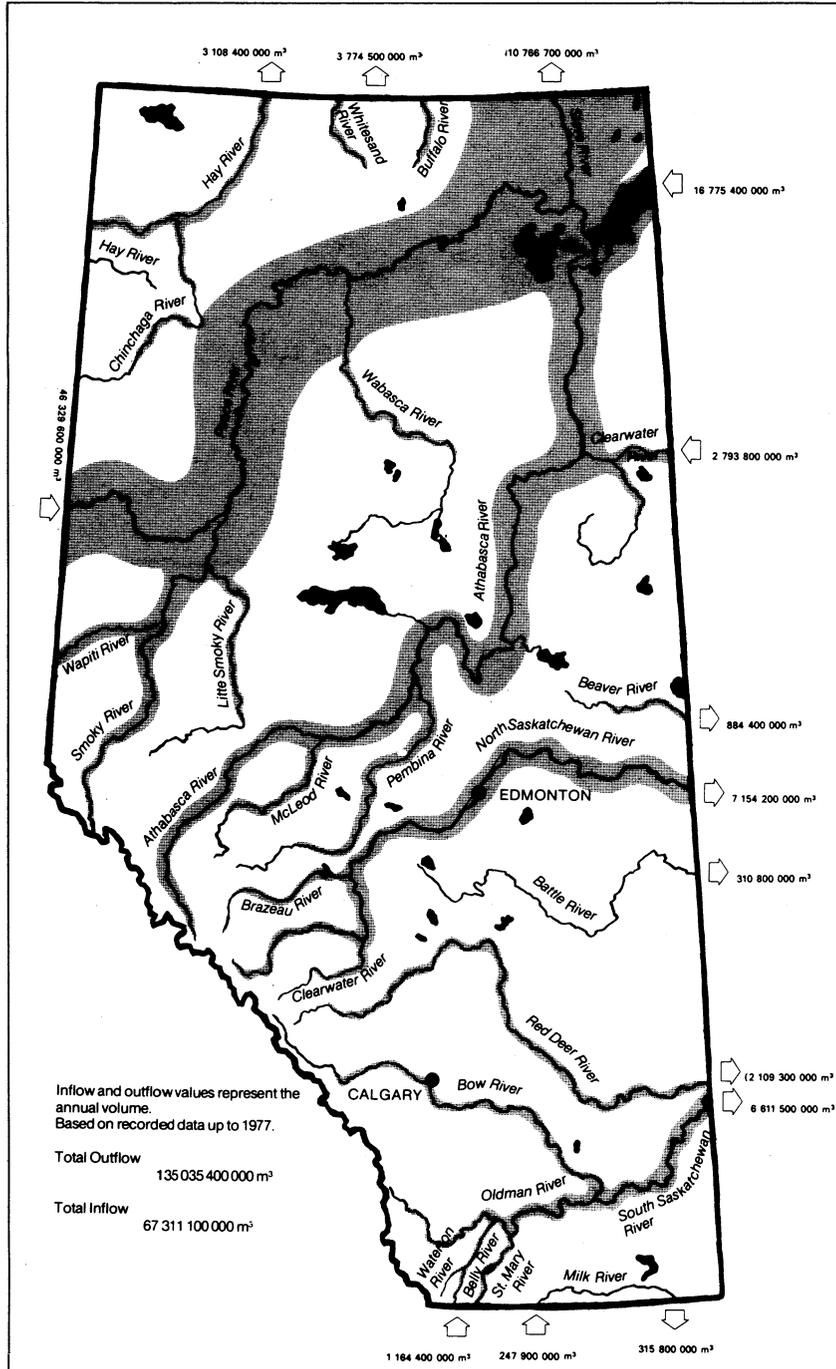


Figure 1. (a). Alberta Water Resource Distribution. Reproduced courtesy of "Environment Views." Alberta Environment.

irrigation water use practices. Specifically, there is a need to insure that a higher proportion of water diverted for irrigation is actually supplied for optimal crop water demand. Such improvements will reduce saline irrigation return flow. Desalination of irrigation return flow is economically feasible in Saudi Arabia but only as an alternative to desalination of seawater.⁵ Prevention of salinity increases, due to inefficient irrigation practices is a far more viable objective in Alberta.

Another major concern regarding water reuse and irrigation has been the possibility of toxic metal contamination where municipal wastewaters are used. Several long term studies have shown that despite higher metal levels in sewage than in alternate irrigation sources, metals (lead, copper, zinc, nickel, chromium and cadmium) did not accumulate in soils or vegetation over more than 20 years of application.⁶ Furthermore, sewage effluent irrigation has been shown effective for forage crop production and has recently been adopted by the City of Cranbrook, B.C. for alfalfa irrigation.⁷ These findings are consistent with successful Alberta experience at Taber. However, the large land requirement for sewage effluent irrigation (128 hectares for 5000 population at Taber) makes it attractive primarily for rural communities in the drier regions of Alberta.

Secondary effluent irrigation of park and golf courses has been successfully implemented provided that efficient treatment is sustained and disinfection is practiced.⁸ Another option for areas already practicing irrigation has been the provision of fresh irrigation water supply to water-limited municipalities in return for adequately treated sewage effluent to be used for irrigation.⁹

Industrial wastes have also proven amenable to irrigation reuse. Among the more interesting recent developments were the use of brewery wastewater for sod farm irrigation in the southern U.S. and tree farm irrigation with paper mill effluents in the Pacific northwest.¹⁰ Many other industrial wastewaters have been evaluated for irrigation reuse in Alberta, including: meat packing, potato processing, cheese manufacturing, natural gas processing, and, nitrogen fertilizer manufacturing wastewater.¹¹

Aquaculture

Reuse of wastewater for the generation of useful biomass has received increasing attention in recent years. Systems which have been considered may be generally grouped into natural wetland and controlled environment systems. Burton *et al.* evaluated an experimental lake and spray irrigation system in Michigan.¹² This was supplied with secondary sewage effluent to culture harvestable biomass in the form of aquatic vegetation and forage crops. Sewage effluent characteristics are compatible with natural wetland ecosystems and their nutrient input is expected to enhance natural productivity of such

systems. Potential health hazards from the consumption of harvested waterfowl from such water reuse systems are presently unknown. This problem represents one of the many research challenges posed to biologists by water reuse schemes.

Aquacultural wastewater systems aimed at generating harvestable algae have been receiving considerable attention recently.¹³ The health concerns associated with pathogen and trace pollutant contamination have not been resolved for the recovery and utilization of the protein content of algae produced by wastewater aquaculture systems. These concerns remain a major constraint upon the expansion of this technology. An alternative approach could be the wastewater culture of algae, followed by anaerobic decomposition of the algae biomass to generate methane.¹⁴ This option avoids human health concerns but the generated methane will not be a viable competitor to natural gas for some time to come, particularly in Alberta.

Aquaculture of shellfish with wastewater has predictably been found to represent an unacceptable health risk.¹⁵ Given the significant contaminant bioconcentration capability of shellfish resulting from their filter feeding habits, water quality requirements for shellfish rearing are usually stringent. Such requirements are unlikely to be economically achievable for reclaimed water.

A recent exciting development is the "Nutrient Film Technique" which employs hydroponic culture of vegetable crops using primary sewage.¹⁶ The root zone of the vegetable is submerged in a thin film of primary sewage which provides excellent nutrient transfer while maintaining isolation of edible portions from contact with the sewage. Once again, health concerns remain to be resolved but this system offers exciting potential. The technique has been successfully demonstrated throughout the winter in New Hampshire and thus may be quite suitable for application in Alberta.

Industrial Water Reuse

Increasing water demands combined with diminishing high quality supplies have caused industry to pay more attention to water reuse potential. A very wide range of water reuse practice exists between and within various industrial categories according to Kollar and MacAuley.¹⁷ A survey of 34 major water using industries in the United States showed a mean recycling rate (total plant water requirements divided by fresh water makeup) ranging from 1.75 for the poultry dressing industry to 137 for the plastic materials and resins industries. Many other U.S. industries relevant to Alberta, such as petroleum refining (67.1), industrial organic chemicals manufacturing (27.4), beet sugar processing (16.8) and fertilizers manufacturing (12.2) showed respectable mean water recycling performance. The most notable exceptions were the food industries such as poultry dressing and meat

packing plants (2.45). The relatively poor performance in the latter cases is directly related to the uncertainty concerning health risks of water reuse in the food industry. Although safe poultry plant water reuse was reported for giblet flume water and chiller water such measures are viewed with a high degree of skeptical conservatism by meat inspection officials in Canada.¹⁸

The petroleum refining industry has demonstrated a high degree of tolerance for process water reuse. A new refinery in Saudi Arabia was successfully required to reuse municipal sewage effluent as a raw water supply because of the limited availability of fresh water.¹⁹

The oilsands industry has also adopted a significant orientation towards water reuse. Existing surface mining operations aim to provide more than 50% of their water demand from supernatant recycled from the tailings pond. This corresponds to a recycling of greater than 80% of the daily wastewater flow to the tailings pond. Likewise, the proposed insitu oilsand projects envisaged a high degree of water reuse. For example, the proposed water balance for the Esso Resources Cold Lake project is summarized in Table 1.²⁰ This indicates that recycled water would have comprised 35% of the total project water demand. A key factor in this recycle scheme was the recovery and upgrading of hot water produced from the well system with the bitumen (Figure 2). Reuse of this water alone would account for 27% of the project water needs. Such measures are desirable for the oilsands industries because of the relatively high water demand of these projects combined with their multiple development potential and consumptive water use (storage in tailings ponds, deep well disposal or loss to producing formations).²¹

Demand for cooling water supplies for the electrical power generation industry offers considerable potential for water reuse. Irrigation return flow has been successfully reused for cooling water makeup.²² Municipal sewage effluents have also received increasing attention as a viable source of cooling water.²³ The continuing growth of coal fired power generation in Alberta will place increasing demands on water resources for cooling water. Consequently, sewage effluent reuse for power plant cooling may become viable in Alberta in the future. An interesting challenge for biologists arising from this application is the problem of biofouling of heat exchangers. Although this problem has been managed to tolerable levels within recirculated cooling systems, improved methods for biofouling control which avoid the use of toxic chemicals would considerably enhance water reuse in this context.²⁴

The pulp and paper industry has historically exhibited one of the highest total water demands among the chemical process industries. This fact, combined with pollution control and economic pressures on the industry, has resulted in many exciting and innovative means for

California where the annual groundwater withdrawal exceeds recharge by 0.27×10^6 hectare-m/yr.²⁶ This annual overdraft peaked at 1×10^6 hectare-m/yr in the drought year of 1976-77. This imbalance is leading to concerns that seawater intrusion will destroy many existing usable aquifers.

Recharge operations can be classed into spreading-infiltration, injection and riverbank/sand dune infiltration. This first approach is widely practiced and has been successfully documented at effluent application rates of 60 m/y in Phoenix, Arizona and with application rates of 244 m/y in Milton, Wisconsin.²⁷ Rapid infiltration has been reviewed for its applicability in the Prairie provinces with the conclusion that it offers a viable and attractive alternative where soil conditions are suitable.²⁸

Direct injection of wastewaters is practiced at a variety of sites around the world. One of the most publicized projects is the Orange County, California Water Factory 21 where secondary wastewater is upgraded to essentially potable standards before being injected into a potable water supply aquifer.²⁹ This approach is in contrast to the Israeli practice of recharging, with wastewater, aquifers used only for nonpotable water supply while protecting potential potable aquifers from wastewater contact.³⁰

River bank filtration is practiced in Germany in order to deal with the polluted water conditions along the Rhine River.³¹ The Netherlands employs a similar approach of allowing polluted raw water supplies to infiltrate artificial sand dunes prior to conventional water treatment.³² Such techniques become necessary where existing raw water supplies are highly contaminated. Zoeteman has documented significantly higher rates of oesophageal, stomach and intestinal cancers in towns supplied with Rhine and similarly polluted surface water supplies versus populations served with groundwater supplies.³³ Fortunately, the relatively low degree of industrialization along Alberta waterways and the now entrenched philosophy of industrial water reuse will hopefully spare Albertans from a similar fate.

Despite the foregoing concerns, direct potable reuse has been practised at Windhoek, South West Africa and is being planned for implementation in Denver.³⁴ In the former case, the health risks involved in such a system can likely be balanced against the reality of water availability actually limiting human survival. For Denver, the prospects are much more controversial. There are those who maintain that current policies of always seeking out the best possible water source, provides the maximum consumer protection and those who argue that wastewater must inevitably be used as a water resource.³⁵ For the foreseeable future, Albertans will likely be spared the difficult decisions required to resolve this debate since the need for direct potable water reuse in Alberta is remote.

TABLE 1

**WATER BALANCE FOR THE ESSO RESOURCES
COLD LAKE PROJECT**

Balancing Fuel	Coal	Gas
Water Requirements	10³ m³/d	
Injection Steam	63.6	63.6
Process Water and Steam	19.7	19.7
Cooling Tower	25.8	25.8
Water Treatment Backwash	17.6	15.5
Utility Water	12.7	12.7
Potable Water	3.8	3.8
TOTAL:	143.2	141.2
Water Consumption		
<i>Consumed in Operations</i>		
• Displacing Bitumen	25.4	25.4
• Cooling Tower Evaporation	20.0	20.0
• Hydrogen Synthesis	2.4	2.4
• Coke Gasification	5.1	5.1
	52.9	52.9
<i>Water Disposal</i>		
• Deep Wells:		
• Water Treatment Backwash	7.6	7.6
• Sour Water	2.4	2.4
• Desalter Brine	2.4	2.4
• Chemical Wastes	0.8	0.8
	13.2	13.2
• Surface:		
• Water Treatment Backwash	10.0	7.9
• Cooling Tower Blowdown	3.3	3.3
• Boiler Blowdown	2.7	2.7
• Utility Water Waste	10.7	10.7
	26.7	24.6
Recycled		
• Produced Water	38.2	38.2
• Sour Water	4.4	4.4
• Sanitary Wastes	3.8	3.8
• Oily Wastes	4.0	4.0
	50.4	50.4
TOTAL:	143.2	141.1
Water Supply		
Recycled Water	50.4	50.4
Fresh Water Make-up	92.8	90.7
TOTAL:	143.2	141.1

Policy Constraints and Water Reuse Disincentives

Conceptually, water reuse is widely regarded as a favourable policy since it represents a form of resource recycling. However, a close evaluation of existing regulations and policies (written and unwritten) in most jurisdictions will reveal countless constraints and disincentives to the adoption of expansion of water reuse by industry or other regulated water users. Johnson has reviewed the institutional and attitudinal obstacles to increased water reuse practice in the United States.³⁶ Some specific examples of industrial water reuse disincentives which have been operative, both formally and informally, in Canada in general, or Alberta in particular, will be considered.

The first case to be considered is that of water pollution regulations development and enforcement. Reduced water use by industry as a consequence of increased reuse will inevitably lead to increased concentrations of pollutants in remaining waste streams. As long as pollution control limits are specified in terms of mass discharge, the industry will not be penalized for having conserved and/or reused water. However, if allowable discharges are specified in terms of concentration or as bioassay procedures using effluent, as received, then the water reuser will be penalized for his efforts. In most cases provincial and federal water pollution regulations recognize this reality. However, any industry which was successful in lowering its water use to the extent that the remaining concentrated effluent was toxic, without the aid of dilution, would inevitably experience pressure to further treat or eliminate the discharge. While this scenario may be desirable in terms of lowering the loading of pollutants discharged to the environment it offers little incentive to the industry concerned.

Another aspect of regulatory policy which may affect industrial water reuse is the concept of total containment or zero discharge. The U.S. Environmental Protection Agency has promoted this concept through its water pollution regulatory development program. While one would expect zero discharge to encourage water reuse, such has not always been the case. In the case of surface mining oil sands plants, the requirement that no process waters may be discharged has apparently discouraged research into optimal treatment and renovation of individual process waste waters which might lead to improved water reuse. Rather, the total containment requirement has led to mixture and storage of all process liquid wastes in the tailings pond. Although supernatant is recycled to a relatively high degree, the full range of onsite reuse options cannot be realized because of the mixture of wastewaters of differing qualities in one receptacle, the tailings pond.

Finally, the disposal option of deep well injection, which is widely practiced by Alberta industry, has a bearing on water reuse potential. Although deep well disposal has performed a useful service in preventing surface water pollution in Alberta, it is a strong disincentive to

water reuse. As long as deep well disposal is pursued for other than saline wastewaters, potentially reusable water is intentionally removed from the surface water cycle. Generally, this disposal option is considerably more economical than wastewater treatment technology. Hence, there is little economic incentive to promote wastewater treatment for reuse unless water supply is strictly limiting. A more restrictive policy on deep well disposal, to limit it to high dissolved solids waste streams, would remove this disincentive.

SUMMARY

With increasing population and economic growth, Alberta will need to heed the examples of the increasing attention being placed on water reuse in the rest of the world. As water supply constraints become evident, it will become even more important to remove some of the artificial constraints to increased water reuse. Attention to these considerations should rate a much higher priority than consideration of interbasin water transfer as a means to deal with water shortages.

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Protecting the Built Environment of Saskatchewan

Marc Denhez

ABSTRACT. The built environment often has elements worth retaining. A variety of legal tools exist from international treaties to private contracts, to achieve preservation. This article reviews the way in which those tools can work in Saskatchewan.

RESUME

L'environnement développé a souvent des éléments qui méritent d'être gardés. Il existe pour ce faire plusieurs moyens juridiques tels que des traités internationaux et des contrats privés. Dans cet article, on examinera comment ces moyens peuvent être appliqués en Saskatchewan.

INTRODUCTION

Most people live in the midst of buildings—a “built-environment.” When that environment has positive features,¹ there are demands for planning mechanisms to protect and improve it. Since public *purchase* of all worthwhile buildings is out of the question, alternative legal mechanisms must be considered.

“Heritage legislation” has existed in western countries for a century.² It is defined, by international consensus, as the body of law which deals with the *identification and protection of sites and areas of historic and/or architectural interest*. Financial aid is a further but non-statutory component. By treaty, Canada *committed itself* to a number of such objectives, including the integration of conservation principles into national policy,³ but passed no implementing statutes.

Despite the federal government's active heritage program (within Parks Canada), most legal authority for the protection of heritage belongs to the provinces. For example, the federal *Historic Sites and Monuments Act* does not protect buildings against demolition.⁴ Furthermore, the federal government is under no legal obligation to protect the Canadian heritage which is in its hands. This distinguishes the federal government's legal obligations from those of other countries, which are by treaty obliged to respect Canada's heritage sites, just as Canada is obliged to respect the heritage sites of other countries.⁵ Indeed, federal property even appears exempt from provincial heritage legislation.⁶ The same immunity does not appear to extend to federally regulated property (e.g. railway stations).⁷ The federal government has, however, established special non-statutory *administrative* procedures to minimize the effect of public works which damage heritage.⁸ The federal *Income Tax Act* however provides no incentives for renovation; this can leave renovation in a poor position taxwise compared to new construction.⁹ This question is currently the subject of debate.¹⁰

The provinces have in the last few years exercised their responsibilities to heritage preservation with the passage of heritage pro-

tection legislation. But much of it is weak as protection is either for a short duration or compensation for designation is mandatory. The Saskatchewan Legislation, the latest of such legislation in Canada, attempts to come to grips with most of the issues confronting legislated preservation.

Before a government can take action to protect historical resources, it must know they exist. Accordingly, most Canadian jurisdictions have developed "environmental impact assessment" procedures, which require inventory and investigation before government-financed construction programmes can proceed.¹¹ For example, Ontario orders an assessment of the impact of proposed development by most government agencies.¹² It also specifies what is to be included in the reports: the description of the proposed undertaking and its effect upon heritage.¹³ The report must also contain "an evaluation of the advantages and disadvantages of the undertaking and the alternatives to the undertaking."¹⁴ If this public report is incomplete, citizens can challenge it.¹⁵ In the U.S., injunctions based upon the inadequacy of government procedures have frequently been obtained against the demolition of otherwise unprotected heritage sites.¹⁶

The corresponding Saskatchewan statute¹⁷ however refers only indirectly to heritage property in its definition of environment.¹⁸ In practice, an assessment of the "heritage" impact is not an across-the-board requirement; instead, it is orderable only when an assessment is already required for *other* reasons (e.g. ecological¹⁹), or when the Minister of Culture and Youth specifically orders one.²⁰ In the latter case, it is a matter of ministerial discretion whether a heritage assessment occurs or not.

I. THE PROVINCIAL LEVEL

There are three main Saskatchewan statutes relevant to heritage and older buildings: the *Heritage Property Act*,²¹ the *Provincial Parks, Protected Areas, Recreation Sites and Antiquities Act*²² (hereinafter referred to as the *PPARSAA*), and the *Planning and Development Act*.²³

The Heritage Property Act

When the Minister of Culture and Youth designates site as "Provincial Heritage property," "No person shall destroy, alter, restore, repair, disturb, transport, add to, change, or move, in whole or in part, real property designated pursuant to this Part or remove any fixtures from any such property . . . without the written consent of the Minister."²⁴ The Minister is thereby given discretion to accept or reject construction, alteration or demolition.

When the Minister decides that a property deserves protection, he must notify the owners²⁵ of the reasons for impending designation,²⁶

and he must also notify the public.²⁷ Failure to issue such notice does not invalidate the designation,²⁸ if the owner had *actual* notice of the impending designation. Any interested person may, within 30 days of publication of the notice in the local newspaper, send a notice of objection to the Minister,²⁹ outlining his reasons. The question is thereupon referred to the Saskatchewan Heritage Property Review Board for a public hearing.³⁰ However, the Minister is not bound by the Board's report: he is only obliged to "consider" it.³¹

All designations take effect (on an interim basis) as soon as all the conditions of notice have been met. Other interim protection is available even before the designation takes effect; this feature will be discussed later.

Aside from the fact that the Act protects "fixtures" in designated properties,³² significant changes to floors, walls, and ceilings presumably qualify as "alterations" which are regulated under the Act. Furthermore, the Minister is also empowered to designate furniture and other personal property.³³

The Provincial Parks, Protected Areas, Recreation Sites and Antiquities Act

The Provincial Parks, Protected Areas, Recreation Sites and Antiquities Act protects several categories of property aside from parks: "protected areas," "recreation sites" and "historic sites."³⁴

Only provincially-owned lands are eligible for designation as "protected areas" or "recreation sites."³⁵ However, no such restriction exists on the Cabinet's power to enact regulations protecting "historic sites," whether designated or not.³⁶

Despite the fact that the legislation labelled "historic sites" as distinct from "protected areas," in practice they have been grouped together. Consequently, despite the potential of the "historic sites" regulation to be applied to private property, "historic sites" are assimilated to "protected areas" with the same limitations which have been imposed on the latter.

The Planning and Development Act

The Minister of Urban Affairs is empowered by this statute to establish "special planning areas" for *inter alia* "the preservation of historic sites."³⁷ This is one of the rare instances where this Minister can intervene even in rural municipalities, which are otherwise the responsibility of the Minister of Rural Affairs. If he does so, he is vested with assorted powers to implement his plan.³⁸

Orders under the Act creating special planning areas have introduced to the area a system called development control.³⁹ A planning commission for the area is established⁴⁰ and "development"⁴¹ within

the area prohibited without a permit. The commission may attach conditions to the permit.⁴² Demolition is presumably a form of “development” that would subject to control.⁴³ Some court decisions suggest that controls cannot be inferred;⁴⁴ that is demolition could not be controlled unless the Act referred *specifically* to it. More courts have held, however, that heritage controls deserve liberal interpretation and should be supported unless they are clearly beyond the power of the authorities.⁴⁵ Such an interpretation would favour the use of the *Planning and Development Act* mechanisms to control both demolition and infill construction. However, in the absence of a test case the *Planning and Development Act* should be used relatively cautiously for purposes of controlling demolition, and the *Heritage Property Act* is usually the preferable mechanism.

Effect on Individual Sites

As mentioned previously, a site designated under the *Heritage Property Act* cannot be changed without government permission.⁴⁶ An area established as a “protected area” or an “historic site” within the meaning of the *PPARSAA* could, of course, and is also protected by the Minister,⁴⁷ as defined by Cabinet regulations.⁴⁸

The Minister’s power to protect heritage structures in a “special planning area” under the *Planning and Development Act* is probably implicit in his authority to make regulations to achieve the purpose (i.e., preservation of historic sites) for which the area was set up. Whether he would have the same power in areas established primarily for purposes other than historic preservation is more problematic.

What kinds of reasons are required to sustain a designation? If, for example, the Minister of Culture and Youth were to designate a property for reasons which were overly extraneous to the *Heritage Property Act*, the designation would be open to challenge in the courts.⁴⁹ However, if the designation was made for the *bona fide* purpose of protecting heritage, then the situation is more complicated if, objectively speaking, its “heritage value” is thin. On one hand, the Act states that in order to be eligible for provincial designation, a property should be “real property of provincial importance;”⁵⁰ this creates the inference that an owner could challenge the designation if, on the facts, he could persuade a judge that the property had no “provincial” importance. That inference, however, is countered by jurisprudence elsewhere which holds that “reasons” for designation are not subject to attack in court even if the heritage value of the property is slight: “If there is some evidence (of heritage value) . . . this court cannot substitute its own opinion for that of the (authorities) . . . as to whether that evidence was sufficient or good enough, or both, to make the declaration under the Act.”⁵¹

The owner does, however, have alternative “recourses”: he can not

only call for a public hearing when the designation is proposed (as mentioned earlier), he can subsequently apply to the Minister asking for the designation to be revoked.⁵² If the Minister refuses, the owner can call for a public hearing before the Saskatchewan Heritage Property Review Board.⁵³ However, the Minister is not bound by the Board's report.

Aside from the protection of property, there are two further important consequences of designation. First, the property can thereafter be exempted from fire codes and building codes; this exemption is not automatic, but instead takes place on order of the Cabinet.⁵⁴

A further consequence of designation is that it makes the property eligible for grants⁵⁵ and other financial assistance.⁵⁶ The various forms of assistance which government could introduce have been discussed elsewhere.⁵⁷ At present, grants and financial assistance are not automatic, but are contingent upon conditions to be outlined by the government.

Effect Upon the Surroundings of Sites

Unlike legislation elsewhere,⁵⁸ the Saskatchewan statutes do not give automatic protection to the surroundings of designated sites. To keep neighbouring construction from blocking view of the Heritage site, it would be necessary to include vistas in the designating order.

Effect Upon Areas

The *Heritage Property Act's* treatment of areas, as opposed to individual sites, is not clear.⁵⁹ Although the *Heritage Property Act* empowers *municipalities* to designate both "properties" and "areas" (or "districts"),⁶⁰ the designation of "Provincial Heritage Property" applies only to "properties," and does not refer to areas or districts. This creates the inference that the legislature had no intention of empowering the Minister to designate areas or districts under that Act. On the other hand, the Act's definition of "property" is broad enough to include areas as well as individual structures.⁶¹ Other jurisdictions have used comparable legislation to protect districts as "historic sites,"⁶² and Saskatchewan appears to be following suit.⁶³ Under *PPARSAA* an "historic site" may be an "area" as a "structure" or "object." The practice is to have "historic sites" designated as "protected areas."

Interim Protection

The *PPARSAA* contains an unusual provision requiring a person undertaking work which threatens any "historic remains" to give notice to the responsible Minister and delay the work until the Minister has had a reasonable opportunity to investigate the site and take salvage measures.⁶⁴ "Historic remains" is nowhere defined in the

Act; without a distinct legal meaning, it means whatever expertise says it means. *If* expert testimony established that a particular site were “Historic,” and the building or structure therefore constituted “historic remains,” then *theoretically* it might be possible to delay issue of a demolition permit (by injunction if necessary) until the required notice was given and a reasonable time had elapsed.

Why “theoretically?” In the section’s 17-year existence there is no record of such a notice ever being demanded by the authorities, or received. The provision has been treated as a dead letter. As a result, a court’s likely response to the use of the section as suggested above is unclear. In the case of a municipality reluctant to issue a demolition permit, it would be entering uncharted waters if it refused the permit on the basis that no notice had been filed. The Minister can however still freeze a property by issuing a “*Temporary Stop Order*.”⁶⁵ The “aggrieved” party can appeal this freeze to the courts.⁶⁶

A second form of interim protection can be ordered under the *Heritage Property Act* if the Minister calls for an “*assessment*” to be submitted as described earlier.⁶⁷ That authority includes sweeping powers to order “*protective measures*” which he considers necessary;⁶⁸ there appears to be no time limit (or almost any other limit) on this power. Any license or permit (e.g., a construction or demolition permit) can be *suspended* until the Minister is satisfied that the appropriate protective measures have been carried out.⁶⁹

Third, a form of interim protection takes place as soon as the Minister complies with the notice requirements of the Act; the property is immediately protected as if the designation process had been complete.⁷⁰

As previously noted, the order declaring a “special planning area” under the *Planning and Development Act* will prescribe regulations for the achieving of the purposes for which the area is set up. In the case of an area established for reasons of historic preservation, the regulations could presumably provide for the suspension or cancellation of any existing construction or demolition permits in addition to controlling the issue in future.

Applications

Requests for protection under the *Heritage Property Act* should be directed to the Minister of Culture and Youth or to the Director, Heritage Conservation Division.⁷¹ Information with respect to protected areas and historic sites under the *PPARSAA* is available from the Minister of Tourism and Renewable Resources.⁷² Questions concerning special planning areas and the *Planning and Development Act* generally would be addressed to the Minister of Urban Affairs.⁷³

Inspection

Unlike the explicit wording of other jurisdictions,⁷⁴ Saskatchewan's *Heritage Property Act* refers to inspection very indirectly. The Minister is empowered to appoint "officers"⁷⁵ who have various rights of seizure.⁷⁶ However, the actual right to inspect is not as clearly defined as in the case of municipalities.⁷⁷ However, as noted above, the Minister may also order work at a site curtailed until a proper investigation has been made "to determine the effect of the proposed operation or activity on that heritage property."⁷⁸ Powers of inspection are also granted under the *PPARSAA*.⁷⁹

Penalties

Three kinds of penalties are possible. The first and most effective penalty would restore at the owner's expense an illegally altered or demolished structure. On this issue, the wording of the *Heritage Property Act* is unusual. The Act states that where designated property is unlawfully altered or destroyed, the Crown may sue for damages "for all sums reasonably expected to be expended for the restoration."⁸⁰ This appears to create the inference that the legislature expected that the government would conduct the restoration with these proceeds.⁸¹ The corresponding provision in *PPARSAA* was repealed.⁸²

The second form of penalty is a fine. Offenders against the *Heritage Property Act* are punishable by a fine of up to \$5,000,⁸³ and \$250,000 for corporations.⁸⁴ Under the *PPARSAA* the maximum fine is only \$500.⁸⁵

The third form of penalty is a term of imprisonment. Offenders against the *Heritage Property Act* face a term of up to six months as an alternative to a fine or in addition to one.⁸⁶ No prison term can be imposed under the *PPARSAA*.

Binding Authority

The provincial government and its agencies are bound by the provisions of the *Heritage Property Act*.⁸⁷ On the other hand, the *PPARSAA* does not state that the Crown is subject to the Act. In the absence of such a provision the Crown is not bound by the statute.⁸⁸ As mentioned earlier, provincial heritage legislation does not apply to federal lands and its application to federally-regulated land (for example, railway property) is currently the subject of debate. The two Acts are binding on municipalities and, of course, any non-government owner.

II. THE MUNICIPAL LEVEL

Planning

Unlike the situation in some other jurisdictions in Canada⁸⁹ and elsewhere,⁹⁰ there is no obligation for Saskatchewan municipalities to include “Heritage” in the planning process. The *Planning and Development Act* does not even specify that the preservation of historic sites and districts is a possible component of municipal planning. However, the *Heritage Property Act* does confer powers on municipalities for the protection of historic sites and other structures.⁹¹ Additionally, the *Heritage Property Act* empowers municipalities to define areas “to be examined for future designation as a heritage conservation district.”⁹² This exercise can lead to a “municipal development plan,”⁹³ of which a major feature is protective measures.

A municipality will normally undertake preparation of “municipal development plan” or, in combination with other municipalities, a “district development plan” on its own initiative;⁹⁴ under the *Planning and Development Act*, it has no obligation to draft a plan or plan amendment unless ordered to do so by the Minister.⁹⁵ After considering written submissions from interested parties who have had an opportunity of examining the plan, the council may adopt the plan and submit it for the Minister’s approval.⁹⁶ The plan takes effect upon such approval and thereafter “it shall be binding upon the council and upon all persons, associations or other organizations whatsoever including all departments and agencies of the Government of Saskatchewan and no development shall be carried out that is contrary to the municipal development plan.”⁹⁷

While there is no express provisions directing a council to adopt zoning controls based on its plan, that is the Act’s intention. Since the plan is binding on the council it follows that by-laws passed contrary to it would be invalid.⁹⁸ The plan itself must contain proposals for zoning controls which “shall be consistent” with it.⁹⁹ The Minister (who must approve zoning by-laws as well as plans) may refuse approval of a by-law where he is of the opinion that it does not conform to the spirit and intent of the Act.¹⁰⁰

It also follows, at least in theory, that if a municipal development plan specifies heritage conservation in an area, neither the province nor the municipality could apparently undertake projects which harmed the heritage value of the area.¹⁰¹ Where the plan contains provisions which are incompatible with heritage conservation (by, for instance, proposing the redevelopment of a picturesque area for high rises)—an amendment is also desirable. The experience of other jurisdictions may be helpful, (e.g. sample plan amendments from the Ontario Heritage Foundation).¹⁰²

Controlling Governmental Demolition

The destruction of heritage by a municipality may be controlled to some extent through the provisions of the municipal development plan as described above. Since the system of environmental impact assessment (described earlier) does not usually apply to heritage structures (unless specifically ordered by the Minister of Culture and Youth) municipalities are normally under no obligation to file impact assessment reports when contemplating public works that might destroy heritage sites. The question of whether municipalities can prevent demolition of designated sites is discussed later.

Protection of Individual Properties

The *Heritage Property Act* permits municipalities to designate "Municipal Heritage Properties."¹⁰³ The first step is for the municipal council to consult with the Municipal Heritage Advisory Committee if such a Committee has been set up.¹⁰⁴ This step is unnecessary where no such committee exists.

