The Political Economy of the Provincial Periphery: Analyzing the Avaricious Verities Underlying *Resources for Freedom* and the Uranium Industry in Northern Ontario

By Chuck Martin

Though the burgeoning of bipolarity in the post-World War II period brought with it lauded stability in the international system, 1 for the region of Northern Ontario, the emerging Cold War and the ensuing urgency by the United States (US) for strategic staples² proved portentous in its development. In 1952, US President Harry Truman disseminated the five volume findings of his presidential commission on natural resources deemed fundamental to ensuring US hegemony and sustaining its security in the Cold War.³ Referred to as *Resources for Freedom*, or simply the "Paley Report" after the chair of the commission William Paley, it identified twenty-two "key" natural resources the US required from foreign nations, thirteen of which were found in Canada: aluminium, asbestos, cobalt, copper, iron, lead, natural gas, newsprint, nickel, petroleum, sulphur, titanium, and zinc.⁴ The Paley Report, furthermore, identified a relatively novel commodity, uranium, as a prospective strategic staple to be procured from Canada.⁵ In the Cold War world of the 1950s, the exploration, exploitation, and exportation of nuclear commodities like uranium were of grave significance to the US. Alarmed that the former Soviet Union (USSR) had detonated its own atomic bomb in 1949 and was further advancing in its nuclear research program, the US sought to gain global nuclear supremacy by ruling over all known uranium reserves in the West. Both the US and USSR thought that by garnering larger arsenals of nuclear weapons than their adversaries they would be able to avert war. ⁶ The ensuing arms race, as Catharine Dixon suggests, resulted in a concomitant race for uranium.⁷

For Northern Ontario and for the community of Elliot Lake (i.e. created in 1955 as a consequence of the Cold War and of the formation of the uranium mining industry in the Algoma region), fervid efforts by the US to protect and procure strategic staples it designated to be vital to its national interests and, evidently, "to the needs of the free world," proved deleterious.⁸ The end of World War II and the postwar dominance of the US ushered in a period of rapid economic expansion in Canada characterized by nefarious foreign, though generally American, control of Canadian natural resources, the proliferation of Canadian "branch plants" of American companies, and dependent development restricted to natural resource sectors.⁹ The release of *Resources for* Freedom fostered a boom in Canada's natural resource industries and an influx of US firms anxious to develop them and, as Wallace Clement and Glen Williams avow, effectively confirmed Canada's "addiction" to natural resource exports as a form of development. 10 For Canada, for Northern Ontario, and for Elliot Lake particularly, the Cold War created a chilly climate of uncertainty. But for Northern Ontario, instability is, ostensibly, its most pertinacious feature and it is, fundamentally, a function of its vulnerability within the Canadian political economy.

Once ensconced solely in pernicious core-periphery connections within the provincial state,¹¹ the advent of the Cold War, Canada's tacit commitment to the Cold War, America's demand for strategic staples, and Canadian acquiescence to incoming American capital all contributed to the creation of new conditions of dependency for Northern Ontario. Historically, however, Northern Ontario's subsistence has been based on the exploitation of staples and it has proved pivotal in the evolving political economy of North America.¹² As Geoffrey Weller argues, from the outset the North has been

ensnared in an enduring staples trap entailing natural resource extraction, fragile single-industry towns (e.g. Cobalt, Timmins, Kirkland Lake), susceptibility to the vicissitudes of boom and bust fluctuations in foreign commodities markets, and the conferring of substandard living conditions for its inhabitants as compared to Southern Ontarians. As Matt Bray and Ashley Thomson insist, instability and regional disparity are abiding traits of the mining towns of Northern Ontario since World War II. It is thus the intent of this essay to elicit the causes of this instability in the North by examining its integral role in generating strategic staples during the Cold War following the release of *Resources for Freedom* and by evaluating its poignant position within the Canadian political economy.

By utilizing the neo-Innisian variant of the new Canadian political economy (NCPE), ¹⁵ it is evinced in this essay that while *Resources for Freedom* did not induce the initial exploitation of the Northern frontier (for exploitation within the region flowed from the fur trade and followed the construction of the CPR in the 1880s to include lumbering, mining, and hydro-electric generating), the Paley Report did foment the vociferous pursuit of strategic staples in the North in the postwar period which exacerbated existing subjugative and subordinating relations with the federal and provincial governments and brought the North, as a "staples satellite," into the orbit of the US. By exploring the case of Elliot Lake and its fluctuating uranium industry in the Cold War and after its cessation, it is revealed that the policies emanating from the Paley Report pertaining to uranium were guided by a pragmatic and avaricious intent which had a destructive consequence for the community. By exploring the political economy of the uranium industry in Elliot Lake, it is revealed, moreover, that exploitation of the North was not restricted solely to US interests. Indeed, it demonstrates that the Canadian and

Ontario governments both provided the impetus for further dependency in the North and in the community of Elliot Lake.

The Canadian government sought, through the Atomic Energy Control Board (AECB), to encourage the growth of the uranium mining industry to stimulate uranium sales abroad and, also, sales of its lucrative CANDU (Canadian Deuterium-Uranium) nuclear reactors. The CANDU reactors used less expensive "natural uranium" rather than the more expensive "enriched uranium" which competing American made reactors relied on, and which gave the CANDU a comparative advantage globally. 16 By assuring that responsibility for the uranium industry fell within the auspices of the AECB, given uranium's strategic portent, it was largely the supposed sagacity of federal government policy which guided the development of the industry in Elliot Lake, if not the community itself. Undoubtedly, the direction of this development ensured that the interests of the federal government were protected. This further confirms Eric Kierans' rather contentious thesis that, contrary to Section 92A of the 1867 Constitution Act (i.e. Exclusive Powers of Provincial Legislatures: Non-Renewable Resources, Forestry Resources, and Electrical Energy) which stipulates that provinces possess the exclusive right to enact laws regarding the exploration, development, conservation, and management of natural resources in their province, ¹⁷ "[r]esource policy has been dictated by the federal government." The actions of the Ontario government, similarly, were less than altruistic. Regardless of the fact that regulation of uranium mining was within the powers of the federal government, the provincial government fought for control over the mines in Elliot Lake to assure its authority over the mining industry in the province, and to satiate its affinity for natural resource royalties. 19 Driven by avarice, the policies

of the provincial and federal governments were grossly inadequate and proved harmful to the health and safety of miners in Elliot Lake.²⁰

Thus, by focussing on the political economy of Northern Ontario, and of Elliot Lake and its uranium industry in the post-Paley Report period particularly, this essay demonstrates that the deepening of dependency in Northern Ontario during the Cold War was the result of factors external to the region (e.g. systemic constraints, the US-USSR arms race, rising US hegemony in the West, and the Canadian and Ontario governments' political and economic goals) and the ensuing imbalanced trade of strategic staples.

