

Underdevelopment in Two Norths: The Brazilian Amazon and the Canadian Arctic

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ABSTRACT. The developmental scholar André Gunder Frank has constructed a model to explain regional underdevelopment within developed nations. Underdevelopment is defined as the inability to control the rents from local resources and limited input into political decision making. The model is based on the concepts of metropolis and satellite, the satellite being a region that is politically, socially, and economically dependent on the metropolis. Frank applies this concept to the Brazilian Amazon as a satellite of southeastern Brazil and concludes that the Amazon region has underdeveloped due to the abrupt entry and withdrawal of capitalist investment. This article applies the Frank model to the Canadian North as a satellite of southern Canada and, using the historical examples of the fur trade, the Klondike gold rush, and the whaling and petroleum booms, concludes by noting that the entry and collapse of capitalist investment in the Canadian Arctic has led to a similar form of underdevelopment or dependency in that region. Underdevelopment and dependency in both regions are seen as a result of the collapse of economic, and primarily resource extraction, booms.

Key words: northern development, underdevelopment, dependency, André Gunder Frank, colonialism, fur trade, Klondike gold rush, natural resources, politics

RÉSUMÉ. André Gunder Frank, le spécialiste en développement, a construit un modèle qui explique le sous-développement régional à l'intérieur des pays développés. Par sous-développement, on entend l'incapacité de contrôler la location des ressources de l'endroit et le manque d'influence dans la prise de décisions au niveau politique. À la base du modèle se trouvent les concepts de métropole et de satellite, ce dernier étant une région qui, au plan politique, social et économique, est dépendante de la métropole. Frank applique ce concept à l'Amazonie brésilienne en faisant de cette zone un satellite du sud-est du Brésil, et il en conclut que la région amazonienne est restée sous-développée à cause de l'arrivée et du retrait brutaux des investissements de capitaux. Cet article applique le modèle de Frank au Grand Nord canadien, faisant de cette zone le satellite du Canada méridional. Exemples historiques à l'appui (commerce des fourrures, ruée vers l'or du Klondike, apogée de la pêche à la baleine et boom du pétrole), il conclut en soulignant que l'arrivée et l'effondrement des investissements de capitaux dans l'Arctique canadien, y ont provoqué une forme semblable de sous-développement ou de dépendance. Dans les deux régions, on peut voir le sous-développement et la dépendance comme le résultat de l'effondrement de booms économiques, surtout celui de l'extraction des ressources.

Mots clés: développement du Grand Nord, sous-développement, dépendance, André Gunder Frank, colonialisme, commerce des fourrures, ruée vers l'or du Klondike, ressources naturelles, politiques

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INTRODUCTION

In 1976, Nils Ørvik expressed the need for a general theory of northern development. Commenting on the difficulty inherent in such a task, he noted: "The analytic problems we are faced with in northern development are becoming very complex . . . the question is no longer whether there is a need for theory, but how soon that need can be filled" (Ørvik, 1976:102). Such a theory would need to be very broad in nature, yet exclusively northern in scope. Yet Ørvik admitted that other developmental theories — those originating outside the North — might also provide valuable insight:

A careful use of such "adapted theories" might provide useful contributions and lead to an improved understanding of the problems. But in most cases they will only apply to certain aspects of northern studies and to a lesser degree what we might call the core problems of northern development. [Ørvik, 1976:93.]

While we are still a long way from any "general theory" of northern development, there are a number of "adapted theories" that could shed light on the problems of northern development. Bearing Ørvik's caveat in mind, this paper examines the applicability of dependency theory — and, in particular, that of André Gunder Frank — to the Canadian North. The paper uses as a basis for comparison the development of the Amazon region of Brazil, an area facing similar developmental problems and about which dependency literature exists. The conclusions

suggest that the origins of underdevelopment in the northern regions of Canada and Brazil are similar — and that by extension responses to developmental problems in one region might be successfully transplanted to the other.

The terms "development" and "underdevelopment" are characterized by multiple definitions and a great deal of vagueness and imprecision. Such definitions could include those based on modernization, which focus on standards of living as evidenced through any number of variables; growth, with the emphasis on economic expansion, integration, and "catching up" to the advanced industrial nations; or dependence, and the control of capital and investment by external entities. Dependency theory tends to concentrate on the last of these possible definitions, emphasizing the dependent, or colonial, relationship between one region and another. Developed regions are able to retain the surplus value or economic rents derived from their own resources, and the key decisions regarding the disposition of the resources and the revenues from them are made within the region. Underdeveloped regions are those unable to control their own resources and the revenues obtained from them. Regions that find themselves in this colonial position do tend to exhibit lower standards of living and unbalanced, export-dependent economies. The definition of underdevelopment for our purpose relies on the relationship between the two regions — the metropolis, which is developed, and the satellite or colony, which is underdeveloped. Note also that underdeveloped regions differ from those that are undeveloped. Under-

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development implies an intentional exploitation of one region by another, leading to differences in the distribution of wealth, while undeveloped refers to those areas that have not been exploited and retain a traditional, insular, and autarkic economy. Most applications of dependency theory utilize the nation-state as the point of reference, yet subnational regions also fit the model. In fact, dependency theory is particularly effective in explaining the underdevelopment of some regions within a developed state, and this is where much of the future applicability of the model lies. This study focuses on subnational, regional underdevelopment, and not on the relationships between developed and underdeveloped nations.