A "notice of intention" is then issued by the council to the owner at least thirty days before the designating by-law is passed.¹⁰⁵ It must also be published twice, at specified intervals, in a local newspaper.¹⁰⁶ It would appear that once the notice is served on the owner, the property enjoys interim protection from alteration and demolition for a period of 120 days.¹⁰⁷ The owner can object to the Saskatchewan Heritage Property Advisory Board, and compel the Board to hold a public hearing.¹⁰⁸ However, although the council "considers" the Board's conclusions, it is not bound by them.¹⁰⁹

The effect of a designating by-law is as follows: "No owner of Municipal Heritage Property may apply to the council of the municipality in which the property is situated for approval to alter or demolish the property."¹¹⁰ Additionally, the Act states that "no person shall destroy, alter, restore, repair, disturb, add to, change or move, in whole or in part, any Municipal Heritage Property . . . without the written approval of the council of the municipality."¹¹¹

The dissatisfied owner can object to the designation to the Saskatchewan Heritage Property Review Board at least three days before the by-law is due to be discussed in council.¹¹² Six months after the designation, he can ask the council to reconsider the designation;¹¹³ and if refused, he can again appeal to the Review Board.¹¹⁴ If the designation is not lifted, he can still continue to reapply at annual intervals.¹¹⁵ However, even if the municipality does not change its decision to designate, the owner has a further recourse: he can apply for a demolition permit, even on a designated property; alternatively, he can apply for a construction permit to alter the property. (Note: the

owner, however, cannot even *apply* for a demolition permit until six months have elapsed from the date of designation.)¹¹⁶ If the permit is refused, he can again appeal to the Review Board.¹¹⁷ If still unsuccessful, he can continue to apply for a demolition permit annually.¹¹⁸ In each case of reference to the Review Board, the Board acts only in an advisory capacity: once it has submitted its report to the municipal council, the latter makes the final decision.¹¹⁹ This process becomes somewhat cumbersome.¹²⁰

Protection of Areas

A municipality may protect an entire area by designating it as an “heritage conservation district.” The procedure is first to consult with the local advisory committee, if it has been created.¹²¹ The council then passes a by-law calling for an “examination” of the area.¹²² Next comes the preparation of a “municipal development plan” for the area,¹²³ which must be put into effect. Once the plan is in effect, the municipality may by-law designate the area as an “heritage conservation district.” This designation, however, requires further steps before it comes into effect. It must be submitted to a public hearing before the Saskatchewan Heritage Property Review Board;¹²⁴ and in this case, the decision of the Board is not merely advisory, it is decisive.¹²⁵

Once the designation takes effect, “no person shall erect, demolish, remove or alter the external portions of any building or structure . . . without a permit issued by the council.”¹²⁶ Although this applies only to exteriors, the municipality can extend its control to interiors if it alternatively designates a building as a Municipal Heritage Property. Where a building is a Municipal Heritage Property and would also otherwise fall within a heritage conservation district, the statutory provision pertaining to the former prevail.¹²⁷ One uncertain feature of this system is that it appears to be without prejudice to another municipal technique to protect districts, i.e. to designate them as a single Municipal Heritage Property in the same manner as individual lots. The reason is that the expression “property” (which the Act also refers to as “site”)¹²⁸ appears broad enough to include both individual and larger groupings. This interpretation has been adopted elsewhere, as in Vancouver’s Gastown. However, it is uncertain whether such an approach reflects the intention of the legislature.

Controlling Construction

(i) *General*

The obvious way for a municipality to halt alteration of a heritage site or area is to designate it under the *Heritage Property Act*.¹²⁹ The controls on “alteration” appear to apply to new construction: the *Act*

defines “alteration” as including “change in any manner” to the site in question,¹³⁰ and new construction presumably falls into that category. There are however other methods of control.

In Saskatchewan, as elsewhere in Canada, the general philosophy of land use controls is that the owner of land can do virtually anything with his property except as specifically prohibited by regulations; these are usually found in zoning-by-laws. Under a *development control system* the situation is reversed: the owner can do virtually nothing unless specifically authorized.

(ii) *Development Control Under the Planning and Development Act*

In a “Planned Unit Development Area” (or “P.U.D. area”), no “development”¹³¹ can take place without official consent;¹³² i.e., step-by-step control over the planning and construction of projects. A municipality may establish districts suitable for P.U.D. areas wherever a plan or zoning by-law foresees their creation; thereafter, no development shall be carried out within the districts unless the development is compatible with the purpose of the district in which the area is located and is in conformity with the plan and by-law.¹³³ Although the P.U.D. mechanism was designed primarily for use in the case of undeveloped land on the urban fringe, it has been used in the redevelopment of a built-up area.¹³⁴ If demolition is assimilated to development, then presumably some degree of demolition control could accompany the municipality’s development controls in such a situation.

A form of *interim* development control may be imposed by a municipality in cases where the adoption of a plan or by-law affecting the area in question is pending. The Council may stipulate that all development must have its written permission¹³⁵ and may also withhold the issuance of building permits for a period of three months from the date of application.¹³⁶ Similar interim powers are available under the *Heritage Property Act*, and will be mentioned later. Finally, a municipal zoning by-law *may* provide for a system of development and use permits and require that no development be undertaken without a development permit.¹³⁷ As in a development control system, these permits are distinct from and in addition to the building permit, which is ordinarily the only permission that must be sought under the traditional zoning approach. The Saskatchewan permit system however, resembles the older system in that there appears to be little room for official discretion in the issuance of such permits (except in the case of “conditional uses”—see the section on “Use Zoning” below.) The Act requires that “the terms and conditions under which any (development or use) permit may be issued” be clear in the by-law.¹³⁸ There is also a right of appeal where refusal of a permit is alleged to be based on a misapplication of the plan or by-law.¹³⁹ To the extent that the Act foresees the control of land use by by-law rather than by permission of

municipal officials exercising discretionary powers, it does not really depart from the conventional system of land use control. That system is explored in detail below.

(iii) *Scope of Municipal Powers*

With the exception of “heritage” controls (which, under the *Heritage Property Act*, can apply to a single site), municipal land use powers are usually exercised over a wide area, not, say, over a single lot. If a council tries to pass a by-law affecting a single lot (often called “spot zoning”), the result is not necessarily illegal; but it would be regarded suspiciously by the courts. If there is any hint of discriminatory treatment the courts may invalidate the by-law; this can occur even when the by-law ostensibly applies to a wider area.¹⁴⁰

(iv) *Size and Height Controls*

An oversized building will appear incompatible with its surroundings regardless of its architectural style. A restrictive size and height by-law can also indirectly discourage unwanted development. Saskatchewan municipalities are empowered to control the height and size of buildings.¹⁴¹

(v) *Design Control Through Zoning*

Unlike most other Canadian jurisdictions, Saskatchewan does not enable its municipalities to pass zoning by-laws specifically controlling design (except in front of civic centres).¹⁴² Saskatchewan has little authority over materials used in facades.

(vi) *Use Zoning*

Municipalities are empowered to regulate the uses to which property can be put.¹⁴³ The *Planning and Development Act* also specifically provides for “conditional use” zoning,¹⁴⁴ a device which allows a greater degree of control in the areas to which it applies. Applications for the approval of a conditional use are made to the municipality and may be permitted “at the discretion of . . . and under the conditions specified by the council.”

The decision to preserve an area does not usually imply a change of use. It is customary to retain the existing zoning designation and simply add extra conditions to protect the special features of the area. Some care must be exercised, however, to ensure that the zoning is not so loose as to encourage displacement of population; e.g., residential heritage areas which are frequently vulnerable to an invasion of bars and restaurants.

No such by-law can have retroactive effect. Consequently, any regulation to exclude such uses from the area would have the effect of “freezing” such establishments at the number that existed at the time of the passing of the by-law. However, it is hazardous to attempt freezing land altogether; e.g., by zoning land as “recreational” or “historical,” to impede construction.¹⁴⁵

(vii) *Setback Zoning*

Setback rules are those which dictate the proper distance between a building and the street.¹⁴⁶ They are important for the harmonious appearance of the streetscape.¹⁴⁷

Signs

Regulation of signs is essential to the appearance of a building or heritage area. Municipalities can regulate all forms of signs.¹⁴⁸ Again, precision is required.¹⁴⁹

Maintenance

Maintenance is obviously essential if the quality of buildings and areas is to be retained. Even outside the "heritage" context, municipalities have the power to prescribe and enforce maintenance standards.¹⁵⁰ Presumably, some control can be exercised over the exterior as well as the interior of buildings. Unlike the case in some other jurisdictions,¹⁵¹ however, such controls probably apply to residential buildings only.¹⁵²

Maintenance and occupancy standards must be approached with caution. Frequently, standards have been so strict that owners of older buildings could not meet them without undertaking costly renovations.¹⁵⁴ Provisions (such as typical maintenance and occupancy standards) often refer to modern building code standards which often do not recognize the special construction problems involved in restoration work . . . accordingly, some of these provisions may even prove counterproductive.¹⁵⁵ Unlike certain other provinces,¹⁵⁶ Saskatchewan has no specific provision for the development of alternative standards specifically for heritage buildings, but variations of existing codes are possible.¹⁵⁷

Trees and Landscaping

Trees and landscaping can enhance a heritage site or area, but may be the subject of municipal by-laws.¹⁵⁸ Examples of a model tree by-law are currently available from the Canadian Environmental Law Association. Unlike some of their counterparts elsewhere,¹⁶⁰ Saskatchewan municipalities cannot pass ordinary by-laws to compel an owner to landscape his property.¹⁶¹ Nor can they regulate vegetation or landscaping generally. It may, however, be possible for landscaping requirements to be introduced in conditional use situation, or where the municipality extracts an agreement from the owner in return for a zoning change.¹⁶²

Interim Control

(i) *Control of Demolition*

A delay can occur between the time that municipality decides to

take action on an heritage issue, and the time that such action takes effect. A possible means of delaying issue of a demolition permit where no Section 17 notice has been given under the *Provincial Parks Act* was examined earlier.¹⁶³ However, more direct methods are available. First, the mayor or reeve can issue a “temporary stop order” for any activity which he considers prejudicial to heritage in the municipality.¹⁶⁵ This order can last 60 days, and is appealable to the Court of Queen’s Bench.¹⁶⁵ Second, the council can pass a by-law providing 60-day interim protection by denying a construction or demolition permit for any property which might, in its opinion, be eligible for designation.¹⁶⁷ Third, the property is protected for a 120-day period after the municipality notifies the owner of its intent to consider designation.¹⁶⁸

(ii) *Control on Construction*

The interim controls on demolition described above also apply to alterations and new construction under the *Heritage Property Act*. Further protection exists under the *Planning and Development Act*. Following the first publication by a municipality of notice of its intention to pass a resolution authorizing the preparation of a plan or zoning by-law, the council may withhold the issuance of building permits for three months from the application date.¹⁶⁹

(iii) *Provincial Intervention*

In several provinces, the central planning authority or the responsible minister is empowered to compel the council to adopt plans and by-laws or to conform to and enforce plans and by-laws that have already been adopted where there has been a failure to do so.¹⁷⁰ In Saskatchewan, such power belongs to the Minister under the *Planning and Development Act*. If he is satisfied that a municipality needs a plan or plan amendment he can compel it to draft one.¹⁷¹ The same holds true of zoning by-laws;¹⁷² as well, the Minister may withhold the necessary approval of any zoning by-law where in his opinion it does not conform to the “spirit and intent” of the *Act*.¹⁷³ Such powers of intervention are infrequently exercised.

Variances

Even the most stringent land use controls will not necessarily cause hardship to owners of property for which the controls are inappropriate. A “zoning appeals board”¹⁷⁴ is empowered to vary the application of zoning controls to a property where they would result in “practical difficulties or unnecessary hardships.”¹⁷⁵ The board’s decision can be appealed to the Provincial Planning Appeals Board, whose decision is final.¹⁷⁶ The appeal mechanism for designations under the *Heritage Property Act* was described earlier.

Compensation

Can an owner of a protected property claim compensation from

the municipality that made the designation, downzoned the property or took other such measures?¹⁷⁷ “Conservationists” fear that a municipality might not designate at all if it has to pay compensation. Both the *Heritage Property Act*¹⁷⁸ and the *Planning and Development Act*¹⁷⁹ rule out any obligatory compensation. In the latter case, for example, compensation becomes payable only when the zoning was used for improper purposes.¹⁸⁰

Nevertheless, a real problem of financial loss resulting from designation may sometimes exist. And there are ways that the community may relieve the burden.¹⁸¹ Municipalities might make grants or loans to the owner of designated property, or assume a percentage of the taxes payable on or maintenance costs of designated property.¹⁸² A special trust fund or similar body might provide grants to municipalities to cover such costs. The province might reimburse municipalities for any grants made for developing or preserving heritage, or provide low interest loans for the preservation of designated properties. Other techniques include a moratorium on tax increases resulting from renovation.¹⁸³ Proposals also concern the federal *Income Tax Act*.¹⁸⁴ These recommendations would assist the renovation of *all* investment property (for example, rental property, business property, etc.); they would also provide preferential tax treatment for the owners of designated historic property.¹⁸⁵

Enforcement

(i) *Inspection*

In Saskatchewan the right of municipalities to inspect premises is clearly enunciated.¹⁸⁶

(ii) *Penalties*

The first possible penalty is the obligation to restore a site to its condition before the infraction occurred, or to require that the offender pay the cost where the authorities undertake the restoration. A judge can order an offender to restore a site to its condition prior to the offence, or otherwise to comply with the by-law.¹⁸⁷ Fines may be imposed for offences against the *Planning and Development Act* and any by-law or municipal development plan in force pursuant to the *Act*. The maximum fine is \$1,000 plus \$250 per day for each day that the offence continues.¹⁸⁸ In the case of offences under the *Heritage Property Act*, fines can reach \$5,000 (\$250,000 for corporations). Under most circumstances (e.g., by-laws under the *Planning and Development Act*), imprisonment is not foreseen as a penalty for violation of municipal by-laws. The *Heritage Property Act* is an exception, foreseeing possible imprisonment of up to six months as an alternative or in addition to a fine.

(iii) *Binding Authority*

As mentioned earlier, the applicability of non-federal regulations

(including municipal by-laws) to federal and federally-regulated works has been the subject of jurisprudence; they may be applicable to limited circumstances.

The provincial government and its agencies are bound by the provisions of a municipal development plan¹⁸⁹ and of a heritage designation.¹⁹⁰ In the case of zoning by-laws the situation is less clear: while there is no specific provision in the *Planning and Development Act* to the effect that by-laws bind the Crown, the Crown is bound by the terms of the *Act*.¹⁹¹ Furthermore, zoning by-laws, like plans, must be approved by the Minister; thus, the province has notice of such by-laws and an opportunity to protect provincial interests. Also, zoning by-laws implement features of the plan, which is explicitly binding.

In the case of municipal development plans, municipal public works must respect the terms of the plan.¹⁹² Similarly, by-laws must conform to any plan in force.¹⁹³ As far as by-laws are concerned, it appears that municipalities are bound by their own by-laws; however, they can also formally exempt themselves.¹⁹⁴

III. THE PRIVATE LEVEL

General

A proprietor can, by private agreement, submit his property to control on alteration and demolition. Most agreements bind the signatories, but they do not bind anyone else; to bind future owners, one would need a contract called an “easement or restrictive covenant” to prohibit the owner from doing something on his land (called the “servient tenement”).¹⁹⁵

The *Heritage Property Act* empowers the Minister of Culture and Youth, the local municipality and organizations approved by the Minister to sign restrictive covenants when the covenant has “as its purpose the protection of heritage property.”¹⁹⁶ Examples of such agreements can be obtained from the Heritage Canada Foundation.

This agreement has market impact—namely, the difference in the value of the property before and after the contract. In the United States, this is considered a donation to the public of a part of one’s proprietorship, and *charitable tax receipts* are recognized accordingly.¹⁹⁷ To date, however, no one has challenged the Canadian Department of National Revenue to give the same tax treatment.

Organization of Conservation Groups

(i) *Incorporation*

Advantages of incorporation include the capacity to own property, to enter into contracts, limited liability, and usually a greater facility in obtaining charitable status. Incorporation can be either provincial¹⁹⁸ or federal;¹⁹⁹ local groups usually choose the former.

(ii) *Charitable Status*

Charitable status permits groups to issue tax-deductible receipts for donation. The rules along with application forms, are available from the Charitable and Non-Profit Organizations Section of Revenue Canada.²⁰⁰

(iii) *Financial Support*

Fundraising is an inevitable necessity for conservation organizations.²⁰¹ Funding for various enterprises related to conservation can be found at the federal²⁰² and provincial levels,²⁰³ as well as in the private sector.²⁰⁴

Powers of Citizens' Groups

(i) *General*

Heritage legislation is useless unless it is enforced. The most expeditious way to do so is by government action; but government might fail to act because of oversight or conflict of interest. In such cases, public action may have a very positive impact.

There is, however, no formal legal mechanisms to integrate public participation in the decision-making process for the designation and protection of heritage property. Federal laws are silent; and statutes of Saskatchewan restrict decision-making power regarding designation to provincial and municipal officials. Similarly, there is no formalized system of continuous citizen input into the planning process, such as the right of compulsory referendum in Quebec municipalities.²⁰⁵ In short, there is no way for the citizenry to compel authorities to protect anything, regardless of its value.

Conservationists, however, must also face other legal problems.

(ii) *Access to Information*

Information from various government levels can be important for conservationists, particularly pertaining to public works. In certain jurisdictions, such as the United States, all government information is *deemed public until declared confidential*; it cannot be so classified without valid reasons.²⁰⁶ In Canada however, the *Official Secrets Act*²⁰⁷ makes all governmental information *secret until its publication is authorized* at the discretion of the government. At the time of writing, legislation was before Parliament to significantly loosen these rules and to make information more available. The *status quo ante*, however, prevails in Saskatchewan.

(iii) *Access to Political Action*

Lobbying on behalf of private interests for entrepreneurs and speculators is not only legal in Canada, but a special provision of the *Income Tax Act*²⁰⁸ states that all such measures of political action are tax deductible.²⁰⁹ On the other hand, the very same measures used on behalf of the public interest are *not tax deductible*; furthermore, a

charitable organization which undertakes such "political action" on behalf of the public interest commits an *offence punishable by the loss of its charitable status*.²¹⁰ At the time of writing, such litigation was indeed pending in relation to a foundation in Manitoba.²¹¹ Although "political action" is very difficult to define,²¹² any charitable organization which undertakes to promote heritage conservation must do so with caution.

(vi) *Access to the Courts*

If an individual is harmed by an illegal act, he may sue. However, if all the members of a community have been *equally harmed* by an illegal act (e.g., by the government), no one has access to the courts except through a representative of the government (the Attorney General). In other words, it is usually necessary for the plaintiff to demonstrate that the alleged illegality will *cause him more harm (physically or financially) than other members of the community*. Otherwise, if only the "public interest" is at stake, he will usually be denied access to the courts.²¹³ In some exceptional cases, it is possible for the public to use "private prosecutions"; for an example see *Environmental Management and Public Participation*.²¹⁴ There are also cases where citizens may take legal action in their capacity of *municipal ratepayers*.²¹⁵ Jurisprudence on this point, however, remains somewhat unsettled.

CONCLUSION

Saskatchewan built environment is difficult to protect. This environment, which determines the quality of life of a large part of its population, is also its habitat, with all the complications which that entails. Planning for Saskatchewan's structural heritage is as complex as dealing with the subject of habitat itself.

There are no simple solutions. By the same token, there is no single legal mechanism which is sufficient to deal effectively with the problems facing our built environment. The proper protection of our structural heritage demands a variety of legal techniques, as well as initiative and imagination in their application.

A number of legal mechanisms have been however placed in the hands of the government in order to protect Saskatchewan's built environment. Some of those mechanisms have been used to advantage; others have, for an assortment of reasons, been relegated to the background while awaiting future legislation or for other reasons. However, the appearance and rapid growth of various citizens' groups across Saskatchewan who are working on behalf of the built environment suggest that there is a growing demand upon authorities to take quick action for the entrenchment of these aspirations in the planning process.

NOTES

- 1 Denhez, Marc, *Heritage Fights Back*, (Ottawa: Fitzhenry and Whiteside and Heritage Canada, 1978), ch. 3.
- 2 Denhez, Marc, *Protecting the Built Environment*, Part 1, (Ottawa: Heritage Canada, 1978). The French version of this work was published in *La Revue du Barreau*, Sept.–Oct. 1978.
- 3 *Ibid.*, pp. 4–5. Here is a description of the legal consequences of these treaties.
- 4 *Ibid.*, pp. 11–17. Here is found a description of these limitations, particularly those found in the *British North America Act*.
- 5 These various obligations result from the treaties mentioned earlier.
- 6 Denhez, *Built Environment*, p. 14.
- 7 *Ibid.*, p. 16. The *Hamilton Harbour Case*, on which this view was based, was appealed unsuccessfully to the Ontario Court of Appeal; appeal to the Supreme Court of Canada was abandoned.
- 8 *Ibid.*, pp. 13–14. It describes the basic features of “environmental impact” procedures at the Canadian federal level as compared with the U.S. and Australia.
- 9 *Ibid.*, pp. 17–19. A more detailed description is found in “Current Tax Proposals Affecting Renovation,” by this author, in *Second Canadian Building Congress* (Ottawa: National Research Council, 1979).
- 10 For a description of current developments in this area, see *Tax Treatment of Renovation*, Heritage Canada Foundation, 1980. Unpublished.
- 11 For an example see *Alberta Land Surface Conservation and Reclamation Act*, 1973 S.A. c. 34, s. 8; *Alberta Historical Resources Act*, 1974 S.A. c. 5, s. 22; *Ontario Environmental Assessment Act*, 1975 S.O. c. 69.
- 12 See *The Environmental Assessment Act*, 1975, S.O. 1975, c. 69.
- 13 The Act’s definition of “Environment” includes at Section 1 (c) (iii), “the social, economic and cultural conditions that influence the life of man or a community,” as well as “any building, structure, machine or other device or thing made by man” at Section 1 (c) (iv).
- 14 *Ibid.*, Section 5 (3) (d).
- 15 *Ibid.*, Section 7 (2).
- 16 *Ibid.*, Section 18 (19). In the United States there are usually twenty to thirty citizens’ applications for injunctions pending before American courts at any given time to block projects threatening heritage. See the *National Historic Preservation Act* (USA) of 1966, 16 U.S.C. s. 470(f), particularly at s. 106i National Environment Policy Act, 42 U.S.C. s. 4321, P.L. 91 190 (1970). An updated list of U.S. litigation to protect historic sites is issued periodically by the National Trust for historic preservation, 740 Jackson Place, Washington, D.C.
- 17 *The Environmental Assessment Act*, 1980, c. E-10.1 of the continuing consolidation.
- 18 The Act, at Section 2 (e), includes in the definition of “Environment”: “Social (and) cultural conditions that influence the life of man or a community, (but only) insofar as they are related to . . . air, land and water, plant and animal life, including man.” That convoluted definition of environment can lead to a tautology, e.g. by including “Cultural conditions that influence the life of man insofar as they are related to the life of man.” Does “Heritage” qualify as a “Cultural condition” which is a component of the environment? The legal answer, in Saskatchewan, is unclear although the answer is affirmative elsewhere.
- 19 In practice, soil disturbance usually triggers an environmental assessment aimed at archaeological resources.
- 20 *Heritage Property Act*, s. 63. (At first glance, it would appear the “heritage”-type environmental impact assessments can be ordered only for areas of “archaeological or scientific” interest, insofar as the only relevant statutory provision is in a section part V of the *Heritage Property Act* entitled “Archaeological and Scientific Resource Conservation.” However, the Act states at 5:59 that these orders can be issued for “heritage property,” and the Act defines “heritage property” as including not only archaeological sites, but also sites of “architectural, historical (or) cultural” value. That clear wording within the text of the statute prevails against the wording of the section titles; (Craies on statute law, 7th ED. p. 194) consequently, it appears that such assessments could be ordered for the protection of *all* “heritage” sites, and not only for those of archaeological and scientific interest.)
- 21 Bill 88, 1979–80. Assented to June 17, 1980.
- 22 R.S.S. 1978, c. P-34, as amended.
- 23 R.S.S. 1978, c. P-13.
- 24 *Heritage Property Act*, S. 39(1), 44(1).
- 25 S. 39(1) (a).
- 26 *Ibid.* This notice must be given at least 60 days before designation.
- 27 The Minister must register a copy at the local land titles office under S. 39(1) (b); publish a notice in the Saskatchewan *Gazette* under S. 39(1) (c); and also publish a newspaper notice under 39(1) (d).
- 28 Re: *Trustees of St. Peter’s Evangelical Church and City of Ottawa*, (1980) 27 O.R. (2d) 264, affirmed (1980) 30 O.R. (2d) 740.

²⁹ *Heritage Property Act*, S. 39(2).

³⁰ S. 42.

³¹ S. 43.

³² S. 44(1).

³³ Ss. 45-50.

³⁴ See Section 20 (a), which refers to each of these as a district entity.

³⁵ S. 4. Speaks of "provincial lands." The term is defined in s. 2(g) by reference to the definition in the Provincial Lands Act, R.S.S. 1978, C.P. 32-essentially, "lands vested in the Crown in right of the province" (s. 2(i)).

³⁶ S. 29(a). "Historic Site" is defined, under s. 2(c), as "any building, structure, object or area that is significant in the history or culture of the province"; no distinction is made between public and private property.

³⁷ S. 193(2) (f).

³⁸ Under S. 193(6). The order declaring the special planning area can prescribe regulations "for the achieving of the purposes for which the area is established." Furthermore, S. 193(7) gives the Minister "all the powers that a Municipal council has under this Act." The latter powers are unlikely to prevent demolition, but powers under S. 193(6) may be effective in doing so if, otherwise, the "purposes for which the area is established" would be thwarted.

³⁹ See, e.g., orders dated May 19, 1978 establishing the Tonkin and Gravelbourg special planning areas. To date no areas have been established with historic preservation as their primary purpose.

⁴⁰ See S. 5 of the above orders.

⁴¹ Defined by s. 2(b) of the above orders as "any construction, excavation, building, mining or engineering or other operations in, on, over or under land or the making of any change in the use or intensity of the use of any land, building or premises."

⁴² S. 6(1) of the above orders.

⁴³ Demolition is presumably a radical "change in the use or intensity of the use" of land, as foreseen as S. 2(b).

⁴⁴ Rogers, Ian McFee, *Canadian Law of Planning and Zoning*, Carswell Co. Ltd., Toronto, 1973, p. 11.

⁴⁵ See *Trustees of St. Peter's Church V. City of Ottawa*, Footnote 34. For a case in which the court equated the threat to heritage with state of emergency, see *E. J. Murphy et al. v. City of Victoria*, (1976) 1 M.P.L.R., p. 166. In that case, the City was empowered to designate buildings for protection as heritage buildings, but nothing in the City's ordinary powers prevented the owner from demolishing the building between the time he received notice of the impending designation and the time the designation became effective (a period of several months). The City therefore declared a "state of emergency" and invoked the extraordinary powers which it may use in "emergencies." The bylaw stated that because of the emergency no person shall demolish a building mentioned in the schedule to the by-law except in accordance with the by-law and no person shall construct a building or structure on the lands designated. Furthermore, all demolition permits then in force were revoked. The court refused to overrule this "state of emergency." A Saskatchewan court could conceivably reach the same decision. However, the case has been described as running "counter to traditional interpretations of municipal powers" (S. M. Makuch, 1 M.P.L.R., p. 167). The author, nevertheless, balances the statement with a number of cases both pro and con.

⁴⁶ S. 44(1).

⁴⁷ Who "the Minister" is will depend on the location of the area or site. In the Northern Administration District (i.e., that part of the province generally lying north of the 54th parallel) the Minister responsible for the carrying out of the Act is the Minister of Northern Saskatchewan whose department administers most provincial programs in the N.A.D. In the rest of Saskatchewan the Minister is the Minister of Tourism and Renewable Resources, except that the Department of Culture and Youth may have jurisdiction over certain sites and areas (for further clarification contact the Departments mentioned.) With respect to the N.A.D. it should also be noted that the Minister of Northern Saskatchewan is given extensive land use control powers (see the *Northern Administration Act*, R.S.S. 1978, c. N-5, s. 9(2)).

⁴⁸ S. 29 (a). See also S. 24(1) (c).

⁴⁹ It is settled that even ministerial discretion is subject to the purposes for which it was granted to the Minister: *Roncarelli v. Duplessis*, (1959) S.C.R. 121.

⁵⁰ S. 39(1).

⁵¹ As stated by Mr. Justice Gould in *Murray v. Richmond* 7 C.R.L.R. 145.

⁵² S. 54(1).

⁵³ S. 54(3).

⁵⁴ S. 76.

⁵⁵ S. 3(1) (j).

⁵⁶ S. 3(1) (h).

⁵⁷ See "What Price Heritage," by this writer, *Plan Canada*, Winter 1980.

⁵⁸ E.g. *Quebec Cultural Property Act*, art. 31.

⁵⁹ E.g. *Alberta Historical Resources Act*, S. 19.1, 19.2

⁶⁰ *Heritage Property Act*. S. 34-36.

- 61 In the words of the Act, Heritage property means any property whether a work of nature or of man, that is of interest for its architectural, historical, cultural, environmental, aesthetic or scientific value, and includes a site where . . . (such) property is or may reasonably be expected to be found. (s. 2(i)). "Site includes any parcel of land . . ." (s. 2(p)).
- 62 E.g. Vancouver's Gastown and Chinatown, and Alberta's Bitumont.
- 63 Qu'Appelle Diocese Property, a collection of five buildings, has been designated in Regina; title was, however, held by a single owner.
- 64 S. 17.
- 65 S. 4(1).
- 66 S. 4(2).
- 67 At p. (5).
- 68 S. 63(1) (c).
- 69 S. 63(2).
- 70 S. 44(1).
- 71 Supervisor of Historic Conservation, Heritage Conservation Division, 11th Floor Avord Tower, 2002 Victoria Avenue, Regina S4P 3V7.
- 72 1825 Lorne Street, Regina S4P 3V7. In the case of properties in the Northern Administration District contact instead the Minister of Northern Saskatchewan, Box 5000, La Ronge, Sask. S0J 1L0.
- 73 2151 Scarth Street, Box 7110, Regina S4P 3V7.
- 74 E.g., *Alberta Historical Resources Act*, s. 22
B.C. Heritage Conservation Act, s. 7(2)
Quebec Cultural Property Act, s. 29.
- 75 Ss. 2(m), 58(g).
- 76 S. 72.
- 77 S. 32.
- 78 S. 63(a).
- 79 See s. 21.
- 80 S. 73(2).
- 81 This inference is strengthened by the fact that the government is already empowered to restore designated properties which are "in jeopardy" because of "non-observance of accepted maintenance and operational procedures": s. 51(1). Illegal alteration or demolition is presumably a rather drastic departure from accepted operational procedures.
- 82 Formerly, Section 23(3) of *PPPARSAA* stated that sites which had been designated as protected areas under the Act and which were illegally altered could be restored at the expense of the party responsible. However, the provision was repealed (1973-74 c. 84 s. 8) and has not been replaced.
- 83 S. 74(1) (b).
- 84 S. 74(1) (a).
- 85 S. 10(1).
- 86 S. 74(1) (b).
- 87 S. 80.
- 88 *Interpretation Act*, R.S.S. 1978.
- 89 E.g., Winnipeg must take into account heritage sites and areas (see *City of Winnipeg Act*, s. 573 (e. 1)).
- 90 See, e.g., Britain's *Civic Amenities Act*, (1967), Ch. 69.
- 91 Part III of the Act is entirely devoted to that subject.
- 92 S. 34(1).
- 93 *Ibid.*
- 94 *Planning and Development Act*, Ss. 32, 89.
- 95 Ss. 41, 42.
- 96 *Ibid.*
- 97 S. 48(1).
- 98 The inference is made explicit by s. 38(3): "Any zoning controls that are inconsistent with the municipal development plan shall to the extent that they are inconsistent with the plan be of no effect."
- 99 S. 38(1) (b).
- 100 S. 70(3).
- 101 John Swaigen, formerly of the Canadian Environmental Law Association has commented on the legal effect of Ontario plans on heritage conservation areas as follows: "If a municipality made an official plan and it was approved by the Minister, and this official plan provided for an area to be designated as a heritage conservation area, the municipal council would be acting illegally if it tried to construct public works, and the construction required the demolition of designated heritage properties. Whether the municipality would be acting illegally if it built public works which simply detracted aesthetically from the area would probably depend on the exact wording of the official plan, the testimony of experts and many other factors." (Opinion rendered to Heritage Canada, July 25, 1977, Unpublished.)
- 102 77 Bloor Street West, Toronto M7A 2R9.
- 103 Part III of the Act.

- 104 S. 11(2) (a).
 105 S. 11(2) (b). Under s. 74, notice can be given by registered mail. Failure of notice may not
 invalidate the by-law if the owner had actual notice: see footnote 38.
 106 S. 11(2) (c). The first publication must be at least 21 days before the council meeting, and the
 last must be at least 7 days before the meeting.
 107 S. 22 (a).
 108 S. 13(2).
 109 S. 16.
 110 S. 23(1).
 111 S. 33.
 112 S. 13(1).
 113 S. 20(1).
 114 S. 20 (a).
 115 S. 22.
 116 S. 23(2).
 117 S. 23(4).
 118 S. 23(8).
 119 Ss. 21, 23(7).
 120 To summarize, the particularly persistent owner can face the Review Board twice annually
 (with public hearings accordingly); once to consider his application to "undesignate," and
 once to consider his application to demolish. He can also place himself on the agenda of his
 municipal council four times annually to consider the following: a) the application to
 "undesignate"; b) the Review Board's report on "undesignation"; c) the application to alter or
 demolish; and d) the Review Board's report on the latter.
 121 S. 34(2).
 122 S. 34(1).
 123 *Ibid.*
 124 Ss. 35(3) and (4).
 125 Ss. 35(6) and (7).
 126 S. 36(1).
 127 S. 35(2).
 128 S. 2 (i).
 129 I. see s. 33.
 130 S. 2 (c).
 131 As defined at s. 2 (g).
 132 S. 119.
 133 S. 118.
 134 The Cornwall Centre Development in downtown Regina.
 135 Ss. 34(1), 57(1).
 136 S. 58.
 137 Ss. 61(2), 65(1).
 138 S. 61(2) says "a zoning by-law *may* provide for (such a system of permits), prescribe the terms
 and conditions (of their issue) and prescribe forms of permits. . . ."
 139 S. 83(1) (a).
 140 See, e.g. *Re H. G. Winton Ltd. and Borough of North York* (1979), 20 O.R. (2d) 737.
 141 S. 61(5) (h). In several American jurisdictions, a new kind of height control, which is both
 precise and flexible, has been developed. The permitted height of a building is expressed as a
 percentage (for example, not less than 80% and not more than 120%) of the average height of
 buildings on the block or buildings fronting upon the street and built before 1950. Although a
 different permissible height on each block may be the result, this kind of control is not,
 strictly speaking, spot zoning because it is of general application throughout the area. It
 could be useful in communities which already have a slightly irregular roof line. Whether
 such controls would be upheld in Saskatchewan remains to be seen.
 142 *Urban Municipality Act*, R.S.S. 1978, c. U-10, s. 189(1).
 143 S. 61(5) (a), (b).
 144 S. 61(6) (a).
 145 That practice encounters problems from the courts: See *Re District of North Vancouver*
Zoning By-Law 4277, (1973) 2 W.W.R. 260. See also *Regina Auto Court v. Regina* (1958), 25
 W.W.R. 167 and *Sula v. Duvernay*, (1970) Que. C.A. 234.
 146 *Planning and Development Act*, s. 61(5) (h); *Urban Municipality Act*, s. 139(1)4.
 147 Some North American cities are considering adapting the 80-120% formula to setbacks—
 that is, by stating that the setback cannot be less than 80% nor more than 120% of the average
 setback of other buildings on certain streets. This approach is suitable for streets where
 setback is already irregular. The formula is still untested in Saskatchewan.
 148 *Planning and Development Act*, s. 61(5) (k).
 149 An example is available from the Central Area Division of the Vancouver City Planning
 Department, covering Gastown.
 150 *Saskatchewan Housing Corporations Act*, R.S.S. 1978, C. s. 24, s. 30(1).