This essay begins by describing the NCPE and the neo-Innisian approach. The Paley Report is then examined within the context of the Cold War. This essay concludes with a study of the uranium industry in Elliot Lake. This essay affirms, finally, that the price of stability and security in the Cold War era has been instability in the communities of Northern Ontario and insecurity in its strategic staples sector. In the Cold War and post-Cold War epochs, the consequences of Elliot Lake's "dependent development," have been costly.

The Need for a Neo-Innisian Interpretation

As Björne Hettne attests, political economy as a concept is both illustrious and elusive.²² It is, Hettne insists, both holistic and specific.²³ Moreover, it is an "ideological battlefield" that is "compatible with widely differing ideological and theoretical perspectives or paradigms, which further adds to its elusiveness."²⁴ Despite this, there exists consensus that the primary concern of political economy still constitutes

explanations of the interactions of states and markets.²⁵ As Robert Gilpin argues in *The Political Economy of International Relations*,

[w]ithout both the state and the market there would be no political economy. In the absence of the state, the price mechanism and the market forces would determine the outcome of economic activities; this would be the pure world of the economist. In the absence of the market, the state or its equivalent would allocate economic resources; this would be the pure world of the political scientist.²⁶

Political economy explores how the state and its concomitant political processes influence the production and distribution of wealth, as well as how political decisions and self-interests influence the location of economic activities and the distribution of the costs and benefits of these activities.²⁷ Conversely, political economy explores the effects of markets and other economic forces on the distribution of power across states and non-state political actors.²⁸ For Gilpin, therefore, political economy refers to "the reciprocal and dynamic interaction of the pursuit of wealth and the pursuit of power."²⁹ In elucidating an understanding of the development of the uranium industry in Elliot Lake, identifying the collision and collusion of political and economic forces is thus fundamental. It is the intent of this essay to utilize the neo-Innisian staples approach of the NCPE in its analysis.

Though pioneering political economy theory from Canada, from the 1920s to the 1950s, garnered tremendous scholarly praise, by the 1960s, many of its main tenets had been rejected and it had been abandoned by many Canadian scholars. Following the publication of the findings of the federal government's task force on foreign ownership in 1968 (i.e. the Watkins Report) and the publication of Kari Levitt's *Silent Surrender: The Multinational Corporation in Canada* in 1970, however, a nationalistic political economy re-emerged. By the late 1970s, the NCPE had begun building upon (and dramatically

renovating) the theories posited by the initial progenitors of the political economy approach in Canada, H.A. Innis and W.A. Mackintosh. As Howlett and Ramesh attest in *The Political Economy of Canada*, the revival of the staples school by the NCPE throughout the 1970s and 1980s (i.e. in a scholarly climate shaped by anti-establishment civic activism, the Vietnam War, anti-colonial nationalism in the Third World, and the proliferation of multinational firms) was a function of the augmented nationalism and cynicism engendered in that age.³² Disenchantment with the reigning liberal and socialist paradigms within political economy provoked interest in alternative analyses and a rediscovery of the staples approach conceived in the 1930s by Mackintosh and Innis.³³ Distinguished and lauded for their varying optimistic (i.e. Mackintosh) and pessimistic (i.e. Innis) evaluations of Canadian development, though later chided for their predominantly descriptive, deterministic, largely atheoretical writings, the political economists reviving these traditions were wary not to reify the mistakes made by the forefathers of the staples approach whilst venerating their legacies.

In his essay "Whither the New Canadian Political Economy?," Wallace Clement concedes that the new political economy improved upon the old political economy through its recognition of the benefits of the dialectic of interdisciplinary interactions and polemics and that its prevailing diversity and vibrancy are a function of its reforms of Innis' eminent staples thesis, its modification of the dependency paradigm for the Canadian case, and its augmented class consciousness.³⁴ As Clement affirms, the new political economy differs from the old political economy in that it is not deterministic and it is not wholly descriptive.³⁵ The new political economy does not suffer from the determinism of the old political economy because it is more focussed on, and more

informed by, human agency, that is, the choices and decisions made by political, social, and economic actors and their consequences.³⁶ Human agency is defined historically and territorially and is mediated through cultural, ideological, social, and technological factors.³⁷ The NCPE's focus on the concept of human agency conveys the belief that consequences are not predetermined or inevitable. But, the definition and mediation of these choices and decisions indicate that political, social, and economic factors considerably structure these consequences.³⁸ Divergent views within the NCPE (e.g. class-based analyses versus dependency-based analyses) give varying value to the weight of agency and structure in determining phenomena.³⁹ As Neil Bradford and Glen Williams assert, one of the fundamental flaws of the old political economy was that it was insufficiently informed by considerations of the political and social forces that influenced economic consequences, that is, those forces influencing state and business policies. 40 The goal of the new political economy, therefore, is to ensure that the influences of political and social factors are not marginalized from interpretations following strictly economic logic thus proffering more thorough and rigorous analyses.⁴¹ The new political economy aspires to tell the story of the political agendas underpinning economic processes and to re-assert the importance of the social.⁴² For the practitioners of the new political economy, the economic might create the context, but the political, social, cultural, and ideological write the text of history. 43 This text ascribes considerable freedom for human agency and action within the confines of the structures which the NCPE strives to identify.⁴⁴

As Clement and Williams avow in *The New Canadian Political Economy*, the practice of the revived NCPE involves a historic, holistic, nationalistic, materialistic, and

macro-level analysis of society and the political, social, cultural, and economic connections that inexorably link that society. Like the old political economy, the new political economy is spatially sensitive, that is, it pinpoints the subject under study territorially through relational linkages with other territories. Similarly, it situates Canada internationally within a system of international trade and recognizes the structural distortions the staples trap, boom and bust cycles, dependency, and uneven development have had on domestic society. The NCPE is comparative in its methodology and is increasingly being integrated within a wider international political economy perspective.

