Foreign ownership and myths about Canadian development

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The dominant historical models that explain Canada’s staple-exporting, branch-plant development are examined and found wanting. The Staples perspectives of Innis and Mackintosh and the new political economy approach of Clément, Naylor and Watkins all assume that Canadian development has been determined by geographic, economic, and external factors. This paper challenges these assumptions by subjecting their premises of ‘distorted’ Canadian development to historical comparisons with the United States and the ‘white dominions.’ In their place, a novel sociopolitical approach is outlined to explain Canada’s dependent economic structure as a variation of late development in Europe and Japan.

INTRODUCTION

People have a wonderful capacity to rationalize about their past failures and present predicaments. Canadians have accepted several myths that make it easier to live with high levels of foreign investment, with compromised political independence, and with a continued reliance on resource exports. On the reassuring side there are the familiar refrains: Canada is a young country, just beginning on

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the path to independent industrial development, and without the help of American
capital and technology over the years, Canadians still would be 'hewers of wood
and drawers of water.' On the resigned-to-our-fate side there are the legends of
Canada’s vast distances as barriers to development, and U.S. or British external
control as inhibiting Canadian development. Unfortunately, far from exposing
these myths to critical scrutiny, social scientists and historians helped to create
them. The ‘late bloomer theory,’ the ‘American role as friend or enemy,’ and the
‘land is bigger than the people’ theory are all comforting because they place the
blame for Canada’s dependent existence on someone else or on a non-human
agent. This paper challenges these myths and shows that Canada was sufficiently
developed and sufficiently free from external constraints to have progressed along
the lines of other advanced countries.

Industry is not new to Canada. A century before Confederation, Canadian iron
was said to be of better quality than English and American and perhaps as good as
Swedish (Sulte, 1920: 179). When England was the only country undergoing the
industrial revolution, Canadian forges were producing cast iron stoves that were
able to meet English imports in quality as well as in price. The engines that
powered the Royal William, the first steamboat to cross the Atlantic, were built in
Canada (Kilbourn, 1960: 7; Sulte, 1920: 180).

In the late 1800s, before the age of the automobile, farm machinery was a
dominant industry. Implement companies staged popular field competitions to
demonstrate the superiority of their horse-drawn machines. The Paris Exposition
of 1889 produced the Eiffel Tower and the greatest farm machinery contest ever. In
the latter all the major international firms were represented. Massey’s Toronto
light binder, designed and made in Canada, took first prize and a special trophy of
honour. Within a few years Canada was exporting its harvesters to over forty
countries (Denison, 1948: 95–113). Often these chapters in Canadian history are
ignored. Writers in the Staples School tradition, particularly Innis and his
followers, give the impression that fish, fur, wheat, petroleum, forest, and mineral
products are the extent of Canadian production (Aitken, 1959; Innis, 1973). Neo-classical economists often provide a similar picture. Canadian manufacturing
has been portrayed as a hot house plant, shored up by unnatural and iniquitous
tariff barriers (Dales, 1966; Johnson, 1977).

Industrial achievements in machinery and finished iron products were not
aberrant exceptions. Canada was the eighth largest manufacturing country in the
world in 1867 and seventh largest by 1900 (League of Nations, 1945). Thus, despite
its small population, Canada was in the big leagues both as a producer and as a
market for industrial goods. It outproduced Japan and Sweden by a wide margin
and had the fourth largest merchant marine in 1867 (The Globe, 1 July 1867).
American branch plants and resource subsidiaries came later. Such facts do not fit
the myths. If Canada had such a promising industrial start why did it not generate
an independent and fully developed manufacturing economy? Instead of being a
late bloomer, its future still ahead of it, why did Canada peak some time ago?

Students of Canadian development do not answer these questions. They either
view Canada’s past as unique or do not venture beyond the Atlantic triangle. The
former orientation leads to the circular proposition that whatever occurred in
Canada was inevitable because Canada was unique. Emphasis on relations with
superior external forces in Britain and the United States also lead to notions of
determinism. Because they are givens, undue focus on geographic factors
perpetuates a fatalistic view as well. In each case our attention is directed towards
the wrong factors. As an alternative to such thinking I will set out a novel
historical-comparative approach to explain the path of Canadian development. By
comparing Canada with countries in an economic position similar to her’s during
the formative period of initial industrialization the blinkers of inevitability might
be removed. The logic of comparison points to a period in Canadian history when
the external situation gave Canada the opportunity to develop into an independent
industrial economy. Laying aside the models that support the myths is the first
step towards examining the internal factors decisive for Canadian development.

CRITIQUES

The Staples Approach
Pioneered by Harold Innis (1930) and W.A. Mackintosh (1923) the Staples
Approach has been Canada’s greatest contribution to the study of economic
history. According to this school of thought, hinterland economic development
was determined by the pattern of demand and the level of technology in the
metropolitan countries on the one hand and the geography and natural resources
of the staples economy on the other. By and large the initiatives came from the
metropolitan countries in the form of changing cultural tastes and economic
demand and in new techniques especially in transportation and communications.
The limits to development largely rested with the availability of resources within
the staples economies. The theory purportedly explained export-oriented growth

There are optimistic and pessimistic variants of the Staples Approach. The
optimistic version assumes that Canada was beginning in resource exports and that
with the help of external sources of capital and know-how, it would develop an
independent industrial economy. This variant is associated with Mackintosh and
easily merges with neo-classical economics. It coincides with the Canada-is-young-
and-full-of-promise theory. The pessimistic variant saw Canada beginning with
resource exports but being blocked from development towards full and indepen-
dent industrial maturation by external forces. The latter had their dependent
capitalist agents in Canada. External and geographic constraints would overpower
internal initiatives for independence and advanced development (Drache, 1978:
12; Watkins, 1977a: 89). Innis, the founder of the pessimistic variant, dealt with
issues far broader than those of growth in staples economies. But only the latter
concern us here.

The Staples Approach was innovative in resisting the common assumption that
growth in a single country can be analyzed in isolation (Nurkse, 1964: 120). Yet
the international perspective went too far in attributing most events in Canada to
external causes. At the same time it was too confined; the experiences of other
undeveloped or staples economies were ignored.

The Staples Approach stressed the role of the state in fostering economic growth
(Aitken, 1964). But though it focussed on government activities, politics did not
seem to exist. Instead, state policies were traced to economic factors originating in
the metropolitan countries. Confederation and the Act of Union (1841) were attributed to the need for railway and canal finance (Innis, 1933: 18; Watkins, 1977b: 5). Since these transportation projects were necessary for exporting staples to Britain, the complex internal factors that preceded the new political departures were ignored.

It was only a short step from neglecting domestic politics to developing a ‘Canada-as-victim’ perspective. Hugh Aitken put the view this way:

Canada, from the beginning of its history, has been a vulnerable economy, exposed to pressures and stimuli from more advanced nations. ... Canada has never been master of its own destiny; as a satellitic staple-producing economy, it reflected, and still reflects, in its rate of development the imperatives of more advanced areas (1959: 3).

In his first article outlining the Staples Approach, Mel Watkins disagreed. ‘Staple economies are often believed to be more at the mercy of destiny than they actually are’ (1967: 63). Independent development could occur if several conditions were met: 1/a favourable person/land ratio, which implies a high standard of living from the outset; 2/strong external demand for resources that are readily available in the country; 3/the ‘good fortune’ to have developed staples which avoid labour systems producing great inequalities in income; 4/a sufficient domestic population and per capita income to permit economies of scale; and finally 5/institutions and values consistent with transformation away from a staples economy. More recently, however, Watkins has moved to the Aitken position that a staple trap was inevitable for Canada (1977a: 89; 1977b).

The notion that Canada’s fate was decided elsewhere is a major theme in Canadian culture. It has defeatist implications that do not coincide with reality. Underestimating the extent to which Canadian history was made in Canada is a result of the failure to adopt a comparative framework.

Sweden’s emergence from staple-exporter to manufacturing-exporter demonstrates the heuristic value of comparison. In the middle of the nineteenth century, Sweden had a resource exporting economy strikingly similar to that of Canada. Forest, farm, and mineral exports provided the basis for Sweden’s growth. It was an economic hinterland of metropolitan Britain. It is true that Sweden still had a major primary iron industry, a hold-over from the eighteenth century, but its technology was archaic and its importance dwindling. There was little secondary manufacturing. Railways were built extensively to overcome harsh winters that immobilized the country for much of the year. They connected previously isolated communities in a large and sparsely populated land. By 1914, Sweden’s railway mileage per capita was closer to the New World level than to the European (Milward and Saul, 1973: 487). Short of capital because it began industrialization late, Sweden borrowed a record amount of foreign capital (in relative terms) to finance its railways in the 1880s. Such a heavy reliance on foreign funds equalled Canada’s enormous rate three decades later (Buckley, 1974: 15). Nevertheless, with a smaller market than Canada, Sweden avoided a staple trap and by World War I Sweden was well on its way towards becoming an independent industrial country. Engineering goods were exported on a large scale (Kuuse, 1977). State policies that blocked foreign ownership and emphasized economic independence
contrasted sharply with Canada’s ‘industrialization by invitation,’ as Tom Naylor puts it. The key to Sweden’s divergence from Canada lay in its different social formation, politics, and history. The point is that the internal social structure and politics of a staples-based economy had an effect on its course of development. ‘Staple traps’ do not flow inevitably from external and geographic factors.

Students of the Staples Approach would dismiss the relevance of the Swedish case on the grounds of the uniqueness of new settler societies. ‘Perhaps the most serious obstacle to effective work in Canadian economic history,’ argued Innis (1973: 10), ‘is the lack of a philosophy of economic history applicable to new countries.’ Mackintosh concurred. He cited the U.S. economy as the logical model. Canada would, Mackintosh felt, develop with the help of foreign capital and technology; Canada was simply a backward U.S. (1959: 67).