Just what constitutes the North is a matter of debate. Some authors define most of Canada as northern, with all but the Maritime provinces possessing some northern land (see Hamelin, 1979). This determination was based on an aggregate of climate, settlement, self-perception, etc. While this is perhaps the most efficacious manner of definition, it is not useful in the political sense. Politically, the Yukon and Northwest Territories are territories, not provinces, with a different federal relationship with Ottawa. Thus the definition of the North as the two territories is the most meaningful for political analysis and will be used in this paper. The Brazilian North, which will figure prominently in the comparative aspect, will be defined as the states and territories of Amazonas, Pará, Roraima, Rondônia, Amapá, and Acre. This region is also known as Amazonia. This is the definition used by the Brazilian government and accepted by most historians and political scientists. Two adjoining regions, the Northeast and the Center-West, which share with the North similar developmental problems, will also be examined briefly.

The Canadian North is an underdeveloped region located within a highly developed nation. Griffiths (1983) has suggested that the arctic regions constitute part of the Third World and share many features with the underdeveloped states in equatorial regions. He notes:

The initial reaction to the hypothesis may be one of disbelief, "Third World" suggesting tropical heat waves and newly independent or neo-colonial status. Upon reflection, however, it will be recognized that the term also connotes underdeveloped and developing areas whose evolution is substantially affected by decisions issuing from remote metropolitan centres, and whose populations experience both an erosion of traditional culture and a sense of powerlessness to determine their own future in the midst of externally generated change. [Griffiths, 1983:350.]

In this sense the Canadian North is not unique. A parallel may be drawn with Brazil, a nation that has developed rapidly and that has a highly concentrated region of development located along the southern and southeastern coastal states. In addition, Brazil also possesses a large underdeveloped region, the Amazon basin, referred to in Brazil as "the North." This region shares a number of commonalities with the Canadian North. For example, both are large, essentially untapped wildernesses with abundant natural resources. Both have unassimilated native populations with distinct cultures. Both have a disproportionately small share of national wealth, population, investment, and industry. Both were settled slowly due to hostile climates, yet each region was instrumental in the original settlement of the nation. "Opening up the North" and military programs were developed in both Canada and Brazil, and government presence (especially at the federal level) increased. And perhaps most significantly, each region has contributed more than any other to

the national identity and self-perception of the nation and figures prominently in the national mythology. As one historian has noted:

[The early Portuguese settlers] borrowed heavily from the Indians. What resulted was their transformation into Brazilians, and nowhere was the nascent Brazilian more easily identifiable than in the *sertão* [interior]. Remarkably similar to the *bandeirante* [Brazilian pioneer] was the Canadian *voyageur* of the same period. Those fur traders, many of mixed European and Indian ancestry, used the great Canadian river system to travel east to west, and those routes fostered future Canadian unity. Brazil too owes its territorial expansion to the *bandeirante*. [Burns, 1980:70.]

The parallels do not end there. But those indicated demonstrate the similarities in the two regions with respect to their place in the national political, economic, and social structure. (For further comparisons of frontier regions in South America, North America, and elsewhere see Katzman, 1977:10-30.)

As a nation itself still in the process of developing, Brazil has received a great deal of attention from those interested in the developmental process. (For a basic introduction see, *inter alia*, Baer, 1965, 1979; Evans, 1979; Furtado, 1963, 1970; Henshall and Momsen, 1976; and Kahl, 1976. Kahl's book describes the principal work of Fernando Henrique Cardoso, much of which is not available in English translation.) While many authors have looked at the national development of Brazil, or of Latin America as a whole, few have examined the singular region of the Brazilian North. As the intent is to focus on the developmental process of the Canadian North as a distinct region within a nation, this latter type of analysis will prove to be the most beneficial. A discussion of the model with the greatest applicability to the Brazilian and Canadian norths follows.

DEPENDENCY THEORY

An examination of the developmental literature has yielded few meaningful theories that can be applied to the Canadian North. Most operate at the national level, without regard to regional and sub-regional development within a single state. An exception to this is an essay by the noted developmental scholar André Gunder Frank (1969), in which the causes of regional disparity in Brazil are discussed and analyzed. This model can help explain the causes of underdevelopment in the Canadian North. Frank's work is situated in the large body of literature known as dependency theory, and in particular in that part of the paradigm referred to as the "development of underdevelopment." Before looking at Frank's model of underdevelopment, some of the basic features of dependency theory will be briefly discussed.

Dependency theory developed out of and as a reaction to modernization models. The basic tenets of the modernization models postulated two types of societies, *viz.*, the developed capitalist society and the undeveloped feudal society. Internal features — the presence of feudalism, scarcity of capital, and concentration of power in the hands of rural oligarchies — prevented some nations from developing. Development, according to these models, took place in stages, one of which was the transformation from feudalism to capitalism. Development, modernization, and economic growth followed the introduction of capitalism. Hence, the introduction of a capitalist economy was the first step towards modernization and prosperity.