The staples approach, as Gordon Laxer explains, postulates four formative "analytical assumptions:" 1) that the key to unlocking the history of Canada's evolution is discerning the export commodity that the economy depends on (e.g. the abiding staples sagas of fish, furs, timber, wheat, minerals, and hydro-electricity); 2) that the history of Canadian political life is influenced by its economy because power and wealth are concentrated in the hands of the industrializing and governing elites who serve as envoys in the periphery for foreign interests in the centre; 3) that its inductive historicism is integral to understanding the uniqueness of Canada's development which liberal and social theories cannot account for; and 4) that geography, or more precisely, the way in which federal and provincial governments intervened throughout history to overcome geographic constraints, is a determining factor in Canada's formation as a nation. 49

Students of the neo-Innisian and neo-Mackintoshian schools, however, have disparate interpretations of these analytical assumptions.

Neo-Mackintoshians, such as M.H. Watkins, ⁵⁰ are cognizant that some staples linkages⁵¹ (e.g. US investment in the natural resource sector) can cause adverse developments in Canada (e.g. a branch plant economy and a reliance on borrowed technology), they are optimistic that through government intervention the worst effects of these linkages (e.g. distortions such as uneven development) can be mitigated and that staples can still form the basis of prosperity. 52 Neo-Innisians, however, do not share this view. Howlett and Ramesh explain that the pessimistic perspectives of the neo-Innisian theorists derives from their efforts to coalesce the writings of Innis with the agenda of Latin American Marxist-Leninist dependency scholars who argued that imperialism perpetuated the uneven development of core and periphery countries.⁵³ Originating from the writings of Andre Gunder Frank and of Fernando Henrique Cardoso and Enzo Faletto, notions of periphery dependency or of underdevelopment proved useful for those reinterpreting Innis' work. Neo-Innisians, however, tend to repudiate the Marxist predilections of the Latin American dependency theorists. As Clement and Williams concede, "unlike dependency theory, the staples approach was not rooted in neo-Marxist models of socio-regional exploitation."54 Given the divergent dependent development in the Canadian case, neo-Innisians argued that indigenous analyses require unique, indigenous insights which, though not Marxist, are still socialist. 55 In forming these indigenous understandings of Canadian development, the neo-Innisians manifest the following four traits: 1) the advocacy of economic nationalism and the fostering of advanced manufacturing in Canada; 2) that foreign investment, from the US especially, has truncated Canada's evolution as an export trader; 3) they forecast a rather gloomy ideology suggesting that this truncated trade and subsequently stunted economy has

created a climate of acquiescence in Canada; and 4) they retain an abiding fear of American dominance of Canada and assimilation.⁵⁶ Fundamentally, NCPE informed by neo-Innisianism affirms that dependency on the exploration, exploitation, and subsequent exportation of staples has inhibited independent industrial development in Canada.⁵⁷

While the study of staples has long proven pivotal to the study of the Canadian political economy, the old and the new schools of political economy differ profoundly in their analyses. As Clement asserts, "[s]taples are no longer the explanation, but the object of investigation." Unlike the old staples thesis tradition, the NCPE focuses on the social relations of production (i.e. class) and the power relations of political actors (i.e. class and state) and it is enriched as a result. The new political economy may embody "uncommon sense," as Wallace Clement and Leah Vosko claim, for it is novel in its efforts to repudiate the common sense belief that certain institutions (e.g. the market) and social and economic systems (e.g. capitalism) are irreducible rather than relational and invariably in a state of flux. The NCPE aims to "trouble" the prevailing paradigms, particularly the neoliberal paradigm and its project. Notwithstanding, the integral goal of the NCPE remains understanding "the economy and market forces so that political and social interventions can direct economic processes."

For an interpretation of the Northern frontier, particularly one purporting to interpret the political economy of Elliot Lake, the neo-Innisian variant of the NCPE is enticing because it takes into consideration, albeit pessimistically, that a critical cause of dependent development in the periphery are the "conscious decisions" of collusive state, industrial, and societal elites to permit the vicissitudes of the international political economy and of foreign interests to impede the evolution of vulnerable communities in

the North. 63 And, as H.V. Nelles, a noted neo-Innisian, 64 asserts, in Ontario, collusive relations are a prevailing characteristic of state and business interactions. 65 Neo-Innisian analyses are also inimitable because they emphasize the historic elements of dependency found in the periphery and the internal and external influences from which they derive. Unlike dependency theory, though, neo-Innisian NCPE does not get bogged down in the mire of Marxist polemics. 66 By rejecting many Marxist tenets, neo-Innisian interpretations could focus on formulating understandings of dependency which were unique to the Canadian case and remained sufficiently socialist and empathetic. Doubtlessly, this ensures a more thorough and rigorous investigation. In interpreting the North, furthermore, neo-Innisian, staples-based assessments of the Northern frontier are more favourable because neo-Mackintoshian, liberal analyses tend to trust in the ostensible ability of the state to assure auspicious development which is simply unwarranted in the study of the uranium industry in Elliot Lake. ⁶⁷ Neo-Innisian analyses. finally, give significance to the nefarious role of foreign investment (i.e. FDI from the US) in exploiting staples regions while liberal assessments assume that this is merely a problem area that may be mollified by state and market mechanisms. As the case of Elliot Lake reveals, however, the systemic constraints of the Cold War, coupled with the voraciousness of the US government to hunt down and gather its strategic staples, gives evidence of the negligible role that federal or provincial governments possessed in impeding US goals for hegemony, security, and stability. As Resources for Freedom manifests, the US was not about to be thwarted in its efforts and it was not worried what effects those efforts would inflict on Northern Ontario.