The Innis variant does not explain how the U.S. escaped from a staple-exporting dependency on Britain. Nevertheless, the U.S. suddenly appears in the analysis as a full-blown metropolitan country (Innis, 1973: 208). But the obvious question is not addressed: if the oldest and most developed settler colony was able to generate an independent and mature industrial economy, why was the second oldest and second most developed colony not able to do the same?

The Innisians have rarely compared Canada to other staple-exporting societies. This is a weakness. If comparisons were made, the logic of Innis’s perspective would suggest the ‘white dominions’ (Australia and New Zealand and possibly South Africa and Argentina and Uruguay) as the countries which ought to be compared to Canada. They grew out of the cultures of Europe and attained high levels of productivity and standards of living while retaining dependent, resource-exporting economies (Maizels, 1963: 59). Mackintosh’s optimistic variant points to the U.S. as the basis of comparison. Are these the right cases for comparison with Canada? These questions are addressed below after discussion of two other perspectives on Canadian development.

The Elite Approach
Tom Naylor and Wallace Clement have developed a new way of explaining Canada’s continued dependence by combining several frameworks (Naylor, 1975a, 1978; Clement, 1975, 1977). At first glance their work appears to be an amalgam of Marxism and Innis’s staples tradition. But the former element is more in the eyes of the authors than in the mode of their analyses. Both writers draw heavily on the elite approach that can be traced back to Mosca, Pareto, Michels, and to later writers such as C.W. Mills and John Porter. This perspective largely ignores the role of classes that are not part of the ruling elite. It appears that for Naylor, power relations are simple: the capitalists control the Canadian state because it is a capitalist society. Banishing political history is hardly a Marxist approach. Naylor also draws on the American muckraking tradition of Gustavus Myers (1910) and others who viewed capitalists as thieves. In this approach, politics is reduced to unearthing spectacular cases of corruption and conspiracy.

Naylor and Clement have attributed Canada’s twentieth-century economic dependence to the peculiar longevity of rule by Canada’s merchants and bankers (Naylor, 1975a, Vol. II: 282; Clement, 1977: 290). According to their argument, the commercial capitalists promoted railways and financed the international move-
ment of staples, but they largely ignored industry. The resulting gap in the economy was filled by American branch plants after 1900. Their emphasis on the role of commercially oriented financial institutions has advanced our understanding of Canadian development. But Naylor's explanation of the causes of the continuing staples orientation of the banks and the state during the National Policy is unsatisfactory.

His argument is based on an inappropriate extension into nineteenth-century Canada of Karl Marx's (1959: 323) and Maurice Dobb's (1954: 123) discussion of the conflict between merchants and manufacturers in the pre-industrial Europe of the sixteenth century:

There are two principal routes, with some minor variants, that an economy can follow on the road to industrialization. Manufacturing industry can grow up 'naturally' from a small scale, even artisanal mode of production when capital accumulation is a largely internal phenomenon based on the reinvestment of the firm's own profits. A second path implies direct development to large-scale oligopolistic enterprise where outside capital is invested to facilitate its expansion and where the state takes an active, direct role in its growth. The outside capital required could come from commercial capital accumulation, from the state, or from foreign investment. The first path, if successfully followed, would lead to the emergence of a flourishing and independent national entrepreneurial class. The second may or may not; it may simply reproduce the conservatism of commercial capitalism in a new guise, the development of inefficient non-innovative, and backward industrial structures with a penchant for dependence on foreign technology, foreign capital, and state assistance (Naylor, 1975b: 52).

Naylor has outlined the difference between early and late industrialization. However the latter was hardly inferior. It was the route followed by the successful late-industrializing countries: Germany, Sweden, and Japan. Canada's failure to make a success of this path thus demands an explanation.

Since the second path involved major state involvement in economic development, it is relevant to look at the social groups that influenced government policy. According to Naylor (1975a) Canadian commercial capitalists dominated politically as well as economically. But he fails to ask why this was so. Surely the political power of a small commercial elite was a curious thing in a new settler society with a broad electoral franchise. After all, in the U.S. and Australia the rule of the commercial pretenders was ended quickly (Beard and Beard, 1968: 163, 220; Rosecrance, 1964: 290).

Clement's (1975; 1977) historical analysis of elite linkages does not rescue Naylor's thesis. It cannot be determined why an elite is in power unless the elite is discussed in relation to the other classes in society. Clement did not do this in these books, although he has since moved to a class analysis. The problem with Naylor's exclusive interest in the economy, dominated as it was by Britain and the U.S. is that it gets us back to the Staples, Canada-as-victim explanation.  

While Innis and others working within the Staples tradition were shy about making comparisons with resource-based economies other than that of the U.S., Naylor was not (1975a, Vol. I). The difference, however, lies only in the explicit nature of the comparison. The logic of each approach points to the same conclusion: that of comparison with the white dominions.
In sum, the dominant perspectives on Canadian economic development perpetuate myths about Canada and vacillate between undue pessimism and excessive optimism. The Innis and Naylor-Clement approaches tend to ignore evidence of considerable industrial output in Canada by the late nineteenth century. At the other extreme the Mackintosh variant makes the naive assumption that the American model of development can be copied. Is there another approach that can strike a more realistic balance about Canadian development?

In the midst of his transition from a neo-classical staples to a Marxist-staples approach, Mel Watkins (1966) suggested that as a more ‘backward nation’ Canada would have done better to copy the German rather than the American model. He pointed to Alexander Gerschenkron’s (1962) work on the successful industrialization of the economically backward nations of nineteenth-century Europe. Let us see if this is a plausible alternative.

The Economic Backwardness Approach

Gerschenkron (1962) noted that while England was used as the model of capitalist industrialization by both Marxist and liberal economists, the ‘backward’ countries of nineteenth-century Europe developed differently. There were ‘gradations of backwardness.’ The greater the backwardness, the greater was the disparity from England’s path to industrialization. It was the gap between the actuality of backwardness and the potentiality which industrialization could release that provided the motivation to develop.

For Gerschenkron, the backward countries of Europe faced two enormous problems: capital shortage for industry and infrastructure and the need to create a free and disciplined labour force. Competition from the advanced countries led to capital shortage and the need to industrialize quickly. Shortages of capital existed for two reasons. First, even though there was often a mass of underemployed workers, only small numbers of skilled and disciplined labourers could be found. Ironically, backward countries tended to adopt labour-saving technologies, that required large infusions of capital. Second, the abruptness of the process meant that little domestic industrial capital had been accumulated. It had been different in the early industrializing countries. There, industry and infrastructure had been financed mainly by the reinvestment of profits within manufacturing and by short-term loans from commerce. These means were not enough, however, to begin industrialization in the backward countries. There was a need to find ‘substitutes’ for these traditional sources.

A major substitution emerged in the ‘backward’ German states in the 1860s. Universal investment banks, a new type of financial institution, tapped non-traditional sources of funds and placed increased amounts of long-term capital in heavy industry. The new type of bank contrasted with the commercial banks that remained dominant in early developing England and France. By the middle of the nineteenth century, commercial banking, designed to supply short-term capital for moving goods, was inadequate for starting advanced secondary industries. Fixed capital costs had escalated dramatically. In still more backward Russia, the state had to assume the substitution role because the banks were too feeble to provide enough funds for industry and infrastructure (Gerschenkron, 1962: 5–30).

Capital was not enough. There had to be a sufficient number of workers whose
ties to the land were broken, to run the factories, mills and foundries. These societies could not wait hundreds of years for aristocrats or agricultural capitalists to push peasants off the land and thus create a work force dependent only on wage-labour. In contrast to the first industrialized countries, the development of a free wage labour force had to occur simultaneously with, rather than before, industrialization. Theories of uniform 'prerequisites' to industrialization, usually drawn from the peculiar English case, are thus not sustained (Gerschenkron, 1962: 31).

Gerschenkron stressed the vast social and cultural changes that were needed to grapple with the twin problems of capital shortage and semi-feudal social structures. New ideologies such as Saint-Simonism in capitalist France and Marxism in Czarist Russia helped to bring about relevant institutional changes. But herein lies a problem with Gerschenkron's approach. He failed to ask which economic and class forces lay behind the sudden shifts in dominant ideas in these societies. His philosophically idealist approach ignored the social factors leading to the generation of dominant ideas that formed the context for institutional substitutions.3

Gerschenkron's approach has another shortcoming. He underestimated the importance of foreign investment as a source of 'substitute' funds. Large amounts of foreign capital were crucial for the development of Russia, Sweden, and Canada4 (Crisp, 1960; Fleetwood, 1947; Buckley, 1974). In some nations, foreign capital was as important as domestic banking funds and state capital for industrialization.

Was Canada ever a 'backward' society like pre-modern Europe? Not in its class structure. Canada had a seigneurial system designed for colonization but not a manorial structure with a noble class that had to be removed (Wade, 1968: 35). In fact, Canada was a more quintessentially new society than the United States, where plantation slavery produced a social structure with similarities to old Europe. The civil war in the U.S. pitted a free wage-labour society against one with an older form of labour relations. The latter was incompatible with capitalist industrialization. Canada never faced the Gerschenkronian problem of creating a free and disciplined labour force.

... The truth is that Canadian employers commanded throughout the nineteenth century a virtually inexhaustible labour reserve. The great reserve ... was the immigrant stream. Frequently it exceeded Canadian requirements, and flowed on to the United States. Whenever jobs were plentiful in Canada – Whenever, that is, capital was found for large construction projects – immigration swelled in an appropriate volume ... Kinds and quantities of skilled labour not at once available could be got from the United States for a little money, or from the United Kingdom for a little trouble (Pentland, 1950: 458).