Dependency models turned the modernization paradigm upside down. Dependency — which has found its greatest application

in Latin America — emphasized external features that led to underdevelopment. Some nations were able to exploit the resources of others — these nations developed — while the exploited nations languished in a sort of colonial relationship. The exploited nations provided both raw materials to the metropolis and markets for manufactured goods. The value added during manufacturing, however, remained in the metropolitan or exploiting nation. Hence a relationship of dependency and reliance developed between these two types of nations, and poverty and stagnation stemmed from external exploitation. Katzman (1977) provides a particularly useful discussion of agglomeration economics and the development of the metropolitan-hinterland relationship, while Orlove (1977) gives a good overview of both the modernization and dependency models. Orlove (1977) notes that the exploited or satellite nations are unable to directly manage their own economies, and they are forced to adopt policies that benefit the metropolis. The small number of elites that exist in the satellite are co-opted by the metropolitan elites and serve as their agents. Thus the satellite nation is in most cases unable to break away from the dependency relationship. Other useful critiques of dependency theory include Bunker, 1985; Chilcote, 1974; Evans, 1979; and Randall and Theobald, 1985.

In addition to the dependency literature described above (which focuses on Latin America), there has been some application of the dependency model to Canada as well. Most of this work has taken place in the Atlantic provinces, where economic conditions are generally not as high as in the rest of Canada. Veltmeyer (1979) suggests that the dependent relationship of the Atlantic provinces to the rest of Canada and the exploitation at the hands of the colonizing powers has led to economic stagnation in the Maritimes and Newfoundland. Noting that dependency literature has tended to ignore class, he observes that an "industrial reserve army" has developed in the Atlantic provinces — a large body of workers that can be called into use if a particular project warrants, but which relies on unemployment insurance and subsistence living when labor is not needed. Antler (1979), in his discussion of Newfoundland, also suggests that external exploitation is responsible for Newfoundland's difficult economic position.

Dependency literature, including that of André Gunder Frank, has been subject to a substantial amount of criticism, from both those who reject the model entirely and those who seek to perfect the dependency paradigm. Chilcote (1974), in his summary of the basic criticisms of dependency theory, notes that Frank's model tends to de-emphasize the importance of class relationships, while focusing only on the relationship between states. As a grand theory, terminology and definitions tend to vagueness. The Frank model focuses entirely on external features of development, while ignoring possible internal explanations that might coexist with external exploitation. Orlove (1977) expresses similar concerns with the model, stating that dependency theory assumes that societies are entirely capitalist, while not recognizing the existence of traditional economies. The large size of the theory and the difficulty in applying such grand theory to individual situations have been noted by Bunker (1985). Some of these charges have been accepted by Frank, while others have been refuted as invalid (see Frank, 1974).

These criticisms should be kept in mind in an application of dependency theory. The theory is particularly useful in examining subnational or regional underdevelopment, as this type of analysis will incorporate internal features — such as traditional

economies — which might play a role in development. Evans (1979) observed that Frank's model focused too much on the world system. This analysis will make no attempt to explain world development, but rather that of smaller regions within nation-states. Frank's theory will be applied as a theory of regional development, rather than world development, a much less ambitious task. An outline of the Frank model follows.

A MODEL OF DEVELOPMENT

Frank begins by noting that "Underdevelopment in Brazil, as elsewhere, is the result of capitalist development" (1969:145). As such, writes Frank, it is not a direct result of feudalism or the lack of capitalist intervention, but rather stems directly from the introduction and expansion of the capitalist economy. This view contrasts with that of earlier theorists, such as Toynbee, Furtado, and Lambert, who argued that an open capitalist society tended towards development, while a closed society of a primarily feudal structure tended towards stagnation and underdevelopment. This notion Frank refutes, though his counter-arguments will not be discussed here. The focus will be on Frank's own thesis, which provides an alternative model to the dualism of earlier scholars.

Frank's model is based on a set of interrelated structures that compose the world economic system. The principal components of this system are the metropolis and the satellite, which may take the form of nation, region, city, or other such units. The metropolis holds economic, political, and/or social dominance over its satellites, while the satellite is subject to the metropolis in similar matters. A unit may at one time be both metropolis and satellite, and, in fact, this is the most common case. Both Brazil and Canada are seen as satellites of the world metropolis — the United States — yet each has satellites of its own. The Brazilian Amazon and the Canadian North are the two that concern us here.

The model contains four cardinal characteristics, each of which Frank examines in light of Brazil and which will be examined here with reference to Canada. As Frank's model is most concisely written and would be difficult to summarize, this section will rely heavily on Frank's own writing (1969:145-152). The first characteristic is the existence of the close political, economic, and social ties between the metropolis and its satellites, thus making each city or region, and the populations of these, integrated members of the whole system. The second is the monopolistic structure of the system. Although the means and degree of this monopoly may differ, each metropolis holds a monopoly of power over its satellites. Thirdly, there occurs a misuse and misdirection of resources within the metropolis-satellite system, with the result that, fourthly, this misdirection and misuse of resources favors the metropolis (at whatever level) at the expense of the satellite (Frank, 1969:147). These four factors characterize the model, which Frank states applies universally across time and place.