Resources for Freedom and Failed Promises

On 1 July 1952, the Paley Report was presented to US President Harry Truman. For the US government, *Resources for Freedom* represented not only a study of the strategic staples it required to fuel the engines of its Cold War machinery, it represented imperious, ideological doctrine. As articulated in the Paley Report:

The United States, once criticized as the creator of a crassly materialistic order of things, is today throwing its might into the task of keeping alive the spirit of Man, and helping beat back from the frontiers of the free world everywhere the threats of force and of a new Dark Age which rises from the Communist nations. In defeating this barbarian violence, moral values will count most, but an ample materials base will support them. Indeed, the interdependence of moral and material values has never been so completely demonstrated as today, when all the world has seen the narrowness of its escape from the now dead Nazi tyranny, and has yet to know the breadth by which it will escape the live Communist one – both materialistic threats aimed to destroy moral and spiritual man. The use of materials to destroy or to preserve is the very choice over which the world struggle today rages. ⁶⁸

Its intrinsic jingoism is evident throughout the five volume tome. Note, for example, the following passage:

Americans have been nurtured on the romantic notion that technology will always come to the rescue with a new miracle whenever the need arises; after all, it gave us synthetic rubber and the atomic bomb in a hurry when the need was urgent. But isolated solutions of problems relating to individual materials are no substitute for a broad frontal attack which technology needs to make on the materials problem as a whole.⁶⁹

Its doctrine conceded, *Resources for Freedom* endures as the embodiment of the natural resource policy of the US for the Cold War period. Overtly avaricious, the Paley Report advocated obstinacy to the "least cost" principle of procurement, faith in free enterprise, and an interventionist and nationalist state. To increase investment in strategic staples sectors, the Paley Report recommended "concerted action by international banks,"

development agencies, and tariff negotiators" and, also, "US governmental encouragement of investment by US resource companies."⁷² To increase the exploitation of foreign natural resources by US firms, it deduced that "the American state should lower tariffs on raw materials, facilitate both import and domestic production through long-term government purchasing contracts at premium prices to American companies, and subsidize production through loans, guarantees of loans, and special tax consideration for depletion, expensing, exploration, and expansion of productive capacities."⁷³ Finally, the Paley Report perceived Canada not only as a "Western Hemispheric," strategically contiguous source for some of its strategic staples, but also as a "friendly" and "non-nationalist" country. 74 The United States' choice of Canada for certain staples was partly "dictated" by "political considerations," according to the Paley Report (e.g. following World War II, the US government sought nickel from INCO's operations in Sudbury exclusively, rather than from Nicaro in Cuba, the "only other free world nickel supply" during the war). ⁷⁵ Evidently, the United States believed that Canada was so obsequious and anti-nationalist that its politicians would actively help, not hinder, US aspirations. 76 Experiencing negligible or no resistance at all from Canadian politicians or the general public, American capital was able to command Canada's strategic staples sectors in its interests.

Following the release of *Resources for Freedom*, a huge wave of investment in natural resources occurred in Canada and, in its wake, an influx of US firms eager to exploit the resources for their own gain.⁷⁷ For the North, *Resources for Freedom* ushered in an era of unfettered prosperity in the 1950s and 1960s. Though it was thought that this prosperity would persist, the buoyancy promoted by the Paley Report ultimately proved

artificial and fleeting. The Paley Report prompted policies that promised prosperity for the uranium industry by promising high prices and long, privileged contracts with the US government. This provided the impetus for the rapid exploitation of uranium in Elliot Lake which the US ravenously stockpiled. On 6 November 1959, however, the US rescinded its promises and reported that it would not renew its contracts for Canadian uranium. 78 With the faltering of the Bretton Woods framework in the late 1950s and early 1960s. 79 the US was no longer interested in financing the expensive cost-plus system of uranium procurement used to provoke the rapid expansion and exploitation of the uranium industry in Elliot Lake. Under intense pressure from US uranium firms to shift from high cost, high grade foreign uranium to low cost, low grade domestic uranium, the US government began negotiations with the Canadian government to briefly prolong or "phase-out" its contracts to 1966 to permit time to "rationalize" the uranium mines in Elliot Lake. 80 The loss of US government demand, the ensuing glut of uranium, and the fact that the nuclear energy generating industry was still in its infancy which meant that there were few alternative markets for uranium, all forced the uranium prices to fall and devastated the uranium industry and the community of Elliot Lake. Despite the portentous role of the US in producing dependency in the North, Elliot Lake was wounded, also, by both the federal and provincial governments. Both levels of government permitted these injurious US policies to occur because both Ottawa and Toronto hoped to elicit some benefit from the process of exploitation. Resources for Freedom promised opportunity and prosperity, 81 but for the North, and for Elliot Lake specifically, these promises proved empty. Instead it fostered a vociferous natural

resource exploitation which further entrenched the North in its subordinate position as a dependent staples hinterland within the province.

Elliot Lake Survives the Booms and Busts

Judging from the Highway 17 and Highway 108 junction,⁸² it is evident that the development of Elliot Lake was an afterthought in the evolution of the province. While Highway 17 runs east to west, Highway 108 runs north then lunges west toward Elliot Lake. Constructed in 1954, the road was carved out of the forests and rocks following an old logging road. Until the late 1950s, the road was too dangerous to traverse without a winch (e.g. muskeg, bogs, rocks, dangerous slopes) and Caterpillar tractors were often used to help trucks hauling drilling rigs and construction gear for the mines to make it through.⁸³ The road was not intended to be aesthetic, it was intended to facilitate the exploitation of the region's uranium as rapidly as possible. As Earle Gray intimates,

Elliot Lake was a roaring, brawling, booming mining town that burst overnight on the quiet solitude of the Algoma basin. The Atomic Energy Commission wanted the uranium in a hurry. Men, money, and machinery drove in on a narrow, twisting road, quickly pushed through in 1954... Someone calculated that in 1955 the big trucks and tractor-trailers that carried in machinery and construction material rumbled along the new road at the rate of one every seventy-two seconds. Those that did not make the hair-pin bends wound up in the ditch. The road was a sheet of ice in winter, a sea of mud in the spring; drivers swore that it was punched through by a catskinner chasing a jackrabbit. It was not uncommon to require a full day to drive the 30 miles to Elliot Lake.