What of capital shortage? Did Canada share this feature with the backward countries of Europe? By the 1850s foreign capital flowed into Canadian railways and canals (Hartland, 1955) on a scale that was not experienced by the first industrialized countries. But long-term domestic investment, especially in manufacturing, was a different matter. Here there is evidence of shortages, typical of the backward countries of Europe, during Canada's first four decades of industrialization5 (Cairncross, 1953: 38; Phillips, 1956: 37).
Industrialization took firm root in Canada in the 1870s and 1880s, the period of the National Policy. Signs of the industrial revolution were everywhere: the factory system spread; steam power was used extensively; finished iron and steel products surpassed the leading resource-processing industry; and provincial and national markets for manufactured goods emerged (Ryerson, 1968: 260; Firestone, 1960: 230; Bertram, 1962: 112; McDiarmid, 1946: 180). Similar events occurred at the same time amongst a handful of late follower countries: Sweden, Russia, Italy, the Czech region of the Austro-Hungarian Empire, and Japan (Milward and Saul, 1973: 488; Gerschenkron, 1962: 119; Cafagna, 1973; Gross, 1973: 261; Smith, 1965). If Canada industrialized at the same time as the backward countries of Europe, would Gerschenkron’s model best explain the path of Canadian development? The following addresses this question.

MODELS OF DEVELOPMENT

After discussing the conceptual adequacy of three approaches to understanding Canadian development, an empirical test would be useful. Each approach suggests comparison with a different set of countries. The Mackintosh version and neo-classical perspective point to the U.S. of thirty, fifty or eighty years ago as the appropriate parallel. On the other hand, the Innis Staples and elite approaches suggest comparison with the other white dominions. Finally, Gerschenkron’s economic backwardness perspective invites comparison with Sweden, Russia, Italy or Japan. Which approach explains the facts best?

Before reviewing the models of development it is useful to explain what is meant by ‘independent industrial development,’ ‘mature industrial economies’ and ‘successful industrialization.’ I use these terms interchangeably to indicate countries that have wide freedom to manoeuvre in a crisis such as a war, an oil embargo, or a drastic fall in the price of one or more export commodities (Seers, 1979). Such countries are not necessarily self-sufficient, but have the ability to produce nearly all finished goods needed without incurring a major reduction in overall productivity. This would exclude countries specializing in the export of a few lines of finished goods but importing most of their machinery. Other countries, which make a wider range of manufactures but have to buy most of the high technology items from abroad, would be excluded also. The ability to respond to a crisis that threatens a nation’s independence is determined both by the willingness of all sections of society to pull in the same direction and by the degree of domestic control over technology and management. The latter provide the basis for the creation of alternatives for imported goods. In the everyday world of normal trade relations, technological and managerial sovereignty are vital also in international capitalist competition. Product innovation has been crucial for the profitability of most corporations since the 1920s (Chandler, 1962). Domestic ownership and managerial control over most of the nation’s productive enterprises and a high degree of technological sovereignty are the sine qua non of substantial product innovation (Bourgault, 1972).

Alfred Maizels conducted a comprehensive study of industrial development and its relation to international trade. Canada was a difficult country to classify. Was it one of the dozen industrial countries in the world or one of the equal number of
semi-industrial countries, including the white dominions? The value of Canada’s
staple exports greatly exceeded that of finished manufactured goods. This was not
characteristic of the industrial countries. Yet Canada’s level of manufacturing
productivity was very high. It was a puzzling case (1963: 58). Others have had
difficulty working Canada into their models also.19

Canada has other anomalous features. It has balance of payments problems
cau sed by the extensive outflow of dividend, interest and royalty earnings to
foreign investors and a strong reliance on foreign-controlled technologies and
management (Britton and Gilmour, 1978). These features characterize the white
dominions as well as much of the Third World (Australia, 1981: 644; U.N., 1974:
154). But in contrast to these countries Canada is still amongst the top ten
industrial nations of the world (Bairoch, 1982: 284).

Is Canada a borderline case because it is transforming itself from a semi-
industrial to an industrial country? This is the usual assumption of progressive
development. But is not the reverse equally plausible? Perhaps Canada was
developing along the lines of the late follower countries and was thwarted for some
reason? Is Canada regressing into the ranks of the semi-industrial countries? To
answer these questions let us consider each approach in turn.

Canada: A Latter Day America

Mackintosh and other neo-classical economists portray Canada as a backward
United States. By invoking their favourite phrase ceteris paribus (all other things
equal), neo-classical economists often throw away most of the useful variables for
understanding development in one society and retardation in another. It would be
difficult, using economic variables alone, to explain how Japan was able to advance
to a point where its industrial output is now three times that of Britain, when 100
years ago it produced one-fiftieth as much.

If Canada is a backward United States, it should be following the same trajectory
towards industrial independence. Is it? A favourable balance of trade in finished
goods, domestic ownership of the bulk of the productive industries, and internal
control over technological progress are all signs of independent economic
development.

First, a country which can supply most of its internal market with finished goods
and break into another’s territory is industrially developed. The extent of maturity
can be measured by comparing exports to imports of finished manufactures. If a
country has an export/import ratio of more than 1.0 it is a net exporter; if less than
unity it is a net importer. Let us compare Canada with the United States in this
regard, giving the former a thirty-year time lag. By 1899, with a score of 1.3, the
United States was already a net exporter of finished goods. In 1929 and 1955, it had
moved up to ratios of 5.2 and 4.0. In contrast, Canada stagnated. Its scores were
0.23 (1899), 0.28 (1929), and 0.20 (1955). The situation has improved a little since
the mid-1950s. When the artificial ‘trade’ of auto production is removed from
calculation,20 the exports of finished goods equalled 0.43 of the imports of such
goods in the years 1981–3. An even balance in trade, however, is still a long way
off. Canada’s deficit in trade in all finished goods ranged from $13 billion to $21
billion in the years 1981 to 1983 (Canada, 1984: 28, 40). In short, Canada still pays
its way in the world by massive exports of resources.
Second the role of foreign investment is crucial in assessing dependence. Canada holds the record amongst advanced economies, along with Sweden, of the extent to which foreign funds contributed to its early industrialization. Most of this investment was in the form of portfolio or loan capital. Of a more permanent and cumulative nature has been the very high level of foreign direct (ownership) investment of Canada’s manufacturing and resource industries. The earliest estimates, for 1920–1, show that about 30 per cent of Canada’s manufacturing industries were foreign owned (Williams, 1983: 28–9). By 1973 foreign control of Canadian manufacturing had increased to 56 per cent, a level far higher than any other advanced economy and second in the world only to Nigeria (United Nations, 1978: 263). In contrast, Swedish governments have had a history of blocking foreign direct ownership since the 1870s and current levels are low (Fleetwood, 1947; Johansson, 1968). The Gray Report (Canada, 1972) demonstrated that high levels of foreign ownership reduced the amount of research and development and led to the massive importation of machinery. At the same time they restricted exports and hindered growth in the size of firms.

Perhaps Canada’s experience with foreign ownership is a passing phase and the country is on the road to greater development? Did the U.S. go through a period of reliance on foreign funds and foreign control?

Foreign capital was important in the development of the American economy in the middle of the nineteenth century. Foreign contributions to net capital formation were almost 11 per cent in the decade following the Civil War (Kuznets, 1961: 133). In the manufacturing and transportation industries, European loans may have contributed as much as a fifth of total investment in the 1850s (Robertson, 1964: 231). However, the U.S. example cannot offer hope that foreign investment is a transitory phenomenon in Canada. American foreign indebtedness never was close to the Canadian rates and they diminished rapidly. Most of the funds were of the portfolio variety, placed in government securities and railway bonds. These loans were either paid off eventually or else wiped out by a massive defaulting on debts in the late 1830s. (American businessmen conveniently forget this chapter in early American development in their holy war against the current threat of loan defaults amongst Third World countries.) In contrast, foreign direct investments, once made, tend to increase in value over time. They were never a large factor in the U.S. British direct investment was estimated at only $700 million in the U.S. in 1913 (Dunning, 1971: 370). By 1974, foreign ownership of manufacturing in the U.S. was 4 per cent by sales and 3 per cent by employment (United Nations, 1978: 263). Douglass North (1960: 576) believes that American direct investments abroad were greater by the 1850s than were foreign direct investments at home.

Finally, turning to technology, it is clear that no country can develop all the new technologies required for an advanced economy. While technological imports are indispensable, they need not imply technological dependence. Two elements are crucial for relative sovereignty: a substantial level of domestic innovations and the borrowing of technology through arms-length arrangements. The Japanese have been masters of the latter while the Swedes have shown an innovative vigour that is surprising for a small country (Kuuse, 1977; Quinn, 1969). The number of patents issued to natives compared to foreigners is a crude way of measuring the
strength of domestic innovations. Is Canada moving towards the American pattern of high ratios of domestic patents?

In the U.S., six of every seven patents issued went to native citizens in 1900. The ratio was the same in 1930 and 1955 (United States, 1970: 957). Canada has been moving in the opposite direction. In the early 1900s Canadians held 15 per cent of domestically issued patents (Canada, 1901: 612). The road has been downhill since: 11 per cent in 1930 and 6 per cent in 1955 and 1975 (Canada, 1931, 1956, 1976–7).