With this model simply defined, Frank goes on to develop the hypotheses that stem from it. They are:

(1) For a metropolis that is at the same time a satellite of another metropolis, development will not be autonomous but will in fact be dependent upon that of the higher metropolis. As the metropolis/satellite cannot sustain independent development of its own, it underdevelops.

(2) The weakening of the ties between the metropolis and the satellite will lead to one of two results, both of which involve

an involution or inward turning of development on the part of the satellite. The first of these forms is the passive capitalist involution into a subsistence economy with the presence of feudal features. The North and Northeast of Brazil are cited by Frank as two regions that have followed this path of involution. Such regions remain remote and isolated from the metropolis. However, notes Frank, this involution stems from the "ultra-incorporation" and "strong (usually export) ties" that are breached by the lessening of the close ties between the metropolis and the satellite, and not from the lack of incorporation of the satellite into the metropolitan economy (1969:148 *passim*). The second form is that of a weakening of ties concurrent with capitalist involvement and involution, which results in somewhat autonomous development within the satellite, such as happened in India, Mexico, Argentina, and so forth, notes Frank. This form takes place in regions that hold a metropolis relationship over satellite regions within the same nation. Thus a *weakening* of the ties between the metropolis and the satellite can result in *increased* development, rather than a lessening of development, as the dualist school would suggest. Frank notes by way of example that in Brazil the northern state of Amazonas developed along the lines of the first form, that of passive involution, while the southern state of São Paulo developed along the lines of the second, that of active involution. Amazonas remains one of the least developed states in Brazil today, while São Paulo is by far the most advanced.

(3) When the strong ties between the metropolis and the satellite are renewed after a period of weakening, one of two results may take place. One such is a reopening of the markets for the satellite region's commodities. Frank notes that in the long run this reopening of ties is detrimental to the development process. The alternative, which follows an active involution, is that of a stagnation of the autonomous development process begun after the weakening of ties with the metropolis. Again, development is stifled over the long run as the satellite returns to non-autonomous development, or underdevelopment.

(4) The fourth factor is the interconnectedness of the economic structure with the political and social structures. If there are strong links between the economies of the metropolis and the satellite, then the linkages between the political elites will be stronger. Frank notes that historically these ties between the metropolis and the satellite have grown stronger, and thus so too have the political and social ties.

(5) The interconnectedness of the metropolis and the satellite results in an increased "polarization" between the metropolis and the satellite, for example, inequality of income and living standards. The tendency in this situation is towards increased tension between the metropolis and the satellite (1969:148-150).

Frank has derived these hypotheses from the four characteristics of his model. He next applies them to the case of Brazil, both in the sense of Brazil as a satellite of metropolitan Portugal and in the sense of Brazil as a metropolis with satellite regions of its own. This latter application is of interest in the study of the Canadian North. Before venturing to apply the model in the Canadian context, I will first examine Frank's application of his own model in Brazil, and specifically to the northern regions of Brazil that remain as underdeveloped colonies of the metropolitan state, and that have the greatest utility and comparative power in an examination of the Canadian North. I will then apply this model to the Canadian North, showing that both norths are in similar positions as satellites of more developed regions, and hence are underdeveloped.

Settlement in Brazil began about one century prior to that of North America. The 1494 Treaty of Tordesillas gave Portugal all lands lying to the east of a line drawn 370 leagues west of the Cape Verde Islands, which included the easternmost part of South America, or what is now Brazil. Portugal realized that in order to protect its colony, there was a need for occupation in from the coast to the highlands and tropical regions of the Amazon basin. In 1750 the Treaty of Madrid abandoned the Tordesillas line, substituting instead the principle of *uti possidetis*, or ownership by occupation, rather than by claim. Land grants were made to the early settlers as a form of inducement (Frank, 1969:151-152). Their intention, at least from the point of view of the settlers, was nothing short of profit, which would in most cases be extracted and returned, if not to metropolitan Portugal or one of her creditors, then to the coastal settlements of southern and eastern Brazil. Population centers emerged in the central and southern parts of the country, and this was where in later years Brazil's industrialization efforts were concentrated (Baer, 1965:163). The large region of Amazonia was therefore sparsely settled and its resources exploited, a pattern that has changed little today.

Following the decline of the brazilwood market due to cheaper indigo production in North America and the West Indies, sugar became the most significant commodity in the Brazilian North for some time. Production was concentrated in the Northeast, in particular in Pernambuco state. Using imported African slave labor, Brazil achieved a rather favorable comparative advantage vis-à-vis other sugar-producing colonies. Most of the sugar-generated wealth did not remain in the colony, but was transferred to Portugal or to the Netherlands, for many of the proprietors were Dutch.

In the seventeenth century, the power of Portugal, along with Spain, declined rapidly. Poor management is often given as a primary cause of this economic decline, as much of the colonial wealth was funnelled through to Dutch and English creditors. The center of European power shifted to the Netherlands and Great Britain, and Portugal was forced to sign several treaties giving the English substantial powers over foreign commerce. These treaties, culminating in the Treaty of Methuen in 1703, made Portugal a virtual satellite of Great Britain. The establishment of English and Dutch sugar plantations in their own colonies in the West Indies led to a decline in the Brazilian sugar industry. Coupled with the relative decline of the metropolis — Portugal — the economy of the Brazilian Northeast experienced the "passive involution" described by Frank (1969:153). Here is, as Frank points out, a case where a capitalist development resulted in regional underdevelopment.