- 151 E.g. Ontario *Planning Act*, ss. 36, 37;
 Alberta *Municipal Government Act*, s. 239(1); and
 Quebec *Municipal Code*, art. 404(2), 392a par. 1.
- 152 The introductory words of s. 30(1) of the *Saskatchewan Housing Corporation Act* are as follows: "A municipality may by by-law do any act or thing necessary for the municipality to carry out this Act . . ." Since the purpose of the Act is the provision of housing, it may be argued that the specific power to regulate maintenance of "property" applies only with respect to residential property.
- 153 *Heritage Property Act*, s. 30.
- 154 For example, in a recent Ontario case, *George Sebok Real Estate Ltd. and David E. Marlow v. The Corporation of the City of Woodstock* the Court of Appeal held that a by-law passed under s. 36 of the Ontario *Planning Act* and "prescribing standards for the maintenance of physical conditions and for the occupancy of property" could call for thicker walls, new walls in the attic, more exits, and an improved basement floor—that is, for extensive alterations entailing substantial expenditure of money. The court held that such provisions fell within the orbit of standards for the "occupancy" of property because such standards are higher than those for the maintenance of property. From the point of view of heritage conservation, however, such high standards only prove to be an incentive for the owner to demolish the building concerned.
- 155 Opinion of Connie Peterson Giller, Assistant Solicitor for the Regional Municipality of Waterloo, Ontario, August 18, 1977 (unpublished).
- 156 E.g., the Alberta *Historical Resources Act*, s. 37.
- 157 Under the new Act the Minister of Culture and Youth may order that any provincially designated property be exempted from any applicable fire or building code regulation (s. 77). S. 195(1).
- 158 8 York Street, Toronto.
- 159 E.g., *Quebec Cities and Towns Act*, art. 429(36).
- 160 See *Re Mississauga Golf and Country Club Ltd.*, cited in footnote 94.
- 162 Such agreements would appear to be authorized by s. 197(1) (b) of the *Planning and Development Act*.
- 163 See section on "Interim Protection" at the provincial level above.
- 164 Or the Minister of Northern Saskatchewan, in that part of the province.
- 165 *Heritage Property Act*, s. 28(2).
- 166 Ss. 28(1) (e).
- 167 S. 28(1) (e).
- 168 S. 33 (a).
- 169 *Planning and Development Act*, s. 58. See also ss. 34(1) and 57(1) which provide for a form of interim development control in such circumstances.
- 170 Rogers, *op. cit.*, p. 252.
- 171 S. 30.
- 172 S. 55.
- 173 S. 70(3).
- 174 *Planning and Development Act*, s. 61(1). See also s. 81 *et seq.*
- 175 S. 83(1) (b).
- 176 S. 84(16).
- 177 In Alberta the problem arises in connection with section 19 of *The Historical Resources Amendment Act*, 1978. Section 19.5(1) provides that: "If a by-law under Section 19.3 or 19.4 (allowing for designations) decreases the economic value of a building, structure or land that is within the area designated by the by-law, the council *shall* by by-law provide the owner of that building, structure or land with compensation for the decrease in economic value." Although all other provinces have heritage legislation, they have refused "getting roped into inflexible cash commitments." See *Heritage Fights Back*, by this writer, Fitzhenry & Whiteside, Toronto, 1978, p. 162; see also "What Price Heritage," by this writer, *Plan Canada*, Spring 1981.
- 178 At S. 75.
- 179 At s. 198. Additionally, s. 419(1) of the *Urban Municipality Act* provides that "a municipality is civilly liable for damages if any land is injuriously affected by the exercise of any of the powers conferred upon it by this or any other Act with respect to the carrying out of any municipal public work." Since designation is not a "work," the section would not support a claim for compensation.
- 180 An extensive discussion of such purposes is found in Rogers, *op. cit.*, pp. 122-26.
- 181 Many of these suggestions appear in the Minutes and Proceedings of the Ontario Historical Society Conference on Heritage Legislation in Ontario, Sept. 24, 1977 (*The Ontario Heritage Act—Present Problems, Future Prospects*). See also C. L. Sanditord's "An Analysis of Ontario's Heritage Preservation Legislation" (unpublished), p. 58.
- 182 *Heritage Property Act*, s. 28(1).
- 183 "What Price Heritage," (op. cit.).
- 184 S.C. 1970-71-72, c. 63 as amended.

- 185 See footnote 10.
 186 *Urban Municipality Act*, s. 139(2); *Heritage Property Act*, s. 32(1).
 187 *Urban Municipality Act*, s. 133(6); *Planning and Development Act*, s. 203(2); *Heritage Property Act*, s. 73(2).
 188 S. 203(1).
 189 *Planning and Development Act*, s. 48(1).
 190 *Heritage Property Act*, s. 80.
 191 S. 196(1).
 192 S. 48(1).
 193 S. 38(3).
 194 "Comprehensive zoning by-laws often exempt local authorities from their provisions and permit by way of exception municipal buildings and structures to be erected on lands otherwise confined to residential uses. It would appear that such exceptions are legal." Rogers, *op. cit.*, p. 144. Rogers bases his opinion on *Dopp v. Kitchener* (1972), 32 O.W.N. 275.
 195 The technical difference between an "easement" and a "covenant" is sometimes confusing. For example, some organizations (such as the Ontario Heritage Foundation) working with these agreements refer to an "easement" as the *interest in* the "servient" land which the agreement gives rise to, whereas a "covenant" is the contract which outlines the mutual obligations of the parties. On the other hand, most texts prefer to define an easement as a proprietor's commitment not to interfere with *someone else's* activity on the proprietor's land (for example, a right of way), whereas a restrictive covenant is a commitment that the *proprietor himself* will not do something on his *own* land. In any event, since both easements and restrictive covenants share the same characteristics for conservation purposes, they are treated together in this article.
 196 *Ibid.*
 197 See the opinion of attorney Russell L. Brenuemar, published in *Preservation News*, May, 1976, p. 3. This view was accepted by the Internal Revenue Service (U.S.) in a 1975 ruling (Rev. Rul. 75-358, 1975-34 I.R.B. Sug. 25, 1975) and U.S. Public Law 94-455, The *Tax Reform Act* of 1976.
 198 Contact: The Corporations Branch
 Department of the Provincial Secretary
 308-1919 Rose Street
 Regina S4P 3P1.
 199 Contact: Department of Consumer & Corporate Affairs
 Corporations Branch
 15th Floor
 Place du Portage
 Hull, Quebec.
 200 Charities registered in Canada can also be recognized in the United States. This would permit Americans donating to the charity to deduct the donation from their income *in Canada*; it would also permit American charities to transfer funds to the Canadian charity. To obtain such advantages, a Canadian charity should complete "Package 1024" and form "SS-4," a series of forms available from the United States Embassy, 60 Queen Street, Ottawa, Ontario K1P 5Y7.
 201 A useful introduction to the subject is *Shortcuts to Survival* by Joyce Young; Shortcuts, Toronto, 1978.
 202 At the time of preparing this article, new programs were being announced by C.M.H.C.
 Contact:
 Neighbourhood and Residential Rehabilitation
 Canada Mortgage and Housing Corporation
 Montreal Road
 Ottawa, Ontario
 K1A 0P7.
 The Department of Indian Affairs and Northern Development administers a program which subsidizes historic sites designated under the federal *Historic Sites and Monuments Act*. Contact:
 Historic Sites and Monuments Board of Canada
 Department of Indian Affairs and Northern Development
 Ottawa, Ontario
 K1A 0H4.
 By agreement with provincial governments, the federal Department of Regional Economic Expansion shares in a number of projects. D.R.E.E. has two offices in Saskatchewan:
 814 Bessborough Tower
 601 Spadina Crescent
 Saskatoon S7K 3G8, and
 204 Towne Square Building
 919 Rose Street
 Regina S4P 3P1.
 The Department of Manpower and Immigration has a "Canada Works" and a "Young

Canada Works" program which has a relatively strong heritage orientation. Contact the local Canada Employment Office.

The Canadian Home Insulation Program (CHIP) can provide some assistance for insulating buildings. For further details, contact CHIP at:

P.O. Box 700
St. Laurent Postal Station
Montreal, Quebec
H4L 5A8.

The Katimavik program can occasionally make free, young, unskilled labour available for community projects. contact: Katimavik, 323 Chapel Street, Ottawa K1N 7Z2.

203 An assortment of programs (primarily the Community Capital Fund) is administered by the Administrative Services Branch (Grants Division) of the Saskatchewan Department of Urban Affairs. It can be contacted at 2151 Scarth Street in Regina.

The Saskatchewan Main Street Program is aimed at communities of less than 2,000 people, and provides:

- (a) 50% of the cost of individual store front renovations to a maximum of \$500;
- (b) Up to 75% of the cost of general improvements to the business district to a maximum of the total of grants under (a);
- (c) Up to 75% of professional costs for a redevelopment plan.

For further information, contact the Business Assistance Branch, Department of Industry & Commerce, 7th Floor, S.P.C. Building, Regina S4P 3V7. A similar program for larger communities is administered by the Dept. of Urban Affairs.

Under the Saskatchewan Residential Rehabilitation Program, people who own their own home may be eligible to receive a low interest loan for improvements to their homes. The repayment of part of this loan to a maximum of \$1,000 may be forgiven. Saskatchewan also makes grants for repairs undertaken by citizens over 65 years old. For information concerning these three programs, contact: Saskatchewan Housing Corporation, 2024 Albert Street, Regina S4P 3P4.

Grants or tax abatements can be made available from municipalities under sections 226 and 350 of the *Urban Municipality Act*. For further information, contact the local municipality.

The Department of Culture and Youth has information concerning four programs:

- a) matching grants (to \$20,000 over 2 years) for municipal heritage properties;
- b) matching grants (to \$100,000 over 5 years) for provincial heritage properties;
- c) general Heritage Conservation Grants (up to \$2,000) to organizations or municipalities;
- d) property tax rebates (to \$1000 or 50% of property tax, whichever is less) on heritage properties.

204 There are some 35,000 registered charitable organizations in Canada; some can be persuaded to donate to the conservation of the built environment. The corporate sector is another possible source of funds.

Some civic beautification projects can be carried out on a purely voluntary co-operative basis. Such projects, often called a "Norwich Plan," require good organization and promotion. Frequently, such organization comes from merchants' associations or chambers of commerce. Interesting examples of this approach, though not for heritage purposes, are found in the civic beautification projects of Kimberley and Osoyoos, British Columbia. Special arrangements may also be made to cover the cost of local improvements—for instance, a beautification scheme may be paid for by the proprietors who are benefitted.

Further information on such projects is usually available from the local representative of the Norwich Union Insurance Company.

205 Quebec *Cities and Towns Act*, art. 426(1c). This right could be invoked (assuming a sufficient number of citizens demanded it) on any zoning amendment.

206 Otherwise, the courts can compel disclosure under the *Freedom of Information Act*.

207 R.S.C. 1970, s. 0-3.

208 S.C. 1970-71-72, c. 63 as amended.

209 Section 20(1) (cc).

210 *Revenue Canada Information Circular 77-14*, June 20, 1977, s. 6(c).

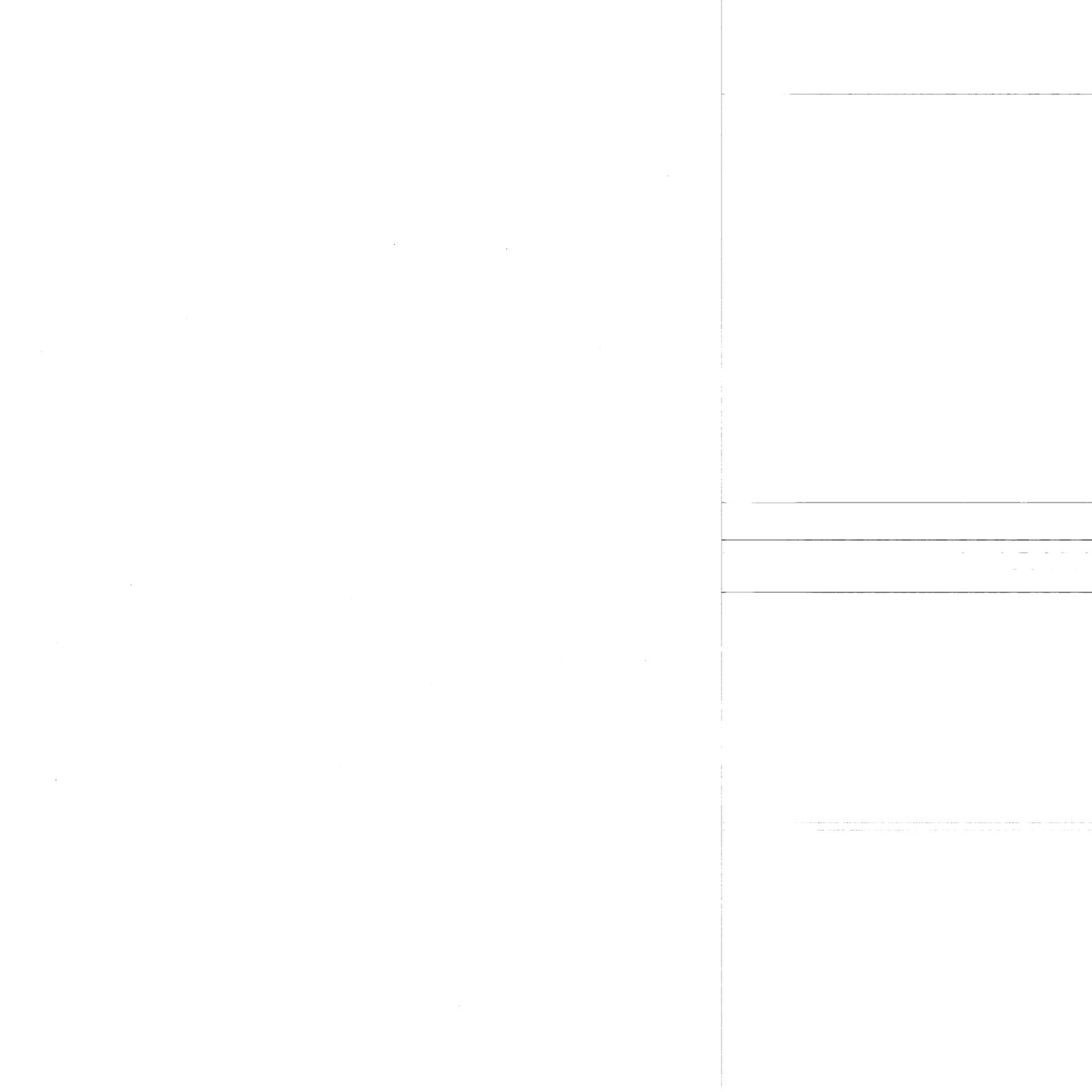
211 The Manitoba Foundation for Canadian Studies. The issue is alleged political content in its magazine *Canadian Forum*.

212 In the spring of 1978, Revenue Canada issued an information circular which so restricted the rights of charitable organizations that it had to be withdrawn. It is, nonetheless, generally assumed to represent departmental policy.

213 See the recent case of *Rosenberg and Makarchuck v. Grand River Conservation Authority* (Ontario C.A.) (1976) 12 O.R. (2d) 496; leave to appeal to the Supreme Court of Ontario was refused in October, 1976. For a full discussion, see John Swaigen's *How to Fight for What's Right*, Lorimer, Toronto 1981.

214 P. S. Elder, ed., *Canadian Environmental Law Association*, Toronto, 1976.

215 See: *Re Davis and Village of Forest Hill*, (1965) 1 O.R. 240 at 246 and *Tache Gardens et al. v. Dasken Enterprises*, (1974) S.C.R. 2.



Community Leaders in Southwestern Manitoba*

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ABSTRACT. Over half of the identified leaders in southwestern Manitoba can be classified as informal leaders. Generally, community leaders are mostly males, over 50 years of age, tend to be more educated, and come from the business and professional occupations. On the average they have also spent longer periods of time in their communities than non-leaders.

RESUME

Plus de la moitié des leaders identifiés dans le sud-ouest du Manitoba peuvent être classifiés comme étant des leaders informels. Les leaders communautaires sont pour la plupart des hommes, âgés de plus de 50 ans, qui sont généralement plus instruits et qui viennent des milieux commerciaux et professionnels. En moyenne ils ont passé de plus longues durées dans leurs communautés que les non-leaders.

Like other rural communities in Canada, Manitoba rural communities have undergone significant changes in the last fifty years. The introduction and acceptance of farm technology, the development of mass communication and transportation systems have brought about dramatic changes in population, economic structure and social organization of rural Manitoba. While some attempt has been made to study the changing population and economic structure little attention has been paid to the study of rural social organization.

One area of social organization which is of vital importance to rural areas is leadership. Many writers have pointed out its importance in rural/community development. Gillette (1911) for example, has pointed out that the most serious problem associated with rural-urban migration is the loss of leadership sustained by rural communities. According to Gee (1933), this large loss of leaders contributes to a lower quality of life in the rural area. Recently Chanon (1971) has noted the importance of leadership in community development; "the difference between a moribund community and a viable one is that the latter has at least one interested person with ideas and initiative" (Chanon, 1971). Mathews (1976) has likewise pointed out that the leadership pattern of a community is a reflection of the commitment and involvement of its members. Despite this recognition little effort has been made to investigate empirically rural leadership patterns. If leadership is important to community life, there is a need to identify who the leaders are and the roles they play in social organization.

Methodology

The data reported here is derived from a 1976 summer survey of four communities in Southwestern Manitoba. Selection was made to ensure that the different sizes of communities in the region as well as all

*The data presented here are derived from a larger study supported by the Community Resource Center and Brandon University. I acknowledge, with thanks, the help of Mr. Ken Bessant in the collection and processing of the data.

geographical areas were represented. Three communities of less than 2,000 and one community of 2,000 or more people were identified. There was no attempt to randomly select the communities surveyed. We can therefore not generalize our findings for all communities in the Southwestern region of Manitoba. Each was divided into residential areas and interviewers were instructed to interview a pre-determined number of residents from each area, based on the number of houses.

There were initially two communities with a population of 2,000–5,000 identified, but in one of these communities only 30 interviews were granted. Data from this community are therefore eliminated from the present analysis. Thus the present analysis is based on data from four communities. However, since the demographic characteristics of the respondents are very similar to that of the total population of the region, we suggest that the findings presented here are at least an indication of leadership patterns. In all 630 residents were interviewed in the four communities: 225 from communities with population under 1,000; 249 from communities with 1,000–2,000 population, and 156 from communities with 2,000–5,000 population.

In their attempt to find a suitable method for analysing leadership patterns, sociologists have used one or a combination of three major methods. The most direct method is the positional approach which concentrates on those who occupy formal positions in the community. These could include elected political officials and officials of voluntary organizations. Obviously, the researcher's judgement is fundamental since he designates which positions are indicative of leadership. Secondly, not all community leaders hold formal positions in the community.

The second major approach to locating leaders, the reputational method, identifies leaders through the opinions or judgements of other community members. They tell the researcher who they think the leaders are. The researcher then uses some criterion of consensus to determine who the leaders are. Studies using this method vary in the number and kind of people who identify the leaders, the way in which the informants are selected, the specific questions used to elicit their judgements and the criteria used by the researcher as to which of the identified leaders qualify as leaders for his study. The validity of the reputational approach depends upon the informants' ability to name or identify the leaders. The fact is, not every person who informants believe to be a leader is in fact influential in community affairs and not every person of influence is perceived as a leader by the informants of a study.

A third approach to the study of leadership involves tracing the history of a particular community decision about some community issue or policy. Such an approach focuses on the decision-making process, locating the various decision-makers and tracing the steps in policy development. In using this method it has to be realized that the

leadership pattern could vary from one issue to another. Thus, the actual decision-making on an issue may direct attention to leaders other than those identified through inquiries into general leadership.

Following Laskin (1963) and Siemens and Forcese (1964), a combination of the reputational and positional methods is used to identify community leaders in the study. The respondents were asked to state the three most important issues facing their communities. They were then asked the following question:

“Suppose a committee of citizens was to be formed to study and deal with these issues, would you mind suggesting a number of citizens you feel would be best suited for the job?”

After a number of related questions were asked, the following question was put to the respondents:

“When you think of the overall leadership in your community, i.e., people who have a lot of influence in getting things done, name the people whom you consider to be most influential.”

All those mentioned in response to the above two questions were designated as leaders and an attempt was made to interview all of them. In addition, all municipal councillors, school trustees, hospital board members and officers of voluntary organizations in each of the selected communities were interviewed. From the above, two types of leaders were identified:

1. Formal leaders: these are individuals who hold elected positions on municipal council, school board, hospital board and voluntary organizations; and
2. Informal leaders: these are individuals who are selected as leaders by the respondents but hold no elected office.

It should be noted that these are not pure types since elected officials who were also selected by the respondents as leaders were categorized as formal leaders.

Findings

Two types of leaders have been identified in this paper: formal leaders who hold elected offices and may also be perceived as influential community leaders; and informal leaders who are perceived as community influentials but do not hold elected offices. The frequency distribution of the respondents by leadership type and community size is shown in Table 1. The data shows that in all categories the majority of the leaders are informal leaders. However, a closer examination of the data shows that while less than half of the leaders in communities of less than 1,000 are formal leaders, in communities of 1,000–2,000 and 2,001–5,000, formal leaders form more than half of the leadership group. This difference could be a reflection of the fact that larger communities are more likely to support a greater number of organizations than smaller ones, and consequently a greater number of office holders.

TABLE 1

FREQUENCY DISTRIBUTION OF RESPONDENTS
ACCORDING TO LEADERSHIP STATUS
BY COMMUNITY SIZE

Leadership Status	Community Size		
	Under 1,000	1,000-2,000	2,001-5,000
Non-Leader	177	199	119
Informal Leader	34	31	23
Formal Leader	14	19	14
TOTAL	225	249	156

N = 630

Factors Associated with Leadership Status

Much of the existing literature on leadership deals with the issues involved in identifying leaders. As Tait and his associates (1975) point out,

This review of social power studies, as well as others, indicates that much of the research has dealt only with power actors and their occupational status. Little has been done to examine the educational, income, political and social participation characteristics of power actors. (Tait et. al., 1975: 6).

An attempt therefore ought to be made to compare the socio-demographic characteristics of leaders with that of non-leaders. Findings are compared with those of previous researchers where applicable.

Sex, Age and Leadership Status

Like previous research findings (Hunter, 1959; Bell, 1960) an examination of the data in Table 2 indicates that only a small percentage of the leaders are females. This applies to both formal and informal leaders. In fact, 80.7 per cent of all informal leaders are males while only 19.3 per cent are females. Likewise, 82.2 per cent of the formal leaders are males compared with 17.8 per cent for females. When the data are examined for the different community size categories, an interesting picture emerges. Although the percentage of the leaders who are females remains small in all community size categories, the percentage of informal female leaders tend to increase with population size. The data show that while only 11.8 per cent of the informal leaders in communities of 500-1,000 population are females, the percentage increases to 26.1 per cent for communities within 2,000-5,000 population category. This is not surprising. Since there is a greater variation in the issues confronting larger communities than

small ones, females are more likely to be exposed to leadership opportunities.

On the whole, the data in Table 2 indicates that youth are under represented in leadership positions. Those below the age of 31 form only 14.7 per cent and 6.7 per cent of informal leaders and formal leaders respectively. On the other hand 35.3 per cent of the informal leadership group is made up of those who are 51 years or more, while as high as 42.2 per cent of the formal leadership group comes from the same age group. The above findings tend to corroborate the findings of Hunter (1953), Form and Sauer (1960), Bohlen et. al. (1964) and Tait et. al. (1975). On the other hand, our finding is at variance with that of Siemens and Forcese (1964). In their study of leadership patterns among fishermen in the Interlake Region of Manitoba, Siemens and Forcese conclude, "Thus it would appear that the older fishermen look to the somewhat younger men for leadership in matters relating to fishing" (1964: 44-45).

A closer look at the data reveals some differences between informal and formal leaders. On the whole the informal leaders are more "evenly" distributed among all the age groups than formal leaders. Indeed almost a third (31.1 per cent) of the formal leaders are between 51-60 years old while only 17.0 per cent of the informal leaders are found in the same age category. The high representation of those 51 years or more in leadership positions could be partly accounted for by migration of youth from rural areas. Individuals who do not intend to stay in a community are not likely to invest the time and energy required to occupy leadership positions in a community.

TABLE 2

PERCENTAGE DISTRIBUTION OF RESPONDENTS
ACCORDING TO SEX AND AGE
BY LEADERSHIP STATUS

Independent Variables	Leadership Status		
	Non-Leaders	Informal Leaders	Formal Leaders
Sex:			
Male	41.5	80.7	82.2
Female	58.5	19.3	17.8
TOTAL	100.0	100.0	100.0
Age:			
Less than 31	23.8	14.7	6.7
31-40	20.5	21.6	24.4
41-50	13.2	28.4	26.7
51-60	16.5	17.0	31.1
61 and above	26.0	18.3	11.1
TOTAL	100.0	100.0	100.0

Education and Leadership Status

Previous researchers (Bell, 1960; Form and Sauer, 1960; Powers, 1963; Bohlen et. al., 1964; Siemens and Forcese, 1964; Tait et. al., 1975) have concluded that leaders tend to have higher levels of education than non-leaders. The data in Table 3 supports this finding. It is observed that while only 14.9 per cent of the non-leaders have university education, as high as 31.2 per cent and 29.5 per cent of formal leaders and informal leaders respectively have attended university. A further examination of the data show a slight difference between informal leaders and formal leaders. Although a higher percentage of formal leaders compared to informal leaders have attended university, more than half (53.3 per cent) of the formal leaders are found in the category, "less than Grade 12." On the other hand 47.7 per cent of the informal leaders have obtained less than Grade 12 education. On the whole informal leaders are slightly more educated than formal leaders.

TABLE 3

PERCENTAGE DISTRIBUTION OF RESPONDENTS
ACCORDING TO EDUCATION BY
LEADERSHIP STATUS

Education	Leadership Status		
	Non-Leader	Informal Leader	Formal Leader
Less than Grade 12	57.2	47.7	53.3
Grade 12	24.0	18.3	13.3
Community College or Nursing	3.9	4.5	2.2
University	14.9	29.5	31.2
TOTAL	100.0	100.0	100.0

Occupation and Leadership Status

As pointed out earlier, previous researchers have dealt mainly with identifying leaders and their occupational status. All the researchers (Hunter, 1953; Bell, 1960; Form and Sauer, 1960; Miller, 1961; Schermer Horn, 1961; Powers, 1963; Bohlen et. al., 1964; Tait et. al., 1975) have agreed that community leaders are drawn largely from business and professional occupations. The data reported in Table 4 tend to corroborate previous findings. Almost a third (32.9 per cent) of the informal leaders are either business men or professionals and more than half (53.3 per cent) of the formal leaders come from the same occupational category. A closer examination of the data reveals some significant differences between informal leaders and formal leaders.

TABLE 4

PERCENTAGE DISTRIBUTION OF RESPONDENTS
ACCORDING TO OCCUPATION BY
LEADERSHIP STATUS

Occupation	Leadership Status		
	Non-Leader	Informal Leader	Formal Leader
Business & Professional	6.7	32.9	53.3
Skilled & Clerical	17.7	27.3	15.6
Unskilled Workers	9.0	4.5	6.7
Farmer	11.8	17.0	11.1
Housewife	34.4	8.0	8.9
Retired & Unemployed	20.4	10.3	4.4
TOTAL	100.0	100.0	100.0

While the majority of the informal leaders tend to be almost equally divided between two occupational categories (business-professional and skilled clerical) more than half (53.3 per cent) of the formal leaders come from only the business-professional occupational category. Formal leaders tend to be more homogeneous in terms of occupational background than informal leaders. The over representation of the business-professional group within the leadership groups become glaring when we note that only 6.7 per cent of non-leaders are businessmen or professionals.

Length of Residence in Community and Leadership Status

It could be argued that the longer an individual stays in a community the more involved and committed to the community he is likely to become. In a sense the individual comes to recognize that his future is bound with that of the community. In such cases the individual is likely to aspire to and seek leadership positions in order to influence the structure and change of that community. It is also possible that the longer an individual stays in a community the more likely it is that residents come to know him and recognize the leadership qualities he may possess. Bohlen and his associates (1964) and Tait and his associates (1975) have found that on the whole, leaders tend to have spent more years in the community than non-leaders.

The data reported in Table 5 support the findings of the researchers noted above. The data clearly show that the leaders have spent a longer period of time in their communities than non-leaders. While more than half of the informal leaders and formal leaders have spent more than 16 years in their communities, less than half of the non-leaders have spent the same number of years. On the other hand,

TABLE 5

PERCENTAGE DISTRIBUTION OF RESPONDENTS
ACCORDING TO LENGTH OF STAY IN
COMMUNITY BY LEADERSHIP STATUS

Length of Residence	Leadership Status		
	Non-Leader	Informal Leader	Formal Leader
Less than 6 years	27.3	12.6	11.1
6-10	16.1	10.2	13.3
11-15	7.5	13.6	13.3
16 and over	49.1	63.6	62.3
TOTAL	100.0	100.0	100.0

while more than a fourth (27.3 per cent) of the non-leaders have spent less than 6 years in their communities only 12.6 per cent of informal leaders and 11.1 per cent of formal leaders have spent the same number of years in their communities. There is no significant difference between formal leaders and informal leaders.

Summary and Conclusion

Of the 630 residents surveyed, 134 are identified as leaders. The leaders have been divided into two types—formal leaders and informal leaders. In all 87 of the leaders are classified as informal leaders while 47 of them are classified as formal leaders.

When the factors associated with leadership status are examined, it is observed that only a small percentage of the leaders are females. However, the data shows that the larger the size of the community, the greater the female representation in the informal leadership group although there is very little change in the formal leadership composition. On the whole, rural youth are under represented in leadership positions. However, the youth seem to be better represented in the informal leadership group than the formal leadership structure. With respect to education, leaders are generally more educated than non-leaders, and that informal leaders are slightly more educated than formal leaders. The data also shows that businessmen and professionals are better represented in the leadership group than other occupations. In addition, businessmen and professionals seem to dominate the formal leadership group more than the informal leadership group. Finally, on the average, leaders tend to have spent longer periods of time in their communities than non-leaders.

There is a general assumption that leadership positions are open to all or to a large proportion of people from all walks of life. These findings do not support this assumption. Differential contribution to leadership positions has been demonstrated for men and women,

different groups and socio-economic sub-groups. Indeed, our findings tend to indicate that individuals with certain socio-economic characteristics see it as their obligation to assume leadership roles and that such individuals are often called upon by others to assume leadership roles.

If the leadership of a community is to reflect all segments of the community, we need to create conditions under which all individuals willing to assume leadership roles can do so. When the respondents were asked why they do not seek elected offices, lack of time and inadequate salary are the most often mentioned reasons. Perhaps, a reduction in the length of time that an individual is supposed to hold an office would make it appealing to some individuals to sacrifice the time necessary. In addition, we have to recognize that in modern complex industrialized societies, even local government has become so complex that if an individual is going to perform his duties well, he would have to devote a lot of time to the position. This could mean that communities and municipalities may have to reward their officials adequately in order to attract the best candidates from all socio-economic groups. The need for broad representation within the leadership group of the community can not be overemphasized since it is only through this that the policies and the programmes implemented in the community can be a true reflection of the needs and wishes of all of its residents.

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Growth and Change in Prairie Metropolitan Centres after 1951

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ABSTRACT. Between 1951 and 1971 there was dramatic growth and change in the Prairie urban system, featured by the rapid expansion of Calgary and Edmonton contrasting with the sluggish growth of Winnipeg. During the half century up to 1951, Winnipeg had been the unrivalled dominant centre on the Prairies, with important wholesaling, manufacturing, and financial functions for this region. A combination of interurban growth forces, particularly those of the growth rates of the respective hinterlands and the differences in entrepreneurship between cities, accounted for the contrasting rates of change.

RESUME

De 1951 à 1971 le réseau urbain des Prairies a connu un accroissement et un changement dramatiques, marqués de l'expansion rapide de Calgary et d'Edmonton par rapport à l'accroissement lent de Winnipeg. Pendant la première moitié du siècle, c'est-à-dire jusqu'en 1951, Winnipeg avait été de loin le centre le plus dominant des Prairies, ayant des fonctions importantes dans les domaines du commerce de gros, des industries de fabrication et de la finance. La vitesse plus ou moins rapide à laquelle ces changements s'effectuaient a résulté d'une combinaison de forces d'accroissement interurbaines, surtout celles des taux d'accroissement des hinterlands respectifs et les façons différentes dont opéraient les entrepreneurs de chaque ville.

During the past three decades there have been major changes in the status and functions of the larger centres of the Prairie urban system. Since the late forties, Calgary and Edmonton have grown rapidly, broadened their range of economic activities, and increasingly asserted their dominance over Alberta and part of northern Canada. At the same time the city of Winnipeg has grown relatively slowly and had its sphere of influence reduced with the two rival cities in Alberta carving off the western half of its former hinterland. The result of these contrasting growth patterns has been a recent convergence of Calgary and Edmonton at Winnipeg's level in the Canadian urban hierarchy, up from their decidedly inferior position several decades ago. As for the two remaining metropolitan centres on the Prairies, Regina and Saskatoon, they have grown rapidly in recent years and broadened their range of functions somewhat, but they still rank below the three larger cities in the Prairie hierarchy.

The evolution of the Prairie urban system and urban economies during this modern era and earlier historical periods has attracted the attention of a number of geographers and historians. Individually they have tended to focus either on the five large cities collectively or on the city of Winnipeg. Relatively few articles have been done on other individual Prairie cities. The earliest Prairie-wide article by a geographer was the pioneer work by Lenz¹ which has, in effect, been updated in the recent article by Preston.² A notable theoretical treatment of the evolution of the Prairie urban system was contained in Burghardt's³ gateway city article, where he documented the causes of Winnipeg's relative decline in the twentieth century within the frame-

work of a set of hypotheses accounting for the rise and fall of gateway cities. This article was the landmark treatment of the recent rise of Calgary and Edmonton and comparative stagnation of Winnipeg within a city-system perspective. Another geographer providing comments on reasons for varied growth rates of Prairie cities was Nader⁴ in his discussions of their economic bases. Phillips⁵ examined changes in the Prairie urban system in the context of the evolving staple economy of this region. In recent years Seifried has written two articles analyzing recent economic growth in Edmonton.⁶ Both Artibise⁷ and Bellan⁸ have made significant contributions in documenting the social and economic development of Winnipeg. Although these studies have shed considerable light on the development of Prairie cities they have not provided the specific reasons explaining these growth patterns.