When domestic innovations are not forthcoming on a major scale, imitation is a way to import technologies while retaining managerial and corporate independence. Yet Canada did not pursue the successful Japanese and Italian strategies of copying their competitors (Quinn, 1969: 153). In the fifteen years before World War I, Canada imported almost 60 per cent of new plant machinery installed, while much domestic production took place in U.S. branch plants (Williams, 1975: 8–9). There was little imitation by domestically controlled companies then. Recently Canadian industry has actually become more technologically dependent. By the mid-1970s, over 70 per cent of the Canadian market for machinery was served by imports and a similar percentage of the domestic machinery industry was foreign owned (Britton and Gilmour, 1978: 48, 91).

In sum, Mackintosh’s late-bloomer thesis is not applicable. Canada has not progressed along the American path. The relative level of Canadian exports of finished goods failed to increase and mammoth imports continue. Foreign investment has not been a temporary phase in Canadian development and cannot be attributed to the supposed youthfulness of the country. Canadian control over the processes of innovation has decreased.

Canada and the White Dominion Model

It is ironic that the best defence of the Canada-as-a-white-dominion model comes not from the Innis staples perspective nor from the Naylor-Clement elite approach, but from Marxists. Buried in a somewhat obscure book, Philip Ehrensaft and Warwick Armstrong have developed an exceptionally able and comprehensive case for the white dominion model (1981). For them the nature and responses of the rural classes and the industrial working class in the white dominions played a crucial role in generating the high-wage, low-industry pattern typical of these societies.

According to Ehrensaft and Armstrong, the white dominions include not only the legitimate British offspring – Canada, Australia and New Zealand – but two unofficially adopted children as well, namely Argentina and Uruguay. These countries distinguished themselves from their poor cousins in the rest of the new world by inhabiting lands where the native population was too small for large-scale exploitation and where the climate did not favour the importation of African slaves or indentured workers from the East Indies. Few slaves, of course, meant no plantation owners. New settlers from Europe provided the bulk of the labour force and the large land reserves produced labour shortages and hence high wages. This situation had a number of implications: the adoption of labour-saving and therefore highly productive technology, urbanization and a substantial level of manufacturing, based on rich domestic markets. The white dominions shared
these features with the advanced capitalist countries, but fell short of full, capitalist development on a number of other scores. Primary products remained their major exports, while manufacturing was largely confined to supplying much, but not all, of domestic needs with protected, inefficient industry and to processing, rather than finishing resources. Subsidiaries of multinational corporations were prominent in the goods-producing sectors and these societies all passed from the British to the American Empire in this century. Furthermore, the politics of the various classes perpetuated the orientation of these economies towards both resource exports and stunted, domestically confined manufacturing. The working classes tended to support government strategies of short-cuts to industrialization through importing foreign factors of production—capital, technology, and management. But workers wanted to keep out a fourth factor, cheap oriental labour, and in this regard they were largely successful.

From the vantage point of the 1980s, Canada seems to fit the ‘dominion’ capitalism category quite well, although if so, it is clearly the most advanced in the group. But Canada’s contemporary similarity to the other white dominions, especially to Australia, may signal a reversal in its fortunes rather than parallel development prospects in the past. Ehrensaft and Armstrong admit the possibility: ‘Another hypothesis would be that Canada, as the senior dominion, possessed an industrial structure which was sufficiently profound to provide a far more autonomous development than we have experienced (1981: 145).

To assess the explanatory power of the white dominion model for Canadian development, let us look at the present time and then at the early years of the century. Ehrensaft and Armstrong demonstrate current similarities: Canada shares with Australia and/or the other white dominions: 1/a low degree of finished manufactures as a percentage of total exports; and 2/a somewhat lower level of manufacturing production as a proportion of GNP than the advanced economies. Canada is not ahead of the other dominions in relative terms. (Its absolute level of manufacturing of course is much higher – as is its total national product.)

It’s when we look to development prospects in the past that the sharp divergence between Canada and the rest is apparent. In their discussion of the early twentieth century, Ehrensaft and Armstrong shift their focus from exports and sectoral shares of the GNP to other measures of development: capital-labour ratios, agricultural productivity, per capita incomes and the percentage of the labour force engaged in industry. In these respects, Argentina and Australia bear up well. Canada was behind in the first two respects: in the middle regarding the number of manufacturing workers; and only somewhat ahead in incomes in the 1910 to 1930s period. But are these the best measures of prospects for independent industrial development? I think not. As a sign of development it makes more sense to look at productivity in manufacturing than in agriculture. How did the countries fare in this respect? Canada was 50 per cent to 100 per cent ahead of Australia in industrial productivity in the 1920s and 1930s and was 140 per cent ahead of Argentina in the 1930s, the first time such figures are available for that country (Clark, 1960: 336). Rather than signifying diversification into secondary manufacturing, capital intensity (capital-labour ratios) may reveal specialization in resource industries and the further processing of primary products before export. Both sectors are notorious for the paucity of workers employed.
Development prospects depended not only on productivity in industry but also on the absolute size of the manufacturing sector and its ability to penetrate foreign markets. It may be arbitrary to establish minimum levels of manufacturing necessary to permit sufficient specialization of factors of production and economies of scale. But it is difficult to argue with the cases of success and failure. The crucial question is whether Canada resembled the white dominions, which we know did not break free from a staples orientation or whether Canada was as developed as the other late follower countries (more on late follower development in the next section).

Consider the scale of industrial production (Table 1). According to Colin Clark (1960), just prior to World War I, Canada's overall manufacturing output was behind that of populous Russia and Italy, but at the same level as that of Japan and Sweden and more than double Australia's. In the 1920s and 1930s, Canadian production was at about the mid-point of the late follower countries and at least two and one half times that of Australia and Argentina.

Ehrensaft and Armstrong's model specifies the inability of the white dominions to produce manufacturing products for anything but the protected home market (with minor exceptions). Was this true of Canada in the 1920s? No, Canada exported more manufactured goods per head than any of the late follower countries, and its absolute level of such exports was in the middle of the late follower range (see Table 11). On the other hand, Australia's manufacturing exports were six times lower than that of Sweden, the lowest of the late follower countries and eleven times lower than that of Canada. Whereas Canada was ahead of any of the late follower countries in per capita exports of finished goods, Australia's record was dismal. It exported less than one fifth as much per head as the average for the late follower countries. New Zealand's per capita export
TABLE II
TRADE IN MANUFACTURED* ARTICLES PER HEAD 1926–9 (ANNUAL AVERAGES)

<table>
<thead>
<tr>
<th></th>
<th>Exports</th>
<th></th>
<th>Imports</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Exports of Manufacturing per head ($)</td>
<td>Gross Value of Manufacturing Exports ($000,000)</td>
<td>Imports of Manufacturing per head ($)</td>
<td>Gross Value of Manufacturing Imports ($000,000)</td>
</tr>
<tr>
<td>Late Follower Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Czechoslovakia</td>
<td>27</td>
<td>395</td>
<td>11</td>
<td>156</td>
</tr>
<tr>
<td>Italy</td>
<td>10</td>
<td>401</td>
<td>6.4</td>
<td>259</td>
</tr>
<tr>
<td>Japan</td>
<td>7.3</td>
<td>451</td>
<td>3.9</td>
<td>241</td>
</tr>
<tr>
<td>Netherlands</td>
<td>33</td>
<td>254</td>
<td>52</td>
<td>397</td>
</tr>
<tr>
<td>Sweden</td>
<td>29</td>
<td>178</td>
<td>31</td>
<td>187</td>
</tr>
<tr>
<td>Median</td>
<td>27</td>
<td>395</td>
<td>11</td>
<td>241</td>
</tr>
<tr>
<td>Canada</td>
<td>35</td>
<td>336</td>
<td>64</td>
<td>627</td>
</tr>
<tr>
<td>White Dominions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Australia</td>
<td>4.8</td>
<td>30</td>
<td>81</td>
<td>510</td>
</tr>
<tr>
<td>New Zealand</td>
<td>1.5</td>
<td>2</td>
<td>119</td>
<td>166</td>
</tr>
<tr>
<td>Uruguay</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

Source: Adapted from League of Nations, Industrialization and Foreign Trade (1945: 84)
*Manufacturing* refers to class IV of International (Brussels) Classification of 1913. Excludes manufactured foodstuffs and some semi-manufactured articles.

performance was worse. Unfortunately neither the League of Nations (1945), nor Bairoch (1982) could obtain comparable data for Argentina and Uruguay, but there is no reason to suppose that either country performed better than Australia then.

Why all this emphasis on the past and the timing of development? Surely the contemporary similarity of Canada with the other white dominions is sufficient to determine its past development prospects. Not according to the great economic historians who stress the profound effects of historical timing on the nature of industrial development. A great chasm was created between the few countries which began serious industrialization before 1900 and the rest who did not get well into the process until World War II or its aftermath. If this was so, it mattered whether Canada was amongst the pre-1900 developers along with the late follower countries or whether it shared the much more difficult prospects of even later, white dominion development.

To understand the profound changes in the 1890 to 1940 period which led to the chasm between the developed and the underdeveloped countries, it is useful first to point to continuity. Despite momentous technological, military, and social upheavals in this century, the relative economic strength of nations has changed little. The Russian Revolution, the introduction of space-age electronics, the eclipse of Britain and the rise of Japan have not greatly altered the international pecking order. Russia was the fifth largest manufacturing country before the 1917 Revolution and is now in second place. Japan has moved up in spectacular fashion
to third place (Bairoch, 1982: 284). But it should not be forgotten that it was already sixth in the 1930s and had an industrial base sufficiently advanced to conquer half of east Asia and challenge the Americans in World War II. By 1913 it was already about the tenth largest industrial country (League of Nations, 1945: 13). Britain has declined drastically, but only from first place 100 years ago to sixth place today (Bairoch, 1982: 284). Notwithstanding these fluctuations, the fact remains that all of the dozen-or-so advanced industrial countries of the late twentieth century had begun widespread industrialization before 1890. The obverse holds as well: no seriously industrializing country of the late nineteenth century has slipped into de-industrialized oblivion. Those ahead seventy or 100 years ago are still ahead today.