The road improved, however, over time. Today it is a fine road, recently resurfaced, 85 and the fact that traffic is so infrequent ought to ensure that it stays smooth for some time yet. At the Highway 17 and Highway 108 intersection there reigns, or rather languishes, a provincial government inspection station for ensuring that the laden trucks which

served the uranium industry and used to punish the lowly road were operating within the rules of Ontario's Transportation Act. Regardless, the end of uranium mining in 1996 has meant that the region is largely ignored now and the inspection station usually stays closed. Proceeding north along Highway 108, the undulating road eventually reveals that there is only one settlement on this route: Elliot Lake. When in Elliot Lake, however, once the "largest single-industry town in Ontario," 86 the vicissitudes and verities of lives devoted to toiling in the uranium industry are easily evinced. A defiant monument depicting an atomic molecule reminds residents of the failed industry, while the town layout reminds them of the failed efforts by provincial officials to create a "planned community" in anticipation of the families drawn by that industry. Presently, though, the stainless steel structure has lost most of its lustre and the already confusing array of curving and circling streets is made even more confusing by the fact that wherever one looks, rows of vacant homes, all similar, have "For Sale" signs in their front yards. While the Elliot Lake of today is not the same as the Elliot Lake of yesterday, it remains reliant on relations of dependency.

Volume IV of *Resources for Freedom*, "The Promise of Technology," identified the integral role of uranium for nuclear energy and nuclear weaponry for the US government.⁸⁷ The ensuing rush, resulting from the Paley Report, to quickly find uranium for the US nuclear weapons program, led prospectors to Northern Ontario. By 1955, the discovery of high grade uranium (e.g. 0.09 percent U308) in the Elliot Lake region had provoked the development of a town to support the burgeoning uranium mining industry. On 1 September 1955, the Ontario government passed an Order-in-Council establishing the "Improvement District of Elliot Lake." Within only three

years, the most pre-eminent uranium mines in Elliot Lake's history were fully operational: Denison in 1956 and Rio Algom in 1958.⁸⁹ Workers flocked to Elliot Lake to work in the mines and, for a brief while, the town and its people prospered. In Table One, however, it is evinced that within the next twenty years, the uranium industry and, consequently, the community of Elliot Lake experienced tremendous turmoil. As Table One demonstrates, uranium production in the province totalled only \$487,054 in 1955, but by 1956 this total had escalated to nearly \$9.4 million. A mere three years later, in 1959, uranium production peaked at \$268.5 million per annum.

TABLE ONE: Uranium Mining in Ontario, 1955-1975⁹⁰

Year	Uranium Value (\$)	Uranium Produced (Kilograms)
1955	487,054	N/A ⁹¹
1956	9,361,867	411,231
1957	82,940,000	3,615,383
1958	210,149,700	9,058,254
1959	268,529,993	11,562,993
1960	211,983,533	8,978,236
1961	151,060,610	6,790,511
1962	118,283,081	5,808,312
1963	102,951,146	5,792,535
1964	63,606,944	5,354,695
1965	47,234,892	3,095,773
1966	42,758,135	2,665,158
1967	41,418,268	2,472,655
1968	39,163,777	2,431,905
1969	38,750,506	2,789,676
1970	40,687,000	3,028,548
1971	N/A^{92}	3,127,956
1972	N/A	3,841,454
1973	N/A	3,590,165
1974	N/A	3,645,503
1975	N/A	4,793,993

The value of uranium produced in Ontario, however, diminished in the ensuing years from \$212 million in 1960 to just \$41 million in 1970. Curiously, by 1971, the Ontario government stopped reporting the value of uranium extracted in the province. Beginning in the 1970s, though, uranium mining was in precipitous decline and, along with it, Elliot Lake's prospects.

As Ciaran O'Faircheallaigh affirms, uranium mining began in earnest in Northern Ontario in the mid-1950s and, through varying strategies suggested by the Paley Report, the US government offered inflated prices for uranium in order to quickly bring the exploitation of this strategic staples sector to its full capacity. The US government then began to hoard its uranium. This hoarding distorted the development of the uranium industry in Elliot Lake by establishing artificially high demand for uranium. US firms, instruments of the state and of the interests of its elected officials, then used the hoarded uranium surplus to induce "demand-side discipline" to remove the leverage which scarce strategic staples might have given to the mines generating uranium in Elliot Lake. As Clement and Williams concede, these avaricious actions emanate from the advice offered by *Resources for Freedom* and formed a critical part of America's militaristic and economic control over Canada. Moreover, these policies and practices belie America's ostensible advocacy of uninhibited, unimpeded, liberal markets and reveals the salience of American interventionism in the uranium industry particularly.

By the end of the 1950s, US military needs were met and, by the early 1960s, the US would not renew contracts for uranium from Canada. The uranium industry subsequently found itself with a surplus and prices, not surprisingly, plunged. To protect it from further decline, the federal government intervened and organized a stockpiling

program until demand rejuvenated in the late 1960s. 97 While the first boom and bust in Elliot Lake was based on uranium for nuclear weapons, its second boom and bust was based on uranium for nuclear reactors. 98 By the 1970s, uranium prices rose rapidly. O'Faircheallaigh argues that the augmented price for uranium was a function of four external factors: 1) the construction of nuclear reactors in the US and Canada which were previously delayed (e.g. the Pickering nuclear power plant became operational in 1971); 2) the US government's decision to raise the assay amount of uranium (e.g. to use enriched uranium) utilized by electric utilities to meet its new nuclear reactor requirements; 3) the introduction of "fixed commitment enrichment contracts" which required utilities to ensure specific quantities of uranium at specific times; and 4) the oil crisis of the 1970s increased energy costs which improved the economics of nuclear energy generating while supporting optimistic market speculation of uranium demand.⁹⁹ Another factor influencing the rapid rise of uranium in the early 1970s was, as David Leadbeater indicates, the "Canadian government's collusion with mining corporations in an illegal international mining cartel." Though the cartel, involving the governments and uranium mining firms from Canada, Australia, France, and South Africa, lasted less than two years (1972-1974) due to the disunity within its ranks and their proclivity to try to undercut one another, it did effectively induce increases in uranium prices before dissension and the onslaught of anti-competition litigation destroyed it. 101