Growth Factors in the Prairie Urban System

The underlying causes of the varied growth rates of cities can be advanced in terms of a group of economic forces or factors which explain patterns of interurban economic change. These factors comprise the reasons why some cities grow rapidly, while others grow slowly, stagnate, or even decline. Gertler and Crowley⁹ identified eleven growth forces in their study of Canadian cities. Five of these factors explain urban growth "in isolation" while the other six factors account for the evolution of systems of cities; i.e., the interurban growth patterns. The latter factors are discussed here in some detail to provide a background for the analysis of Prairie cities. Included in this group are the following: 1) growth and development in the hinterland; 2) achievement of market thresholds; 3) changes in occupational structure and corporate organization; 4) role of foreign investment and ownership; 5) entrepreneurship and; 6) invention and innovation by individuals and firms.

Since the larger Prairie cities are primarily central places for hinterlands of regional dimensions, changes in the nature of their hinterlands are perhaps the *key* consideration in explaining urban growth. As Simmons¹⁰ has noted, economic growth within a city's hinterland and spatial expansion of its hinterland are reflected in growth of an urban node. At the beginning of this paper, the loss of the western half of Winnipeg's hinterland was noted. As a consequence, this city was left with dominance of a slowly growing area (Manitoba, and much of Saskatchewan). In marked contrast, Calgary and Edmonton were increasingly dominating their Albertan and northern Canadian hinterlands which were growing rapidly in population and wealth.

The second factor, the attainment of successive market thresholds for various goods or services results from a growing city and hinterland. This process often involves import substitution—the development of local production of goods or services previously imported. In

this way, a city retains more of the income received from lower order places in its hinterland and in effect, becomes increasingly self-sufficient. Given the rapid growth in Alberta, it is hypothesized that this was a positive factor in the growth of Calgary and Edmonton, with data from the manufacturing sector being used as supporting evidence.

Shifts in the occupational structure of Canada, as this nation moved from the industrial into the post-industrial age combined with changes in corporate organization contributed to differential growth in the Prairie urban system. The quaternary (management, finance, research, government administration) and quinary (development planning and forecasting) sectors have assumed increasing importance in modern economies. Moreover, these activities tend to be highly concentrated in metropolitan centres. At the same time, large multi-locational, in some cases multi-functional, firms have increased their dominance of many economic sectors. The establishment and expansion of quaternary and quinary activities in the headquarters of firms is an important element in the rise of cities to metropolitan status. In western Canada, Winnipeg has been known as a finance and insurance centre, while Calgary has been identified as an oil administrative centre.

Foreign-owned units are a significant part of the pattern of multi-locational activities in Canada. In some instances units on the Prairies may represent branch plans of a United States firm with a Canadian headquarters in central Canada; in other instances, units represent the Canadian headquarters of an American corporation. According to Phillips,¹¹ a north-south axis developed between energy activities in the United States and those in western Canada.

The fifth factor in explaining differences in the growth rates of cities is the vigour of their entrepreneurial elite. The rise of Toronto in competition with its rival, Montreal, has been related to its business elite.¹² Much credit is given to entrepreneurs in accounting for Winnipeg's early growth.¹³ In more recent times, it is hypothesized here that entrepreneurs in Calgary and Edmonton have been more active than those in Winnipeg.

A final factor accounting for intercity growth patterns is the differences which may exist in the levels of inventiveness and innovation. Since city-by-city figures on innovations have not been compiled, this factor will not be investigated. Given the generally poor record of innovation across Canada, it is likely that this consideration has been at the most a minor consideration in urban growth patterns.

The Prairie Urban Hierarchy in 1951

From the beginning of extensive settlement in the 1870s, Winnipeg was the dominant city on the Prairies because of its early start as

the gateway city to this expanding region. It grew rapidly from 1880 to 1930 from the stimulus of its important manufacturing, wholesaling, financial, and transportation functions. With the onset of the great depression, the city entered a period of slower growth when various forces conspired to reduce the importance of these key functions in relative or absolute terms, while the cities of Calgary and Edmonton were gaining in population and gradually emerging as competing centres on the Prairies. Nevertheless, in 1951 Winnipeg has twice the population (350,000) of either Calgary or Edmonton and was still the dominant city on the Prairies. At that time Winnipeg's hinterland comprised the entire Prairies, and Maxwell¹⁴ described it as a major metropolitan centre, which contrasted with the regional capital status of Calgary and Edmonton.

TABLE 1

WHOLESALE ESTABLISHMENTS IN
PRAIRIE METROPOLITAN CENTRES, 1951

	Number of Establishments				
	Winnipeg	Calgary	Edmonton	Saskatoon	Regina
Automotive Supplies	35	20	21	11	10
Bulk Oil	15	23	18	11	9
Chemicals, Paint	8	6	5	1	3
Dry Goods, Apparel	74	9	21	5	1
Electrical Goods	24	13	12	7	6
Groceries	23	10	13	5	9
Hardware	10	9	11	4	3
Industrial, Farm Machinery	58	47	64	23	17
Plumbing, Heating Equip.	10	8	5	4	4
Professional & Service Equip.	34	16	20	6	6
Paper	22	12	6	7	5
Tobacco, Beer	55	15	10	5	2
Drugs	5	3	—	—	—
Lumber, Const. Mat.	27	17	16	6	5
TOTAL	498	234	255	99	85

Source: Census of Canada 1951, Vol. VIII, Wholesaling.

The framework which will be used for a detailed examination of the distinctive central place characteristics of the five cities in 1951 is the classification adapted from Borchert and Adams, who had identified various levels in the central place hierarchy of the upper mid-western United States on the basis of the range of the wholesale and the retail functions of cities.¹⁵ At the top of their hierarchy they defined the Metropolitan Wholesale-Retail level in terms of a city having more than 500 wholesale firms including the most specialized types, in

addition to having a complete range of retail types. Rather interestingly, Winnipeg had 498 wholesale firms in 1951 which would put it near the lower threshold of this top rank (Table 1). The second level was the Primary Wholesale-Retail centre, a community with more than 100 wholesale establishments, including the more specialized types. Calgary and Edmonton fitted comfortably into this category in 1951 (Table 1). The third level was the Secondary Wholesale-Retail city with 50 to 99 wholesale establishments, with several of the more specialized wholesale types not being present. As indicated by the data in Table 1 this designation fits Regina and Saskatoon. In summary, using wholesale business as the main distinguishing criterion, the five largest Prairie cities were arranged in a three-level hierarchy in 1951.

Further evidence of Winnipeg's preeminence at this time is provided by financial activity data. Although it ranked far behind Toronto and Montreal, Winnipeg was the only financial center of any consequence on the Prairies in the nineteen-fifties and sixties. This situation has been documented by Kerr¹⁶ in his study of Canadian patterns and Parsons¹⁷ in his paper on Winnipeg's financial activities. In the fifties this city was an important centre of head offices of financial companies, it was an important Prairie banking centre, and it also had a commodity exchange. Its stature in 1951 was reflected in a location quotient of 1.75 in the finance, insurance, and real estate group which suggested a large amount of "export" employment and an associated regional role for these activities.¹⁸

TABLE 2

CHANGE IN POPULATION, PRAIRIE PROVINCES, 1951-1971
AND METROPOLITAN AREAS

	1951	1961	1971	% change 1951-71
Manitoba	776,541	921,686	988,247	+ 27.3
Saskatchewan	831,728	925,181	926,242	+ 11.4
Alberta	939,501	1,331,944	1,627,874	+ 73.2
Winnipeg	354,069	476,543	534,685	+ 51.0
Regina	71,319	112,176	138,956	+ 94.8
Saskatoon	53,268	95,564	125,079	+134.8
Calgary	139,105	279,062	400,154	+187.7
Edmonton	173,075	337,568	490,811	+183.6

Source: Census of Canada, 1951, 1961, 1971.

On the basis of the above information, it is quite evident that Winnipeg was the highest-ranking city in the Prairie urban system in 1951. Its supremacy was clearly shown in wholesale as well as in financial activities. Although this city had little growth momentum

after the nineteen-twenties, its early start and role as the gateway to the Prairies established a long-lasting dominance of the region. At this time, Calgary and Edmonton were only regional centres in Alberta, within the hinterland of Winnipeg for numerous high-level functions. However, in 1947 the discovery of oil at Leduc marked the beginning of the explosive growth and upward movement of these Alberta cities in the urban hierarchy.

Growth and Change in the Prairie Urban System: 1951-1971

The patterns of provincial and metropolitan area population growth between 1951 and 1971 showed great variability across the Prairies (Table 2). The population of Manitoba grew slowly at an average rate of about one per cent per year, but its dominant city Winnipeg did better because of the trend to increasing centralization of population and jobs. Saskatchewan had only a little net population growth over the twenty year period; this was part of the continuing struggle this province had up to 1971 in maintaining its population. However, strong centralization tendencies resulted in rapid growth in Regina and Saskatoon (Table 2). By far the most rapid growth occurred in Alberta and its leading cities, Calgary and Edmonton. As a result, by the early 1970's these cities were rapidly approaching Winnipeg in population.

Labour Force Growth in Metropolitan Areas: 1951-1971

The rates of growth of the labour force in Prairie cities were generally rapid, following population growth closely, but there were major differences between industries (Table 3). The primary industries, e.g. mining, were comparatively small sectors in these cities, but generally had very rapid growth rates. Aside from those in Winnipeg, the secondary group (manufacturing, construction) had very healthy growth rates. Although it was not a large sector in employment terms, manufacturing had growth rates in four of these cities which would be envied by industrialized cities in central Canada. In absolute terms, the largest employment gains were in the tertiary and quaternary (service) industries; transportation, trade, financial services, and government activities.

The tendency of these cities to generate the bulk of their new jobs in the tertiary, quaternary, and quinary industries was similar to trends in other cities of advanced western countries; it has been a prominent economic feature of the post-industrial age. There are several reasons behind this preponderance of service jobs.

The first comprises the growing levels of productivity and income in the basic (export) portion of urban economies, resulting in a greater multiplier effect. The second is the increasing levels of productivity and income in the primary and secondary industries of the hinterland.

TABLE 3

LABOUR FORCE BY INDUSTRY, PRAIRIE METROPOLITAN CENTRES, 1951-1971

Industry Group	Winnipeg			Regina			Saskatoon			Calgary			Edmonton		
	1951	1971	% change	1951	1971	% change	1951	1971	% change	1951	1971	% change	1951	1971	% change
Primary Industries	2,335	1,865	- 20.1	602	1,170	+194.4	479	2,000	+317.5	3,032	12,225	+303.2	3,221	8,180	+154.0
Manufacturing	39,270	44,480	+ 13.3	3,662	5,835	+ 59.3	3,121	5,225	+ 67.4	10,310	19,845	+ 92.5	10,797	24,975	+131.3
Construction	9,820	12,480	+ 27.1	2,145	3,395	+ 58.3	1,472	3,375	+129.3	5,824	15,775	+170.9	9,142	18,360	+100.8
Transp., Comm. & Ut.	21,838	27,530	+ 26.1	3,648	6,610	+ 81.2	2,929	4,880	+ 66.6	7,038	15,545	+120.9	8,305	20,355	+144.9
Trade	36,000	45,705	+ 27.0	8,508	11,885	+ 39.7	5,395	10,165	+ 88.4	13,822	30,205	+118.5	15,550	37,860	+143.5
Wholesale	13,435	15,065	+ 12.1	3,437	3,050	- 11.3	2,426	3,140	+ 29.4	5,721	9,680	+ 69.2	6,364	11,655	+ 83.1
Retail	22,565	30,640	+ 35.8	5,071	8,835	+ 74.2	2,969	7,025	+136.6	8,101	20,525	+153.4	9,186	26,205	+185.3
Fin. Ins. & R.E.	7,379	12,890	+ 74.7	1,499	3,540	+136.2	833	2,230	+167.7	2,816	9,750	+246.2	2,739	9,560	+249.0
Comm. Bus. & P.S.	26,440	62,620	+136.8	6,968	16,695	+139.6	5,415	18,665	+244.7	10,694	49,815	+365.8	13,895	60,360	+334.4
Publ. Admin. & Def.	10,652	20,010	+ 87.9	4,550	8,540	+ 87.7	1,718	3,660	+113.0	5,970	12,525	+109.8	7,984	22,820	+185.8
Unspecified	997	16,220		242	3,960		135	3,090		302	12,140		608	16,310	
TOTAL	154,731	242,800	+ 57.6	31,824	61,625	+ 93.6	21,497	53,275	+147.8	59,808	177,830	+197.3	72,241	218,770	+202.8

Source: Census of Canada 1951, Vol. 4, Census of Canada 1971, Vol. 3.

These two reasons have resulted in the greater disposable incomes in all economic sectors to support an ever-growing array of services. The increasing role of government and its growing expenditures in labour-intensive activities; e.g., education, health, and the civil service, have also had an important impact.

In Alberta these factors were augmented by characteristics unique to this province: 1) per capita incomes which moved up to the national average; 2) resource revenues which led to a smaller per capita tax burden than in neighbouring Prairie provinces. In 1970-71 Alberta had per capita expenditures of \$476 on health, education and welfare, and taxes of \$231. By comparison, the respective figures in Manitoba were \$395 and \$305.¹⁹

Development in Prairie Hinterlands

By virtually every socioeconomic measure, Alberta was rapidly becoming the dominant province in the Prairies between 1951 and 1971. In 1951 it had a population somewhat larger than Manitoba or Saskatchewan; by 1971 its population was nearly as large as the other two provinces combined. Similarly, Alberta had eight per cent of Canadian retail trade in 1951 compared to six per cent each in Manitoba and Saskatchewan. Alberta still had eight per cent of the total in 1971, but that percentage equalled the combined total of the other provinces. In effect, the hinterlands of Edmonton and Calgary, which approximately divide Alberta equally in population and wealth, had each become as important as Winnipeg's hinterland of Manitoba and Saskatchewan. This development is reflected in 1971 retail sales in which all three cities had similar totals.

The emergence of Alberta as a large market was both a cause and effect of rapid economic growth in that province. While the catalyst of development was activity in extractive industries and related quaternary office functions, market-oriented tertiary activities (retailing, wholesaling) and market-oriented manufacturing also flourished.

Extractive Activities

Employment in extractive activities (agriculture, mining, forestry) formed a significant portion of employment in 1971 (Table 2). However, in both Regina and Winnipeg, farmers living within the census metropolitan limits comprised most of the extractive total. Of the Saskatoon total of 2,000, about 900 were in agriculture and nearly 800 were employed in nearby potash mines. In Edmonton, the total of over 8,000 was made up of 3,700 in agriculture and about 4,000 in oil and gas related activities. Only in Calgary was employment in primary industries, mainly oil and gas, a dominant component of the urban economic structure. This was noted by Ray,²⁰ who identified extraction as the single most important export (city-building) activity

and more recently by Marshall²¹ in his functional classification of Canadian cities.

Calgary got its initial start as a petroleum centre with the Turner Valley discoveries in 1914, but for many years the industry was relatively unimportant to the city; as late as 1951 employment in oil and gas was less than 1,000 persons. During the following 20 years, this industry underwent enormous expansion and by 1971 employment was approaching 10,000 persons. Traditionally, within Alberta, Calgary was considered to be the administrative centre of the oil and gas industry and Edmonton the operations centre. As measured by numbers of head offices, Calgary was overwhelmingly dominant in the former activity and even dominant in the latter activity by the early 1970s.²² Within Canada, Calgary has become an important headquarters center in this industry with 75 per cent of head offices in 1974. Many of these were relatively small, Canadian-owned firms; measured by revenues of the top 40 petroleum companies in Canada, Calgary's total of over \$6½ billion ranked far behind the \$13 billion figure for Toronto.²³ The importance of foreign ownership and north-south connections with the United States was reflected in the external component of nearly \$4 billion of the \$6½ billion total.

TABLE 4

EMPLOYMENT IN EXTRACTION AND RELATED ACTIVITIES, 1971

	Winnipeg	Calgary	Edmonton	Regina	Saskatoon
Mines	560	11,080	4,165	240	1,090
Services to Business Man.	6,055	8,140	6,035	1,505	1,305
Engineering & Sci. Serv.	970	3,160	1,625	425	295

Source: Census of Canada, 1971, Vol. III.

In addition to employment in extraction, the oil and gas industry was important for the employment it generated in ancillary activities, particularly the category "Services to Business Management." As shown in Table 4, this sector was particularly well-developed in Calgary, especially in the engineering and scientific services category, compared to its counterparts in Edmonton, Winnipeg, Regina and Saskatoon.

Edmonton developed as an important operations centre for oil and gas but direct employment gains from this activity were modest, rising from about 1,500 persons in 1951 to about 2,500 in 1971. Employment in directly-related activities such as trucking services, machinery wholesaling and manufacturing was probably substantial but it cannot be discerned in the census data. Related activities which

can be identified are the important petroleum refining and petrochemical industries, which had combined employment of over 2,000 persons in 1971. Edmonton's early importance and increasing dominance in these industries was associated with its proximity to the early oilfields of central Alberta in the nineteen-fifties.

Manufacturing

At the beginning of the period in 1951 Winnipeg was the paramount industrial centre of the Prairies with a total of 40,000 workers compared to about 10,000 each in Calgary and Edmonton and about 3,000 apiece in Regina and Saskatoon. Moreover, this city had the most diversified industrial structure, with a broad array of activities which included components of the food and beverage group, particularly meat packing, transportation equipment, particularly railway rolling stock repairs, clothing, iron and steel products, printing and publishing, and wood products. Most of these industries were central place activities which had developed in response to local or regional market demand. The industrial structures of Calgary, Edmonton, Regina, and Saskatoon were also dominated by central place activities, but with a smaller range, reflecting their smaller populations. Foods and beverages was by far the largest group in each of the cities, with remaining employment spread through other industry groups, each with a small employment total.

Between 1951 and 1971 manufacturing employment grew very slowly in Winnipeg (+13.3%), at moderate rates in Regina (+59.3%) and Saskatoon (+67.4%), and more rapidly in Calgary (+92.5%) and Edmonton (+131.3%). Several industry groups in Winnipeg actually recorded employment decreases while other important activities such as foods and beverages, furniture, paper, and printing and publishing had modest increases at a one to two per cent annual rate. Only the metal fabricating, machinery, and electrical products industries had large increases in the 50 to 100 per cent range. In Regina and Saskatoon employment gains were concentrated in the foods and beverages, printing and publishing, metal fabricating, machinery, and non-metallic mineral groups. The overall growth rates of Calgary and Edmonton were the highest among the large cities of Canada. Increases exceeding 100 per cent were common in many industry groups, including foods and beverages, printing and publishing, primary metals, metal fabricating, machinery, and non-metallic minerals.

The employment changes in central place manufacturing types in the Alberta cities reflected the rapidly increasing size of the provincial market and an upward movement of Calgary and Edmonton in the city-system. Lower-level types were pulled along by rapid growth in Alberta, whereas the lower rates in Manitoba and Saskatchewan cities reflected slower population growth in these provinces (Table 5). The

TABLE 5

EMPLOYMENT CHANGE IN LOWER-LEVEL CENTRAL PLACE INDUSTRIES,
PRAIRIE METROPOLITAN CENTRES, 1951-1971

Industry	Winnipeg			Calgary			Edmonton			Regina			Saskatoon		
	1951	1971	% change	1951	1971	% change	1951	1971	% change	1951	1971	% change	1951	1971	% change
Dairy Products	459	945	+105.9	127	705+	455.1	250	950	+280.0	225	405+	80.0	277	330	+ 19.1
Bakery Products	1,395	1,365	- 2.2	549	760+	38.4	525	940	+ 79.0	270	330+	22.2	169	255	+ 50.9
Beverage Industries	1,041	1,165	+ 12.1	426	625+	46.7	332	605	+ 82.2	245	345+	40.8	182	240	+ 31.9
Millwork Plants	587	390	- 33.6	281	675+	140.2	228	405	+ 77.6	86	90+	4.7	64	15	- 76.6
Printing & Publishing	3,086	4,140	+ 34.6	844	2,205+	161.3	715	1,880	+162.9	248	355+	43.1	285	510	+ 78.9
Fab. Structural Steel	453	600	+ 35.8	232	695+	199.6	56	585	+944.6	5	230+	4500.0	—	55	—
Concrete Products	202	575	+184.7	56	695+	1141.1	64	700	+993.8	54	160+	196.3	12	105	+775.0

Source: Census of Canada 1951, Vol. 4 and Census of Canada 1971, Vol. 3.

TABLE 6

EMPLOYMENT CHANGE IN HIGHER LEVEL CENTRAL PLACE INDUSTRIES,
PRAIRIE METROPOLITAN CENTRES, (1951-1971)

	Winnipeg			Calgary			Edmonton			Regina			Saskatoon		
	1951	1971	% change	1951	1971	% change	1951	1971	% change	1951	1971	% change	1951	1971	% change
Furniture	1,385	1,695	+ 25.3	223	630	+182.5	317	935	+195.0	50	55+	10.0	38	85	+123.7
Paper Boxes and Bags	537	845	+ 57.4	82	470	+473.2	43	140	+225.6	8	135+	+1587.5	3	25	+733.3
Miscellaneous Mach.	950	980	+ 6.3	61	625	+924.6	262	470	+ 79.4	74	85+	14.9	92	75	- 19.5
Miscellaneous Manuf.	623	1,435	+132.7	200	665	+232.5	163	820	+403.1	57	175+	207.0	48	195	+306.3

Source: Census of Canada 1951, Vol. 4 and Census of Canada 1971, Vol. 3.

data for some higher-level types showed rapid growth in Calgary and Edmonton, and their combined totals suggested that they had largely "caught up" with Winnipeg by 1971 (Table 6). The relatively small totals in Regina and Saskatoon reflect the lower position of these cities in the hierarchy and their concomitant domination by other cities, particularly as Winnipeg (Table 6).

There is evidence to indicate that differences in entrepreneurship between Winnipeg and Calgary and Edmonton helped account for the contrasting growth rates of manufacturing in these cities. For example, during the 1950s, if the prolific garment industry in Winnipeg is discounted, Edmonton and Winnipeg generated a similar number of new manufacturing establishments. However, during the 1960s, Edmonton spawned nearly twice as many new firms. A better indication of the comparative amount of entrepreneurship is the rate of new plant establishment.²⁴ In the 1960s Alberta had a rate of 5.0 per cent compared to 3.6 per cent in Manitoba. The vast majority of new establishments in both provinces were started by local entrepreneurs. Alberta had two advantages: the rapid growth of the provincial market; and the human stimulus provided by an influx of migrants from the rest of Canada and other parts of the world.

As for the quality of entrepreneurs, one indication of this is the ability of established firms to penetrate distant markets. According to this measure, Manitoba manufacturers did not appear to be particularly strong. Using 1974 data on factory shipments, only a small portion of Manitoba manufactured goods were destined for the Alberta market, and furthermore, Manitoba manufacturers accounted for only a small (0-10%) portion of Canadian-made goods sold in Alberta. While it is true that Manitoba producers had to contend with newly-developed Alberta firms in many industries, it does not seem unreasonable to assume that established Manitoba firms could have responded more aggressively to rapidly-growing markets in Alberta and also British Columbia.

Wholesaling

During the twenty years after 1951 there were important shifts in wholesaling activities within the Prairie urban hierarchy. Of greatest significance was the rapid growth of Calgary and Edmonton and their subsequent overtaking of Winnipeg with the result that in 1971 these three cities were of roughly equal importance in many types of wholesaling (Table 7). Another notable change was the shift within Saskatchewan whereby Saskatoon grew to similar size and importance with Regina as a wholesaling centre.

Winnipeg had ranked far above Calgary and Edmonton in 1951 which, as indicated earlier, put it on a higher level as a Metropolitan Wholesale-Retail city compared to the Primary Wholesale-Retail

designation for the Alberta cities. It had over twice the number of establishments and employees of Calgary and Edmonton combined, and far outranked these cities in virtually every wholesaling category.

Between 1951 and 1971 wholesaling in the Alberta cities grew rapidly while Winnipeg expanded rather slowly. By 1971 Calgary and Edmonton were approaching parity with Winnipeg in total number of establishments and employees and, if farm products were discounted, in the combined value of wholesale trade in other types of activity (Table 7). The large value of farm products in Winnipeg was associated with the Winnipeg Commodity exchange. In some lines, notably paper products, general merchandise, and apparel and dry goods, Winnipeg still remained dominant. On the other hand, Calgary and Edmonton had moved ahead of Winnipeg in the value of motor vehicles, farm machinery, other machinery, hardware, metal products, and lumber wholesaled. This position reflected the rapidly growing Alberta market for consumer goods, construction materials, and household equipment, and also machinery for resource industries, particularly agriculture and the oil and gas industry. As in many other activities, Calgary and Edmonton had come to dominate the Alberta market, partly at the expense of Winnipeg.

Finance, Insurance and Real Estate

The finance, insurance and real estate sector is another activity in which Winnipeg was formerly dominant on the Prairies, only to have its position eroded by the twin pressures of powerful competitors, i.e. Toronto, to the east and emerging rivals, i.e. Calgary and Edmonton, to the west. As in other functions, Winnipeg got an early start as an important financial centre for the west. Associated with this role was the grain exchange, which later became the Winnipeg Commodity Exchange, several important insurance companies which developed their markets to national proportions, and numerous trust and loan companies. However, its importance as a banking and insurance centre has declined in relative terms because of the strength of eastern Canadian centres. Nevertheless, as a banking centre it still ranked third, albeit a distant third, behind Toronto and Montreal in the nineteen-sixties.

Winnipeg's relative decline as the dominant regional banking centre on the Prairies is shown graphically by its declining share of cheques cashed in the five large clearing centers. In 1951 it held a dominant 56 per cent share of the total for these cities (Table 8). Because its amount only tripled between 1951 and 1971 while Calgary and Edmonton were each increasing eightfold, its share dropped to 39 per cent while the combined share of the two Alberta cities increased to 47 per cent.

TABLE 7

WHOLESALE TRADE, WINNIPEG, CALGARY, EDMONTON, 1971

	No. of Locations			Volume of Trade \$000		
	W.	C.	E.	Winnipeg	Calgary	Edmonton
Farm Products	64	16	23	1,917,441	97,076	120,874
Coal and Coke	4	—	2	—	—	—
Petroleum Products	28	37	44	85,813	233,846	99,448
Paper and Paper Products	34	23	18	31,175	13,838	16,629
General Merchandise	21	10	11	138,690	25,589	24,898
Food	92	57	53	221,769	130,142	215,433
Tobacco Products	7	5	5	22,202	16,531	14,898
Drugs & Toilet Prep.	18	16	13	21,962	18,397	—
Apparel and Dry Goods	142	36	37	95,571	17,642	24,552
Household Furniture	46	27	22	38,686	22,171	21,377
Motor Vehicles & Access.	110	120	160	66,070	100,564	98,740
Electrical Mach., Equip. & Supp.	60	46	60	50,286	33,292	43,061
Farm Mach. & Equip.	26	26	38	15,355	28,259	22,318
Other Mach. & Equip.	195	226	296	113,092	149,022	194,156
Hardware, Plumb. & Heating Equip.	60	57	69	54,746	54,238	65,280
Metals & Metal Products	22	21	20	20,819	30,900	17,347
Lumber & Building Materials	87	87	100	75,077	84,500	91,578
Scrap and Waste Materials	25	8	22	—	2,997	4,151
Other Wholesalers	165	106	106	178,094	63,612	54,145
TOTAL	1,206	924	1,099	3,159,064	1,122,626	1,150,562

Source: 1971 Census of Canada, Volume VIII.

TABLE 8

CHEQUES CASHED IN CLEARING CENTRES,
PRAIRIE METROPOLITAN AREAS, 1951-1971

	Cheques Cashed (\$000's)			
	1951	% Total	1971	% of Total
Winnipeg	10,373,940	56.0	42,555,999	38.8
Regina	1,759,587	9.5	12,463,808	11.3
Saskatoon	590,105	3.2	3,196,743	2.9
Calgary	3,349,247	18.1	29,754,338	27.1
Edmonton	2,459,203	13.3	21,845,007	19.9
TOTAL	18,532,082	100.0	109,815,895	100.0

Source: Statistics Canada, Cheques Cashed in Clearing Centers, 1971.

Public Administration and Defence

An integral part of the movement of economies into the post-industrial state has been the rapid rise of government employment. Western Canadian cities benefited from this trend and employment had risen to large-scale dimensions by 1971 (Table 9). In fact, for the provincial capitals of Regina and Edmonton, Ray²⁵ listed public administration as the "dominant" industry, that is, the largest "exporter" of services. Thus, in addition to being a large employer, this sector provided an important city-building or propelling function in these cities.

The underlying cause of expanding government employment was the increased proportion of the Gross National Product accounted for by government spending and the attendant growth of functions and services in this sector. Local government employment tends to be proportional to the urban population. For example, the larger cities on the Prairies have approximately one local employee per 1,000 population. Employment in provincial administration accrues largely to the provincial capitals; Winnipeg, Regina and Edmonton. Federal employment in either defence-related activities or in local or regional federal functions is also an important component of employment in the larger cities.

Prairie Metropolitan Centres in 1971

By 1971 Calgary and Edmonton were rapidly converging with Winnipeg in most of the indices of urban ranking (Table 10). The growing populations of the Alberta cities were heading toward one-half million and near parity with Winnipeg. Stimulated by the rapidly

TABLE 9**EMPLOYMENT IN PUBLIC ADMINISTRATION AND DEFENCE,
PRAIRIE METROPOLITAN AREAS, 1971**

	Winnipeg	Regina	Saskatoon	Edmonton	Calgary
Federal Administration	9,245	3,265	1,695	8,665	6,165
Defence Services	4,120	865	395	4,510	3,650
Other Federal Administration	5,120	2,400	1,295	4,155	2,515
Provincial Administration	5,345	3,790	705	9,075	1,920
Local Administration	5,395	1,485	1,260	5,065	4,425
Other Government Offices	30	10	5	20	20
TOTAL	20,005	8,540	3,665	22,820	12,530

Source: Census of Canada, 1971, Vol. 3.

expanding Alberta market, retail sales had surged ahead and by 1971 Edmonton exceeded Winnipeg by a small margin. In wholesaling, if sales of farm products were excluded Calgary and Edmonton were on a similar level with Winnipeg. The most notable remaining areas of the ascendancy of Winnipeg showed up in manufacturing, where the value added total was higher, although Edmonton was rapidly catching up, and in cheques cashed where the Manitoba city had a sizeable, but diminishing lead. As indicated in a previous section, Winnipeg was still the undisputed financial centre of the Prairies, but it was not in a rapid growth phase of this important indicator of metropolitanism. On the other hand, Calgary had become a significant corporate centre with its large number of head offices of oil and gas firms. In general, it might be argued that Calgary was the more important decision-making centre in the private sector of the economy, with Winnipeg, Edmonton, and Regina as provincial capitals being the dominant decision-making cities in the public sector. It seems probable that the three larger cities were regional capitals of submetropolitan status in 1971. There is little doubt that none of them was a regional metropolis, since the word metropolis connotes a city which has achieved considerable importance as a financial, wholesaling, cultural and administrative centre. In North America, this status has normally been associated with a population in excess of one million people. The data for Regina and Saskatoon suggest that while the former city ranked higher in several key indices, Saskatoon had also achieved supremacy in several others, so they may have become regional capitals of somewhat similar stature. In decision-making Regina ranked first by virtue of its function as provincial capital. Nevertheless, Saskatoon had caught up in population, and had moved ahead in wholesaling, but Regina still led in retail sales, value added in manufacturing, and cheques cashed.

TABLE 10

INDICES OF URBAN RANKING, PRAIRIE METROPOLITAN CENTRES, 1971

City	Population (000)	Retail Sales (\$000,000)	Wholesale Sales (\$000)	V.A. in Manufacturing (\$000)	Cheques Cashed (\$000)
Winnipeg	534.7	839.4	3,159,064	452,221	42,555,999
Calgary	400.2	705.6	1,122,626	235,103	29,754,338
Edmonton	490.8	853.0	1,150,562	346,815	21,845,007
Regina	139.0	225.9	302,683	76,285	12,463,808
Saskatoon	125.1	201.8	403,310	57,870	3,196,743

Source: Statistics Canada, Various Sources.

NOTES

- ¹ Karl Lenz, "Large Urban Places in the Prairie Provinces—Their Development and Location," in R. L. Gentilcore, *Canada's Changing Geography* (Scarborough, 1967), pp. 199–211.
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- ³ A. F. Burghardt, "A Hypothesis About Gateway Cities," *Annals Association of American Geographers*, Vol. 61, June 1971, pp. 269–285.
- ⁴ George A. Nader, *Cities of Canada*, Volume Two (Toronto, 1976), 460 pp.
- ⁵ N. R. Siefried, "The Changing Economy of Edmonton 1961–1971," in P. J. Smith (ed.) *Edmonton: The Emerging Metropolitan Pattern* (Victoria, 1978), pp. 1–27. N. R. Siefried, "The Expanding Urban Economy of a Spontaneous Growth Centre: Edmonton, Alberta," *The Albertan Geographer*, Vol. 14, 1978, pp. 105–116.
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- ⁷ R. Bellan, *Winnipeg First Century: An Economic History* (Winnipeg, 1978), 270 pp.
- ⁸ J. W. Maxwell, "The Functional Structure of Canadian Cities: A Classification of Cities," *Geographical Bulletin*, Vol. 7, 1965, pp. 79–104.
- ⁹ Leonard O. Gertler and Ronald W. Crowley, *Changing Canadian Cities: The Next 25 Years* (Toronto, 1977), 474 pp.
- ¹⁰ James W. Simmons, "Short-Term Income Growth in the Canadian Urban System," *Canadian Geographer*, Vol. 20, 4, pp. 419–431.
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- ¹² Gertler and Crowley, *op. cit.*
- ¹³ Artibise, *op. cit.*
- ¹⁴ Maxwell, *op. cit.*
- ¹⁵ See Chapter 7 in Edgar C. Conkling and Maurice Yeates, *Man's Economic Environment* (Toronto, 1976).
- ¹⁶ Donald Kerr, "Some Aspects of the Geography of Finance in Canada," *Canadian Geographer*, Vol. 9, 1965, pp. 175–192.
- ¹⁷ G. F. Parsons, "Winnipeg as a Financial Centre," in J. J. Kux (ed.) *Winnipeg 1874–1974, Progress and Prospects* (Winnipeg, 1974), pp. 189–210.
- ¹⁸ *Ibid.*
- ¹⁹ E. H. Shaffer, "The Employment Impact of Oil and Natural Gas in Alberta," (Edmonton, 1976), mimeographed.
- ²⁰ D. M. Ray (ed.), *Canadian Urban Trends* (Ottawa, 1976), 322 pp.
- ²¹ John U. Marshall, "Industrial Diversification in the Canadian Urban System," *Canadian Geographer*, Vol. 25, 4, pp. 316–332.
- ²² See George H. Zieber, "Inter- and Intra-City Location Patterns of Oil Offices for Calgary and Edmonton 1950–1970," Unpublished Ph.D. thesis, Department of Geography, University of Alberta.
- ²³ A city-by-city measure of headquarters functions in various economic activities, including the foreign component, was provided by R. K. Semple and W. R. Smith, "Metropolitan Dominance and Foreign Ownership in the Canadian Urban System," *Canadian Geographer*, Vol. 25, 1, pp. 4–26. While their calculations are based on 1977 data, it is likely that the interurban patterns which showed up, e.g. Toronto and Montreal dominance in most activities, had not changed significantly since 1971.
- ²⁴ This measure refers to new plants established as a percentage of all plants in existence that year.
- ²⁵ Ray, *op. cit.*



Short-Run Effects of an Inland Terminal on the Grain Handling System and Rural Communities: A Case Study of Weyburn*

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ABSTRACT. The construction at Weyburn, Saskatchewan, of an inland grain terminal with a storage capacity of one million bushels has been surrounded by controversy since 1973. The short-term impact of the terminal on the grain movement and on rural communities can be determined by examining the changes in the capacity of the elevators, population, taxable assessment, and business services. The careful analysis of these factors concludes that the Weyburn inland terminal, in the short-term, has not altered the grain handling or rural community systems in the region.