Another economic boom-and-bust cycle that took place in the frontier regions of Brazil was that of the gold rush in Goiás state, in the interior. As is common to all gold rushes, there was a rapid influx of population, new towns were constructed, and capitalist development began. However, as soon as the gold ran out, another passive involution took place, especially acute since many of the would-be miners did not possess the wherewithal to vacate the region. Again there is a case of capitalist development leading to an involution and the underdevelopment of a region.

The region of Amazonia has seen several booms. With North American and West Indian traffic interdicted during the American Revolution and Napoleonic wars, British commercial inter-

ests became somewhat more reliant on Brazilian exports, particularly rice, cocoa, and cotton, which were produced in the Amazon region. With the termination of these conflicts, North Atlantic commerce returned to normal and the regional economy declined. The most significant and far-reaching economic cycle to hit the North was certainly the rubber boom of the late nineteenth century. It was during this period that the city of Manaus, in Amazonas state, and Belém, in Pará state, grew large. The famous *Teatro Amazonas*, the florid opera house of Manaus, was constructed during this period with wealth generated from the rubber boom. Both Manaus and Belém experienced incredible growth. In Belém, for example, the population jumped from 40 000 in 1875 to over 100 000 in 1900. Manaus recorded similar growth and in 1876 became the first large city in Brazil to get electric street lighting. Both cities could boast, as a result of the boom, modern public buildings, residences, and all modern services, such as telephone, sanitation, and communications (Burns, 1980:334-337).

The rubber boom did not last long, however. Wild rubber plants were secretly smuggled out of the region, and, thanks to the botanists at Kew Gardens in England, soon made their way to Malaya, where a large rubber plantation economy was established. The presence of this controlled plantation economy, which was, moreover, British, led to the economic decadence of Amazonia. While supplies expanded, prices plummeted and exports decreased. Within the period 1901-10, Brazil exported 345 079 tons of rubber. Between 1911 and 1920, this fell to 228 754 tons, and between 1921 and 1930 to 202 634 tons. By 1922, plantation rubber accounted for 93.1% of world exports, with most of that produced in British Malaya (Burns, 1980:336-338). Since rubber accounted for 70-80% of the income of Amazonas and Pará states, the impact on the economy was tremendous. The part of the population that could afford to leave did so, while those who could not remained in the declining cities, resulting in waxing poverty. Many of the immigrants were *nordestinos*, or former inhabitants of the Northeast, who had emigrated to Amazonia to escape the poverty of the coast. With the decline in the Amazonian economy and "without means for returning home . . . the migrant resigned himself to staying. Compelled to eke out his budget through local hunting and fishing activities, he regressed to the most primitive form of subsistence economy. . ." (Furtado, 1963:147). One source notes that by 1940 "Manaus' ancient blue lights now glowed fitfully along unkempt streets and a tram line, which ran to a somnolent country club at the end of the line, passed through what must once have been a handsome suburb but was then in the process of reverting to jungle" (Henshall and Momsen, 1976:54). Again, capitalist intervention resulted in passive involution in the case of the Brazilian North.

The Brazilian government, like that of Canada, undertook a conscious effort to "develop" the northern part of the country in the 1950s. Public efforts to integrate Amazonia into the national economy resulted in a cementing of the metropolis-satellite relationship. In 1953, Brazil established the Superintendency of the Plan to Valorize the Economy of Amazonia (SPVEA), an organization whose purpose was to increase standards of living and to develop natural resources. The SPVEA was connected directly to the Brazilian president (Katzman, 1977:74-75) and thus provided an opportunity for significant federal input and control. Its successor organization, the Superintendency for the Development of Amazonia (SUDAM), formed in 1965, had a

similar mandate. Since much of the investment incentives were for capital-intensive projects, the rate of employment was not much improved. A still later attempt, the National Integration Program, provided for the construction of the Transamazon and Cuiabá-Santarém highways. One implication of this program is that it provided an outlet for *nordestinos* to emigrate to Amazonia, rather than to the cities of the southeast (Wozniwicz, 1974:291-292). Hence, the southeast-dominated federal government encouraged such programs, as they eased the strain on places such as São Paulo. The National Integration Program also provided more opportunities for the introduction of foreign investment capital, thus exacerbating the dependency relationship of the North. As Reis (1974:43) has observed, the North and Central West "are large demographic vacuums, whose imbalance, in the face of the development of other regions of the country, is marked." (For a detailed discussion of public initiatives in Amazonia, see Katzman, 1977:69-83; and Mahar, 1979:1-34.)