This striking fact about international development is surprisingly neglected. Much work has been done on economic problems in the Third World in the past thirty years and on specific countries over a longer period. But the increasing strength of the barriers to industrial success between 1890 and 1940 has received little systematic attention. A comprehensive treatment of the gap between the leading nations and the would-be followers during that time, along the lines of David Landes' The Unbound Prometheus (1969), is clearly needed. Here I can list only a few of the main factors that turned against the attainment of industrial independence and maturity during that time.

Around 1900 there was a transformation in the nature of international capitalism. Observant contemporaries understood this. J.A. Hobson (1905), a liberal, and V.I. Lenin, both labelled the phenomenon 'imperialism.' Major corporations and cartels emerged in the advanced economies as a response to overproduction, increased international competition, and the high cost of new technologies. The scientific discoveries of the previous half century at last began to bear fruit with the automobile; electrical communications, motors and lighting; and new chemical products for wear and for war. In contrast to earlier manufacturing, these industries required large capital outlays, scientifically educated workers and managers, complex techniques and a modern communications system on a national scale (Landes, 1969). Shipping costs fell drastically as steam, metal hulls, and new propulsion techniques revolutionized oceanic travel. Between 1874 and 1884, for example, ocean freight rates were cut by 60 per cent between New York and Europe. Strategically placed canals such as Suez (opened in 1869) and Panama (opened in 1914) removed thousands of kilometres from major shipping routes (Clough, 1952: 594–602). Railways were pushed into Asia, Africa, and South America after the major networks were completed in northwestern Europe and North America.

The developed countries could easily thrust their goods, their business organizations, their techniques and their armies into every part of the globe. Most of Africa and Asia was conquered. Though nominally independent for the most part, the Latin American countries were reduced to economic satellites of the industrial countries. World trade in finished goods rose by 75 per cent in the 1899–1913 period alone and imports doubled in the semi-industrial and small industrial countries (Maizels, 1963: 136). For the first time large corporations began to set up foreign subsidiaries to overcome tariff barriers that were erected everywhere except England and a few smaller countries. The U.S. was the main centre for the
FOREIGN OWNERSHIP AND MYTHS ABOUT CANADIAN DEVELOPMENT

TABLE III
AGRICULTURE AND MANUFACTURING AS A PERCENTAGE OF G.D.P. AVERAGES FOR SELECTED 5-YEAR PERIODS

<table>
<thead>
<tr>
<th></th>
<th>1871-5</th>
<th>1881-5</th>
<th>1891-5</th>
<th>1901-5</th>
<th>1911-5</th>
<th>1921-5</th>
<th>1931-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>8.6</td>
<td>11.2</td>
<td>11.2</td>
<td>11.4</td>
<td>14.0</td>
<td>13.8</td>
<td>15.7</td>
</tr>
<tr>
<td>(not. incl. mining)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>23.2</td>
<td>19.2</td>
<td>18.3</td>
<td>18.5</td>
<td>18.6</td>
<td>19.7</td>
<td>17.6</td>
</tr>
<tr>
<td>(incl. pastoral but excl. dairying)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>23.2</td>
<td>24.0</td>
<td>23.9</td>
<td>22.6</td>
<td>20.1</td>
<td>21.8</td>
<td>21.7</td>
</tr>
<tr>
<td>(not. incl. mining)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>33.1</td>
<td>32.9</td>
<td>27.8</td>
<td>24.5</td>
<td>22.0</td>
<td>18.9</td>
<td>9.6</td>
</tr>
<tr>
<td>Sweden</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>13.1</td>
<td>14.0</td>
<td>17.5</td>
<td>24.4</td>
<td>27.9</td>
<td>30.1</td>
<td>30.8</td>
</tr>
<tr>
<td>(incl. mining)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>38.5</td>
<td>35.7</td>
<td>33.0</td>
<td>25.8</td>
<td>23.8</td>
<td>18.2</td>
<td>11.2</td>
</tr>
</tbody>
</table>


1 Mining comprised the following percentage of Australia's G.D.P.: 8.9 per cent (1871-5), 4.5 per cent (1881-5), 6.9 per cent (1891-5), 9.8 per cent (1901-5), 5.6 per cent (1911-5), 2.4 per cent (1921-5), 2.3 per cent (1931-5).

2 Mining comprised the following percentage of Canada's G.D.P.: 1.2 per cent (1871-5); 1.0 per cent (1881-5); 2.2 per cent (1891-5); 3.9 per cent (1901-5); 3.1 per cent (1911-5); 3.1 per cent (1921-5); 4.3 per cent (1931-5).

3 Swedish Statistics combine mining with metal industries and it is not possible to disaggregate the two. The inclusion of mining inflates the Swedish manufacturing percentages. According to a study by Lindahl et al., mining made up roughly 15 per cent of the total of manufacturing production in the 1861 to 1895 period (1937: 185, 302).

4 These figures are taken from Historical Statistics of Canada (2nd ed.) 1983 F 59. They are compatible with Urquhart’s recent data.

emergence of the transnational corporation. While Canada and Mexico were the largest recipients of American direct investment, Europe was not neglected. In fact as early as 1901–2, three books were published in Europe on the theme of the ‘American invasion’ (Wilkins, 1970: 70, 110). All of these new developments in trade, transportation, technology, and the monopoly control of big business made it much more difficult for the pre-industrial countries to emulate the example of the advanced countries. A watershed had been crossed. The disadvantages of following-the-leader seemed to outweigh the advantages.

Did Canada develop before or after this watershed? If Canadian manufacturing remained weak prior to World War I, the white dominion model would seem to hold, and a capitalist Canada probably never had the chance to break out of its staple trap. If, however, Canadian industry were as old and established as the successful late follower countries, then its failure becomes more interesting. To help assess Canada's relation to the development gap, comparison with Australia and Sweden seems useful. Australia was the most advanced of the other white
dominions, while Sweden was the smallest of the successful late follower countries.

Soon after Confederation, manufacturing was just under one quarter of Canada's gross domestic product compared to one eighth for Sweden, whose manufacturing figures are somewhat inflated by the inclusion of mining statistics and only one twelfth for Australia (see Table III). If absolute levels of production are considered, the difference between Canada and the other two was even greater. International comparisons of total output are always arbitrary, and the farther back in time you go, the more tenuous the assessments. But without doubt, Canada had the highest gross domestic production of the three countries and probably somewhere in the order of double the product of the other two in the 1870s. Thus Canadian manufacturing had a higher share of a greater output. Furthermore, Canadian industry in 1870 was of a different character than that of Australia. Whereas half of Australian industry in 1900 was still 'primary manufacturing' or the processing of staples before export (Forster, 1970: 129), thirty years earlier between two-thirds and three quarters of Canadian manufacturing was in secondary (i.e., finished) production (Dales, 1962: 75; Bertram, 1962: 103). Finished iron and steel was already the leading sector in Canada then, slightly ahead of primary wood products (Bertram, 1962: 112–13).

Industry developed so slowly in Australia that by the 1930s it accounted for only one-sixth of the gross domestic product. It was not until World War II that manufacturing became larger than agriculture in Australia, something that had happened in Canada during the First World War despite the wheat boom on the prairies. (Manufacturing took the lead slightly earlier in Sweden.) Thus Canada had experienced considerable industrialization by the late nineteenth century, whereas Australia developed after the period that separates the mature economies from the rest of the world. The Canadian case is different from that of Australia and the other white dominions. We may conclude therefore that a pure staple-exporting model along the lines of the Innis or Naylor-Clement approaches is inapplicable to Canada.

Canada and Late Follower Development

We have seen that Canada's early development clearly differed from the other white dominions and that it possessed certain features in common with the late follower countries. But was it advanced enough in all respects in the late nineteenth century to be one of Gerschenkron's late follower countries? We must turn our attention to the late 1800s. The 1920s and 1930s comparisons with Argentina and Australia were not early enough to gauge this.

In the 1870s and 1880s, during what was then called the 'Great Depression,' a handful of countries began their initial phase of industrialization. The United States, Britain, Germany, France, and on a smaller scale Belgium and Switzerland, had emerged already as industrial powers in fierce competition with one another. The four large industrial countries controlled over 75 per cent of world production. Putting aside Canada for the moment, the late follower countries were: Russia, Italy, Sweden, the Czech provinces, Japan, and possibly the Netherlands. In 1913, by which time industry had surpassed agriculture in most late follower countries, their shares of world production had climbed. Individual totals were 5.5
### TABLE IV

**CANADIAN EXPORTS OF FINISHED GOODS* 1899 – RANK ORDER**

<table>
<thead>
<tr>
<th></th>
<th>1899 prices ($Can.)</th>
<th>1913 prices† ($Can.)</th>
<th>Total exports (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural implements</td>
<td>1,863,468</td>
<td>2,627,490</td>
<td>22</td>
</tr>
<tr>
<td>Manufactures of leather including soles, uppers, boots and shoes</td>
<td>1,681,283</td>
<td>2,370,609</td>
<td>20</td>
</tr>
<tr>
<td>Manufactures of wood including doors, furniture, misc. and spools</td>
<td>1,545,432</td>
<td>2,179,059</td>
<td>18</td>
</tr>
<tr>
<td>Manufactures of Iron and Steel</td>
<td>706,411</td>
<td>966,040</td>
<td>8</td>
</tr>
<tr>
<td>Musical Instruments including organs and pianos</td>
<td>561,836</td>
<td>792,189</td>
<td>7</td>
</tr>
<tr>
<td>Textiles and Clothing</td>
<td>480,876</td>
<td>678,035</td>
<td>6</td>
</tr>
<tr>
<td>Chemicals including drugs, explosives and fertilizers</td>
<td>464,432</td>
<td>654,849</td>
<td>5</td>
</tr>
<tr>
<td>Vehicles including bicycles</td>
<td>303,757</td>
<td>428,297</td>
<td>4</td>
</tr>
<tr>
<td>Cordage, twines</td>
<td>134,522</td>
<td>189,817</td>
<td>2</td>
</tr>
<tr>
<td>Publishing</td>
<td>92,426</td>
<td>130,321</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>739,971</td>
<td>1,043,359</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,574,414</strong></td>
<td><strong>12,089,924</strong></td>
<td><strong>102</strong></td>
</tr>
</tbody>
</table>

**SOURCE:** Canada, Statistical Year-Book (1901: 288-91)

*Using Maizels (1963) definition of finished goods. See his Appendix D. Does not include food products or household effects (emigrants effects).