RESUME

La construction à Weyburn, en Saskatchewan, d'un marché-gare à grains intérieur d'une capacité d'un million de boisseaux est un sujet controversé depuis 1973. On peut déterminer les effets à court terme du marché-gare sur le transport des grains et sur les communautés rurales en examinant les changements de capacité des élévateurs, de population, d'imposition des impôts et de services commerciaux. L'analyse poussée de ces facteurs démontre qu'à court terme le marché-gare intérieur à Weyburn n'a eu d'effet ni sur le système de manutention des grains ni sur le réseau rural de la région.

Construction of a producer-owned inland terminal at Weyburn¹ would be considered to be a landmark decision in the history of the Canadian prairie grain handling system by many observers. However, ever since the proposals for the Weyburn Inland Terminal (WIT) were initially presented to producers in 1973 the project has generated a good deal of controversy.² Those opposed to the development were primarily concerned about the effect the terminal may have on the existing grain handling and transportation systems and consequently upon the surrounding rural communities.

An assessment of the merits of the inland terminal approach to prairie grain handling can take many dimensions. The relative cost of handling grain is of course critical and has been a topic of several studies, notably by Grains Group and Kulshreshtha (1975). As important a consideration is the impact of the inland terminal upon the surrounding hinterland—on rural communities, municipalities and upon existing grain handling facilities.³ In spite of the critical questions these issues pose, few studies have focussed on them.

Any analysis of the impact of an inland terminal on its hinterland will be a complex task for several reasons. First, no conceptual framework exists in which to evaluate either the short or long term impacts resulting from the development of such a terminal. While the

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many changes that occur in any region may appear to be related, only a rigorous analysis can separate those linked to the inland terminal from those linked to others. Secondly, the economic effects attributable to a change in the grain collection system can be both direct and indirect. The indirect impact may only be felt in the long run.

This study was designed with the following objectives:

1. To briefly review the factors leading to the development of the Weyburn Inland Terminal;
2. To develop a conceptual framework to assess the impact of the Weyburn Terminal on the region, particularly on the rural community system and the service centres and;
3. To actually assess the short term impacts of the terminal upon the grain handling system and communities of the region.

The basis of this study is an examination of relevant changes in the Weyburn region from 1961 to 1978.⁴ The pre-terminal years, 1961 to 1976, are compared with 1977 to 1978 (or 1977 to 1979), the post-terminal period. Also the changes in the Weyburn region are contrasted with those in a region where no inland terminal was present.

AN HISTORICAL PERSPECTIVE ON THE WEYBURN INLAND TERMINAL

The grain handling and transportation system in Canada has become a topic of a large number of public and private investigations. Since the passage of the 1967 National Transportation Act, efforts were made by the federal government, through the creation of the Grain Group,⁵ to seek alternatives. The lowest cost alternative in 1969 dollars was an 80 unit inland terminal system.⁶ However, due to the increased distance⁷ between farms and grain terminals and the need for a large new capital investment, this solution was not preferred.⁸ Furthermore, many producer groups and the provincial governments feared adverse impacts on rural communities.

From 1975 to 1979, the grain handling and transportation system was attacked by the Canadian Wheat Board. It blamed the inability of Canada's transportation system to handle more grain for a poor performance in the world market. While Canadian grain⁹ exports reached a peak of 20.8 million tonnes during 1972-1973, they have declined since then, resulting in a consistently smaller Canadian share of the world grains market.

Many producer groups were frustrated, on the one hand, by losses in income resulting from lower exports and, on the other, by the lack of concrete steps by the federal government to improve the grain handling system on the prairies. Taking matters in their own hands, one affected group of southeastern Saskatchewan organized and constructed a

grain terminal at Weyburn. There are now an estimated 1,300 producer shareholders in the terminal, many of them located within a 60 mile radius of the facility.

The Weyburn Inland Terminal is located on 195 acres adjacent to the C.P.R. and Highway No. 39, southeast of Weyburn. Constructed of concrete and steel, the terminal has an estimated lifespan of 25 years and a storage capacity of 27,000 tons (1 million bushels). It can receive grain from 30 farm and commercial trucks per hour, and similarly can load 100 covered hopper cars in an eight hour shift.

A CONCEPTUAL MODEL FOR ASSESSING THE IMPACT OF AN INLAND TERMINAL ON THE REGION

The economic effects of a change in the grain handling system are felt by other grain handling and transportation firms, municipalities (both urban and rural), and business services in various trade centres.

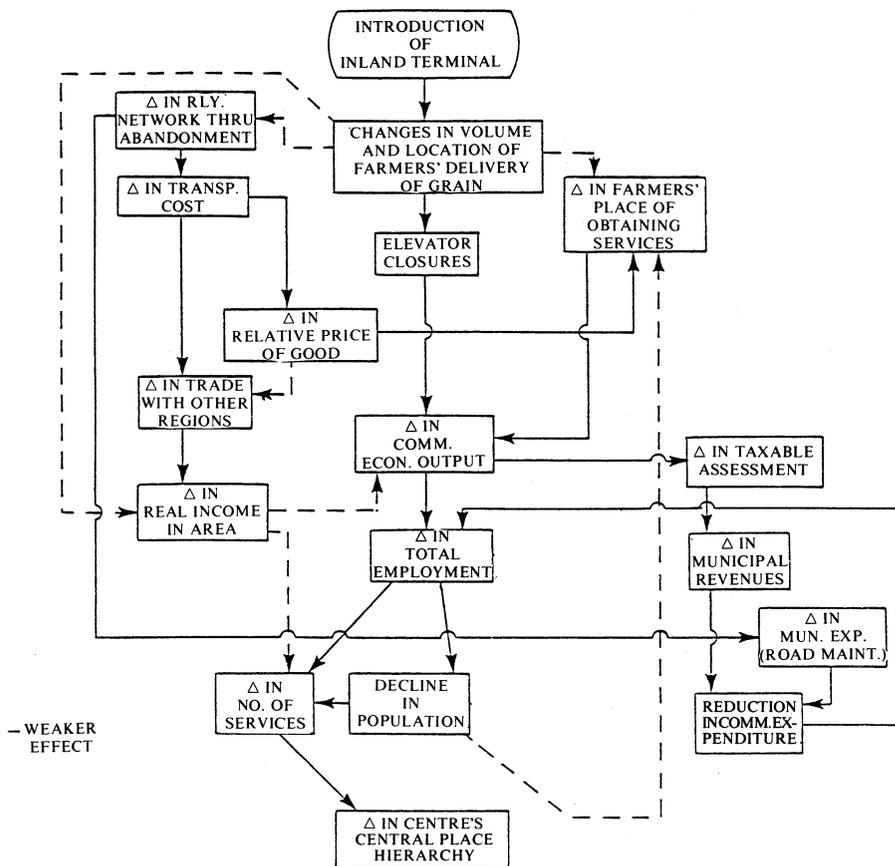


Figure 1. Effect of an Exogenous Change (Inland Terminal) on Rural Communities

A conceptual basis for measuring the economic impact of a grain terminal is shown in Figure 1. A grain terminal can not only affect producers (consumers) and the communities or trade centres directly and immediately, but also indirectly as the result of other changes in related infrastructure. Furthermore, some of these changes will be positive while others will be detrimental. It should be noted that the impact on the various communities would not be the same due to differing circumstances.¹⁰

The major effect of an inland terminal would be a diversion of grain from existing delivery elevators. In order to be fully covered in its cost of operations, an inland terminal must draw 10–20 bushels of grain during any given year. Unless grain production in the region increases, and marketing opportunities for prairie grain are enhanced, this increase could come through reduced deliveries to existing elevators. A decrease in elevator receipts in the surrounding region would have a number of effects. The short term impact would be a drop in elevator profits, reduced employment, and thereby lower real incomes for people residing in the community. In the longer term, two types of effects would be visible: first, the elevator companies might either consolidate elevators, or close a few elevator points down; secondly, if grain deliveries dwindle, the railway line might become a candidate for abandonment.

The effect of decreased grain deliveries on other businesses on any impacted community will depend upon the nature and degree of association between the place of delivery of grain and the place where the various farm and family services are obtained. The degree of association has been a topic of investigation by many past studies and results are far from unanimous.¹¹ Part of the difficulty lies in isolating the cause and effect relationship between delivery of grain and obtaining services. Since changes in shopping patterns may result from other factors, it is impossible to attribute all changes to the grain handling function. For example, Olsen and Brown pointed out that technological developments in agriculture and transportation and the resulting urbanization had a substantial influence on the service centres. Furthermore, the location of the community in relation to a highway, hospital, school or government agency offices, and community desire and leadership, are important contributors to a community's growth and viability.

In the event that an existing railway line becomes a candidate for abandonment, further changes in the grain delivery system will be felt, induced by the increase in the cost of transportation to both consumers and producers. This may further alter the interregional flow of goods and may affect the competitive position of one service centre over the other.

In addition to the effect on producers and businesses, the local

municipalities may also be affected. Losses of economic activity in a given trade centre will likely result in lower taxable assessment and, therefore, lower revenues. This could lead to: a municipal government attempt to reduce expenses; failing this, the mill rate would increase, resulting in higher taxes for the remaining business establishments and individuals. Alternately the local government may request higher transfer payments from the provincial government. More frequent use of certain roads may also result in higher maintenance costs.

ANALYTICAL FRAMEWORK

Study Design

The short term effects of the Weyburn Inland Terminal are measured through observing changes in relevant economic variables in two regions: the control region, where no inland terminal was constructed; and the test region surrounding the Weyburn inland terminal.

Both the regions were monitored during a pre-terminal and during the post-terminal time period. The pre-terminal period was defined as the period before plans for the terminal were announced. Since plans for the WIT were finalized by 1975, this period was chosen as 1961-1975, where the post-terminal period was 1976 to 1978 (or 1979).

The inland terminal region in this study was an area within a 60-mile radius¹² of the city of Weyburn. The selection of the control region was considered to be a critical step in interpreting the results. The control area chosen for comparing the Weyburn area was the area surrounding the town of Kindersley, as shown in Figure 2. There were three major reasons for the choice of the Kindersley region. First, it is a predominantly grain producing area, similar to that surrounding Weyburn. Second, characteristics of the farm sector in the two regions are quite similar.¹³ Third, the community structure, in terms of the distribution of hamlets, villages and towns, was very similar. Although no two regions are perfectly identical to each other in all respects, it was considered that Weyburn and Kindersley provided a common base before the inland terminal came into existence. This suggests that the post-terminal period can be compared to obtain a fair assessment of the impact on the communities and on the grain handling system.

Measurements of Effects on Communities and Study Hypotheses

A primary problem encountered in measuring the impact of a stimulus, such as an inland terminal, on communities is the development of measures that most appropriately and accurately capture the changes in economic welfare over time. Several criteria can be employed including: (1) change in volume of economic activity; (2) growth or decline in the size and number of services available at a

service centre; (3) change in population; and (4) changes in taxable assessment. In addition, other measures such as employment, municipal revenues and expenditures, economic performance (as measured by rates of return to factor inputs) of businesses, etc., can also be used.

In this study the effects of the terminal on the grain handling system were examined by monitoring changes in (a) elevator capacity at various delivery points in the two regions, (b) receipts of grain at various delivery points. Effects upon communities were measured through (c) changes in population, (d) changes in taxable assessment of unincorporated non-farm communities, and (e) changes in the number of business services. The following hypotheses were advanced:

(1) If the inland terminal has been successful in diverting the grain deliveries from farmers over and above those being delivered to Weyburn before WIT became operational, there would be a drop in deliveries to points other than Weyburn during the post-terminal period. Furthermore, this rate of decrease in deliveries will accelerate as one approaches close to the terminal in the Weyburn region.

(2) In light of the short-period (that by the end of 1979) it is hypothesized that the terminal has had no effects on elevator closures in the surrounding region. Furthermore, it is hypothesized that new construction of grain handling facilities has slowed down during the post-terminal period in the Weyburn region.

(3) The population change in the region is not related to the grain handling function.

(4) The taxable assessment of a centre is hypothesized to be related positively to grain handling function and the population base. Furthermore it is assumed that there exists a positive relationship between community viability as expressed by taxable assessment and (a) the number of elevators, (b) the capacity of elevators, (c) the distance a community is from a major trade centre, and (d) the size of the major trade centre.

Each of the hypotheses presented above was tested using multivariate statistical analysis, particularly multiple regression. Details of these are shown in the Appendix.

The effect of the terminal on grain handling was tested by comparing changes in storage capacity of primary elevators, and those in receipts of grains in the test and control regions before and after the stimulus.

Population changes in communities included in the sample and the effect of the terminal on such changes were also analyzed using a regression model, using change in population levels as the dependent variable.

Analysis of taxable assessment was carried out with a combined

time series cross-section of data and employing a multiple regression model with binary variables. Taxable assessment was hypothesized to be related to variables such as: year of assessment, size of the community; and grain handling facilities.

Analysis of business services was carried out by a cross-tabulation of service centres by distance from Weyburn and size of the service centres. Growth of the centre during 1973–79 was analyzed in terms of change in the number of business establishments. The probability of a service centre losing business was analyzed in terms of its distance from Weyburn and its size in 1973.

Sources of Data

Most of these data were collected from secondary sources. Data related to services—type and number of outlets—were collected from the Dun and Bradstreet reference book; and to grain handling system from the Canadian Grain Commission. Municipal taxable assessment data were obtained from the Department of Municipal Affairs, Regina, while population data were obtained from Saskatchewan Health, Statistics Canada and the Saskatchewan Department of Municipal Affairs.

EMPIRICAL RESULTS

Changes in the text and control regions were examined in detail to show the nature of adjustment in the two regions. Several demographic, industrial and community variables were analysed over time and across communities for an approximate 18-year period.

Changes in Population

In terms of the population residing between 11 and 40 miles of the major city in the two regions, in 1961, there were some 7,120 people in the Weyburn region, compared to 6,794 in the Kindersley region. Both regions showed moderate gains in population during the 1961–1966 period.¹⁴ However, during 1961–1979 both regions experienced a population decline, although the decline in the Weyburn region was half that observed in the Kindersley region.¹⁵ The largest decline occurred within the 11- to 20-mile radius of both centres, with the Kindersley region revealing a somewhat faster rate of change: a 26.64 per cent decline, compared to a 13.74 per cent decline in the Weyburn region. Decline in rural population around large urban centres (such as Weyburn and Kindersley) has been a common phenomenon during the post-world war II period. Various explanations of such population trends have been offered, including the consistent increase in the labour saving technology. However, analysis for the 1961–1979 period does not suggest that the shift from non-farm rural to urban population has been accelerated due to the operation of the Weyburn terminal.

Results for factors affecting the growth in population of various centres before and after the emergence of inland terminal based on regression analysis are shown in Table 1. The population growth rate for any community during 1971–1976 was negative if the community's population was declining since 1961; and the effect of distance on the growth rate was negative but insignificant. During the 1976–1979 period (the post-WIT period), the population growth in the Weyburn region was higher than that for the Kindersley region. The previous trends in population (as indicated by community type) were not significant determinants of annual population growth. The distance to a major centre was positively related to population growth but was not found to be statistically significant. This suggests that most communities during this period enjoyed a positive population growth and the proximity to a larger centre did not deter their growth rate. This also suggests that there exists no evidence of a negative effect of the WIT on population growth.

Taxable Assessments

The changes in taxable assessment (non-exempt)¹⁶ in the two regions are summarized in Table 2. The growth in taxable assessment (TA) for both regions was similar within the 40-mile radius, from 1961–1978. Weyburn communities experienced a 63.2 per cent increase in TA and the corresponding figure for Kindersley was 65.6 per cent. The smallest growth in TA occurred within the 11–20 mile radius of Weyburn: the TA increased 32.8 per cent in the Weyburn region, in contrast to an increase of 62.2 per cent during the same period in the Kindersley region. In the Kindersley region, however, the growth in TA for centres located between 31 and 40 miles was relatively slower than that in the Weyburn region.

Urban and nonfarm assessment for some 44 centres in the two regions for 1961, 1966, 1971, 1973 and 1975 period were analysed using multiple regression function: The following results were obtained.

$$\begin{aligned}
 (1) \text{ TA} &= -220.08 - 234.91 X_1 + 3.557 X_{15} + .7396 X_{16} \\
 &\quad (1.34) \quad (1.14) \quad (4.83) \\
 &+ .000103 (X_{16})^2 + 1.062 X_{17} - 86.21 D_{11} - 113.40 D_{12} \\
 &\quad (5.89) \quad (3.79) \quad (.50) \quad (.89) \\
 &+ 33.35 D_{13} + 149.86 D_{14} \\
 &\quad (.27) \quad (1.21) \\
 R^2 &= .941 \quad R^2 = .937 \quad S_e = 480.08
 \end{aligned}$$

Equation (1) suggests that population of a community (X_{16}) determines the economic activity of a centre but in a nonlinear fashion. Based on the central place theory this is to be expected,¹⁷ as demand increases over the threshold level businesses are attracted. The effects through changes in secondary and tertiary industries are even higher. Positive coefficients for distance (X_{15}) and elevator capacity

TABLE 1

REGRESSION ESTIMATES FOR SELECTED VARIABLES DETERMINING POPULATION CHANGE

Variable	Dept. Var.: Per Cent Annual Growth During 1976-1979		Dept. Var.: Per Cent Annual Growth During 1971-1976	
		t		t
Intercept	-3.371	-1.11	5.989	2.31
Location (=1, Weyburn)	3.777	2.18	-1.509	-.98
Distance	.042	.75	-.061	-1.35
Quality or Highway Transportation	.264	.15	1.207	.81
Elevator Closure	-2.182	-1.27	-1.231	-.84
1976 Population	.0011	.55	-.00035 ^a	-.19
(1976 Population) ²	.26 D-6	.75	-.19 D-6 ^a	-.61
1976 Population * Location	-.004	-1.52	.00168	.71
Community Type I ^b	-1.538	-.73	-65.976	-4.09
Community Type II	-1.991	-.36	-2.102	-.45
Community Type II	-2.731	-1.05	-4.308	-2.01
Community Type IV	1.683	.79	.075	.04
R ²	.246		.443	
S _y	4.961		4.253	
Mean	-0.717		-4.52	

^a1971 Population^bType I: Population Trend 1961-79 Decline.

Type II: Population Trend 1961-71 Decline, stable thereafter.

Type III: Population Trend 1961-71 Increase, decline thereafter.

Type IV: Population Trend 1961-71 Decline, increase thereafter.

TABLE 2

TAXABLE ASSESSMENT (NON-EXEMPT) CHANGES, FOR THE WEYBURN AND KINDERSLEY
REGIONS FOR SELECTED YEARS AND DISTANCES 1961-1978.

Radius	Region	No. of Observations	Years					Per Cent Change During 1961-1978	
			1961	1966	1971	1973	1975		1978
11-20 miles	Weyburn	4	825.5	936.7	1,015.6	1,007.1	1,003.6	1,096.1	32.8
	Kindersley	8	1,810.5	2,531.4	2,672.8	2,640.8	2,659.2	2,936.6	62.2
21-30 miles	Weyburn	9	2,978.8	3,591.9	4,240.8	4,257.0	4,368.2	4,986.0	67.4
	Kindersley	5	2,312.8	3,332.2	3,672.8	3,704.7	3,771.7	4,421.8	91.2
31-40 miles	Weyburn	11	2,864.4	3,419.9	4,142.6	4,104.1	4,309.8	4,798.5	67.5
	Kindersley	7	2,302.8	2,652.2	3,058.8	2,982.3	3,057.4	3,274.7	42.2
11-40 miles	Weyburn	24	6,668.7	7,948.5	9,399.0	9,368.2	9,681.6	10,880.6	63.2
TOTAL	Kindersley	20	6,426.1	8,515.8	9,404.4	9,327.8	9,488.3	10,633.1	65.5

(X_{17}) are also plausible, *a priori*. Since elevator capacity is positively related to elevator taxable assessment, such is to be expected. The coefficient for the distance variable was not significant, which suggests that after one adjusts for population differences, centres located closer to a large city grow at a rate similar to those located farther away. Binary variables for various years were not significant, which indicates that, relative to the year 1973 (when plans to construct the WIT were sent in motion), taxable assessment was not significantly different from the level before or after that period.

Grain Handling System

The structure and capacity of the grain elevator industry revealed several interesting changes from 1961-62 to 1978-79. Most communities experienced a decrease in elevator storage capacity from 1961 to 1979 as shown in Table 2. The most noticeable exception was within the 21-30 mile radius of Kindersley, where the capacity increased by 16.6 per cent. Similarly, the number of elevators and the number of delivery points declined over the same 17-year period. The reduction in elevators and the number of delivery points was more rapid in the Weyburn region and particularly in those centers near Weyburn.

TABLE 3

**ELEVATOR CAPACITY IN THE WEYBURN
AND KINDERSLEY REGIONS SELECTED PERIODS**

Radius (Miles)	Region	Elevator Capacity (1000 bu) during				Per Cent Change 1961/62- 1978/79
		1961-62	1973-74	1975-76	1978-79	
1-10	Weyburn	282	207	207	188	-41.1
	Kindersley	384	253	250	228	-40.6
11-20	Weyburn	1,879	1,722	1,659	1,554	-17.3
	Kindersley	2,866	2,778	2,485	2,279	-20.5
21-30	Weyburn	3,487	3,602	3,529	3,320	-4.8
	Kindersley	2,893	2,765	3,374	3,374	+16.6
31-40	Weyburn	3,782	3,717	3,376	3,097	-18.1
	Kindersley	2,994	3,068	2,921	2,752	-8.1
1-40	Weyburn	9,430	9,248	8,771	8,159	-13.5
	Kindersley	9,138	8,864	9,032	8,632	-5.5

As noted in the previous section, the changes in elevator capacity and receipts for some 65 communities (grain handling points) were analysed further to identify factors that determine grain elevator capacity and handling. The two major factors which explain an

TABLE 4

REGRESSION RESULTS FOR CHANGE IN ELEVATOR CAPACITY AND ELEVATOR RECEIPTS

Independent Variable	Dept. Variable: Per Cent Change in Elevator Capacity During 1975-78 Period Over 1973-75		Dep. Variable: Per Cent Change in Elevator Receipts During 1976-78 Period Over 1973-75	
		t-value		t-value
Intercept	6.000	.140	-13.908	.533
Location (Weyburn=1)	32,318	.808	54.057	2.247
Distance	-.444	-.341	.263	.224
(Distance) ²	.013	.623	.007	.399
Distance * Location Code	-.881	-.838	-1.241	-1.574
1975-76 Elev. Capacity	-7.426	-1.611	.0005 ^a	.053
(1975-76 Elev. Capacity) ²	.408	1.852	.000001 ^b	.716
1975-76 Elev. Cap. * Loc. Code	-.204	-.094	-11.655	-1.386
Code for Hwy. Transportation	-2.319	-.226	.003	1.903
Municipal Taxable Assessment	.001	.763	5.572	.599
Average Hd/Cap. Ratio (1972-75)	1.630	1.191	-3.528	-.943
R ²		.232		.399
S _y		32.33		25.23
Mean of Dependent Variable		4.81		9.67

^a1975-76 Average handlings.

^b1975-76 Average handling in a square form.

increase of elevator capacity at a grain handling point were existing capacity, and average handling-to-capacity ratio of the existing elevators. The points with smaller capacity tended to increase, particularly if the handling-to-capacity ratio was high.¹⁸ Conceptually one would expect these factors to play an important role in deciding where more elevators should be built. The interesting observation is that the distance from a major centre (Weyburn or Kindersley) had no influence on these decisions, nor did the presence of the inland terminal.

With respect to changes in elevator receipts during 1976–78, the results suggest that: (1) the Weyburn region had a relatively higher receipts than the Kindersley region; (2) more grain was diverted to the terminal in the Weyburn region from points located farther away from Weyburn; and (3) towns located at intersections of major highways had somewhat higher receipts, and thus contributed to elevator capacity adjustments in the region.

Changes in the number of business services and the role played by a centre in a region's hierarchy are more difficult to analyse in the short-run for the following reasons: (1) data for 1974 to 1979 were sketchy, and information on smaller communities could not be obtained in as much detail as for the pre-1974 period; (2) change in the number of establishments is a somewhat inadequate measure of change in economic activity of a centre since it ignores any measurement of economic performance; and (3) the effect on the business services of the operation of the WIT could only be felt after a certain lag.

TABLE 5

ESTIMATED PROBABILITIES OF A SERVICE CENTRE
LOSING SERVICES IN THE WEYBURN REGION DURING 1973–79,
AS RELATED TO SIZE AND DISTANCE

Size	Distance					All
	1-10	11-20	21-30	31-40	41+	
1-10	0.00 (1)	.143 (7)	.286 (7)	.571 (14)	.522 (23)	.442 (52)
11-30	—	1.000 (1)	1.000 (2)	.750 (4)	.727 (11)	.777 (18)
31-50	—	1.000 (1)	1.000 (2)	1.000 (1)	1.000 (5)	1.000 (9)
51+	—	—	—	—	0.000 (1)	0 (1)
All	0.00 (1)	.286 (7)	.545 (11)	.631 (19)	.625 (40)	.575 (80)

A comparison of the number of services present at a trade centre during 1979 and 1973 was made. Some 46 out of 80 service centres in the Weyburn region declined during this period. At the same time, some 17 centres grew and the other 17 maintained the number of services. Based on mere number of services, centres located further away (31 miles or more) from Weyburn had a greater probability of losing services, as shown by data in Table 5. This phenomenon was confined by all sizes of service centres in the Weyburn Region. In terms of size of a service centre and decline in services, it appears that medium sized centres have a higher probability of losing services than either very small or very large ones. This would, again, be plausible since lower order trade centres survive because of lack of competition for those services from large trade centres.¹⁹ Larger trade centres grow through the process of urbanization, in which more people move into cities, thereby creating in turn more demand for goods and services.

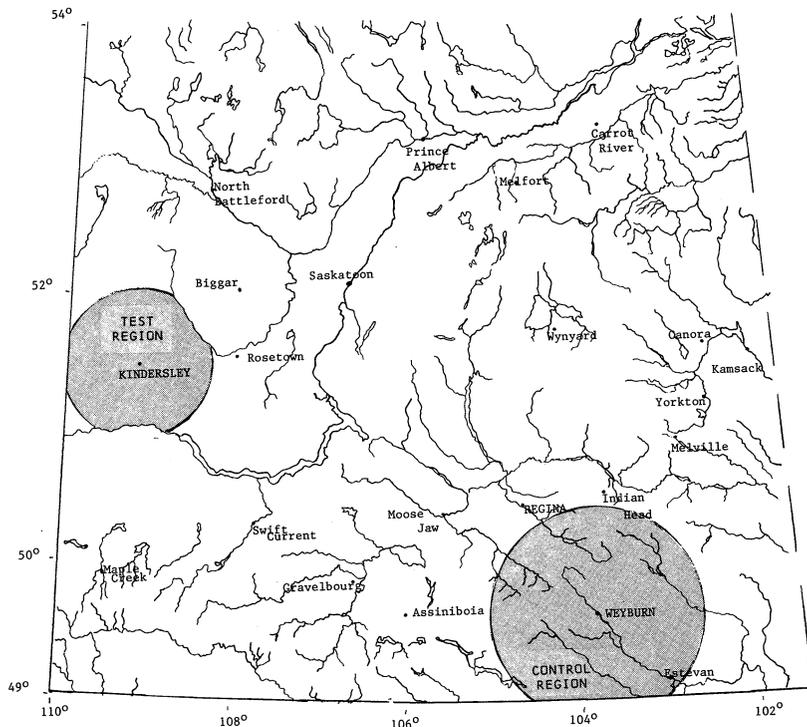


Figure 2. Map of Southern Saskatchewan Showing Location of Test Region and Control Region.

SUMMARY AND CONCLUSIONS

The primary objective of this study was to identify the pattern of changes that have occurred in the Weyburn region prior to, and since, the beginning of operations of the inland terminal. The study was based on socio-economic data for several trade centres in Weyburn,

and in a control area—Kindersley. The analytical design used was a pre-test/post-test control group design employing the multiple regression. The conclusions can be stated as follows:

1. Changes in elevator capacity or those in the grain received by primary elevators (at points other than the Weyburn terminal) have not been associated with the presence of the WIT.
2. Most communities in the Weyburn region enjoyed a positive growth, relative to those in the Kindersley region. Also the proximity of the centre to Weyburn had no effect on population change. In the analysis of data from 1976 to 1979, there seems to be evidence that the WIT may have deterred the population growth of the communities surrounding Weyburn.
3. It can be inferred that a community's taxable assessment is positively related to elevator capacity and the population at that centre, and that it is not significantly determined by the distance between the community and a larger service centre. Given the fact that there was no relationship established between the WIT and changes in the grain handling system, it can be concluded that the WIT is not instrumental, in the short term in changing the economic viability of various service centres in the region. This conclusion is also supported by the analysis of losses in business services at a given centre and its lack of relationship with distance from the Weyburn Inland Terminal.

This study has found that, in the short term, changes in the grain handling system to a more centralized inland terminal system in the Weyburn area, did not have any detrimental effects on the existing grain handling system, nor on rural communities. However, results should be interpreted with caution since the study has only addressed the changes in the short-run (less than four years) and it is conceivable that long-run effects may differ from these reported here. Furthermore, certain changes such as the elevator closures may not occur immediately for reasons such as, public resistance to the closures, or policy of large grain handling firms to subsidize losing elevators. These types of effects, of course, will not be captured by the proposed methodology. However, this study has developed an analytical framework which could be employed in assessing effects of changes in one sector upon other sectors.

APPENDIX

Statistical Methodology for Testing Study Hypotheses

The multiple regression estimated for testing the effect on grain handling system was of the following form:

$$(1) Y_{1i} = f[X_1, X_{2i}, (X_1 * X_{2i}), X_{3i}^2, (X_{3i} * X_1), X_{5i}, X_{6i}, X_{7i}]$$

$$(2) Y_{2i} = f[X_1, X_{2i}, (X_{2i})^2, (X_1 * X_{2i}), X_{4i}, (X_{4i})^2, X_{5i}, W_{6i}, X_{7i}]$$

where:

Y_{1i} = Per cent change in average elevator capacity in 1978 over 1975, at the delivery point i

Y_{2i} = Per cent change in average grain receipts at delivery point i during 1973–75 and 1976–78

- X_1 = Location code (=1 if Weyburn region; 0 otherwise)
 X_{2i} = Distance between Weyburn (or Kindersley) and the delivery point i , in miles
 X_{3i} = Pre-test period capacity in 1,000 bu. for delivery point i
 X_{4i} = Pre-test period receipts in 1,000 bu. for delivery point i
 X_{5i} = Quality of highway transportation code (=1 if the point is located at an intersection of 2 major highways; 0 otherwise) A major highway was defined as a provincial or a national highway.
 X_{6i} = Municipal taxable assessment of the delivery point (excluding elevators)
 X_{7i} = Average handling to capacity ratio for point i during 1972-75

Among these parameters, those of particular interest are the coefficients for X_1 and all others that involve an interaction with X_1 . If these coefficients are significant, these changes can be attributed to the inland terminal at Weyburn. In an earlier analysis access to a railway line was also introduced. The results obtained were inconsistent and thus the variable was dropped.

The hypothesis with respect to changes in the population levels of various communities was tested using the following regression equation:

$$(3) Y_{3i} = f[X_1, X_{2i}, X_{5i}, X_{8i}, (X_{9i})^2, (X_{9i} * X_1), X_{11i}, X_{12i}, X_{13i}, X_{14i}]$$

$$(4) Y_{4i} = f[X_1, X_{2i}, X_{5i}, X_{8i}, X_{10i}, (X_{10i})^2, (X_{10i} * X_1), X_{11i}, X_{12i}, X_{13i}, X_{14i}]$$

where:

- Y_{3i} = Per cent annual change in 1976 population over 1971 for center i
 Y_{4i} = Per cent annual change in 1979 population over 1976 for center i
 X_{8i} = Binary variable for elevator closure during the period for analysis
 X_{9i} = 1971 level for community i
 X_{10i} = 1976 level population for community i
 X_{11i} to X_{14i} = Binary code for long-term growth prospects of the community such that $X_{11i} = 1$, if there was a continuous decline in population since 1961; $X_{12i} = 1$ if population declined during 1961-1971 but stabilized after 1971; $X_{13i} = 1$ if the population increased during 1961-1971, but increased since then; and $X_{14i} = 1$ if population declined during 1961-1971 but increased during the 1971-1979 period

X_1, X_{2i}, X_{5i} = defined above

The taxable assessment of a community for a given year was specified to be determined by the following set of variables.

$$(5) Y_{5it} = f[D_{t1} \text{ to } D_{t4}, X_1, X_{15it}, X_{16i}, X_{16it}, (X_{16it})^2, X_{17i}]$$

where:

- Y_{5it} = Taxable assessment of center i during the year t , in dollars
 D_{t1} to D_{t4} = Binary variables for years, such that $D_{t1} = 1$, if 1961, 0 otherwise; $D_{t2} = 1$ if 1966, 0 otherwise; . . . ; $D_{t4} = 1$ if 1975, 0 otherwise
 X_{15i} = distance of the community from a major center, in miles
 X_{16i} = Population of the community i in year t
 X_{17i} = Elevator capacity in the year t at community i
 Other variables as defined above.

As noted earlier, the major interest in this analysis is on the coefficient for X_1 , and the location binary variable.

NOTES

- Weyburn is located some 60 miles south-east of Regina (the capital of Saskatchewan) in the south-east region of Saskatchewan. For location of the terminal, see Figure 1.
- The producers in this region, as well as in other regions of Saskatchewan held polarized opinions. The pro-terminal group believed that the establishment of a terminal system on the prairies was a logical development, a forward-looking concept that has a potential for savings to grain producers. Those opposed to the terminal system were of the opinion that the terminal may accentuate branch line abandonment, lead to the abolition of the Crownest Pass rates, and accelerate the already existing depopulation trend in rural Saskatchewan. Some of these controversies have been detailed by Kulshreshtha.
- Although one might argue that some of these results are not totally transferrable to other regions, it is believed that the pattern of impact will be similar, though magnitudes may differ from those reported here.
- Where data permitted, analysis was extended to 1979. Similarly, for certain data series, availability of data limited analysis to 1975 only.
- A summary of the reports to the Grains Group is provided by Ross and Partners.
- This cost was estimated at 38.7 cents per bushel, compared to a cost of 49.2 cents per bushel for the existing system of 5,000 elevators with a total storage capacity of 399 million bushels. (Ross and Partners, p. 26).
- The average haul under an inland terminal system was estimated at 62.7 miles, as against an average of only 7 miles for the existing system.
- In fact, the Grain Groups did not make a recommendation in favour of any specific plan for rationalizing the prairie grain handling system.