In more recent developments, both oil and gold extraction are gaining greater importance in Amazonia. A number of test wells have indicated the presence of reserves estimated at 100 million barrels of crude oil, and another 100 billion m³ natural gas in the Urucu River basin (Petrobrás, 1987). These discoveries were made by Petroleo Brasileiro S.A. (Petrobrás), the state oil company, which is based in Rio de Janeiro. It is unclear at present the use to which these resources would be put and to whom the rents would accrue. Similar circumstances arise with the extraction of gold in Amazonia. Recent estimates suggest that Brazil might be the world's largest gold producer by the end of the century, with much of the production centered in the Amazon. Much of the investment (about 39.9%) is foreign controlled (Vanvolsem and Crevels, 1988). Ironically, the largest foreign investor is a Canadian-British consortium, controlling 174 558 km² and representing 47.5% of all foreign investment (Vanvolsem and Crevels, 1988). A large foreign presence in the mining industry of Amazonia would suggest that much of the economic rents would be lost to the region, and this would further the position of Amazonia as a satellite both within Brazil and in the world economy.

The above examples illustrate the principal tenets of the model. As Frank has argued, development takes place when the ties with the metropolis are *less* close, exactly the opposite of the dualist position, which views development as a result of an expanding metropole. Frank further examines the effects of active involution in the southern states of Brazil, but these are not directly brought to bear on the application of regional underdevelopment in the Canadian North. (The reader interested in the active involution of the southern states and the *external* satellization of Brazil should consult Frank, 1969:167-213.)

UNDERDEVELOPMENT IN THE CANADIAN NORTH

As in Brazil, the Canadian North figured prominently in the early history and economic development of the nation. The Canadian North, as much *terra incognita* as the Brazilian Amazon, was the site of exploration, resource extraction, and limited settlement, not unlike its South American counterpart. Whereas the Brazilian interior was developed via a system of land grants, the Canadian North was developed primarily by private corporations, a not dissimilar form of capitalist intervention. In Canada, one of the most prominent and largest of these corporations was the Hudson's Bay Company, which was

granted a Royal Charter in 1670 and given monopolistic control of Rupert's Land (the land draining into Hudson Bay). The company's primary line of business was the fur trade, which was expanding rapidly as demand in Europe increased. The traders from the company did not venture very far inland and activity was restricted to the coastal lands on Hudson Bay. Eventually, after merging with its rival, the North West Company of Montreal, the firm expanded its reach westward into the Mackenzie River Valley and beyond into the Yukon. The British colonial government was indeed anxious to promote this expansion, as they feared incursions into British territory on the part of both the Americans and the Russians in Alaska, and especially the latter. In this sense, the ambitions of the early fur trading companies, such as the Hudson's Bay Company, and the British colonial government with regard to the North did not differ dramatically from the ambitions of the Brazilian landholders and the Portuguese colonial government in Brazil. Each private individual and firm was concerned with generating profits through resource extraction, while the colonial governments were interested in both successful economic development from which they too could profit, as well as the occupation of lands that might otherwise fall to rival nations.

The Canadian North experienced cycles of boom and bust not unlike that of Amazonia. Moreover, the commercial and subsequent missionary activity in each region resulted in significant cultural alterations still present. The "colonial" activities of the Canadian government and the resulting changes in native life are well documented by Jenness (1964). The boom and bust cycles, which began with early capitalist incursions, followed by passive involution, have led to underdevelopment in both regions. There are several examples worth discussing to indicate the negative developmental effects that capitalist investment has had in the Canadian North. These examples will be discussed in a little more detail in the following section.

As outlined briefly above, the fur trade was one of the first western economic incursions into the North. Large sections of the North were under the control of private corporations, such as the Hudson's Bay Company. This parallels the development of Amazonia, where economic power was concentrated in the hands of a few landowners. As in Brazil, this development led to a passive involution and resulting underdevelopment in the region. Several factors accounted for the decline of the fur trade. The border disputes with Russian Alaska resulted in Russian claims being upheld in the Alaskan panhandle, which effectively limited the British trade routes on that coast. American competition also increased (Coates, 1985:46). The purchase of Alaska by the United States in 1867 opened the Yukon River to American traders, and the loss of this position resulted in the Hudson's Bay Company's decline in the western region. Moreover, rival American companies were able to take much of the trade away from the Hudson's Bay Company. In 1870 Rupert's Land was sold to the new government of Canada, which did not share the same objectives as the private company. Canada was much more interested in encouraging development and settlement in the prairie west and focused its attentions in that area. All of these factors led to the decline of the private trading companies, with a resulting decline in development in the North. The closer ties brought about by the transfer of Rupert's Land to Canada, or the strengthening of the metropolis-satellite link in Frank's terms, led to the underdevelopment of the North.

The next major boom experienced in the Canadian North was that of the Klondike gold rush of 1896-1903. In 1896, gold was

discovered in substantial quantities in the Yukon River. Following in a long line of gold rushes, which had progressed from California and Colorado to British Columbia, the Yukon attracted thousands of gold seekers, who brought with them western culture and values. The Yukon towns of Whitehorse and Dawson, like their Amazonian counterparts of Manaus and Belém, grew at an amazing rate, and Dawson temporarily became the largest Canadian city west of Winnipeg. The lawlessness occasioned by the large influx of population necessitated the involvement of the Canadian government, through the North West Mounted Police, thus strengthening the ties between the Canadian metropolis and the newly formed Yukon Territory. But in the early twentieth century, the boom began to fade, as the gold began to dwindle and as most of the extracted wealth was sent out of the territory, with much of it going to the United States. The pullout was immediate. The Yukon population declined rapidly, and the level of social services and government presence began to shrink. Coates (1985:130 *passim*) notes that, among other things, Dawson lost its municipal charter and the Yukon territorial court shrank from three justices to one. Zaslow (1971:146) observed that the region "was reverting, through economic setbacks, from an advanced order of social development to one approximating more closely that of the primitive North." The later war boom, that of the Canol Pipeline and the Alaska Highway, again reduced the natives to a minority and threatened social and political structures (Whittington, 1985:61-62). Here, as in the example of the fur trade, the capitalist infusion precipitated a passive involution of the economy, leaving the Yukon a politically and economically underdeveloped region.