In the late 1970s, with more nuclear reactors on-line in Ontario, high demand for uranium, and uranium prices rapidly rising, the former Ontario Hydro signed two significant long-term, cost-plus contracts with Elliot Lake's two uranium mining companies, Denison and Rio Algom, to produce and provide uranium for the province

until 2012 and 2020 respectively. Once more, Elliot Lake was booming. But growing economic and public pressure globally against nuclear energy prompted revisions by governments of nuclear policies and of the future of nuclear energy generating facilities. Uranium prices subsequently plummeted by the 1980s. A downward spiral persisted from the 1980s to the present as a result of over-estimation, over-production, and falling prices. The viability of the uranium industry was unlikely. As the fortunes of the uranium industry dwindled in response to diminishing demands, so too did the fortunes of those of the town of Elliot Lake. In 1990, Ontario Hydro terminated its contracts with Denison and Rio Algom and Elliot Lake endured huge layoffs. In 1992, the "loss of 2,500 mining jobs, the equivalent of over one million jobs in Metro Toronto" represented a deletion of 70 percent of Elliot Lake's workforce." As George Farkouh, Mayor of Elliot Lake, relates, "this disaster hit with tremendous force." In 1996, the last uranium mine in Elliot Lake, the last uranium mine in Ontario, Stanleigh Mine, closed. 105 However, neither Resources for Freedom nor the United States' ensuing uranium procurement policies are solely to blame for the falling fortunes of Elliot Lake. Federal and provincial governments also had a stake in creating conditions, or syndromes, of dependency in this Northern Ontario town.

For example, as manifest by Brian Walker, federal and provincial policies pertaining to the regulation of health and safety standards in the uranium mining industry in Elliot Lake were guided by pragmatic self-interest which inflicted harmful effects on mine workers and on the community as a whole. Walker suggests that though the provincial government would typically take responsibility for the development of natural resources within its territory, the federal government was mandated authority over the

evolution of the uranium industry in Elliot Lake by the 1946 Atomic Energy Control Act which stipulated that it was a strategic staples sector which was critical to the national interest and to the military security of the nation. 106 The federal government, however, proved negligent in safeguarding the health and safety of miners in Elliot Lake because it devoted itself, instead, to fulfilling its self-interests in promoting uranium sales to the United States and Great Britain and, also, in promoting the sale of its lucrative CANDU nuclear reactors. 107 Uranium mining during the most intensive period of exploitation, the 1950s, adversely affected the miners because health and safety standards were relaxed in an attempt to expedite production and ensure delivery deadlines during the urgent beginnings of the Cold War. 108 The AECB was also negligent in assuring that high health and safety standards were met because the early nuclear industry in Canada comprised a "closed, tight-knit community." Consequently, Walker concedes, the policies of the AECB began to mimic the interests of the actors and firms it sought to regulate rather than the interests of the workers it was legislated to protect. 110 When the federal government transferred its regulatory responsibility in the field of health and safety to the provincial government in the 1970s, it unfortunately followed the same fateful and harmful path. The Ontario government's interests in uranium mining in Elliot Lake, and in mining in general, were relegated to the role of promoting the industry and of procuring the royalties that development brought. 111 As Walker avows, the Ontario government devoted only a small portion of its administrative capacity to auditing and monitoring health and safety standards in the mines of Elliot Lake. 112 Toronto's interests in Elliot Lake, like Ottawa's were essentially economic and this is evident in the elevated

levels of radiation and incidences of silicosis which persisted in the mines in Elliot Lake throughout its history and provoked successive "wildcat" strikes in protest.¹¹³

Conclusion

Through its utilization of the neo-Innisian variant of the NCPE, this essay has demonstrated that though the emerging bipolarity in the post-World War II period provided the impetus for relative stability in the international system, for the region of Northern Ontario, the Cold War and the ensuing urgency by the US to obtain strategic staples caused instability and proved portentous in its historical development. An analysis of the ravenous and interventionist natural resource policy of the US during the Cold War, embodied in *Resources for Freedom*, demonstrated that America's advocacy of ostensibly unobstructed liberal markets was conditional upon whether or not it was protecting and promoting its specific interests. The Paley Report advised US firms and elected officials to pursue a strategy urging artificial inflation and hoarding of strategic staples which would distort or subvert the market and ensure reduced prices and secure supplies of critical natural resources. As the above case study of the political economy of Elliot Lake and its uranium industry reveals, the Cold War, the Paley Report, and the avaricious policies of the American, Canadian, and Ontario governments all levied a detrimental political, social, and economic cost on the residents of Elliot Lake and engendered dependency and uncertainty. The self-interested motivations of politicians in both Toronto and Ottawa throughout the evolution of the uranium industry in Elliot Lake is evinced by the fact that neither proved effectual in reforming health and safety

standards for the miners because they were both preoccupied with promoting revenue generating endeavours. Finally, this essay affirmed that the price of stability and security in the Cold War era has been partially paid for by Northerners through instability in its communities and insecurity in its strategic staples sector. Vestiges of the Cold War and its pernicious legacy of dependency on strategic staples persist in the provincial periphery in the post-Cold War period.

Notes

¹ Cold War "stability," as a consequence of systemic constraints, is critical to the interpretations of the structural realist school of international relations theory. As Kenneth Waltz avows, the emergence of nuclear weaponry and the ensuing "structural shift" from multipolarity to bipolarity endures, for him, as the "biggest changes" in the international system in the post-World War II period. Similarly, John Mearsheimer states that stability from 1945 to 1990 (i.e. the "long peace") was a function of bipolarity, nuclear weaponry, and military parity between the US and the USSR. Kenneth Waltz, "Reflections on *Theory of International Politics*: A Response to My Critics," *Neorealism and its Critics*, Robert O. Keohane, Ed. (New York: Columbia University Press, 1986), 327; John J. Mearsheimer, "Back to the Future: Instability in Europe After the Cold War," *International Security*, 15:1 (Summer 1990), 10-11