†Prices adjusted using 70 commodity index from K. Taylor, Statistical Contributions to Canadian Economic History Vol. 1, p. 56. 1899 prices were 71.1 per cent of 1913 prices.

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per cent (Russia), 2.7 per cent (Italy), 1.4 per cent (Czechoslovakia), 1.2 per cent (Japan), 1.0 per cent (Sweden and the Netherlands). Yet Canada, with less than 0.5 per cent of the world’s population, compared favourably with these countries. In 1880–5 it had 1.3 per cent of world manufacturing production and 2.3 per cent by 1913. Only two of the six late follower countries produced more.

Gross production statistics tell only part of the story. Canada has a long record of exporting large quantities of semi-processed goods such as pulp and paper but confining finished goods to the home market (Williams, 1983). How did the Canadian economy fare around the turn of the century in these respects? In 1899 Canadian exports had the greatest proportion of finished to primary manufactures of any industrial nation. All late follower countries for which there are statistics recorded exports of finished manufactures compared to primary manufactures of unity or less. In contrast the Canadian ratio was 5 to 1. Did Canada achieve this high ratio by exporting few manufactured goods? Partly, but Canada’s exports of finished goods compared favourably in absolute terms with other late followers. In 1899, Canadian exports of fully finished goods was $15 million (American dollars) compared to Sweden’s $13 million, Japan’s $24 million and Italy’s $53 million. The
latter two achieved higher levels of finished exports by concentrating on textiles and clothing, items which then accounted for half the world’s trade but which now make up only a small portion of it. When textiles and clothing are excluded on the grounds that they are not indicative of twentieth-century development prospects, Canadian finished exports were more comparable: Japan $10 million, Canada $12 million, Sweden $13 million, and Italy $23 million.

Lest the reader suppose that the aggregate figures hide more than they reveal and that Canada’s performance looked good only because of a definitional quirk of ‘finished goods,’ the breakdown of Canadian exports in 1899 is presented. It was not canned fish that placed Canadian exports at a level comparable to other late follower countries. Processed foods are excluded from finished exports.

With 22 per cent of the total, agricultural implements led the list of Canada’s finished exports in 1899. Consisting of items such as harvesters, mowers and ploughs, 64 per cent of Canada’s implement exports went to the competitive markets of Britain, Germany and France. Manufactures of leather, chiefly soles and uppers, and manufactures of wood, including doors, matches, and mouldings made up an additional 38 per cent of all finished exports. More technologically advanced articles such as manufactures of iron and steel, musical instruments, chemicals and vehicles accounted for another 24 per cent. Thus Canadian finished exports in 1899 were a balanced mix of the sophisticated and the simple.

**Canada: Failed Follower**

We have seen that Canada held its own with the other late follower countries at the end of the nineteenth century. It began the initial phase of industrialization before 1890, and its absolute level of manufacturing finished products was high. Furthermore, industry surpassed agriculture’s share in the economy during World War I, a sure sign that Canada had passed beyond the precarious initial phase of industrialization. Yet Canada was the only late follower country that clearly failed to generate a mature and independent industrial economy. Two final questions thus need to be addressed. When did Canada diverge from the path of the other late followers and why did it do so?

In the post-World War II era, the Canadian economy has been quite different from the other late follower countries. The familiar pattern of dependence on the export of raw materials and the massive disparity between importing and exporting finished goods has been solidly established. In 1955, with only 3.2 per cent of the population of the ten major capitalist economies, Canada accounted for over 25 per cent of all their imports of finished manufactures. At the same time Canada exported only 2 per cent of the total. Some 80 per cent of Canada’s manufactured exports were unfinished while imports of finished goods were five times the level of exports. Canada paid its way in international trade through staple exports. None of the other late follower countries exhibited a similar pattern.

When did Canada begin to regress from late follower development? There was evidence of a high propensity to import industrial goods as early as 1899. In that year, with only 1.8 per cent of the population of the ten major capitalist countries, Canada received 5.9 per cent of the imports of finished goods in those countries. There were two reasons for this. First, an import surplus at that phase of development was not unusual. Japan imported twice as much in the value of all
finished goods as it exported (three times as much if clothing and textiles are excluded). For Canada the ratio was four to one. Italy and Sweden had much better balances. Second, Canada had a higher standard of living than the other late follower countries and therefore Canadians could afford to import more. The pattern of large imports of finished goods, although present, was not overwhelming in 1899 and could have been reversed.

But between 1899 and 1913 a sharp divergence between Canada and the other countries developed. Although this was the period of Canada's most rapid growth ever in manufacturing output – the time when Canadian industry is alleged by some to have come of age (Firestone, 1969: 25), all the indicators point to a regression in development (Bertram, 1962: 103). In 1913, 52 per cent of Canada's manufactured exports were finished, down from 83 per cent fourteen years earlier. The trend in the other late-follower countries (for which there are complete statistics), was in the opposite direction: Italy 70 per cent, up from 41 per cent; Japan 63 per cent, compared to 39 per cent; and Sweden 57 per cent, up from 50 per cent. While Canadian industrial output had more than doubled, the value of finished exports climbed by only one-half, confirming Williams' (1983) argument that industrial production was aimed almost exclusively at the home market. At the same time, imports of manufactured goods more than trebled. The ratio of exports/imports of finished manufactured goods in 1913 tells the story (the 1899 ratio is given in brackets): Canada 0.10 (0.23); Japan 1.3 (0.53); Sweden 1.5 (1.1); and Italy 1.4 (1.5). Even if textiles and clothing are excluded, the figures do not improve much: Canada exported only 14 per cent of the value of finished manufactures that it imported. For Sweden the comparable figure was 23 per cent, and even for the clothing and textile exporting countries the percentages indicate more developed manufacturing economies: Italy 79 per cent, and Japan 66 per cent.

In the crucial capital goods sector, the same economic regression occurred. Imports of producer durables increased from 13 per cent of Canadian use in 1880 and 1890 to 30 per cent plus between 1900 and 191528 (McDougall, 1973: 193). At the same time, little Sweden made a spectacular breakthrough in this sector by exporting a wide range of Swedish-invented engineering tools (weapons, electronics, gas lighting, precision instruments, ball bearings) (Kuuse, 1978). Canada's contemporary economic structure appears to have emerged by World War I. Never again did Canada look like the other late follower countries.

In the 1920s, exports of finished goods rallied to some extent as American corporations used their Canadian branch plants as assembly points for exports to British Empire markets. But the rally was more apparent than real. U.S. transnational companies strove to disguise products of high American content with Canadian warehouse-assembly operations and made-in-Canada labels (Williams, 1983: 80). Encouraged by the Canadian Manufacturers Association and the federal government, this strategy raised finished exports to the not very impressive level of slightly over one quarter of imports by 1929. But the strategy was ephemeral and blew away with the British Empire after World War II.

What happened in the pre-World War I period to push Canada off the path to late follower development? Two interrelated factors were of major importance. First, many Canadian manufacturers imported technology by entering into licensing
agreements with American firms. Usually the agreements specified that the rights to the technology applied to the Canadian market. It would not do to have Canadian firms competing with their technological parent by exporting from Canada (Williams, 1983: 25). Second, American branch plants came to dominate the most dynamic sectors of Canadian manufacturing, often by taking over the Canadian firms that had started out by licensing American technology (Naylor, 1975a, Vol. II: 56). Subsidiaries were even more stringently restricted from competing with the parent company, while at the same time they tended to import parts and machinery on a major scale. In either case — technological dependence or branch plant ownership — Canada ended up importing a lot and exporting but little.

Before 1900 there were only sixty-six American branch plants in Canada. While fourteen years later there were five times as many²⁹ (Marshall, 1976: 21). American companies had captured commanding positions in the dominant secondary industries of the twentieth century. Canadian ownership remained high only in industries using older technologies such as textiles, clothing, printing, and publishing (Field, 1914: 39). By 1914 the Ford Motor Company, Goodyear Tire, Kodak, Pratt and Whitney, National Cash Register, Westinghouse, International Harvester, John Deere, Coca Cola, Quaker Oats, and many other major companies had set up shop in Canada. In none of the other late follower countries did foreign enterprises and foreign technologies gain control over most industries of the second industrial revolution.