Two other examples will be touched upon only briefly. Both are concerned with the extraction of oil products in the arctic waters of the Beaufort Sea. During the nineteenth century, whaling was a highly profitable business in the arctic seas, though it tapered off towards the end of the century. Coates notes that during the period 1820-30, over 750 ships were in the North, capturing about 8000 whales. Later in the same century, during the period 1890-1900, only 58 ships ventured north and only 140 whales were captured (Coates, 1985:146). By the early twentieth century, the whaling industry had ended. The invention and use of synthetic oils, as well as the discoveries of petroleum and its increased use, brought the whaling industry into decadence. The whaling settlements of the North, in particular Herschel Island, fell into disuse. These settlements had previously impacted on the Inuit way of life, involving them in the whaling trade and affecting their social and political structure because of the white presence. With the decline of the whaling industry, a passive involution took place and the northern economy, of which the Inuit were the most significant part, became underdeveloped.

In the last two decades, the North has witnessed a new oil boom, this time in the form of petroleum in the Mackenzie River Valley and Delta, and in the Beaufort Sea. A similar path of underdevelopment took place. The large influx of capital and settlement again disrupted the indigenous way of life, altering the slower but more socially beneficial development that was taking place. Now, with oil prices dropping, many of the oil companies have withdrawn, leaving the native people high and dry in many cases. This is another example of a passive involution occasioned through capitalist involvement in the region. In accordance with Frank's model, underdevelopment is initiated at times when the ties between the metropolis and the satellite are strongest.

One of the foremost writers on the North today, Gurston Dacks, also discusses the colonial aspects of the North (1981:208-210). Dacks analyzes both political and economic colonialism. The first of these, political colonialism, takes two forms, *viz.*, constitutional and practical. The former refers to the complete constitutional dependence that the territories have on the federal government, while the latter refers to the limited input that the territories have in Ottawa. As Dacks notes, each territory has only one Senate seat and very limited representation in the House of Commons. The Yukon has one seat, while the Northwest Territories has two. Moreover, the political systems of the North are not indigenous, and they do not reflect the traditional values and political processes of the native people, although recently the Northwest Territories has moved in the direction of greater consensus government. The northern territories are also unable to set their own agendas, and local priorities often differ from those of the federal government. As McInnes has noted (1983), the chief priority of the federal government is the development of natural resources, with environmental preservation and the development of native cultures clearly secondary in importance. On the other hand, the territorial governments have generally given a higher priority to native development and land claims settlement and have focused a great deal of attention on the process of devolution, or the transfer of some currently federal powers to the provincial level, with the eventual goal of provincial status.

Economic colonialism is also a feature of northern society. Small markets and great distances limit the capacity for local production and economies of scale. As Dacks notes, northern development only takes place "when the South needs something the North possesses" (1981:209). Resources are extracted, with little of the revenue remaining within the northern territories. The trend towards foreign control of the resource industries further removed potential rents from the territories (Zaslow, 1971:284). The North, as a region that witnessed extensive capitalist intervention, now faces the underdevelopment of a modern economy due to passive involution. Much of the food and other necessities of life must be imported from outside the region at great cost, while resource revenues are lost to the South. Had the metropolis-satellite ties *not* strengthened, leading to the dominance of the capitalist economy over the traditional, the forms of underdevelopment seen today would not have taken place.

CONCLUSION

No single author has yet defined the realities and reasons underlying underdevelopment in the Canadian North. The topic is both complex and dynamic, making concrete or modular explanations difficult, if not impossible. But individual authors have contributed valuable pieces to the understanding of that mosaic which is the North. This paper has attempted to add yet another small piece, by indicating the value of theoretical and comparative study and by applying conclusions reached in other nations and regions to the North. The developmental model of André Gunder Frank, which examines regional, intrastate development and underdevelopment, has proven to be particularly useful in understanding the developmental problems of the Canadian North. Frank's model illuminated the origins of underdevelopment in the Brazilian North, an underdevelopment premised on the growth of capitalist intervention and the passive involution that arises from the decline of capitalism. The

Canadian North shares many features with that of its Brazilian counterpart, and indeed, the model seems to help explain the nature of underdevelopment in the Canadian North. Both Canada and Brazil remain as satellites of the world metropolis. Each nation also possesses its own satellites, of which some have followed the path of active involution, leading to development, while some have suffered underdevelopment due to passive involution. In this sense we find that satellites and regions occupying the same level in the worldwide metropolis-satellite structure are comparable, and that the causes of underdevelopment in the Brazilian Canadian norths are similar.