² In this essay, the definition of "staples" refers to, as Wallace Clement and Glen Williams insist, those natural resources exploited for export (e.g. nickel, titanium, uranium). The tag "strategic staples," I insist, refers to those natural resources exploited for export that possess profound military import and are, as David Haglund argues, deemed "essential to the national security (either in the narrow military sense or in the wider understanding that equates national security with economic well-being)" and are "traded internationally." Wallace Clement and Glen Williams, "Resources and Manufacturing in Canada's Political Economy," *Understanding Canada: Building on the New Canadian Political Economy*, Wallace Clement, Ed. (Montreal and Kingston: McGill-Queen's University Press, 1997), 46; David G. Haglund, "The New Geopolitics of Minerals: The Changing Significance of Strategic Minerals," *World Politics: Power, Interdependence, and Dependence*, David G. Haglund and Michael K. Hawes, Eds. (Toronto: Harcourt Brace Jovanovich, 1990), 415

³ As asserted in *Resources for Freedom*, the commission was brought together to investigate the following question: "Has the United States of America the material means to sustain its civilization?" America, *Resources for Freedom: Summary of Volume I* (Washington: The President's Materials Policy Commission, 1952), 1; Melissa Clark-Jones, *A Staple State: Canadian Industrial Resources in Cold War* (Toronto: University of Toronto Press, 1987), 13

⁴ Clement and Williams, "Resources," 49

⁵ In Volume IV of *Resources for Freedom*, "The Promise of Technology," the commission identifies that the "chief use" of uranium, plutonium (i.e. its nuclear derivative), and thorium from the US and Canada was for military and energy generating purposes. The commission concluded, however, that the "whole field of nuclear energy is in its infancy" and though it will "some day become an important factor in the economy of the world" for the following twenty-five years its "total effect on the energy picture may be limited to military use." America, *Resources for Freedom: The Promise of Technology, Volume IV* (Washington: The President's Materials Policy Commission, 1952), 20

⁶ T.E. Vadney, *The World Since 1945*, Second Edition (Toronto: Penguin, 1992), 418-419

26

⁷ Catharine Dixon, *The Power and the Promise: The Elliot Lake Story* (Elliot Lake: Gillidix, 1996), 20

⁸ America, Resources for Freedom: Summary of Volume 1, 1

⁹ Clement and Williams contend that the end of the Second World War and the ensuing rise of US hegemony in the West in the postwar period was critical in determining Canadian dependency. For example, they demonstrate that Canadian control of natural resource industries declined from 62 percent in 1946 to 30 percent in 1957. Clement and Williams, "Resources," 49

¹⁰ Ibid, 49

¹¹ In *The Politics of Development*, H.V. Nelles proves that, prior to World War II, the rise of Ontario, and the ascent of Toronto as its political, social, cultural, and economic core, was rooted in avaricious and interventionist provincial policies and collusive relations between provincial politicians and industrialists which sought to subjugate Northern Ontario for its staples for the benefit of Southern Ontario manufacturing and varying fiduciary interests. H.V. Nelles, *The Politics of Development: Forests, Mines, and Hydro-Electric Generating, 1849-1941* (Toronto: Macmillan, 1974), ix, 489-495

¹² Provincial government statistics pertaining to Northern Ontario allege that the region presently generates roughly \$8 billion in forest production, \$5 billion in mineral production, \$1.5 billion in tourism, and \$140 million in agricultural production per annum. Ontario, *A Focal Point for Economic Development in Northern Ontario* (Toronto: Ministry of Northern Development and Mines, 2001), 2; Ontario, *A New Approach to Economic Development in Northern Ontario* (Toronto: Ministry of Northern Development and Mines, 1999), 4-5

¹³ Provincial statistics indicate, for example, that the North suffers from poorer health, education, and government infrastructure than the South. Geoffrey Weller, "Politics and Policy in the North," *The Government and Politics of Ontario*, Fifth Edition, Graham White, Ed. (Toronto: University of Toronto Press, 1997), 284-302

¹⁴ Matt Bray and Ashley Thomson, "Introduction," *At the End of the Shift: Mines and Single-Industry Towns in Northern Ontario*, Matt Bray and Ashley Thomson, Eds. (Toronto: Dundurn, 1992), ix-x

¹⁵ As Wallace Clement concedes, the new Canadian political economy has been transformed by the "dialectic" of interdisciplinary interactions and its present "diversity" and "vibrancy" are a consequence of its transformation of the "dependency paradigm"

and of its reforms of Harold Innis' "staples approach." Wallace Clement, "Introduction: Whither the New Canadian Political Economy?," *Understanding Canada: Building on the New Canadian Political Economy*, Wallace Clement, Ed. (Montreal and Kingston: McGill-Queen's University Press, 1997), 6-7

¹⁶ Ontario, *Department of Mines Review 1973* (Toronto: Department of Mines and Northern Affairs, 1973) 39

¹⁷ Rand Dyck, *Canadian Politics: Critical Approaches*, Third Edition (Toronto: Nelson, 2000), 644-646

¹⁸ Eric Kierans, *Report on Natural Resources Policy in Manitoba* (Winnipeg: Government of Manitoba Secretariat for the Planning and Priorities Committee of Cabinet, 1973), 7

¹⁹ For example, Catharine Dixon explains that by 1965 the Ontario government had garnered roughly \$30 million in mine royalties from Elliot Lake and had returned only \$6 million to the community, but only in lieu of municipal taxes which the mining companies were exempt from paying. In Dixon's own words, it "never occurred to those living in [S]outhern Ontario that the good life they enjoyed was being subsidized by those who lived in the [N]orth." Dixon, xix

²⁰ The often harmful effects of federal and provincial policies affecting Elliot Lake are evaluated, for example, in Brian Walker, "Government Regulation of Health Hazards in the Ontario Uranium Mining Industry, 1955-1976," *At the End of the Shift: Mines and Single-Industry Towns in Northern Ontario*, Matt Bray and Ashley Thomson, Eds. (Toronto: Dundurn, 1992), 130-139