Why did a branch plant structure become entrenched in Canada and not in the other late follower countries? The common answer is that Canada erected tariff barriers to encourage the development of industry, and that American producers, cut off from their export markets decided to leap over the tariff wall by establishing branch plants (Marr and Paterson, 1980: 294). This is not an adequate answer. Canadian tariffs were neither high nor exceptional. Tariff levels, as measured by the ratio of duties to total imports for consumption, were higher in almost every year in the United States than in Canada between 1867 and 1900 (McDiarmid, 1946: 181; Taussig, 1910: 409). Protective duties were increased in many countries at the same time as the National Policy tariffs of 1879 and in response to the same conditions of depression, decreasing prices, and rising nationalism:

Austria raised its duties in 1878, 1882 and 1887 . . . Germany raised its rates in 1879, 1885 and 1888; France, in 1881, 1885, 1887 and 1892; Belgium, in 1887, Italy, in 1878, 1887 and 1891; and Russia, in 1877 and 1892. Practically every western European state was swept along in the current of protection. Only the Netherlands, Denmark, Finland, Turkey and Great Britain retained their free trade systems (Clough, 1952: 611).

It is true that tariffs have a more restrictive impact on small countries than on large ones and that comparisons of absolute figures on tariff levels can be misleading (Liepmann, 1938: 37). But Sweden and several other small manufacturing-exporting countries combined tariffs with retention of domestic ownership. Clearly the tariff barrier argument requires reconsideration. If tariffs were almost universal, why did Canada alone of all the industrializing countries become so dominated by foreign firms?

The usual answer is that Canada was the only advanced country situated beside
the United States. Canada accepted the American corporation on a massive scale at an early point in its development, whereas European nations were shielded from the American economic invasion by the Atlantic Ocean until after World War II. By then they had generated more mature industrial structures, dominated by their own capitalists. This answer, too, is inadequate. The catastrophic effects of the two world wars have obscured pre-1914 realities. The United States was not the only rapidly developing industrial power, nor was it the only country to establish branch plants abroad. Germany was also conquering foreign markets in the new technologies. On the eve of the Great War, German exports of electrical products was greater than that of the U.S. and Britain combined. In the new chemical industries, especially dyes, Germany was the world's leader. Its firms achieved these positions through technical excellence (Landes, 1969: 275, 290). Foreign tariff walls blocked the entry of German goods, and led to experiments with the branch plant solution. As early as the 1870s and 1880s, German industry began to locate branch plants and resource subsidiaries in nearby countries. However, Germany's neighbours reacted differently from Canada. They took steps to block German investment (Crisp, 1970, 1976; Fleetwood, 1947). Furthermore they strengthened domestically owned industry through measures such as changes to industrial finance, government procurement programs and subsidies to and protection for strategic industries for military reasons (Laxer, 1985). Herein lay the differences between Canada and the other late follower countries. It was not proximity to an expansionist industrial giant that accounted for Canadian exceptionalism but rather a different reaction to the threat of external domination. The branch plants were not the sole cause of Canada's failure at independent, late industrialization. In fact U.S. subsidiaries were able to win such an early victory in Canada's electrical, chemical and automotive industries because of a deeper institutional and ideational malaise in the financial system and in military and railway policies. These factors can be listed but not elaborated here. First, Canada's commercial banking system was oriented towards short-term loans suited to trade. It was particularly inappropriate for nurturing technologically innovative industries in a late industrializing country. German investment banking, adopted in most late follower countries, performed precisely this role with the use of domestically controlled capital. Second, military industries form much of the basis of the engineering sector, the crucial place where innovation occurs. As independent nations, the other late follower countries fostered domestically owned and technologically independent strategic goods industries. Canada did not. For fifty years after Confederation, precisely the years in which Canada's industrial structure was formed, its military policy remained, voluntarily, under British authority. Finally there was the Canadian mania for railway building. Even though Canada needed only one transcontinental railway before the Great War, it was felt that three would be good; the more expensive the building methods, the better (Buckley, 1974). As a result Canada borrowed enormous amounts of British portfolio capital. The latter created inflationary pressures which led to increased imports, augmented the movement of U.S. branch plants into Canada (Viner, 1975), and invigorated the resource exporting nature of the economy (Innis, 1973: 152).

Why did the Canadian state adopt economic policies that were not suited to late
follower industrialization? Why did the farmers and their allies, representing the numerical majority, fail to break down the commercial banking system as their counterparts had done in the U.S.? Why did the agrarians allow high-taxes and governments to throw away millions on useless railways? To answer these questions requires a multifaceted class analysis of the politics that lay behind the formation of Canadian state policies. I will not do that here because I have not the space and have done so elsewhere. Nevertheless a few points can be made. First, I must sound a cautionary note. When analyzing the politics of immediate issues and confrontations, the intentions of various groups and their class interests are naturally the prime focus. But the politics of economic development must have another focus. It is not the intention of social groups that matter so much as the long-term consequences of their actions taken in combination with that of their political foes and allies alike. In other words, classes and other social groupings usually have no great prescience regarding what will safeguard their long-term interests. In fact, their actions may very well lead in unforeseen directions, especially when compromises are made with other groups. Thus it was with Canadian politics during the formative period of early industrialization.

The striking thing about Canadian politics between the 1837 rebellions and World War I was the weakness of farmer-led, popular-democratic movements. In other new settler societies which, like Canada, enfranchised large numbers of people, popular democratic movements based on agrarians and sometimes the working class as junior partners held great influence over state policies in the era in which industry was becoming dominant. But not in Canada. It was not some peculiar conservative character implanted in Canadians by dint of its British heritage or geography. After all, Australians and New Zealanders displayed radical politics early, while remaining staunchly British. Nor were petit-bourgeois populist movements unknown in Canada. In fact they dominated political life in Lower and Upper Canada prior to the 1837 rebellions and re-emerged in force in the 1920s with the Progressive Party and farmers' governments in Ontario, Alberta, and Manitoba. But they were blown off the stage in the eight decades in between, when the character of the nation state was determined and the branch plant economic structure was put in place. Why did this happen and what has it to do with economic development?

Despite the recent emphasis on 'political economy' in Canada, most of us have difficulty seeing the connection between broad-based politics and the way the economy develops. Conspiracy theorists, plotting their corporate-state interlocks, do not help. Nor do left-wing Parsonians posing as Marxists with their teleological assumptions about the capitalist-maintaining functions of the state. The 'superstructure' had profound effects on the 'base' in Canada. The politics of class in the 1837 to 1914 period was largely supplanted by the politics of English-French sectionalism. In this context, big business easily ruled and because it faced little challenge, even allowed itself the luxury of openly conducting internal disputes. For example, the conflict between commercial and industrial capitalists, an unusual feature of other countries in a similar economic phase, was documented in S.D. Clark's early work (1939).

Time and again popular-democratic political movements arose in English Canada, mainly in Ontario in the pre-1914 period, in opposition to the policies of
a state run by big business, only to be defeated by anti-French-Canadian and anti-Catholic bigotry. For their part, popular-democratic movements in French Canada represented the most nationalist and most anti-British opinion. In contrast to their counterparts in the big business-oriented parties, the popular-democratic movements in English and French Canada could not overcome the national and religious divide.

In consequence, state policies were pitched towards the short-term interests of the majority of Canadian businessmen. Instead of creating a fully independent state, as the pre-1837 popular movements had wanted, the plutocratic, English-speaking leaders fashioned Canada as a 'dependency of the Empire.' French-Canadian objections to this status were overruled. Remaining under the British military umbrella, Canada had no need to encourage technological independence in the military industries, nor the strategic motivation to block the in-migration of American branch plants. Instead of carefully husbanding scarce financial resources in the context of domestic capital shortage, as the agrarian movements demanded, the Canadian state induced extravagant expenditures on unnecessary railways. After all, for major sectors of Canadian business, money was to be made building, not running the railways (Naylor, 1975, Vol. I: 23). Large foreign debts were not to be feared even though farmers demanded cheap and efficient government. Finally, the commercial banking system that was so reluctant to invest heavily in Canadian industry expanded abroad on a large scale at precisely the time when American manufacturing companies made their first great push into Canada (1900-14) (Naylor, 1975a, Vol. II). This type of banking system had been dismantled in the United States in the 1830s by the agrarian-based Jacksonian movement. Despite similar attempts by Canadian farmers, it was retained here.

Briefly these were the factors which diverted Canada from the path of independent industrial development. The important point is not to elaborate on these themes here but to note that internal factors, not geographic and external constraints, were decisive in Canada's failure at late follower industrialization.

CONCLUSION

The dominant paradigms in Canadian historiography leave a great deal unexplained. For the past century it has been incorrect to characterize Canada as simply a dependent resource economy presided over by a commercial elite, as the Staples and Naylor-Clement approaches have been wont to do. The easy assumptions must be modified or discarded. It was neither inevitable that Canada would follow the American model of development at a later date nor that it would fail to break fully free from a 'staple trap.' Reality has been more complex than this. As we have seen, two contradictory tendencies must be explained: Canada's promising manufacturing development in the late nineteenth century and its failure to make good on that promise. None of the traditional approaches account for these tendencies satisfactorily. In their place I have set out a modified Gerschenkron approach that focuses on the problems and possibilities of late development. It seems to explain the facts best. Because this approach is comparative, it breaks down the assumptions of uniqueness, and inevitability. As well, it helps pinpoint the major factors affecting the direction and character of Canadian economic
development. To move forward in our understanding of Canadian development, we must go beyond the givens of geography and external influence and look at the role of Canada's internal social formation. We may discover that Canadian history was made in Canada, not by geological forces millions of years ago, but by the people who later inhabited it.

NOTES

1 I am referring here to manufacturing by means of modern industrial methods and excluding handicraft production. Semi-manufactured articles as well as manufactured foodstuffs are included, but mining, building, and the generation of gas and electricity are excluded. See the League of Nations (1945) study for comparative estimates of manufacturing output.

2 If Newfoundland and Prince Edward Island are included, Canada would have the third largest merchant marine as measured by tonnage.

3 Staples economies had limited room for initiative. They could develop new wheat strains or encourage settlement, but they could not create external demand.