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REFERENCES

- ANTLER, S. 1979. The Capitalist Underdevelopment of Nineteenth-Century Newfoundland. In: Brym, R.J., and Sacouman, R.J., eds. *Underdevelopment and Social Movement in Atlantic Canada*. Toronto: New Hogtown Press. 179-202.
- BAER, W. 1965. *Industrialization and Economic Development in Brazil*. Homewood, Illinois: Richard D. Irwin. 309 p.
- _____. 1979. *The Brazilian Economy: Its Growth and Development*. Columbus, Ohio: Grid. 239 p.
- BUNKER, S.G. 1985. *Underdeveloping the Amazon: Extraction, Unequal Exchange, and the Failure of the Modern State*. Urbana: University of Illinois Press. 279 p.
- BURNS, E.B. 1980. *A History of Brazil*. New York: Columbia University Press. 579 p.
- CHILCOTE, R.H. 1974. A Critical Synthesis of the Dependency Literature. *Latin American Perspectives* 1(1):4-29.
- COATES, K. 1985. *Canada's Colonies*. Toronto: James Lorimer & Company. 251 p.
- DACKS, G. 1981. *A Choice of Futures: Politics in the Canadian North*. Toronto: Methuen. 226 p.
- EVANS, P. 1979. *Dependent Development: The Alliance of Multinational, State, and Local Capital in Brazil*. Princeton: Princeton University Press. 362 p.
- FRANK, A.G. 1969. *Capitalism and Underdevelopment in Latin America: Historical Studies of Chile and Brazil*. New York: Monthly Review Press. 344 p.
- _____. 1974. Dependence Is Dead, Long Live Dependence and the Class Struggle: An Answer to Critics. *Latin American Perspectives* 1(1): 87-106.
- FURTADO, C. 1963. *The Economic Growth of Brazil*. Berkeley and Los Angeles: University of California Press. 285 p.
- _____. 1970. *Economic Development of Latin America: A Survey from Colonial Times to the Cuban Revolution*. London: Cambridge University Press. 271 p.
- GRIFFITHS, F. 1983. Arctic Third World: Indigenous People and Resource Development. *Cold Regions Science and Technology* 7 (Special): 349-355.
- HAMELIN, L.-E. 1979. *Canadian Nordicity: It's Your North, Too*. Montreal: Harvest House. 373 p.
- HENSHALL, J.D., and MOMSEN, R.P., Jr. 1976. *A Geography of Brazilian Development*. London: G. Bell & Sons Ltd. 305 p.
- JENNESS, D. 1964. *Eskimo Administration: II*. Canada. Montreal: Arctic Institute of North America, Technical Paper No. 14. 186 p.
- KAHL, J.A. 1976. *Modernization, Exploitation and Dependency in Latin America*. New Brunswick, New Jersey: Transaction Books. 215 p.

- KATZMAN, M.T. 1977. *Cities and Frontiers in Brazil: Regional Dimensions of Economic Development*. Cambridge: Harvard University Press. 255 p.
- MAHAR, D.J. 1979. *Frontier Development Policy in Brazil: A Study of Amazonia*. New York: Praeger. 182 p.
- MCINNES, S. 1983. The Policy Consequences of Northern Development. In: Atkinson, M.M., and Chandler, M.A., eds. *The Politics of Canadian Public Policy*. Toronto: University of Toronto Press. 247-266.
- ORLOVE, B.S. 1977. *Alpacas, Sheep, and Men: The Wool Export Economy and Regional Society in Southern Peru*. New York: Academic Press. 1-19.
- ØRVIK, N. 1976. *Toward a Theory of Northern Development*. *Queen's Quarterly* 83(1)93-102.
- PETROBRÁS. 1987. *Petrobrás News* 109 (December). 8 p.
- RANDALL, V., and THEOBALD, R. 1985. *Political Change and Underdevelopment: A Critical Introduction to Third World Politics*. Durham, North Carolina: Duke University Press. 219 p.
- REIS, A.C.F. 1974. *Economic History of the Brazilian Amazon*. In: Wagley, C., ed. *Man in the Amazon*. Gainesville, Florida: The University Presses of Florida. 33-44.
- VANVOLSEM, W., and CREVELS, P. 1988. Canadian firms join search for Amazon gold. *Globe and Mail*, 29 January:B17.
- VELTMEYER, H. 1979. The Capitalist Underdevelopment of Atlantic Canada. In: Brym, R.J., and Sacouman, R.J., eds. *Underdevelopment and Social Movements in Atlantic Canada*. Toronto: New Hogtown Press. 17-36.
- WHITTINGTON, M.S., ed. 1985. *The North*. Toronto: University of Toronto Press and the Royal Commission on the Economic Union and Development Prospects for Canada. 53-108.
- WOZNIEWICZ, W.D. 1974. The Amazonian Highway System. In: Wagley, C., ed. *Man in the Amazon*. Gainesville, Florida: The University Presses of Florida. 291-314.
- ZASLOW, M. 1971. *The Opening of the Canadian North 1870-1914*. Toronto: McClelland and Stewart. 339 p.