- ⁹ These include wheat, barley, oats, rapeseed, and corn. Data were obtained from Canada Grains Council.
- ¹⁰ It is because there is a distribution of the positive and detrimental effects. The gains for some communities may only be at the expense of losses for certain other communities.
- ¹¹ For example, a study by Stabler (pp. 49-50) concluded that "removal of rail and/or elevator facilities does little to alter the direction in which the community is already moving." The study goes on to suggest that "the centre's viability must be dependent upon functions which are not themselves closely associated with the transport of grain delivery function." Hodge (1968), in identifying the relationship of grain movement and community growth, concluded that "the level of grain shipments and community structure are not closely related in most Saskatchewan centers." Furthermore, Hodge (1968, p. 69) pointed out that "population growth in most Saskatchewan centres is not a function of either level of grain shipped or of growth in the level shipped." However, Hodge in an earlier study (1966) had concluded that "the importance of the center as a grain shipment point is also strongly related to its viability." Smith (p. 79), in a study of community impact of rail line abandonment in Saskatchewan, reviewed both the above works and disputed the proposition that "the ability of a community to act as a grain collection point is not related to that community's viability, or its long term prospects for stability of growth." A survey of businesses by the Manitoba Department of Agriculture similarly suggested that changes in the community's economic activity do occur as a result of branch line abandonment.
- ¹² This 60-mile radius was chosen because 75 per cent of shareholders lived within this radius. It was assumed that these shareholders would patronize the terminal more than other producers in the region.
- ¹³ Several characteristics for the two regions were compared. For example, average size of the farm in the Weyburn and Kindersley regions were 1073 and 1274 acres respectively. Similarly the average wheat area per farm was 357 and 436 acres in the two regions.
- ¹⁴ The total population of all communities within the 11-40 mile radius changed during 1961-1966 as follows: Weyburn, +0.6 per cent; Kindersley, +2.5 per cent.
- ¹⁵ The relative declines during 1961-1979 for communities located within 40 miles were: Weyburn, -6.95 per cent; Kindersley, -13.95 per cent.
- ¹⁶ These figures exclude those establishments that are exempt from paying municipal or local taxes.
- ¹⁷ This would not apply to those centres which are predominantly dependent on an elevator.
- ¹⁸ The handling-to-capacity ratio is an indication of elevator's profitability. Given a certain level of fixed cost, more handlings add more to the profitability of the elevator.
- ¹⁹ For further details of the concept see Richardson, and Berry and Garrison.

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RESEARCH NOTES

Abandoned Railroads as Potential Habitat Refuges

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Transfer by the Federal Government of 12,500 acres of abandoned railroad rights-of-way to the Alberta and Manitoba governments, has yet to be done in Saskatchewan where 58 railroads representing 15,425 acres will become available upon completion of abandonment. Transfer of such lands to private or municipal ownership would pose a serious threat to our flora and fauna, should agricultural or transportation uses be encouraged. Studies of abandoned railroads have not been made in Western Canada, except by the Habitat Protection and Development Division (1978).

Research in southeastern Saskatchewan would be especially interesting because of possible existing relicts of tall grass prairie, southern mixed-grass prairie, and prairie-aspen forest transition. One particular abandoned railroad in this area, the Alida line, was selected for detailed botanical study to determine the possibility of abandoned rights-of-way railroad lands serving as potential habitat refuges.

The selected railroad (Sections 13 to 18 inclusive, Range 30 to 33 inclusive, Township 5 west of the 1st Meridian), in southeastern Saskatchewan, is located between Alida and the Manitoba boundary (Fig. 1). A detailed discussion of the topography, climate and geological history of the area is given by Bird (1930), Campbell *et al.* (1962), Coupland (1961), Mitchell *et al.* (1944) and Sanderson (1948). The railroad has a linear length of 33.6 km (21 miles) in a 30 meter (100 foot) wide strip totalling approximately 100.8 hectares (250 acres).

The Moose Mountain-Souris River area where the selected railroad is situated, was settled between the 1880s and 1890s. Settlement eventually brought pressure on the government for extension of the Lauder-Tilston Manitoba branch line westward to Alida. This extension was completed in 1912. As rail needs dwindled, services were halted in 1976 and the railroad abandoned in 1977 (Hall Commission, 1977). With abandonment of the railroad adjacent landowners often used these lands as part of their farm operation eliminating native habitat, thereby encouraging alien species to invade disturbed areas.

To obtain an accurate concept of existing plant communities, notwithstanding the relatively small total of dominants and prairie relicts, a point transect method was used on recently undisturbed

railroad sections. The existing vegetation was field identified and some species collected for critical examination. Analysis of the vegetation revealed a vascular flora conformable to the mixed-grass and Aspen Parkland association of Bird (1930) and Campbell *et al.* (1962).

The small number of prairie relicts suggested an *Agropyron-Agrostis-Stipa* (Wheatgrass/Bent Grass/Needle Grass) community, with *Agropyron dasystachum* (Northern Wheatgrass), *Agrostis scabra* (Rough Hair Grass) and *Stipa comata* (Spear Grass) the dominant grasses. *Koeleria gracilis* (June Grass) appeared to be a co-dominant in places. On exposed cutbanks *Gutierrezia sarothrae* (Common Broomweed) is characteristic.

Typical for sheltered locations are *Lilium philadelphicum* var. *andinum* (Western Red Lily) and *Cypripedium calceolus* var. *parviflorum* (Small Yellow Lady's Slipper). Ecologically equipped invaders of disturbed areas are *Bromus inermis* (Smooth Brome), *Cirsium arvense* (Canada Thistle) and *Sonchus arvensis* (Perennial Sow-thistle).

Characteristic shrubs of the community are *Elaeagnus commutata* (Silverberry), *Symphoricarpos occidentalis* (Western Snowberry) and *Salix interior* var. *pedicellata* (Sandbar Willow), often becoming dominant on the railbed. *Carex atherodes* (Awned Sedge), *Scirpus validus* (Great Bullrush) and *Typha latifolia* (Cattail) are monodominants in damp depressions.

Other noted forbs of the association are *Galium boreale* (Northern Bedstraw), *Achillea millefolium* (Milfoil), *Artemisia ludoviciana* (Prairie Sage), *Aster falcatus* (White Prairie Aster) and *Helianthus maximiliani* (Narrow-leaved Sunflower).

A total of 194 species of vascular flora were identified and annotated by de Vries (1981).

The analysis suggests a community comparable to those occurring in the mixed-grass and Aspen parklands of southeastern Saskatchewan, with a climax *Agropyron-Agrostis-Stipa* grassland type. Two environmental types are present in this assemblage. A moist habitat is suggested by the presence of Cattail, Awned Sedge, Great Bullrush, Slough Grass (*Beckmannia syzigachne*) and Field Mint (*Mentha arvensis* var. *villosa*). The terrestrial habitat is made up of Poplar (*Populus* sp.) and Willow (*Salix* sp.) with Rose (*Rosa* sp.), Silverberry, and Western Snowberry. This is further strengthened by a marked number of other species indicative of such habitat.

The evidence shows a marked presence in the abandoned rights-of-way railroad lands of the increasingly scarce Western Red Lily and Small Yellow Lady's Slipper, as well as prairie remnants typical of the mixed-grasslands. This is a strong argument for the preservation of this select 38 acres of land as habitat refuges. People are discovering the

benefits of preserving native species, or at least providing "wild lands" which will allow some degree of natural growth and interaction, diversity, gene pool, soil stabilization and seed banks for species whose value has not yet been recognized. Abandoned railway rights-of-way provide excellent potential for refuges which should not be overlooked by conservationists.

W

Rural route to Alida		ALIDA
	Section K 3.2 km	
Rural route to Redvers		
Road allowance	Section J 1.6 km	
	Section H 4.8 km <i>Recommended for Habitat protection</i>	Lightning Creek
Rural route to Nottingham		
Road allowance	Section G 1.6 km	NOTTINGHAM
	Section F 4.8 km <i>Recommended for Habitat protection</i>	
Highway No. 8 to Redvers		
Rural route to Storthoaks	Section E 1.6 km	STORTHOAKS
	Section D 4.8 km	
Rural route to Bellgarde		
Road allowance	Section C 1.6 km	
	Section B 4.8 km	GAINBOROUGH CREEK
Rural route to Antler & Fertile		
	0.8 km	FERTILE
	Section A 4.0 km <i>Recommended for Habitat protection</i>	
Saskatchewan-Manitoba boundary ...		

E

Figure 1

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Economic Diversification in the Canadian Prairies: Myth or Reality?¹

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This study examines the economic structure of the prairie provinces to demonstrate the extent to which the economy of the provinces has branched away from its dependence on agriculture (mainly wheat production) to an economic production distributed across several industries without being dominated by any one of them.

The broadly similar processes in the agricultural settlement of each of the prairie provinces, along with their broad similarities in the physical environment, and accentuated by the relative isolation from the earlier Canadian ecumene have fostered the traditional concept of the prairie provinces being a "region" functioning as a "colonial appendage" to produce primary goods. In recent times there has been a decline in the agricultural labour force on the prairies (from about 47% of the total labour force in 1941 to about 13% in 1976) along with a very high percentage of total provincial employment in the service sector in the late 1970s (Alberta 65%, Saskatchewan 59% and Manitoba 70%). These factors together with highly visible energy-related ventures (crude oil, natural gas, bituminous and sub-bituminous coal, tar sands) in Alberta, expansion of the mining sector (oil, potash, uranium and coal) in Saskatchewan and modest improvement in the production of primary metals and hydro-electricity in Manitoba, suggest an accelerating economic diversification of the prairie provinces.²

To a certain extent this impression is valid. As Figure 1 illustrates, the Real Domestic Product of the prairie provinces has steadily increased over the past two decades as predominantly capital-intensive resource developments have strengthened the regional economy.³ However, as the information contained in Table 1 indicates, this trend has not been paralleled by a significant diversification of that economy.⁴

It is significant to note that even though the prairie provinces differ in industrial structure, e.g. agriculture is very important in Saskatchewan compared with mining in Alberta, the ratio of goods-producing industries to service industry measured in terms of RDP is broadly similar in the three provinces. Some changes have occurred in the last twenty years. Agriculture continues to be relatively most important in Saskatchewan and Manitoba while mining and manufacturing are becoming increasingly important in Alberta. Public administration and defence sectors have declined relatively in all the provinces while construction has retained its significance only in Alberta. In spite of such fluctuations, the Diversification Index values

REAL DOMESTIC PRODUCT¹
ALL INDUSTRIES
(Millions of 1971 Dollars)

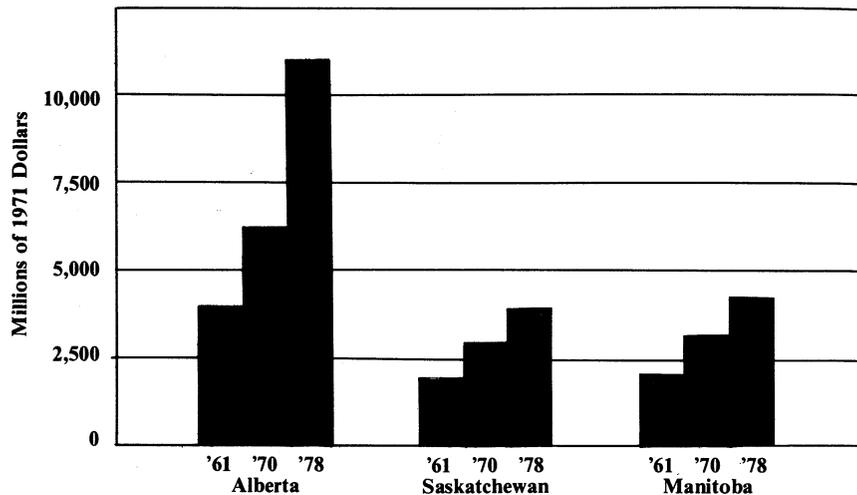


Figure 1 1. $RDP_{i,t} = GDP \text{ in } 1971 \times W_{i,1971} \times (IRDP_t / 10,000)$ Where $W_{i,1971}$ = Real Domestic Product Weight, industry i in 1971
GDP is = Gross Domestic product
IRDP_t = Index of Real Domestic Product at times t , 1971 = 100
Source: Compiled from The Provincial Economies, 1961-1978 Data, The Conference Board in Canada, Ottawa, 1979.

in Table 1 indicate no significant change in diversification in any of the three provinces in the past twenty years.⁵

The failure of the prairie region to significantly diversify its economy is, in part, a reflection of its continued role as a hinterland economy and its domination by the national heartland.⁶ At national and international scales, heartland economies determine the level and form of economic activity in hinterland locations, and Canada is no exception.⁷ Essentially, the regional structure of the prairie provinces is a product of centrifugal and centripetal forces emanating from Central Canada and to-date the latter have far out-weighed the former. Certainly the region has altered its earlier rôle as a supplier of staple products to one that now includes, to varying degrees, the domestic processing of these staples prior to export together with the domestic production of certain consumer goods. It is equally true, however, that Prairie Canada continues to be under some significant constraints in the diversification of its economy. These constraints include distance and lack of access to a large consumer market, heavy dependence upon capital-intensive resource activities, an uncertain investment climate, a freight-rate structure which favours export of primary rather than processed or manufactured goods, a limited and variable fiscal base,

TABLE 1

PRAIRIE PROVINCES REAL DOMESTIC PRODUCT
OF 1971 DOLLARS PERCENTAGES

Alberta	Percentage Contribution			Saskatchewan	Percentage Contribution			Manitoba	Percentage Contribution		
	1961	1970	1978		1961	1970	1978		1961	1970	1978
Agriculture	9.35	7.04	5.26	Agriculture	13.70	18.41	22.52	Agriculture	5.6	5.99	6.59
Forestry	0.15	0.15	0.12	Forestry	0.15	0.24	0.22	Forestry	0.09	0.13	0.12
Fishing	0.07	0.02	0.01	Fishing	0.10	0.07	0.04	Fishing	0.18	0.09	0.06
Mining	11.61	16.70	13.09	Mining	7.78	9.97	7.74	Mining	2.78	3.88	1.99
Manufacturing	8.58	8.95	10.24	Manufacturing	5.40	5.91	6.14	Manufacturing	12.45	12.11	13.82
Construction	13.01	10.15	12.88	Construction	10.06	5.92	6.68	Construction	8.06	7.51	5.59
Utilities	2.13	2.53	2.84	Utilities	1.77	3.02	2.61	Utilities	2.0	3.09	4.33
Transport	7.41	7.89	8.96	Transport	11.12	11.51	10.50	Transport	13.19	13.79	13.62
Trade	11.09	10.63	11.66	Trade	10.66	9.49	10.65	Trade	13.89	13.55	13.59
Finance	10.89	10.23	11.32	Finance	10.20	9.28	9.41	Finance	13.06	12.02	13.63
Business and Personal Services	16.37	18.64	17.03	Business and Personal Services	18.50	18.06	16.70	Business and Personal Services	18.10	19.64	19.14
Administration and Defence	9.34	7.07	6.59	Administration and Defence	10.56	8.12	6.79	Administration and Defence	10.60	8.20	7.52
	<u>100.00</u>	<u>100.00</u>	<u>100.00</u>		<u>100.00</u>	<u>100.00</u>	<u>100.00</u>		<u>100.00</u>	<u>100.00</u>	<u>100.00</u>
Diversification Index	.112	.119	.116	Diversification Index	.119	.122	.128	Diversification Index	.124	.123	.127

Source: Compiled from The Provincial Economies, 1961-1978 Data, The Conference Board in Canada, Ottawa, 1979.

the absence of a well developed regional money market and the "parochial" vision of the political leaders.

In conclusion, it can be said therefore, that while diversification of the Prairie economy is not entirely a myth it is not a complete reality either nor is it likely to become so while its dependency upon the economic and political climate of Central Canada persists.

NOTES

- ¹ The authors gratefully acknowledge the contribution of discussions with D. L. Beattie, Department of Economics, and the encouragement and editorial assistance of A. H. Paul, Department of Geography, both at the University of Regina.
- ² For an earlier attempt to comment on the reorganization of the economy in the prairie provinces see Barr, B. M., 1972, "Reorganization of the economy since 1945," in P. J. Smith (ed.), *The Prairie Provinces*, Toronto.
- ³ It requires as much as \$250,000 investment to create a job in the oil-refining industry while an investment of even \$30,000 may create a job in many of the industries based in Ontario and Quebec.
- ⁴ Changes in the labour force are to a very large extent indicative of technological change. For example the contribution of agriculture to RDP has remained high in spite of a decline in its labour force, signifying that output/labour ratio is an inefficient measure of product diversification. However, Table 1 does not indicate the degree of diversification that may have happened within a given industry or what would have happened if the provincial governments had not stiven for economic diversification.
- ⁵ Diversification Index = $\frac{m}{\sum_{i=1}^m (p_i)^2}$
 where p_i equals the ratio of output of the i^{th} industry to the total output of the province (extreme values $1 \leftrightarrow 0$). The value of the index will fall, indicating a higher degree of diversification, whenever the number of industrial activities increases and/or whenever output is more equally distributed across the industries. Examples of the use of this index are found in McVey, J. S., 1972 "The Industrial Diversification of Multi-Establishment Manufacturing Firms: A Developmental Study," *Canadian Statistical Review*, 47, 7, pp. 4-6, 112-113 and Beattie, D. L., "Conglomerate Diversification and Performance: A Survey and Time Series Analysis," *Journal of Applied Economics*, Vol. 12, No. 3, Sept. 1980, pp. 251-274.
- ⁶ Heartlands have been defined by Friedmann as territorially organized subsystems of society possessing a high capacity for generating innovative change whereas hinterlands are regions beyond the heartland whose growth and change is determined by their dependency relationships to the heartland (Friedmann, J., 1972, *Urbanization, Planning, and National Development*, Beverley Hills).
- ⁷ An earlier discussion of the dominance of the Canadian economy by its heartland can be found in Kerr, D. P., 1968, "Metropolitan Dominance in Canada," in *Canada: A Geographical Interpretation*, Edited by Warkentin, J., Toronto, pp. 531-55.

The Cost of Making a Farm on the Prairies

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In a most useful article, "Estimates of farm-making costs in Saskatchewan, 1882-1914,"¹ Lyle Dick has collected detailed evidence of these costs. He concludes that "a large capital investment was not essential for the establishment of a successful farming operation" and that "a prairie settler could get started with a very small investment of about \$300-\$550." This does, indeed, imply "a degree of economic democracy in the prairie settlement experience,"² a conclusion which would be strengthened by some refinement of the analysis and clarification of the underlying concepts.

Two themes run through Dick's presentation of the data: (1) The cost to settlers of getting established on the prairie; and (2) the cost to settlers of "bringing their farms into market-oriented production."³ These are two different problems which need to be disentangled. For example, neither the size of a settler's family,⁴ nor the standard of comfort which he expected⁵ had any direct effect on the cost of bringing a given acreage of virgin land into commercial production, though Dick includes both among the "multiplicity of variables" that affected farm-making costs.⁶ Both, however, clearly affected the cost of getting settled to a family. The outlay for the food necessary for a large family would obviously be greater than the outlay necessary for food for a bachelor, while an acceptable standard of comfort for a family accustomed to the elegancies and refinements of life, would evidently require a greater expenditure than would the standard of life tolerable to a peasant family, or even to a middle class family for a short time, until the farm began to pay. The more substantial expenditures required by a large family or by a family that was not prepared to put up with a low standard of comfort were not part of the cost of making a farm. They were the costs of meeting consumer needs and providing consumer satisfactions.

Only expenditures on provisions and shelter required for the subsistence of the labour needed to bring raw land into production are properly included as part of the cost of farm-making. Additional expenditures (on food for members of a family that were not part of the labour force and on comforts not common to the majority of settlers engaged in the work of farm-making) cannot be considered a part of the necessary cost of turning virgin land into an operating farm.

A large part of the real cost of farm-making did, however, consist of the cost of the labour required. The necessary inputs of labour, whether they were made by a homesteader himself or by members of his family, without any cash outlay being made, or by wage-earners or contractors, involved one of the most important costs of farm-making.

Dick is primarily concerned with the question “How much money did a settler on the Western Canadian prairie need to start farming?”,⁷ so he leaves out of account the real cost of unpaid labour, except in so far as expenditures on provisions, shelter, bedding and other household gear, and fuel (rather oddly omitted from Dick’s calculations) may be taken as a measure of the cost of the requisite labour. Well-to-do settlers might, as Dick points out, contract out the work of breaking land, erecting buildings and fences, or digging wells,⁸ or they might employ hired hands to do this work. Less well-to-do settlers did the work themselves or helped each other to do it, in voluntary exchanges of labour in “bees” and co-operative enterprises. In these, the majority of cases, no money was spent, but there was none the less a real cost. The value of the labour inputs necessary in the very labour-intensive process of farm-making, however these inputs were provided, and whether or not any cash payment were made for them, should be included in the tabulation of the cost of farm-making. This labour cost may be measured, on the basis of the economic principle of opportunity costs, by pricing the labour required either at what it would have cost to get the job done by hiring labour to do it, or at the wage which a homesteader might have earned had he spent his time and energy in working for a wage, perhaps for an established farmer, for a threshing outfit, or for a CPR construction crew, instead of working on his own homestead. It is true that such alternative opportunities were not sufficiently plentiful to absorb the labour of all potential homesteaders, but they do make it possible to set a value on the do-it-yourself labour expended without pay in farm-making.

Pinning down the labour cost of making a farm not only would give a more complete picture of the total, real cost of farm-making, but it would make it possible to eliminate the confusion resulting from expenditures on provisions, shelter and other consumer outlays that may be in excess of the actual cost of the labour, materials, and equipment needed to make a farm.⁹ Certainly such expenditures must be included in the cost of settling a family on the prairies, but the cost of making a farm should include only—and all—the labour and other costs involved in bringing virgin land into commercial production.

A complication remains. Many settlers were not at all experienced agricultural workers. Even those who had had some experience in farming, likely, would have only been familiar with conditions in Ontario or Europe. Only American settlers from comparable prairie country and Europeans who came from the open plains of the steppe country were likely to have the knowledge and skills required in making a prairie farm. A good deal of time and energy of the unskilled, therefore, was spent in acquiring western farming skills, rather than in making a farm, so some allowance must be made for this factor in calculating labour costs.¹⁰

A further difficulty arises from the fact that making a farm was in most cases, as Dick points out, a “gradual process.”¹¹ The expenditures that a homesteader had to make in his first year might, indeed, be kept to the very low level indicated in Table 3 under the heading “Minimum Capital Requirement.” Further capital expenditure would be needed before the farm was capable of full-scale market-oriented production. These expenditures were postponed until the settler himself could devote the time and energy required to erecting more elaborate buildings and the like, or until he could earn sufficient cash to buy implements, lumber or livestock, by working for wages in the winter or in a threshing crew, or selling whatever produce he could spare, to accumulate, bit by bit, enough money to make the initial cash payments necessary to secure everything that was needed for a fully-fledged farm. Meanwhile, he might keep his living costs down to the bare, unavoidable minimum so that his margin of spare cash and spare labour, i.e., his savings, would permit the ultimately necessary capital formation as fast as possible. In other words, instead of making the whole required investment at once, as a settler with sufficient funds at his disposal might do, he himself provided a succession of capital inputs over the years as he managed to eke them out of his current earnings and labour resources.

Dick describes the ingenious methods by which out-of-pocket expenditures were kept to a minimum in the first few years of settlement: sharing ownership and so the costs of equipment, livestock and shelter; by contracting out certain types of work, such as well digging or steam plowing; by other co-operative arrangements; and by the mutual exchange of labour with neighbours.¹² These devices made it possible to spread the costs of indivisible capacity (shelter, livestock, a rake, a mower, or even the homesteader’s own labour) over more than one farm-making operation, at least in the early stages, so cutting down the cost per farm.

That the cost of making a farm was different for different types of farm is clear. For example, raising livestock meant more fencing¹³ and hay-making equipment¹⁴ than were required for growing field crops.

Still more important, and frequently neglected, was the fact the cost of making a farm was different on different types and quality of land. Access or lack of access to hay sloughs,¹⁵ to supplies of wood for construction¹⁶ and for fuel, or of coal for fuel;¹⁷ an easily available and adequate water supply or high costs of digging a well; stones that had to be cleared away¹⁸ or a stone-free quarter section; proximity to or distance from a railway shipping point—all these and other variables, as well as the character of the soil itself and the amount and reliability of precipitation, affected the cost of making (as well as the eventual cost of operating), a prairie farm. These were such important “variables” that it is difficult to arrive at any general figure for that cost.

Access to wild game and fisheries may have provided some settlers with an alternative to buying some provisions,¹⁹ but hunting and fishing meant the diversion of labour time and energy from farm-making or the accumulation of capital by wage-earning. Game and fish might be a cheaper means of subsistence (as well as one entailing more agreeable activity) than the purchase of provisions, but they themselves imposed labour costs. It is to be noted, incidentally, that strict limits were placed at an early date on catching fish in the hope of conserving fish stocks that were threatened with exhaustion.²⁰

The price of land is mentioned, more than once, as part of the cost of farm-making,²¹ though not included in the tables of costs. To the extent that the market worked effectively, which can by no means be confidently assumed, the price of a given acreage would measure the degree of its scarcity, and of its superiority or inferiority in relation to other available land. That price certainly had to be included among all the costs to a colonist of getting established on a particular bit of the prairie, but it should not be included among the costs of making a farm. Those costs were the costs of the inputs of capital (including the inputs of labour required for capital improvements) needed to bring the land into a state in which it would be commercially productive. In the early days of plentiful, free land it was frequently only the value of "improvements" on it that were paid for when a farmstead changed hands. For example, two "surrenders" of privately held farmsteads on Indian Treaty reserves seem to have been made at the value of the "improvements." For these fenced, ten-acre holdings, with the premises on them, the prices paid were \$200 (1885) and \$400 (1887).²² Such sums seem to have allowed little if anything for the land itself. However, when land became scarce and acquired a value, what had to be paid for it was certainly an important part of the cost of getting settled as a prairie farmer, but not of the cost of making a farm out of virgin land. That land had a price whether or not it had been made into a farm.

If, as Dick suggests, "the homesteaders" own assessment of value of farm improvements can be assumed to reflect their actual expenditures,²³ then they greatly under-estimated the value of those improvements, since much unpaid labour had gone into them. On the other hand, as has been suggested in this note, some of their expenditures were not farm-making costs, but the costs of raising a new generation of workers and of satisfying consumer wants.

Whichever test is applied, however, that of the cost of making a farm, or that of the cost of setting a family on the prairies, Dick's conclusion, that the capital resources needed initially were small, is amply borne out. Settlers of "energy, experience, judgement, and enterprise,"²⁴ if they were prepared to skimp and save, to work themselves and their families very hard, to make the most of every

opportunity to earn a little cash, to space unavoidable expenditures over the whole “proving-up” period and often longer, and to exercise both ingenuity and good will in co-operating with their neighbours, might—and did—make commercially viable farms and establish their families happily, even though they started out with remarkably little money.

NOTES

- ¹ This journal, Vol. 6, No. 2 (Fall 1981), pp. 183–201.
- ² *Ibid.*, p. 198.
- ³ *Ibid.*
- ⁴ *Ibid.*, pp. 187, 190, and 198.
- ⁵ *Ibid.*, pp. 190, 195, and 198.
- ⁶ *Ibid.*, pp. 183, and 198.
- ⁷ *Ibid.*, p. 183.
- ⁸ *Ibid.*, pp. 190, 192–3, and 196.
- ⁹ *Ibid.*, pp. 190, and 193–94.
- ¹⁰ For a delightful account of one settler’s attempts to learn Western farm skills, see John Francis Wilson, *The Migration of Skivens* (Toronto: Macmillan of Canada, 1962).
- ¹¹ Dick, p. 194.
- ¹² *Ibid.*, pp. 193–94.
- ¹³ *Ibid.*, pp. 190, and 191.
- ¹⁴ *Ibid.*, p. 192.
- ¹⁵ *Ibid.*, p. 195.
- ¹⁶ *Ibid.*, p. 187.
- ¹⁷ Settlers in the Innisfail area of what is now Alberta made trips by sleigh to the Red Deer River to bring back loads of coal which they dug themselves out of the river banks. Personal communication, Mrs. J. Richards.
- ¹⁸ Dick, p. 194. L. H. Neatby gives a vivid picture of the labour costs of stone clearing in *Chronicle of a Pioneer Prairie Family* (Saskatoon: Western Producer Prairie Books, 1979), pp. 52–53.
- ¹⁹ Dick, p. 195.
- ²⁰ See the Diaries of F. C. Gilchrist, Inspector of Fisheries, in Saskatchewan Archives Board, Regina, and *Saskatchewan History*, Vol. 20, No. 3 (Autumn 1967), pp. 108–113.
- ²¹ Dick, pp. 186, and 198.
- ²² Canada, *Indian Treaties and Surrenders*, 3 Vols. (Ottawa: Queen’s and King’s Printer, 1891 and 1912; reprinted in Coles Canadiana Collection, 1971), Vol. II, pp. 159–160 and 212–213.
- ²³ Dick, p. 198.
- ²⁴ *Ibid.*, p. 185. To this list one should add “lucky.” Dick suggests (p. 198) that the settler with limited resources was especially vulnerable to such disasters as prairie fires. Late or early frosts, drought, floods, hail, grasshoppers or rust might similarly destroy a small farming venture.



A Reply to Professor Spry's Critique "The Cost of Making a Farm on the Prairies"

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When I first presented the paper at the conference on Quantitative Methods in Kingston, other economists drew my attention to the fact that labour and opportunity costs were omitted from my tabulations. They are right, of course. While a complete picture of the actual costs of farm-making would have to include these costs, I was principally concerned with tabulating out-of-pocket expenditures entailed in settlement. After reading Spry's critique I am inclined to think that my article might more appropriately have been entitled "Economic Barriers to Settlement," rather than "Farm-Making Costs" *per se*.

Spry's agreement with the proposition that the initial capital outlay for most settlers was initially small is tempered by her awareness of considerable labour costs that could not be obviated in the process of making a farm. She implies that this experience exacted a heavy toll from those who began with inadequate capital resources, and notes that many were lucky to preserve their homesteads from early failure. I cannot disagree with this interpretation.

It must be admitted that the tabulation of homesteading or farm-making costs is only the first step in determining whether or not the settlement experience was democratic. The ultimate test would be to determine how settlers were faring ten, twenty or more years after their arrival. Census statistics that might assist in resolving this question are not available, but other measures, such as land titles searches, could help to identify increases in land holdings as a crude index of economic advancement of different groups of settlers. I might make the point more forcefully that pre-1900 settlers generally captured significant land rents that accrued as the prairie settlement sector filled out. They should be differentiated from post-1900 settlers who were faced with higher land costs as a consequence. The point to be made is that for those settlers who did not obtain free grant land, opportunities to turn a small capital investment into a viable farm were diminishing at an accelerating rate after 1900. Comparatively low capital costs in homesteading do imply a degree of economic democracy, but only for certain individuals and groups of settlers, and within a certain time frame, i.e., a period that does not extend far into the twentieth century.



Prairie Theses, 1979-80

The CANPLAINS data base maintained by the Information Services of the Canadian Plains Research Center has provided the following list of 1979-80 theses concerning the prairie region. Theses of a general nature or which did not relate specifically to the plains region have been deliberately omitted. If any relevant theses have yet to be included we would be grateful to our readers for bringing them to our attention.

Readers wishing a list of theses for all or other years, or wishing a listing of research in addition to theses on a particular subject may have a search of CANPLAINS performed by their libraries. CANPLAINS (CPL) can now be accessed through QL Systems, which is available in libraries across Canada and the United States. Further information about searches can be obtained from librarians, or from Information Services, Canadian Plains Research Center, University of Regina.

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BOOK REVIEWS

Beyond the Harvest: Canadian Grain at the Crossroads, by Barry Wilson. Saskatoon: Western Producer Prairie Books, 1981. 290 pp., \$14.95, paperback.

“Would I recommend the book to other people?” “Yes.” It is interesting, thought provoking and one of the few recent books that examines issues facing grain producers and government policies on grain. The book, however, falls between audiences. An urban reader with little knowledge of agriculture may find the issues too complex, and would require more background information to appreciate the book. Those who have followed agricultural policy development closely will ask for more details. However, general readers with some knowledge of agriculture will appreciate the book.

There are areas of the book I would have liked expanded. The author could have been more critical of statements made by policy makers, experts or farm leaders. Some of their statements are open to question. The blame for this does not necessarily reside only with the author of this book. Many people in agriculture do not force farm leaders, policy makers and researchers to use appropriate methodology in their studies or to put the proper caveats on their studies and statements.

Two issues of particular interest were farm technology and the Crow. The author was somewhat pessimistic about the future of farm technology. For example, in Chapter 3, he seems to think that agricultural technology has slowed down. What about the new technologies in seeding, such as air seeders and side banding? What about more fuel efficient engines for tractors, and engines that will burn products such as Canola oil? It is possible that we may not recognize farm equipment in ten years.

A major part of the book deals with the Crow Rate and grain handling and transportation. This area continues to be surrounded by confusion and controversy. Discussion of the Crow Rate would seem to be relatively straightforward if it was limited to principles. The Crow Rate was originally for protection against the monopoly powers of the railroads. With inflation over the last three-quarters of a century, it has also become a subsidy to grain producers. In examining the Crow Rate, the questions are simply: Is the Crow Rate the best protection against monopoly power? Do farmers need a subsidy? The answers to both questions may well be positive, but it would be interesting to hear a discussion on those items, and not on all the side issues.

The discussion of the Crow also notes that the Department of

Transport seems to be providing the major advice on Crow changes (and not the Department of Agriculture). It is somewhat ironic that the people who brought us Mirabel Airport, as well as fiascos such as Via Rail, are providing the major advice on changes to the Crow. It makes one somewhat apprehensive of how policy is developed and how policy decisions are made in Ottawa. Where is the voice of "agriculture?"

The book also deals with the lack of clear policies in Ottawa (Chapter 18). In these troubled times of inflation, high interest rates, high unemployment, one wonders if any economic policy exists. It will be necessary for producers as well as all other actors in the agricultural industry to develop new policies that can meet the new challenges. Failure will result in increased problems for agriculture.

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Wednesdays are Cabinet Days: A Personal Account of the Schreyer Administration, by Russell Doern. Winnipeg, Manitoba: Queenston House, 1981. 206 pp., \$16.95, cloth, \$6.95 paper.