4 His major concern was with the transmission of culture and technique on an international scale (Innis, 1952, 1973).

5 This is not true of Creighton and others who have written within the 'Laurentian' or 'metropolitan' approaches (Careless, 1967).

6 Sweden's 25 km per 10,000 people in 1914 compared to 41 km in the U.S., 44 km in Australia and Argentina and 57 km in Canada.

7 Sweden had 4.2 million people in 1870, compared to Canada's 3.7 million in 1871. By 1910-11, Canada had 7.2 million and Sweden only 5.5 million (Mitchell, 1973: 748; Lower, 1977: 335). Sweden consumed about two thirds of the Canadian level of manufacturers per head in 1899 (Maizels, 1963: 539).

8 Differences between Canada's and Sweden's political economy of industrialization are discussed in my doctoral dissertation (1981).

9 U.S. economic historians such as Douglass North (1961) have analyzed the American transformation away from resource dependency from a staples perspective. But given the success of American development, their explanation was of the Mackintosh variety. Aitken (1964) alludes to surpluses from cotton going into industrialization but offers no analysis of the American escape from the staple trap.

10 Even though more than 80 per cent non-white, South Africa was treated as a white colony. It was granted dominion status almost forty years before the first 'non-white' colonies. Its economy resembles Australia's and New Zealand's in many respects.

11 Clement differs from Naylor in this respect. He attributes more strength, independence, and political influence to the Canadian corporate elite. As well, Clement has adopted a class analysis recently.

12 Landes (1965: 116) disagrees. 'In Europe, the follower countries made the most of their cheap manpower by building more rudimentary but less expensive equipment, buying second-hand machines whenever possible, and concentrating on the more labour-intensive branches or stages of manufacture. Not until the last third of the century did the Continental economies conform to the usual theoretical model and avail themselves of the opportunity to adopt the latest techniques.' However, the late 1800s was precisely the time when late follower countries began to industrialize.
13 Gerschenkron did a fine class analysis in an early work, *Bread and Democracy* (1943), but discussed ideas largely without reference to class in his later works.

14 Gerschenkron (1962: 47) recognized foreign investment as a form of 'substitute' capital but did not think it a major source even in Russia in the 1890s.

15 Not enough work has been done on secondary industries to show that this was true in every case. Something can be learned from the demand side but the greater evidence lies with the supply side. The essence of investment banking was its ability to initiate change and consolidation in industry. If supply had been available in Canada through an investment banking system, would demand have been far behind? The capitalization of Canadian industry was low in comparison with American industry in the 1870s and 1880s (Bertram, 1962: 115). The consolidation movement did not begin until 1909–12, twenty years after consolidations occurred in Germany, Russia, the U.S. and to a lesser extent Britain (Clement, 1977: 45; Gerschenkron, 1962; Landes, 1969: 245).

16 Most neo-classical economists do not concentrate on questions of long-term development. Amongst those that do, not all would agree with Mackintosh's scenario. Johnson (1977) and Dales (1966) accept the resource orientation of Canada's economy as its comparative advantage.

17 International comparisons of industrial statistics present enormous problems regarding different methods applied in calculating national indices, a multiplicity of overlapping national series, a lack of uniform assumptions as to what constitutes manufacturing (prior to World War II) and arbitrary currency valuations. The farther back in time we go, the more uncertain the conclusions. Despite the crudeness of the exercise, comparative estimates are crucial to assess comparative development levels.

There are only a handful of comparative studies on industrialization levels, on these we must rely. For estimates of manufacturing output in the advanced industrial countries, there are basically two sets of data that can be used. One is the recent monumental work by Paul Bairoch, 'International Industrialization Levels from 1750 to 1980' (1982), which for the first time includes estimates of handicraft production from the Third World. This provides an exciting new view of economic and political relations between the developed and the underdeveloped world since the beginning of the Industrial Revolution in England. Indeed this is the main purpose for Bairoch's new methods of Calculation (see his Appendix A).

The other set of data is older and includes the works of Hilgerdt for the League of Nations (1945), Clark (1960) and Maizels (1963). These studies do not wholly agree among themselves regarding numbers, nor do they involve exactly the same methods of calculation. Nevertheless there is considerable agreement amongst them regarding orders of magnitude and levels of industrial production amongst the countries that my study is interested in: namely the 'late follower' countries, the white dominions (these categories are discussed in the body of the article) and the U.S. in the period from 1870 to the 1930s. Furthermore, Simon Kuznet's work is in general agreement with their estimates as well. He had a high regard for Hilgerdt's study, for instance. See Kuznets (1969: 305).

I decided to stay with the earlier sources rather than use Bairoch (for the period before World War II) for several reasons: 1/Bairoch's estimates for Canada's aggregate level of Canadian manufacturing production in the 1881 to 1913 period is between one third and two fifths the level estimated by Hilgerdt. Estimates for the U.S. in 1860 and
1880 are also much below Hilgerdt's (and others), suggesting a systematic underestimation of North American manufacturing production at an early point in their industrial development. Bairoch's figures for the later period (starting about World War I in the case of the U.S. and about World War II in the case of Canada) are very similar to the earlier studies. 2/Bairoch's estimates for Canada do not coincide with what we know about the character as well as the quantity of Canadian manufacturing between 1870 and 1914. The works by Bertram (1962, 1963), Dales (1962), McDougall (1973) and Urquhart (1984) are in general agreement on the question of Canadian manufacturing levels, with the earlier sets of comparative international statistics.

3/Bairoch does not reveal enough detail for the reader to make an independent assessment of his sources and assumptions. On the other hand, Hilgerdt, Maizels, and Clark have laid out their methods in much greater detail.

18 The ability to produce most needed items in case of an emergency cut-off of supply can not be determined by looking solely at a nation's economic indicators. As Seers (1979) points out, the strength and unity of national feeling that would allow the state to impose restrictions is an important ingredient of potential self-sufficiency.

19 Canada did not fit Rostow's (1965) model of 'economic take-off' because of the unusually high rate of gross investment in the pre-take-off stage.

20 Trade in automobiles and parts is an artifact of the Canada-U.S. autopact (1965), which treats North America as one entity for the auto producers. Most of the 'trade' consists of movement between parent and subsidiary. If auto trade is included, the export/import ratio for 1981–3 is 0.64. Maizels is the source for 1899, 1929 and 1955. Canada (1984) is the source for the early 1980s (my calculations).

21 Argentina was an exception in this respect. Manufacturing comprised as high a percentage of its gross national product as in the 'dominant economies.' (Ehrensaft and Armstrong, 1981: 115). This may not mean any more than that other sectors of the economy were even sicker than manufacturing.

22 I am not arguing that economic comparisons between Canada and other white dominions are irrelevant. Nor am I saying that comparisons of class structures, politics, and culture are inapplicable between these two countries. On the contrary, Ehrensaft and Armstrong (1981) take us in fruitful new directions. But the white dominion model is misleading in assessing early development prospects for Canada.

23 The data for this section are derived from the tables of my doctoral thesis (1981). To probe these figures further, consult as well the sources from which they were drawn: League of Nations (1945), Maizels (1963), the United Nations (1974, 1976, 1978).

24 Internationally comparable data are not available for Argentina before this time. The situation is a little better for Australia. The League of Nations (1945) estimates go back to 1908, at which time Australia had in the neighbourhood of one per cent of the world's manufacturing production (141). Bairoch's (1982) estimates go back to 1860 for Australia. He estimated that in 1860, Australia produced 0.2 per cent of the U.K.'s 1900 level of industrial production and 2.3 per cent of that level by 1913 (330). Australia produced about one quarter of Canada's output in 1913 according to Bairoch. For a discussion of the validity of Bairoch's (1982) estimates, see note 17.

25 A century later, an altered set of the top four industrial countries accounted for between 61 per cent and 73 per cent of the world's total (Bairoch, 1982; u.n., 1973).

26 According to Maizels (1963) there are no adequate figures for the Netherlands. Bairoch (1982) ranks that country's industrial production level as very low for the 1880 to 1913 period (330). Czechoslovakia was not an independent country then.
27 The ratio does not change appreciably if textiles and clothing are included or excluded.
28 The ratio of exports to imports indicate the same trend. In 1880, 1890, and 1900 the ratio was about 0.2 and it dropped to about 0.15 in 1905 and 1910. The 1915 figure indicates a gain (0.32) but this was due to an artificial boost for exports because of the war. These figures, as well as those quoted in the text, are derived from Table I in McDougall (1973). His Table VI is misleading. (The 'producer durables' column should be read as percentages, not ratios.)
29 These figures underestimate the actual number of U.S. branch plants before 1914. Marshall et al. (1976) included only those still in operation in 1913 at the time of the survey. Field (1914) calculated that there were 450 U.S. branch plants in Canada in 1914.
30 See my doctoral thesis (1981), chapters VII and VIII.
31 Large amounts of foreign capital also came in to finance the prairie wheat boom. See Buckley (1974).
32 See my 'Class, Nationality and the Roots of Foreign Ownership' and The Roots of Foreign Ownership (Toronto: Methuen, forthcoming) for elaboration and references.
33 The James O'Connor (1973) model of state 'accumulation' and 'legitimation' functions is widely used by 'Marxist' scholars in Canada. The reasoning is rather circular and certainly ahistorical. When the state helps the capitalists suppress the workers' wages, capital accumulation is increased. This is the 'accumulation function.' When, on the other hand, the workers make some gains and the state provides concessions, that is the 'legitimation function.' According to this model, in every case the workers lose. One can imagine Marx spinning in his grave at the thought that 'Marxists' have ruled out the possibility of a workers' revolution. These left-wing Parsonians have simply replaced God the Creator of benevolent functions, with the Capitalist State as the devil brilliantly foreseeing all the ways to forestall social change.

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