The author of this book declaims academic pretention. True to the subtitle his account is purely "personal," although in the Preface the hope is expressed that the book "should be of value to all students of civics, government and the history of [Manitoba]." It is neither easy to marry the two objectives, nor wise to make the attempt. For a reminiscence, freed from a need to interpret experience in light of an interest beyond self, grows slack in the telling. And that happens here, where the personal record becomes a record of persons, while the events which give meaning to their lives—and the analysis of either—take a distant second place.

This is not to say that the book is uninteresting—it is informative—or that it is unuseful as an historical source—it will be consulted. But it is less interesting than it could have been had more care been taken to avoid the danger, posed to all but the most exceptional diarist, of discussing only what is seen.

Mr. Doern occupied a favourable perch from which to view the Schreyer ministry. For three years before the NDP came to power in 1969, he sat on the opposition backbenches (to which he returned in 1977 after the NDP's defeat) and for the first three years of the Schreyer administration he occupied the government backbenches. It was only in 1970 that he was sworn as minister without portfolio, then later became acting-minister of public works and, finally, in 1972 minister. From the perspective of the students and others who the Preface expects to use this book as a "primary source," it is this account

of backbench experience as much as anything else that will attract them. An example, and one of the book's most memorable passages, describes the rapid and unhappy translation of opposition to government caucus; where debate and argument had reigned in the former, now rubber stamp of government action was expected of the latter. With its superior resources, including information, the cabinet dominated caucus: "It was almost as if a foreign body had entered the confines of our warm and friendly bloodstream" (62).

The turnover rate among Manitoba MLAs runs around one-third. The author's own survival through several elections and three changes of government (if November 1981 is included), while perhaps not a record is sufficiently unusual to mark him out as a man of the legislature, a phenomenon provincial assemblies are short of normally. Doern was not a Schreyer man in the sense that he owed his electoral success to the NDP leader, but he was loyal to the premier. Indeed, he complains more than once that under Schreyer loyalists did not rise as fast as mavericks in the councils of government. The explanation for these different rates of progress along the pathways to power lay quite simply, the reader is told, with Ed Schreyer and his perception of his role as party and government leader.

Again, because of the book's disclaimer to be a text, there is no discussion of theories of leadership or of the literature on personality and politics. Yet the centrepiece of this record is the author's description of Schreyer—in caucus, in cabinet, in the legislature, on the hustings. The picture presented is essentially a familiar one—a kind, sincere, unsophisticated man, conservative by nature however progressive in politics. In all that he was not a weak man. In fact, he dominated cabinet, to the detriment of his ministers and, ultimately, when the supreme test came in 1977, of his party. But then again we are told that he was a "political Hamlet," whose indecisiveness about his future, was responsible for the debacle.

The party drew support from Winnipeg and the province's north; the rich rural constituencies of southern Manitoba were, and remained, hostile to the NDP despite the premier's labours to make inroads there. The premier's agrarian passions were not generally appreciated outside of Manitoba but the rural-urban tension of the period is well-known, for it has moulded the province's politics throughout this century. A variation on this theme is the conflict between the governments of Manitoba and of Winnipeg. In the Schreyer years Doern, as a Winnipeg MLA and as a minister concerned with urban affairs in a government committed to urban reform, had a front seat even a part to play in the continuing battle with Winnipeg's officialdom led by the irrepressible mayor, Steven Juba.

Juba, as well as several cabinet ministers of the period—Saul Cherniack, Saul Miller, Joe Borowski, Larry Desjardins, Sid Green

and Howard Pawley—are the subjects of word portraits most of which are entertaining although few probe behind the surface of the politician. As well, there are major omissions in this picture of Manitoba's first socialist administration. The most notable is the absence of any account of civil service-government relations. To say that "only a handful of changes were made despite strong suspicions of Tory tendencies and suspected disloyalties" is unsatisfactory as well as puzzling (112). Every memoir published in recent years by a former cabinet minister in Canada or in Great Britain dwells on this crucial link in our political system—the mammoth *Crossman Diaries* return repeatedly to it. Even if one accepts that this book is no more than a personal record, it is an odd silence from one who exercised power in a government whose political philosophy diverged markedly from all of its predecessors.

Because first hand accounts of politics are rare in Canada, all the more expectation greets those that appear. The level of anticipation may therefore be unreasonably high. But admitting that, this is still a disappointing book. Those who seek the quick of Manitoba politics need not look here.

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Sinclair Ross: A Reader's Guide, by Ken Mitchell. Moose Jaw, Sask.: Coteau Books, 1981. 120 pp., \$6.00, paperback.

In *As For Me and My House* (1941), Sinclair Ross has written an acknowledged classic of Canadian literature, and this novel, together with his other fiction, especially his stories and *Sawbones Memorial* (1974), make Ross one of our first and more important modern writers. It is disappointing, therefore, to read in the Introduction to his *Sinclair Ross: A Reader's Guide* that Ken Mitchell is writing for a "general audience . . . which may be only vaguely aware that the Canadian plains have produced in James Sinclair Ross a literary artist of international stature." It is disappointing, in part, because Mitchell may well be correct. Although it is impossible to speak for the awareness of a "general audience," it is safe to say that, even from a scholarly audience, Ross's work has not received the amount, or degree, of critical attention it deserves. Apart from a few articles, most of them devoted to *As For Me and My House*, and some discussion in general studies of Canadian literature, only one full-length critical study has as yet appeared—Lorraine McMullen's fine *Sinclair Ross* (Twayne, 1979).

But the problem of Ross's recognition, with which Mitchell begins

his study, raises two further questions, and both are directly relevant to *Sinclair Ross: A Reader's Guide*: can Ross ever be a “popular” writer with a “general audience,” and if for reasons of subject matter or style he cannot, should his critic appeal to a “general audience”? This is a problem that Mitchell does not address adequately, for on the one hand he claims that, paradoxically, Ross’s work “*has* become popular,” while on the other he notes Ross’s disappointing sales, which he suggests are caused by the “too realistic, too frankly observed, too painful” world that Ross creates. And then Mitchell goes on to write for a “general audience,” after directing readers to McMullen’s book for a “scholarly” interpretation of the fiction. However, the more I think about this somewhat vexed question of Ross’s recognition with *any* audience, the more convinced I am that what is needed is further detailed, scholarly criticism of his work, instead of an introduction to his themes which is directed at a general audience. Ross is *not* a “popular” writer, and explaining his themes will not make him one.

Although I disagree with the intention of this book, I am pleased by almost everything else about it. Mitchell writes honestly and well; therefore, his discussion of Ross’s existential vision is enjoyable to read. He is not afraid to point out shortcomings in Ross’s fiction, particularly in *Whir of Gold*, and he makes several clear and perceptive comments about individual texts and about Ross’s fictional world. For example, in both stories and novels, Mitchell writes, there is “no attempt to provide social history, or any kind of documentary realism. The effect is to give us a microcosm of suffering mankind, caught in the grinding wheels of a universe beyond understanding or control” (5).

His discussion of *As For Me and My House* is sensitive (if too cautious) in that it touches upon the complexities and ambiguities of narrative strategy and characterization before moving on to a hopeful interpretation of the novel’s conclusion. However, Mitchell missed, or refused, the chance to weigh some of the conflicting interpretations of this problematic work, and as a consequence he undervalues one of the novel’s chief sources of interest. To be sure, this novel is about the terrible psychological and sexual conflicts of the Bentleys, but it should also be seen as an exploration of the limits of perception and language. Mitchell’s categorical assertion that the novel ends in an “unambiguous projection” of hope and rejuvenation limits the novel unfairly because neither Mrs. Bentley nor the reader can know what lies ahead—and this is Ross’s point.

Sawbones Memorial marks a highpoint in Ross’s career, and Mitchell’s discussion provides some useful ways of thinking about this late novel in connection with the earlier fiction. As he points out, it is a re-statement of a central Ross theme—“the eternal cycle of life and death . . . where beginnings and endings merge” (70). Furthermore, Mitchell locates the “organizing principle” of the narrative in the

characterization—of the town, of the townsfolk at the reception (and a few who are absent), and of Doc Hunter himself. What he does not go on to explore is the progress Ross has made, from the earliest stores through *As For Me and My House*, towards a full structural use of character to convey his themes. To my mind, one of the most stunning aspects of Ross's technique is his ability to use his deftly drawn characters—even in the stories—to develop plot and convey theme, instead of relying upon exposition and a narrator's controlling voice: *Sawbones Memorial* dispenses altogether with any form of traditional narrator in order to allow the brilliantly captured voices of the characters to speak for themselves.

Sinclair Ross: A Reader's Guide is an attractive, well-produced volume, relatively free of typographical error and nicely illustrated with photographs of Ross. The only perplexing feature of the book is Mitchell's inclusion, at the end, of two short stories, "No Other Way" (1934) and "Spike" (1959), along with facsimile pages of a typescript draft of "Spike." Nowhere does he explain why he is reprinting any of Ross's fiction or why he is reprinting these stories in particular. Various possibilities come to mind, but it would be helpful to have some direction from the author. What these stories, plus facsimile typescript, invite me to consider is the development of Ross's writing—in language, narrative voice, structure, and character—over the twenty-five years spanned by these stories and on to the publication of *Sawbones Memorial*. If someone out there is not writing the critical study that will carry on from where McMullen's *Sinclair Ross* left off, they should be. Ross's themes, like Margaret Laurence's, are clear enough; it is his evolving craftsmanship, especially the deceptive transparency of his "realism," which demands further, more penetrating attention.

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Confessions of an Immigrant's Daughter, by Laura Goodman Salverson; Introduction by K. P. Stich. Social History of Canada Series, No. 34. Toronto: University of Toronto Press, 1981. 415 pp., \$30.00, Cloth, \$15.00, Paper.

Laura Goodman Salverson's marvelously readable autobiography, *Confessions of an Immigrant's Daughter*, originally published in 1939, provides an introductory compendium of the immigrant experience in the New World at the turn of the Twentieth Century. Seduced by promises of success in Canada, Lars and Ingiborg Goodman emigrated from Iceland in 1887, losing their two youngest children to disease on the passage; they arrived in Winnipeg where Lars

found work in a saddlery sweatshop, earning sixty to seventy cents a day; they repeatedly sought a better life, but failed at farming and sheep ranching; they moved constantly, from Winnipeg to North Dakota, to Minnesota, to Mississippi, and back again. Laura, born in 1890 in one of their periods of extreme poverty, saw her eldest sister adopted by a cousin to relieve the burdens on the family; watched two of her younger brothers die; suffered from medical neglect, diphtheria, malaria, and a weak heart; and was humiliated at school because of her ignorance of English and her evident foreign origins. And when she struck out on her own, after having refused the kind of marriage that her friends used to escape their childhood horrors, she encountered the difficulties of the immigrant's child in the urban world of a piece-work factory, a salesgirl's counter, and, most degrading of all, a servant's quarters. "For girls like us," she wrote, "the dice were loaded from the start. The ensign of the mop and the dustbin hung over our cradles." Even after marrying a telegraph and railway worker, Salverson had to face the typical problems of homesteading and running a boarding house before writing her first and best-known novel, *The Viking Heart* in 1923, at which point the autobiography ends.

Yet for all these experiences, *Confessions* is neither a diatribe nor polemic, for Salverson uses a novelist's eye to choose the most representative image or anecdote to illustrate the central effect of each experience, rather than merely piling up details and repeating a catalogue of hardships. For instance, the saddlery shop where her father worked when not pursuing his idealistic dreams is captured fully in the child's view of Papa being too tired to eat after "almost fourteen hours at a bench, stitching by hand the heaviest traces." Again, a mere handful of incidents, including two seduction attempts by her employer and by the family son, exemplify her months as shop-girl and house-servant. Salverson's concern for women's rights builds from an accumulation of scenes, mostly involving the constant drudgery of her mother's childbearing and housework. When working in her Aunt Haladora's private hospital for unwed mothers, Salverson learns about religious and social intolerance; when working as a servant, she learns that this curse of the poor can be avoided by the rich. "What struck me like a blow," she writes, "was the obvious injustice of a society which exacts the letter of the law only from the less fortunate."

Her novelist's eye, too, helps Salverson create the characters who form the central interest of the book: "despite the general harshness of our existence in those vanished days, life itself supplied us with sufficient interesting drama. We were rich in characters." Minor figures delight, such as her first suitor, a "cheerful imbecile," or they add tragic intensity, such as when her spirited school friend confesses at the end of her short life how she had resorted to prostitution to pay for a life insurance policy that would provide education for her younger sister. Aunt Haladora, with her midwife's hospital in Duluth,

becomes an heroic figure who reflects the pragmatic humanitarianism that Salverson comes to adopt. But the central characters are her parents, an idealistic dreamer and a practical realist. Throughout the first two-thirds of the book, Salverson worships her father for his kindness, his romances, his literary and liberal ideas, his impractical gifts; she accepts as his birthright the attacks of wanderlust and optimism, which often come at times of modest success. On the other hand, her mother seems proud, dour, and stoic, following her husband with few words and little hope; her stories run to the tragic sagas, and her outlook to bleak despair. She was "a woman who rejected assimilation in any degree with [Canadians] whose sensibilities she doubted, and whose culture she therefore refused to admit." The death of Laura's brother in Mississippi, however, breaks her father's spirit, and Laura rejects a marriage he favored to go to work, at which point her mother acquires new respect. Against these individuals, Salverson presents concise and convincing pictures of the Icelanders, both as pioneers and in their homeland; of the immigrant community; and of American Southerners. Curiously, she provides few portraits of Canadians, though she does comment on "how contemptuous the general run of Canadian was of his own country."

Nearly a century after the events, these characters and their experiences provide a fascinating and believable account of times past. For general readers, the picture of the Icelanders, with their love for literature, and of their homeland devastated by natural and economic tragedy remains especially impressive. While aware of tradition, Salverson nevertheless aligns herself with the younger intellectuals, "perverse individualists, who refused to believe that man is a miserable worm, conceived in sin and shaped in iniquity. Mad hatters, who even went so far as to contend that women might be trusted not to wreck the earth if, now and again, they were permitted to toy with a vision that transcended the cradle and the kitchen." For this reprint in the University of Toronto's Social History of Canada series, Prof. K. P. Stich has provided a useful introduction which clarifies some of the book's confusing chronology and effectively sets it in the Canadian tradition of immigrant memoirs. *Confessions* won the Governor General's Award for 1939 at a time when Canadian literature was not highly regarded; in the past forty years, Salverson's achievements have paled somewhat, so it's good to have her book available again, for the social historian, to be sure, but to the general reader as well. If it doesn't have the sustained force of an outraged attack, it perhaps lives the better because of its sense of life—a human document, with the emphasis on the humans.

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How I Spent My Summer Holidays, W. O. Mitchell. Toronto: Macmillan, 1981, 224 pp. \$14.95, cloth.

W. O. Mitchell's fourth novel, *What I Did in My Summer Holidays*, is a complex and compelling work that indicates that Mitchell at sixty-seven is still developing as a writer. The title and the book jacket, with its expanse of Saskatchewan sky and grasslands, seem to promise an extension of Mitchell's classic *Who Has Seen the Wind* (1947). But his readers will be surprised. The time and place are similar and the protagonist is a twelve-year-old boy, but this novel is a much darker study of the world of childhood and puberty, the war between children and adults, and the bigotry, hypocrisy, sensuality and corruption of the adult world.

The form of the novel is retrospective. The old man Hugh, who is given no surname, looks back to his youth, in particular to the summer of 1924 and the months following which marked his transition from innocence to experience, the Blakean theme which underlies all of Mitchell's writing. Conceived when Mitchell was working on a series of first person reminiscences, the novel opens with several sections in the present, indicated by a smaller typeface, and concludes with Hugh's summary of the outcome and its influence on the characters. Elsewhere the narrator controls the recollections of the boy to give us a sense of double-time, the world as seen through the eyes of the child but corrected by the mature understanding of the adult.

The book begins with Hugh's elegy for the isolated rural village of his childhood and for "an age of innocence" (4). The title is deliberately ironic. It juxtaposes the adult's view of the child's experience, its regimentation and restriction as represented in the ritual of composition exercises, with the confusion, chaos and horror of the reality, a theme Mitchell has developed in the title chapter of *The Vanishing Point*. The darkness of this world is indicated by the elder Hugh's recounting a horrifying and obscene dream; touring through a type of hospital, he discovers a row of draped humps to be children's bottoms, the sheets parted to show the orifices and the caves within. The tour is conducted by a middle-aged and respectable matron who sells tickets and the old man awakes to attempt, in reconstructing his past, to explain this recurring brothel dream.

In the opening chapter Mitchell also establishes the divisions of the town and its environs into four separate societies. The child's world is seen through the eyes of the young Hugh and his friends and school-mates: Peter Deane-Cooper, Austin Musgrave, the Liar, Angus Hannah and Irma Van Wort. Adult society is represented by Hugh's mother, his teachers Miss Coldtart and Mr. Mackey, Inspector and Mrs. Kidd and Mrs. Judge Hannah. These figures are either over-protective or rigid and unimaginative. Unlike Brian and the Kid of the

radio series, Hugh has a father but he is a rather quiet, even docile man dominated by his wife. To the north-west of the town are Sadie Rossdance's three little cottages and the world of overt sexuality and desire. And to the north-east is the Mental Hospital with its own self-contained society and its pathetic inmates Blind Jesus, Buffalo Billy and Bill the Shepherder who, in their tragic isolation, recall the three mad women of Mitchell's play *Back to Beulah*.

These four elements are unified through the figure of Kingsley Spurgeon Motherwell whose ghost haunts the older Hugh and demands atonement. A tragic Jake Trumper, King stands between the world of the children and that of adults, gently initiating them into society and protecting them from the harsher aspects of life as seen in the poolroom or the hockey arena. As war hero, hockey star and poolroom winner, King is a suitable idol for the growing boys. He is linked to Billy the Shepherder through his earlier occupation as an attendant in the Mental. Only later do we discover that he is also linked with the world of Sadie Rossdance through his wife Bella.

The protagonist Hugh is a very credible character, an everyboy like Brian and the Kid. Small, defensive about his size, his weak chest and his horn-rimmed glasses, he is recreated by Mitchell with the skill of a Dickens. Juxtaposed in his memory are such universal boyish activities as digging caves, selling scrap and bottles from the dump for cash, swimming naked in the shallow swimming hole, watching movies starring William S. Hart, reading *Chums* and sleeping out on the prairie, with the less often recorded but equally memorable moments of sexual awakening, the attaining of a first pair of long trousers, the first jock strap and an almost cinematic scene where Hugh, concealed behind the bushes, watches Sadie's girls bathing naked and joking boisterously of their sexual conquests.

These events, powerful and evocative, suddenly give way to horror. The boys, primed by King, hide the escaped Billy the Shepherder in their cave and help to supply him with food. But one day while King is out of town, engaged as we later discover in rum-running across the border, Hugh comes upon the body of Bella in the cave, one leg gnawed by coyotes and the head mutilated. It is assumed by the town that Billy in one of his fits has killed Bella and been killed by King, though his body is not found in the river till spring. It is only much later that Hugh reconstructs the more probable sequence, that Billy has died accidentally and King has murdered Bella on discovering her return to Sadie's girls while he is away. King withdraws within himself; like Carlyle King of Mitchell's earlier unpublished novel *The Alien*, he is half-Indian, overcome by a sense of alienation. He is committed to the confines of the Mental Home and ten years later hangs himself. The guilt of this Hugh bears in his old age, for it is he who told King that Bella's new pink dress was purchased by Mrs. Inspector Kidd in return for favours.

How I Spent My Summer Holidays is a powerful novel, a study like William Faulkner's fiction of a world of betrayal, violence and mutilation. Yet as Mitchell has remarked, while it is tragic to lose one's innocence, to not lose it places one outside society and with the inhabitants of the Mental. In his dedication from the *Aeneid* "I want to sing of arms and a man" (17), the elder Hugh indicts a society which demands war heroes and presents them with medals and ribbons but cannot accept them in times of peace, a society which has outlawed an open expression of sexuality and denied humanity to those mentally ill. While the book flap compares the novel to Twain's *Huckleberry Finn*, Mitchell's work is a study not only of the evil in society but also of the evil within. In the end all the children are both guilty and victimized, even Austin Musgrave who as a west coast psychiatrist finds profitable employment for his childhood talents of gossiping and describing with relish every sin of the Old Testament patriarchs. Fast-paced and more tightly structured than Mitchell's earlier novels, *How I Spent My Summer Holidays* is Mitchell's mature treatment of a theme introduced in *Who Has Seen the Wind*, his vision of the heart of darkness within us all.

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The Regional Decline of a National Party: Liberals on the Prairies, by David E. Smith. Toronto: University of Toronto Press, 1981. pp. 188, \$17.50, cloth, \$8.95, paper.

Professor David Smith, of the Department of Political Science at the University of Saskatchewan, and the author of *Prairie Liberalism: The Liberal Party in Saskatchewan 1905-71* (an outstanding book published in 1975) has now turned his attention to federal party developments following the Conservative landslide of 1957-58. He describes in a fact-packed narrative the reasons for the earlier success of the Liberal Party in Saskatchewan from 1905 to 1944, and its amazing decline. Today no Liberal sits in the Legislative Assembly or the House of Commons.

The efforts of the party's national officers to re-build and reform the party organization are described at length. Professor Smith has made very effective use of primary sources in the provincial archives of Manitoba and Saskatchewan. In the Public Archives of Canada he has made extensive use of the papers of the National Liberal Federation, and particularly of the correspondence of Senator Stanbury. A wide range of newspaper sources has also been consulted. The book is an essential source for all Canadians concerned with the obvious fact that there are now no national political parties in the House of Commons—

only regional ones. Federal Liberals who wonder why they are so unpopular in the West can find the answers in Professor Smith's study.

The work begins with an analysis of the social development of the prairie provinces from the Sifton era to the post World War I years. This development was characterized by the arrival of large numbers of continental and United Kingdom settlers. The settlers from the continent were predominantly agriculturalists, as compared with those who arrived in the United States, where they settled mainly in the cities. The high proportion of foreign-born in the prairie population in contrast to Ontario and Quebec, resulted in differences in attitudes to the problems of government, education, and the economy.

Since the Western Canadian population included very few French-Canadians, it was inevitable that the newcomers would claim equality with the two other ethnic groups in Canada—the Anglo-Saxons and the French. The result of this was hostility to the bi-racial compact of 1867, and to officially sanctioned bi-lingualism.

Many of the European settlers were concentrated in group settlements, and the process of integration was slow; but it was the Liberal Party which immediately welcomed these people into its ranks, and thus succeeded in establishing the broadest spectrum of support in the political arena.

The author stresses that wheat growing was the primary source of wealth, and still remains the chief concern of the rural population. Hence it must be the chief concern of any political party which seeks to retain the loyalty of the prairie voter, even though mineral resources and oil have recently become important in the prairie economy. The maintenance of the family farm is still sacrosanct, and political parties can only ignore it at their peril. It was the chief concern of J. G. Gardiner, who dominated provincial and federal affairs in Saskatchewan from 1926 to 1954. A farmer himself, his commitment to the grain growers was only equalled by his skill as an organizer, and the "Gardiner machine" was justly famous in Saskatchewan. When he became federal Minister of Agriculture in 1935, he continued to fight for Western interests in the cabinet. One of his victories was gaining federal participation in the South Saskatchewan River dam project. His successor as premier of Saskatchewan, however, was unable to cope with the growing discontent of the voters during the latter stages of the depression and the war years.

During this period a third party, the democratic socialist CCF, gained increasing support, and defeated the Liberals in 1944. Thus Saskatchewan followed Alberta and Manitoba, where third parties had been in power since 1921. These parties devoted themselves to the advancement of distinctively provincial interests, although they had much in common: the maintenance of railway branch lines and the Crow's Nest Pass freight rates, and the control of their natural

resources which they had gained only after a hard struggle with the federal government in 1930.

There was a time when these interests had been exclusively defended by Gardiner in Saskatchewan and Garson in Manitoba. After 1957, however, the Liberal Party became more centralized and less tolerant of regional demands. The metropolitan areas of the east were regarded as the primary sources of political strength. To this end, reforms in the party organization were introduced by Walter Gordon, a confidant of Lester Pearson, and with the assistance of Keith Davey, who engineered the defeat of Diefenbaker in 1963. The activities of the reformers outraged Saskatchewan's Ross Thatcher, who criticized them as spokesmen for the geographic centre and the philosophic left.

Because Canada was becoming a more decentralized federation, with provincial governments seeking and acquiring greater power and influence, the federalists were increasingly frustrated. Because their program of bi-lingualism was so unpopular in the West, Pearson adopted the concept of multi-culturalism as a government policy, but he had been forestalled by the prairie governments who introduced school instruction in languages other than English and French. Thus they, in a highly visible way, had recognized the variety of ethnic groups within their boundaries, and had, in the author's words, "blunted the impact of the federal government's multi-cultural policies."

Smith claims "the Liberal Party has been the author of its own demise in western Canada." He supports this contention in a wide-ranging and closely-reasoned argument. This is a work of national importance and will be welcomed by all concerned with the study of Canadian politics and government.

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A Voice in the Land: Essays By and About Rudy Wiebe, Edited by W. J. Keith. Edmonton: NeWest Press, 1981. pp. 254, \$16.95, cloth, \$8.95, paper.

With the publication of *Peace Shall Destroy Many* in 1962, Rudy Wiebe established himself as a writer to be reckoned with, and since the novel was set in Saskatchewan, the term "regional" was at once applied to him. His reputation as a "regional" writer seemed to be confirmed and strengthened with the publication of his monumental novels *The Temptations of Big Bear* (1973) and *The Scorched-Wood People* (1977).

Of course, Rudy Wiebe is a writer of the Canadian West, of the prairie, and since he so strongly identifies himself with that region, he is a "regional" writer. But that label obscures as much as it reveals, and the recent publication of *A Voice in the Land*, which brings together interviews with Wiebe and essays by and about him, allows us to gain a clearer perception of what precisely, in his case, the appellation "regional" means.

Several of his interviewers raise the question. Brian Bergman, saying to Wiebe that, more than any other Canadian writer, he is "a prairie writer," asks him: "Do you ever worry about being labelled a regionalist?" (p. 167). George Melnyk opens an interview by asking point-blank: "Do you consider yourself a regional writer?" (p. 204).

To Bergman, Wiebe replies by citing the case of William Faulkner. Faulkner, says Wiebe, did not worry "about being a regionalist." For Faulkner, the little corner of the earth out of which he created his fictional world was sufficient to "go on forever, endlessly, exploring the human condition." As for himself, he says, since he has "three hundred thousand miles of prairie to work with," he doesn't have to worry. And if Faulkner is to be called a regionalist, then he will accept that definition, too (p. 167).

To Melnyk's question he gives what seems at first glance an unequivocal answer. "I don't like to think of myself as a regional writer." But he goes on to say that a novelist must be rooted in a place and deal with particular people, since there's no such thing as writing about people in general. He's not sure whether the term "regional" has any meaning in a country that's so vast and varied as Canada. Indeed, a certain kind of regionalism disturbs him because it's based on stereotypes accepted by both writers and readers and leads inevitably to hackneyed perceptions of reality. Thus the West is forever associated with the Depression, and he's tired of the constant reiteration of that theme, for it makes the West seem "static and monotonous," and that is a false and misleading image (p. 204).

In an interesting conversation between Rudy Wiebe, Shirley Neuman, and Robert Kroetsch, a different kind of light is thrown on the whole issue. As people become ever more mobile, as the concept of a stable and relatively homogeneous society bound to a distinct place and region becomes ever more tenuous, and as the modern media, particularly the movies and TV, show everyone living the same story, the whole controversy about regionalism and internationalism says Shirley Neuman, has become irrelevant (p. 232).

Wiebe seems inclined to agree. The modern urban novel has demolished all distinctions. "Most characters (in the modern metropolitan, urban novel) are totally impoverished. . . . In a sense, all the cities of the Western world are the same." (p. 232). He (and Kroetsch, too) have pursued a different path. And so, he argues, have writers like

Matt Cohen, Jack Hodgins, and Alice Munro, who have made particular, non-metropolitan localities the centre of their fiction.

So we are back again to the importance of place, of “region.” “There is an authentic kind of western Canadian experience,” says Wiebe, “and I look upon myself as a prairie writer. I’ve always written about this country. This is my place and I don’t want to leave it.” (p. 208).

Always, and foremost, there is the land itself and its overwhelming presence. In a moving essay (“Tombstone Community”) he writes of the early life of his parents, who’d settled in a remote Mennonite community in northern Saskatchewan in 1933, a year before he was born. It was a hard life, but it was loneliness, he says, that caused the greatest hardship. “Russia had been vast; but Canada was not merely vast; it was impassively empty and lonely.” (p. 18). In passages that remind one of Grove, he writes of the price in hard work that had to be paid to wrest a mere living from the land. Ultimately, the price was too exacting. “By 1950 the church, and with it the community, had ceased to exist.” (p. 21) When he returns for a visit in 1963, only the shells of houses are left, and “the poplars and the willows are quickly reclaiming the territory they once lost, very briefly, to the axe and plow.” (p. 23).

In rendering the experience of the early white settlers, Wiebe clearly stands in the main tradition of Western writers. But there are also significant ways in which he stands outside that main tradition. He is, first of all, a committee Christian writer. Indeed, he goes so far as to speak of his “Christian vocation.” (p. 127). One might also add that Wiebe stands in the Anabaptist tradition as it developed during the Reformation period, and also in the prophetic tradition as it has come down to us from the Old Testament. There are indeed instances in his work when the prophet overwhelms the novelist. There is no doubt, however, that this religious dimension of Wiebe’s work transcends his attachment to place and region.

Wiebe was born into a Mennonite family, and his own relationship with the Mennonite community has often been rocky. The sections of *A Voice in the Land* that deal with his Mennonite background are in some ways the most interesting parts of the book.

Wiebe argues that the Mennonites have become an ethnic group “at the expense of Christian doctrine.” (p. 26). With a certain amount of sorrow, one suspects, he is drawn to conclude that “blood and culture, not belief, make the Mennonite.” (p. 27). Although he understands the historical circumstances that have led to this result, he would like to see a change. The Mennonite churches, he says, should “cease emphasizing that they are primarily linear descendants of original Anabaptists, and place emphasis on their spiritual heritage. . . . The main thrust of the churches as such must be to reapply the Biblical interpretations of the Anabaptists—and the Biblical interpretations

which we can now see they lacked—to our time.” (p. 28). The Mennonite churches, he says further on in the same essay, significantly titled “For the Mennonite Churches: A Last Chance,” should reject “the middle-class paradise we have been struggling for—and have largely attained. Rather, captured by the revitalizing uniqueness of the Gospel, we must leave ourselves open to the leading of the Holy Spirit.” (p. 29). Herbert Giesbrecht and Elmer F. Suderman in their essays on *Peace Shall Destroy Many* recognize these concerns as central preoccupations of that novel.

The history of the Mennonites has been a history of persecution, of suffering, of loyalty to a faith even unto death, and of constant searching and journeying. It is a history that certainly transcends a particular region, and thus when Wiebe set out, in *The Blue Mountains of China*, to give fictional form and shape to the experience of the Mennonites, he was at once forced to move outside the space of the prairies, to spend time among the Mennonites in Paraguay, and above all to examine their relationship with the native people among whom they now lived, an experience he sets down in the essay called “Moros and Mennonites in the Chaco of Paraguay.” And in translating the Mennonite experience into fictional form, he was also drawn, as Ina Ferris shows in a perceptive article, to examine, particularly in the figure of Frieda, the relation between language and the idea of the church.

As a result of the controversy that arose in Mennonite communities after the publication of *Peace Shall Destroy Many*, Wiebe was also forced to address himself to the connection between faith and art, and to take issue with the orthodox, if perhaps simple, view that the task of the Christian novelist should be to explicate and strengthen doctrine. In the face of opposition, he must insist that the novel “is not a systematic theology which explains commonly held doctrines: it is a work of art which can and should contain ideas no one else has broached before and no one, perhaps, will ever believe.” (p. 47).

Wiebe’s attempt to enter imaginatively into the Mennonite experience in order to recreate it in his fiction, and his philosophical and doctrinal arguments with members of the Mennonite churches thus naturally lead him to expand and enlarge and move away from the purely regional concerns of the Western Canadian experience. His discovery of the experience of the native people who lived and worked and worshipped in Western Canada long before the white man came, on the other hand, lead him deeper into the Western experience, and thus deeper into the region.

Why was he drawn to immerse himself in the life of the Indians and Métis, and to recreate their life and their history in novels that are not so much a re-telling of historical events, but rather meditations on the past?

In the conversation with Brian Bergman, from which I quoted earlier, he says that it was in part by accident. It was not until he began to write *Peace Shall Destroy Many* that he realized “in an emotional sort of way” that there had been people living in northern Saskatchewan long before the white settlers arrived there, and that the history of the aboriginal people goes back for generations:

And then I discovered that Big Bear and Wandering Spirit and all those other easily identifiable historical figures had actually lived in this area. As a matter of fact General Strange had chased Big Bear around Turtle Lake which was seven miles from where I was born. So I got this incredible sense of a *past*, and so then Big Bear appears in my first novel as an ancestor of one of the Métis characters in the book (p. 165).

From reading William Cameron’s *The War Trail of Big Bear* he realizes that Big Bear and his diminishing band had probably traversed, in June 1885, the very homestead where he himself was born fifty years later; that on the very sand beaches of Turtle Lake, where the schools of the district used to hold their annual sports days, “Big Bear had once stood looking at the clouds trundle up from the north.” (p. 134) And there is of course the moving moment (an epiphany really) when, in a small room on the sixth floor of the American Museum of Natural History in New York City, he holds in his hands Big Bear’s sacred bundle (pp. 143–149).

Nothing in his early experience or in his formal schooling had prepared Rudy Wiebe for his encounter with the past of the region. Certainly, as he says in the interview with George Melnyk, he grew up in communities where Indians were part of the people. At the same time, he had a very typical Western Canadian childhood and was raised to think “we were superior to Indians because we were white and farmers. Invariably, in the Depression novels which are usually recollections of the writer’s own particular childhood, the Indian people come across as drunken bums or thieves . . . never in the sense of a people with an identity of their own, or a family life or a community.” (p. 205).

In school of course he had been taught nothing of the deep historical and human layers of the region. He had been taught about Cromwell and Lincoln, but Big Bear was a non-person. So he was forced (as most of us still are) to discover for himself the deeper meaning of “regionalism”:

All people have history. The stories we tell of our past are by no means merely words: they are meaning and life to us as *people*, as a *particular* people; the stories are there, and if we do not know them we are simply, like animals, memory ignorant, and the less are we people (p. 134).

I would like to suggest a link between Wiebe’s awakening to the region’s past and his own Mennonite background. Mennonite history

is the history of a people who were pushed into the periphery of European and, later, North-American history, just as the Indian and Métis people were. Their suffering, their endurance, their wanderings are not widely known. Their history also had to be reconstructed, pieced together, and made known. They, too, had to be given a voice which those of us who are not Mennonites could hear.

Of course, it is a awesome task to try and give a voice to people whose traditions and experiences are totally different from our own. Eli Mandel recognizes the problem when he says that what he hears in Wiebe's *Big Bear* "is not so much Indian speech, whatever that might be, but Biblical speech. I hear the cadences of the Bible, and a prophetic voice in that sense, as if you'd made these Indian people a Biblical people." (pp. 151–152).

Wiebe demurs somewhat. Of course, he says, one must remember that he is writing a novel, and not an impartial history, but then in a way he concedes Mandel's point:

But I do think that, say, the Biblical prophets and *Big Bear* had a great deal in common, the sense of a heritage that has been sold out, that through ignorance or neglect has simply been left: and the voice very clearly says that you cannot neglect your inheritance like this, the gifts of—the Cree call it 'the Main One,' the Jews "Jehovah"; you cannot do that and expect to get away with it. (p. 152).

It can also be argued, as R. P. Bilan does in an essay on *The Scorched-Wood People*, that Wiebe is not as critical of the Indian and the Métis people as he is of the Mennonites and their shortcomings, so that the "kind of complex cultural judgment we find in the earlier books is missing here." Nevertheless, Bilan recognizes the service Wiebe has performed for us, for suddenly such seemingly mundane places as St. Boniface, St. Vital, and Kildonan are transformed for him (and for us also) "into settings of intense and significant historical action, actions that (he), like many other Canadians, grew up knowing little about." (p. 171).

It is because he has performed this service that Rudy Wiebe has earned the right to take issue with Edward McCourt's bemoaning of the fact that the West lacks tradition. Yes, says Wiebe, it is true that the West lacks *white* tradition. But we must "dig up the whole tradition, not just the white one." (p. 206).

Only then, one might add, will the region open itself in its full depth and we shall know the place for the first time.

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Western Separatism: The Myths, Realities & Dangers, Edited by Larry Pratt and Garth Stevenson. Edmonton: Hurtig Publishers, 1981. 240 pp., \$9.95, paper, \$16.95, cloth.

The rise of Western separatism during the seventies was a phenomenon that caught many off guard. Its rapid return to obscurity, followed by a singular electoral victory in Alberta that gave it new impetus, has renewed questions about the nature of the movement. This is the first major book to attempt to explain separatism and relate it to the social and political history of the region. Generally, the contributors are anti-separatist academics and journalists who have examined the phenomenon, diagnosed it as a disease, and prescribed therapies for its cure.

In their introductory essay, editors Larry Pratt and Garth Stevenson of the University of Alberta acknowledge the recentness of separatism and they emphasize its vehemence. "Not since the evangelical period of Social Credit in the early 1930s," they write, "had the West experienced anything like these large stormy meetings." They group the explanations for this sudden outbreak into four categories: the first views separatism as the reassertion of the long tradition of Western alienation and protest; the second views it as a new response to recent national policies and the lack of representation in Ottawa; the third treats it as a mass psychological phenomenon characteristic of alienated society; and the fourth sees separatism as a revolt by disenchanting fringe groups against the mainstream. What the contributors find hard to answer at this early stage is whether Western separatism is a major or a minor movement. A closer examination of the explanations offered, allows the reader to gauge both the strengths and weaknesses of each argument.

The first essay, "Who are the Separatists?" is by Denise Harrington, a legislative reporter with the *Edmonton Journal*, who covered the separatist eruption in 1980–81. She provides background on the major figures—Elmer Knutson of West-Fed; Doug Christie of Western Canada Concept; and prominent supporters like oilman Carl Nickle. She describes the separatists of 1980 as "mostly middle-aged or elderly," whose roots were rural and whose politics were rightwing. She also makes the point that the hub of Western separatism is Alberta. The victory of Gordon Kesler in Olds-Didsbury, a conservative rural riding in Alberta, supports her analysis. Her article provides an excellent journalistic introduction but it does not offer any historical depth.

That omission is taken care of by historian Doug Owram of the University of Alberta in his essay, "Reluctant Hinterland." Owram, the

author of *Promise of Eden: The Canadian Expansionist Movement, 1856–1900*, sees Western alienation as a structural problem going back to the period of colonization that resulted in a West that became “a hinterland in cultural, economic and political terms.” He sees the present rise of separatism as a reflection of “the long-standing desire to move from hinterland to metropolitan status.” This may be true of a hardcore Albertan like Lougheed who is not a separatist, but it is difficult to ascribe to Elmer Knutson. The separatist reaction is motivated by conservative values and a desire for independent action, which have little to do with achieving “metropolitan” status. Nevertheless, Owsram is right when he says Ottawa is perceived as being “distant and uncaring” in spite of 20th century communications technology. He says the main complaint “has been unequal treatment within Confederation and . . . a subordinate position relative to Ontario and Quebec.” This problem can be resolved, he suggests, by a reform of the Senate to increase regional participation.

The issue of a regionally-determined democracy is taken up by economists John Richards in his essay, “Populism and the West.” He points to Western populism as an ideology rooted in the desire for democratic control. This sense of local control is strong in the separatists. Their rightwing populism has outstripped leftwing populism because the left has allowed itself to support a strong, central government interested in social reforms, instead of seeking a decentralized federalism. The issue, however, is not one of right versus left. It is an issue of whether a declining economic reality like agriculture can provide a sufficient base for a separatist victory. The urbanization and industrialization of the West during the seventies presents a challenge to separatist ideology.

One basis for urban popularity may be opposition to Pierre Elliot Trudeau. Political scientist Allan Tupper, in his essay, “Mr. Trudeau and the West” concludes that the removal of the Prime Minister would not deprive the separatists of their main weapon. It is clear that Trudeau is a symbol and not the essence of the problem. The structural problems between the hinterland regions and the centre extend beyond personalities.

Richard Cleroux, Winnipeg bureau chief for the *Globe and Mail* tackles the problem of comparing separatism in the West with separatism in Quebec. He provides a quick summary of the history of Quebec nationalism and points out how the Western separatists lack a significant intellectual component and a leader like Levesque. He considers separatism in the West “primitive” because it has yet to promote a “new western Canadian identity.” The comparison proves unhelpful because there is no set model of separatist development. The two are so distinct, as Cleroux admits, that their paths are radically different. The closest one can come to comparing the Western separatists is with the defunct Creditistes.

A much more informative comparison is drawn by Garth Stevenson who points out the similarities between Western Canada and Western Australia. He describes Western Australia's hinterland nature, its unwillingness to be a partner in Australian federation, its long history of alienation and its early agrarian economy, now superceded by mineral extraction. In a single sentence he highlights the parallels when he writes, "A new Western Australian secessionist movement was launched in 1973 by Lang Hancock, a flamboyant mining entrepreneur. . . ." Except for the word "mining" the sentence could describe a situation in Alberta. Stevenson makes the important observation that the Australian institution of an elected Senate with equal representation from every Senate has not allayed discontent in Western Australia. His warning should be heeded by those who think parliamentary reform is the answer for Canada.

A contrast to Stevenson's enlightening comparison of Australia and Canada is Peter Puxley's unenlightening essay, "The Psychological Appeals of Separatism." Statements such as "Western separatism should be seen as typical of the politics of mystification which are the general rule in Canada today," are not really helpful. Nor is a statement that "exalting the institution of the province . . . (creates) a political environment suggestive of fascism," anything more than overreaction. Mr. Puxley is the senior researcher for the leader of the Alberta NDP, so his attack on Lougheed as the fomenter of "emotional illusion" is understandable, but it is doubtful whether his observations increase our insight into separatism.

Larry Pratt takes up the theme that Lougheed is an element in the separatist upsurge because of his "Alberta nationalism." In an article titled "Whose Oil is it?", Professor Pratt claims that Alberta's attitude toward resource ownership is "exaggerated" and "inappropriate in a federal state." His writing is very much in the tradition of the intellectual opposition in Alberta which has sought to defend Canadian interests against the provincial elite.

One argument which is made frequently by those who favour an independent West is that such an entity would be better off economically. That claim is examined by Kenneth Norrie and Michael Percy in "The Economics of a Separate West." They believe that "Western separatism has gained momentum precisely because the rise of energy prices makes it appear profitable and realistic for the West to opt for independence." They consider the claims realistic, but they are concerned that a fall in energy prices could affect an independent West adversely. They recommend the federal system over the independence alternative and they make their argument in a prudent manner. Unfortunately, their option for federalism as the least of two evils is a weak statement. The platitude on which they end their essay, "The real option is a renewed federalism where the full benefits of economic integration are realized for the participating regions," is too nebulous a

concept. Besides "renewed federalism" à la Claude Ryan and others has been discredited as too little, too late.

The next essay by Roger Gibbins attempts to put some flesh on the skeleton of federal reform. He argues for increased use of the American model of political institutions to make the national government more sensitive to the regions rather than strengthening the role of provincial governments in Ottawa or devolving the federal system further. He makes this recommendation because he feels "many of the preconditions for a successful separatist movement in Western Canada are present," and "if we had paid more attention to American success in combining effective regional representation with political strength at the centre, we would not be facing the crisis we face today."

Frederick Engelmann disagrees. He argues against the Gibbins proposal by suggesting a head of state elected by the provinces and a house of the provinces as a second chamber, as well as the creation of a special constitutional court. When reading either Engelmann or Gibbins, one is reminded of Stevenson's warning that parliamentary reform of the Senate has not defused separatism in Australia.

These essays provide a great deal of information, but they leave the reader with a sense of uncertainty about the separatist phenomenon. The contributors are not distant observers, but active participants in a political drama that is unfolding each day. So they can talk about the trees, but are rather vague on the size and nature of the forest. There seems to be only one certainty about Western separatism—it is a product of economic change in the West and its evolution is dependent on economic conditions. The adverse pressures on the region's economy may be so powerful in the eighties that they will create social instability sufficient to undermine the present long-established governments and launch a popular third party. That has happened before in the West. Should the economy in the region move toward stagnation or even decline, then deepening recessionary forces will augment alienation and protest. At that point separatism will lose its peripheral character and enter the mainstream. But in order to consolidate that mainstream identity it requires two factors: first, a widespread dissatisfaction with the ability of the provincial governments of the region to effect the economy; and second, the participation of established figures in an increasingly respectable separatist movement. Should this participation occur, then it will have a moderating effect on the separatist platform, making it more appealing to urban voters and, thereby, increasing its chances of victory.

The scenario of a West in economic decline can constitute as much, if not more, of an impetus to separatism as did the boom of the seventies. The latter gave it birth; the former may very well give it power. If this proves to be the case, this rather Alberta-oriented, yet

pioneering effort, will not be the last book on Western separatism, only the first installment.

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Radical Regionalism, by George Melnyk. Edmonton: NeWest Press, 1981. 114 pp., \$14.95, cloth, \$6.95, paper.

This sample of trendy social science fiction is not really about radical regionalism, but negative xenophobia. Its author is executive director of the NeWest Institute for Western Canada Studies, the publisher is the NeWest Press, and most of the contents are reprinted from the *NeWest Review*. Its interpretation of Western Canada sounds like "Tobacco Road" and of Westerners like "White Niggers of America." Although it purports to deal with affairs in Canada's richest region, there is nothing here of good fortune and opportunity, only gloomy exhortation like that which bedevils Quebec and betrays Canada.

"Of comfort no man speak:
Let's talk of graves, of worms and epitaphs;
Make dust our paper, and with rainy eyes
Write sorrow on the bosom of the earth."

The articles are contained in three sections—"Culture," "Mythology," and "Ideology." The author says his objectives are "to build institutions that would further the cultural identity of the West," and "to develop an indigenous ideology that would increase regional consciousness." His challenges are to "stop being ambivalent about our history of social protest, radical thought and political innovation. We must view it as the basis of our identity." And to "start thinking regionally rather than provincially"; "if regionalism is ever to dominate our cultural values it must become the prime mover in our creative effort." And "When westerners . . . can determine cultural priorities for the region and use substantial federal funding for them, the possibility of a renaissance arises." (How frequently localism plans to flourish with someone else paying the bills.) And western provincial governments "must be pressured to develop a unified cultural policy," and, since governments are not interested, we need "a cultural revolution that will rearrange the present system." And "to create an indigenous culture the artist operates like a guerilla." These thoughts are stated in varied ways and repeated over and over again in five chapters that support a highly politicized indigenous culture. The result: the artist "knows that in a period of originality, when indigenous form appears, the structure of identity imposed by imperialism is overthrown, the region's sense of truth, its own definition of what is important, its

autonomously-developed myths and a self-determined reality become the dominant factors in his art." None of these concepts are defined or explained.

For chapters on mythology that seem planned to bolster the "autonomously developed myths" are followed by five chapters on ideology. The conclusion, obvious from the beginning, is that the "appearance of radical regionalism as an ideology means that one step has been taken on the road to reconciling regionalism and socialism." "But the final step . . . is the liberation of the region and the establishment of an indigenous society. . . ." "At this stage," records the final line of the book, "the relationship between regionalism and socialism is not a dialogue, but a dialectic."

The main weakness is an entirely one-sided view. What the author thinks is going on in Western Canada is interpreted to suit his thesis, and there is no thought whatever that the thesis should be tested for practicality and truth. The title itself could do with definition. "Radical," for example, is given a sophisticated, reformist meaning the danger of which is indicated by the phrase "radical chic." But it can indicate ultra conservative worship of an ideology that has become a dogma to be followed whether it works or not and whether people want it or not—for example, Marxist-Leninism has not yet worked anywhere. Dogmatism is a feature of this book. "Regionalism" is a geographic concept, and while it has social and economic implications, they cannot be sustained, anywhere, by mere space and boundary—especially in the field of ideologies which require imperialistic xenophobia for their sustenance. The author condemns "imperialism" again and again without evidence, but ignores the fact that ideologies are the most imperialistic of all ideas. He does not give the slightest indication of who will determine and implement the suggestions he devises for Western Canada. He talks often of "indigenous," but his concepts all reflect ideology that is itself certainly not indigenous to this country or region.

There is a very unhealthy element in the thought that what is indigenous is necessarily good. Inevitably the idea of purity is advanced, that safety lies in keeping out what is non-indigenous. Actually culture is never "pure" anywhere; often its strongest parts are combinations of indigenous and non indigenous. Asking westerners to distill their culture seems ludicrous when most of them come from other places; the anthropologists tell us even the Indians came originally from Asia. Indeed it would do the western whites and Indians (and Ontarians, Quebecers and Maritimers) some good to build up their culture by sharing more of it with others, and learning from peoples who do things far better than we do—for example; Ukrainian folk arts in the Maritimes, or some drumming and dancing,

imported by the Indians of Senegalese are among the best of their kind in the world.

One thing is certain; any culture that is over-politized weakens, and can decay and die. This is one of the greatest dangers of Canada and all her regions. Much of our contemporary difficulty is a result of cultural and social self-flagellation that often follows too much navel-gazing when times were good, art was trendy, nationalism was an enthusiastic patron, and there was encouragement and money enough to give even the worst participants opportunity and recognition. It will be for subsequent generations to judge the wheat and chaff, and certainly not for ours to seek to perpetuate the chaff. Mr. Melnyk does not admit that our heirs may not want to base their efforts on our original "creations," and for very good reasons.

One of the most serious faults of the book is its jargon. The language is complicated and torturous and most sentences beg explanation. Every cliché and buzz word in the leftist lexicon appears to give a hackneyed trendiness to the discussion. One wonders how Indians would regard the author's use of "she" when indicating them; there is nothing indigenous about that. The repetition is tedious; indeed the whole piece could be edited without loss into one article.

The idea that the good from our heritage can be featured without admitting the bad and changing it, is a presumptuous feature of the book. Going back to the roots is not as glamorous as ancestor worshippers suggest. The white men have a proud heritage, but their imported, cherished resentments can spoil that heritage. Indians are wise to remember their fine traditions; as well as the fact tribes often treated one another worse than the white man. All our regions need to know the truth, both good and bad, and they are not getting it in the flurry of political exclusiveness, ideological snobbery, and pseudo-intellectual trendiness. David Lewis had a warning in his autobiography *The Good Fight* (p. 45): "Separate, purist, splinter groups never appealed to me . . . The exclusiveness of such groups always seemed to me self-indulgent futility." Regionalism has splendid features, but if it is so "radical" as to be exclusive it too will become self-indulgent and futile.

The fatal flaw in this book to a reviewer, with many years of involvement in economic and cultural regionalism is the lack of discussion about realities: advantages and disadvantages; cost and who pays; relations with other regions; conflict with the national interest; what happens in prosperity and emergency; the kind of administration necessary; the civil rights involved—especially of those who may disagree with excess localism; how government is to be responsible and to whom; and the impact of change. No region or people can thrive on rhetoric without realism, something the Mari-

times and Quebec have often neglected and the West cannot afford to forget.

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Gentlemen Emigrants: From the British Public Schools to the Canadian Frontier, by Patrick A. Dunae. Vancouver: Douglas and McIntyre, 1981. 240 pp., \$16.95, cloth.

In *Gentlemen Emigrants* Patrick Dunae gives an account of the well-born, well-educated British emigrants who came to Canada between the end of the Napoleonic Wars and the outbreak of World War I. These included retired military officers, public school boys, university graduates, and aristocrats. One of Dunae's stated aims is to rescue these bourgeois and aristocratic emigrants from the shadows of obscurity. He distinguishes two waves of emigration. One began shortly after the Napoleonic wars and resulted in agricultural settlements principally around Lake Ontario. Their numbers were reinforced by veterans of the Crimean War and by those who were attracted by the discovery of gold in 1858 to the new colony of British Columbia. The second wave began swelling in the late 1870s and reached flood proportions during the early 1900s. Many of these emigrants were destined for the wheat lands and ranches of the North West Territories.

Unfortunately, the nature of the immigration records does not allow Dunae to be precise about the actual number of gentlemen emigrants. First-class passengers were not required to provide the immigration authorities as much information as were steerage passengers. Nor did ships' masters always keep accurate records concerning the number of passengers they carried. However, Dunae quotes a study which used United Kingdom Board of Trade estimates to show that Canada received approximately 45,000 "high class" British migrants in the last quarter of the nineteenth century, and that these numbers increased in the period from 1900 to 1914.

The book contains a number of vignettes and short biographical sketches of gentlemen emigrants often based on their memoirs or correspondence. We learn, for example, about seventeen-year-old John Gwynn Swain who came from a respectable but modestly endowed Edinburgh family. He and a school friend, Hugh Gibson, departed for Canada in June 1867. Swain, who was a high-spirited and aggressive individual, did quite well for himself in the new country, but Gibson seemed unable to hold a job or make a success of anything. Degenerating into a drunken wreck, Gibson appealed to Swain to let him stay in the latter's lodgings. This arrangement lasted only one

night. When Swain discovered that his friend was crawling with lice, he tossed him back out on the street.

Another case was that of Richard Byron Johnson who was drawn by gold fever to British Columbia in 1864. Upon arriving in Victoria, he applied to Governor James Douglas: "I had some dim notion of the possibility of a snug government berth . . . with nothing to do and plenty of pay, and hinted this misty idea in a subdued way to my friend the governor." Douglas led Johnson to a large drawer in one of the desks he kept in his study. Johnson peered into the drawer which contained a thousand or more "letters of introduction." Douglas then suggested that on the mainland there were many jobs available on the road gangs.

One of the most delightful chapters of Dunae's book deals with the remittance men. Strictly speaking, a remittance man was anyone who received an allowance from family or friends at home. But the term came to refer to "disreputable, languid fops," bounders and scapegraces who were exiled to the colonies to spare their families embarrassment. Many of these individuals believed that the British Empire represented the apex of civilization. This, in fact, was a common assumption of many of the gentlemen emigrants. As the Canadian-born imperialist George Parkin remarked: "One city-bred Englishman, if properly selected and trained, is worth more to Western Canada than all the Doukhobors put together."

Remittance men with their air of superiority sometimes suffered a rude awakening. Dunae writes that western farmers who had by enormous effort built up prosperous farms "were acutely conscious of English greenhorns who had the audacity to lecture them on how much better the squire's estate was managed in the Old Country. Farmers who suffered these lectures did so but once." Not surprisingly the Reggies, Berties, Monties and Teddies of Western Canada became the butt of jokes and amusing stories. There was, for example, the remittance man's description of farming in Manitoba. "'Tis nice upon the wintah's morning to get up and look out upon the open prairie, and see the little butterflies making buttah and the graws-hoppahs making graws!"

The main thesis of Dunae's book is that the poor reputation of remittance men, and by extension all gentlemen emigrants, is for the most part unjustified. He argues that taken as a whole the group of well-born and cultured British settlers made a valuable contribution to the development of Canada. They invested capital in fledgling industries, they filled positions as administrators and educators, and they enriched cultural life by supporting artistic and athletic associations. I am not convinced. The evidence presented in *Gentlemen Emigrants* is too anecdotal and impressionistic to support a judgment one way or the other. There aren't enough numbers in this study, and

there isn't enough systematic analysis to show what the gentlemen emigrants accomplished.

Dunae does not consider the possibility that in some ways the gentlemen emigrants thwarted Canadian development. Their devotion to the Empire first and to Canada second helped tear the country apart on more than one occasion. One hard-working Doukhobor family was probably worth more to Canada than a dozen Sir Clive Phillipps-Wolleys. Sir Clive decried "money-grubbing" while piling up a fortune through real estate speculation, and received a knighthood for organizing branches of the Navy League in Western Canada. Over the main doorway of Phillipps-Wolley's mansion in Oak Bay, the most anglophile of Victoria's municipalities, was inscribed a quotation from Horace which could be translated: "Those who cross the seas change their heaven but not their spirit." Perhaps that was the problem.

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The One-and-A-Half Men, by Murray Dobbin. Vancouver: Newstar Books, 1981. 270 pp., \$14.95, cloth, \$7.95, paper.

The person interested in Native history will find *The One-And-A-Half Men* a most important addition to their collection of books about Native people. For too long Metis history has centred around Louis Riel and Gabriel Dumont. It seemed that there were no other Metis leaders worthy of mention. Furthermore, Metis history has always been taught within the context of 19th century events. Murray Dobbin has broken with that tradition and presented a readable account of two Metis men who played a major role in the development of the Alberta Metis Association during the 20th Century.

Metis organizations are now accepted as a political fact of life. However, the attempts by Brady, Norris and Joe Dion at establishing a strong political organization during the 1930s in Alberta did not meet with the same social and political reception that the newly active organizations enjoyed at their inception. According to Dobbin, the Metis attempt at forming a political organization was marred by government and Church interference from the beginning. The Ewing Commission is viewed as a government attempt at actually sabotaging the Metis Association. The trials, tribulations, financial difficulties and Metis apathy that Brady and Norris had to overcome are described in vivid detail. This book is Marxist in analysis but that cannot be blamed on the author since both Norris and Brady (especially Brady) turned to the CCF and the Communist Party for the solutions to the Metis dilemma.

The major weakness of the book is Dobbin's inability to clarify Brady's position of the Metis as a class in accordance with Marxist interpretation. Race and class are used interchangeably. Brady may have thought of the Metis as a class but did the Metis? Were the Metis politically aware of the distinction? These questions are not answered and deserve to be—otherwise a label is placed upon a group of people without any suggestion that it is accepted or understood.

Dobbin has begun what I hope will be a new trend in Metis historiography. Sawchuk has written about the Manitoba Metis Federation; Ron Bourgeault about the Metis of Saskatchewan but only Dobbin has dealt with twentieth century Metis leaders. Furthermore, the book is invaluable as a source for additional research on the Federation of Metis Settlements in Alberta, many of which are presently writing their respective histories. The footnotes to Dobbin's work represent new sources of evidence. Unfortunately the book lacks an *Index*. But that is a minor point. *The One-And-A-Half Men* is a welcome addition to Metis historiography. It is the second volume to come out about Alberta in two years (Sawchuk: *Metis Land Rights in Alberta*) and both deserve national distribution and attention.

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Summer of the Hungry Pup, by Byrna Barclay. Edmonton: NeWest Press, 1981. 196 pp., \$14.95, cloth, \$7.95, paper.

Perhaps times have changed in Saskatchewan. When I went to school in Saskatchewan, little or no Indian history was taught in federal or provincial schools. If taught, a value was placed on culture according to some European scale. Some cultures were regarded as more highly civilized than others. The Indian civilizations were well down the scale, because we had not invented the wheel, gunpowder or the Gutenberg press.

Then along came the sixties, with their search for a more meaningful life—Canadian students marched against discrimination in the United States, others marched to ban the bomb and stop the Vietnam war, others reinforced the romantic stereotype of the Indian as noble savage or child. A great secular missionary effort was started. A change from poverty was the goal. Indian organizations (for self-determination and economic self-sufficiency) were underwritten by government funds so that we might grow up and take our place as Canadian citizens.

The White Paper of the late 1960's sought to take away our legal status as registered Indians, and we would be "just plain folks,"

blending with all people under the sun and becoming anonymous—without our own language, culture, history, religion or support systems. Support came from white society; they would even write our history for us. A backlash developed. In white society, Indians were seen as victims responsible for their own poverty. In Indian society, a strong traditional movement began to emerge.

It is against this background that Byrna Barclay bravely writes. Her main characters are women. “Old Woman,” the Cree Indian, recounts her story to Annika, the granddaughter of her deceased Swedish friend, Johanna.

After the Battle of Cutknife Hill in 1885, the Cree surrender at Battleford and begin their life in exile. Some join relatives in their old territory (now in the United States); some move to “left over land” (also known as “land we had no part in choosing” or reserves). Those who survive the epidemics and the liquor trade, deportation back to Canada in closed boxcars, “the visit of Summer’s hungry pup” (famine) and culture shock, are put on reserves.

The story covers much territory, both geographic and psychic. Most it will not dispel the stereotype of the Indian as victim or romantic figure. In fact, the prevailing image in my Indian mind is of people adapting to ever-accelerating change. The small family group is the social unit on which we depended in times of stress. We see this in the story. With the leadership in jail, it is “Old Woman”—“New Woman”—“Medicine Woman,” who is seen as leader as in the ancient past.

Ms. Barclay is to be credited with studying the Cree language in her research. Readers are involved in her search to transcend cultural differences by having “Old Woman” become, in the end, “All Women,” in whom all voices meet. This attempt to project through time is very important to Indian history, as we regard history as a direct line from the creation myths. The use of language without articles is the poetic license allowed the “Old Woman.” Presumably, Ms. Barclay would write in some dialect form in speaking with the voice of her own grandmother.

In reference to the author’s use of Cree, this reviewer was pleased that care was taken in utilizing Cree quotes, but disagreed with some of the interpretations. After all, it is most important to me as an Indian that Cree and the other Indian languages were the first languages of North America, and hence deserve respect! I do not appreciate my language being “used” just to add “colour” to writing. I have read too many books written by non-Indians who “quote Cree”—incorrectly! By using Cree (or any other Indian language) you show respect. If an Indian Elder (who has never written a book) can be so presumptuous as to offer advice it would be this: “certainly you are free to use my

language, but please show respect for my nation by using its language correctly.”

In the acknowledgements, Barclay states “. . . I have adhered faithfully to Cree history.” She does not make the same claim of her own history. Perhaps she could more properly claim to write what she interprets to be true. As we know, there is always something lost in the translation.

The book is populated with people such as Poundmaker, Little Bear, Lucky Man and Bowboy. The author adds another dimension to the stories about Poundmaker which are critical to those who regard him as a cultural hero. This is difficult for an Indian writer to do. What rings true for this reader is not the Cree characterization but the white.

We are still waiting for Cree history to be written and published by Native writers. The appearance of this or any book should not serve as a deterrent to other writers. It is an interesting story, and I'll read Ms. Barclay's next book.¹

NOTE

¹ I understand Ms. Barclay is presently working on a sequel to *Summer of the Hungry Pup*.

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Saskatchewan Government, Politics and Pragmatism, by Evelyn Eager. Saskatoon: Western Producer Prairie Books, 1980. 240 pp., \$11.95, paper.

Evelyn Eager has provided a descriptive account of the machinery and history of government in Saskatchewan, similar in intent and coverage to MacGregor Dawson's classic text on Canadian government. It has both the merits and defects of that approach.

Its merits are that it is superbly organized, readable, and detailed. If the student needs a reference text for a study of Saskatchewan's history, this is ideal. When was Thatcher elected? What percentage of the vote did the CCF obtain in 1948? What were the identified issues, and which slogans were advanced by which party? All is here in a format that makes quick access possible. Also provided are details on the *Saskatchewan Act*, the history of its enactment, party organization, the Legislative Assembly, the office of the Lieutenant General, the Cabinet, the public service, and interesting historical information on the relations between cabinets and parties especially within the CCF and NDP. The defect of this approach is that it, quite frankly, lacks

perception, frequently bores and often repeats conventional wisdom on the whys and wherefores of legislative action or electoral politics.

The analytical content is sparse, though not entirely absent. The final two chapters provide limited but interesting observations on federal-provincial relations. Dr. Eager argues that the voters have felt defensive toward Quebec in the past decade because the East lumps the West together with Ontario as "English Canada." She states "it is debatable whether frustration ran deeper at being regarded as a satellite of Ontario or at being unfairly castigated, as the West felt, for hostility toward Quebec." The argument, I think, is worth stating for it is one that undoubtedly influenced Western responses to the federal government over the constitution.

To my mind what is singly missing in this scholarly compendium of facts is a sense of intellectual puzzlement. The book reads as an encyclopaedia: this occurred; that is the undoubted explanation for it; then the next event occurred. There is no profound implications here, no serious intellectual challenges, no controversy that might fascinate the mind. Yet Saskatchewan presents exciting challenges to both the theorist and the practical politician. Morton, Lipset, Zakuta, Young, and Richardson have for example offered original analyses and arguments. Eager's contribution is valuable for those who wish to engage further in those debates, but its value is in its detail, not in its analytical insight.

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The River Horsemen, by David Williams. Toronto: Anansi, 1981. 224 pp., \$9.95, paper.

"Suddenly I understood everything in life which had perplexed my life. The powers of destruction were here among us. We were living in the end times and didn't see it" (p. 140). These words of one of the principal characters in *The River Horsemen* provide a major insight into David Williams' disturbing but powerful novel. The novel is indeed set in apocalyptic times—Saskatchewan in 1937. However, the "four horsemen" alluded to by the title and preface are a rather unlikely lot; two Indians, a Ukrainian youth, and a fundamentalist preacher who are travelling upriver from Lacjardin to Saskatoon by tractor, car, canoe, and train.

While use of the journey as a narrative device is certainly a well-worn (or time-honoured) convention, Williams' narrative technique is far from conventional. He makes strong demands on his readers, forcing them to reconstruct the plot from the inner monologues of the

four principal characters. In addition to receiving conflicting or complementary impressions of the same events from different points of view and frequent allusions to events not previously described, readers must sort out the relative significance of memories, dreams, nightmares, present thoughts, and realities. These demands on the reader, however, are brilliantly conceived because they are in keeping with both theme and characterization. The major characters themselves, to a greater or lesser extent, inhabit inner worlds where there is no clear demarcation between dream and reality.

Among them, these four characters are suffering from the loss of gods and loved ones, and are obsessed with fear of failure, dreams, death, insanity, and spiritual and sexual impotency. Young Nick, the Ukrainian boy, is journeying to Saskatoon to carry word of his father's death to his mentally-ill, tubercular mother. He is assisted by an old Indian, Fine-day, and a lapsed revivalist preacher, Jack Caan, both of whom are suffering from disillusionment with life brought on in part by marriage break-ups resulting from failure to produce longed-for offspring. The fourth major character, Many-birds, is a demonic ex-convict, obsessed with sex. His purpose in travelling to Saskatoon is to pursue his former lover, the wife of a Ukrainian barber who viciously shaved off all the young Indian's hair.

The "scalping" of Many-birds by a white-man provides a good example of the complexity of symbolism which Williams employs. "But I still think those white guys are only half of my goddam troubles. There's got to be something bigger up there that's dead against Indians. Thunder Bird, are you scalped now too, that you don't have the Power to look out for us?" (p. 121). Thwarted though he is by the loss of his hair and Jack Caan's watchful eye, the bald-headed Many-birds still represents unmitigated lust to the extent he can almost be considered a human phallic symbol, although a somewhat ironic or ineffectual one, since he really does not manage to live up to his name.

A far more sympathetic Indian character is Fine-day, a recluse for twenty years, living with dreams, memories, and the dread of death since losing his son to tuberculosis and his wife to Many-birds' father. There is a fine quality of nobility and sensitivity in the old man, who discovers resources within himself which he has long since forgotten as he resurrects himself to help young Nick. He realizes "It's this feeling of hope that won't let me alone . . . that would maybe let me live in the dream if I learned not to insist on it" (p. 143). Fine-day is more than the Noble Savage representing a better and lost way of life; he is Everyman struggling on in the human predicament, retaining compassion though buffeted by life. Williams does a remarkable job of writing in four distinct styles to represent the inner monologues of each of the principal characters. It is in the chapters devoted to Fine-day, however, that his writing becomes most lyrical.

In the chapters devoted to the thoughts of Jack Caan the language reverberates with biblical allusions and symbolism. Though on occasion Jack's fundamentalist rhetoric becomes somewhat tedious, in general it rings true—as one might expect from a writer of Williams' background and skill. Though the use of rough language and the portrayal of a back-sliding minister will no doubt elicit charges of blasphemy from fundamentalists, as did William's earlier novel, *The Burning Wood*, Williams seems to answer these charges through the words of Caan: "I looked through the door at his face set in such self-righteousness. Then I turned my back on a man who sought only the face of respectability." (p. 141). While Jack Caan's binge of profligate behavior seems sharply out of character and rather insufficiently prepared for, he does fulfill the unexpected, unnatural tendency of characters bearing his initials to perform the ultimate heroic gesture in a most dramatic and pathetically unrewarding situation.

The River Horsemen is a major accomplishment of a writer growing in skill and power. In technique, style, and vision, it is considerably more complex than *The Burning Wood*. The earlier novel, however, showed evidence of a talent for humour, exuberance, and fast-paced action—qualities which are less frequently employed in the present, rather grim, intellectually and spiritually probing novel. While in tone *The River Horsemen* is rather dark and sinister, it is certainly not totally pessimistic. Man is depicted as being capable of rising from failure and disillusionment to perform acts of altruism. And *Horsemen* is not without its lighter moments. While some readers may prefer the ribald descriptions of young Nick "saluting" the flag or Highway Mary washing the windshield, I prefer the delightfully humorous and sensitive portrayal of Fine-day, the wizened child of nature, tremulously coming to grips with the machine age by driving a tractor.

Together, *The Burning Wood* and *The River Horsemen* illustrate Williams' strength and versatility as a novelist. He sets enormous imaginative tasks for himself in exploring the fundamental nature of religious, moral, physical, and creative experience, and as the following excerpt illustrates, he does so wholistically in a concrete regional setting:

The words of the story seemed suddenly to engulf the room in light, and I was there with Crystal around that blessed manger. My very bowels twitched out to entwine with hers, and then the child was ours, and the glory of the Lord shone round about. And the shepherds who arrived were come to White Fox, Saskatchewan, and a multitude of the heavenly host sang round about the house, and praised God in the sparkling cold of twenty-five below. (p. 35).

David Williams is following a great tradition in exploring epic questions through a regional setting. And he certainly has a congenial literary landscape. After all, why crate Yoknapatawpha when you have Saskatchewan?

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