²¹ The concept of "dependent development," as postulated by Fernando Henrique Cardoso and Enzo Faletto, and as presented by Elisabeth Gidengil, is relevant for this investigation of the North. Gidengil posits that "dependent development" evolves as a "conditioning situation" or "syndrome of related characteristics" which limits prospective development in the periphery as a result of the following factors: the absence of the autonomous capacity for change or growth, "external penetration, restricted choice, vertical interaction, lack of integration, functional incompleteness, development disparities, and differences in level of living." Elisabeth Gidengil, "Diversity Within Unity: On Analyzing Regional Dependency," *Studies in Political Economy*, 29 (Summer 1989), 93-94, 99

²² Björne Hettne, "Introduction: The International Political Economy of Transformation," *International Political Economy: Understanding Global Disorder*, Robert W. Cox et. al., Eds. (Halifax: Fernwood, 1995), 2

²³ Ibid, 2

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<sup>24</sup> Ibid, 2
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²⁵ Ibid, 2

²⁶ Robert Gilpin, *The Political Economy of International Relations* (Princeton: Princeton University Press, 1987), 8

²⁷ Ibid, 8-9

²⁸ Ibid, 9

²⁹ Ibid, 11

³⁰ Wallace Clement and Glen Williams, "Introduction," *The New Canadian Political Economy*, Wallace Clement and Glen Williams, Eds. (Montreal and Kingston: McGill-Queen's University Press, 1989), 3

³¹ Ibid, 3

³² Michael Howlett and M. Ramesh, *The Political Economy of Canada: An Introduction* (Toronto: McClelland and Stewart, 1992), 99

³³ Ibid, 99

³⁴ Clement, "Introduction," 3-5

³⁵ Ibid, 3-5

³⁶ Clement and Williams, "Introduction," 10-11

³⁷ Ibid, 11

³⁸ Ibid, 11

³⁹ Ibid, 11

⁴⁰ Neil Bradford and Glen Williams, "What Went Wrong? Explaining Canadian Industrialization," *The New Canadian Political Economy*, Wallace Clement and Glen Williams, Eds. (Montreal and Kingston: McGill-Queen's University Press, 1989), 59-60

⁴¹ Clement, "Introduction," 5

⁴² Ibid, 5

⁴³ Ibid, 5

⁴⁴ Ibid, 5

⁴⁵ Clement and Williams, "Introduction," 10-11

⁴⁶ Ibid, 10-11

⁴⁷ Clement, "Introduction," 3-8

⁴⁸ Clement and Williams, "Introduction," 10-11

⁴⁹ Howlett and Ramesh, 93

⁵⁰ Though Watkins' writings were initially neo-Mackintoshian, as evinced in his 1963 essay "A Staples Theory of Economic Growth," his later writings reflected a shift to neo-Innisian values, as evident in his 1989 essay "The Political Economy of Growth." M.H. Watkins, "A Staple Theory of Economic Growth," *Approaches to Canadian Economic History*, W.T. Easterbrook and M.H. Watkins, Eds. (Ottawa: Carleton University Press, 1986), 49-73; Mel Watkins, "The Political Economy of Growth," *The New Canadian Political Economy*, Wallace Clement and Glen Williams, Eds. (Montreal and Kingston: McGill-Queen's University Press, 1989), 16-35

⁵¹ Watkins identifies three integral linkages: 1) forward linkages (e.g. investment in further processing of inputs for the staples sector, such as, lumber into pulp and paper); 2) backward linkages (e.g. investment in further "production of the inputs" for the staples sector, such as, machinery for mining or railways to move minerals); and 3) final demand linkages (e.g. further expenditure of revenues generated from the staples sector). Howlett and Ramesh, 104

⁵² Ibid, 103-106

⁵³ Ibid, 72, 99

⁵⁴ Clement and Williams, "Introduction," 8

⁵⁵ Howlett and Ramesh, 108

⁵⁶ Ibid, 100-101

⁵⁷ Ibid, 100

⁵⁸ Wallace Clement, "Debates and Directions: A Political Economy of Resources," *The New Canadian Political Economy*, Wallace Clement and Glen Williams, Eds. (Montreal and Kingston: McGill-Queen's University Press, 1989), 39

⁵⁹ Ibid, 41

⁶⁰ Wallace Clement and Leah F. Vosko, "Introduction," *Changing Canada: Political Economy as Transformation*, Wallace Clement and Leah F. Vosko, Eds. (Montreal and Kingston: McGill-Queen's University Press, 2003), xiii

- 61 Ibid, xiii
- 62 Clement, "Introduction," 4
- ⁶³ Howlett and Ramesh, 106-107
- ⁶⁴ Nelles, vii; Howlett and Ramesh, 108
- ⁶⁵ Nelles, viii-x
- ⁶⁶ Howlett and Ramesh, 108
- ⁶⁷ For example, as Walker avows, the federal government absolved itself from promoting safety in the uranium industry and aspired, instead, to promote the export potential of uranium and of its CANDU nuclear reactors; and, as a result, more Elliot Lake miners were afflicted with work-related diseases such as cancer and silicosis. Walker, 132
- ⁶⁸ America, Resources for Freedom: Summary of Volume I, 1
- ⁶⁹ Ibid, 18
- ⁷⁰ While the commissioners of the Paley Report concluded that "national materials policy should be squarely founded on the principle of buying at the least cost possible for equivalent values," the benefits of which were "ultimately [and solely intended] which prejudice to our [America's] own economic growth and security." Ibid, 21-22
- ⁷¹ Clark-Jones, 13-15
- ⁷² Ibid, 15
- ⁷³ Ibid, 15
- ⁷⁴ Ibid, 16
- ⁷⁵ Ibid, 18, 122
- ⁷⁶ Indeed, as Clement and Williams intimate, Kenneth Taylor, Canada's Deputy Minister of Finance in the 1950s, once commented that he kept a copy of *Resources for Freedom* in his desk and that every time he became "depressed about the future" he would take it out and read it to make himself feel better. Clement and Williams, "Resources," 49

⁷⁷ Ibid, 49

⁷⁸ Earle Gray, *The Great Uranium Cartel* (Toronto: McClelland and Stewart, 1982), 64-65

31

⁷⁹ Michael K. Hawes, "Assessing the World Economy: The Rise and Fall of Bretton Woods," *World Politics: Power, Interdependence, Dependence*, David G. Haglund and Michael K. Hawes, Eds. (Toronto: Harcourt Brace Jovanovich, 1990), 155-156

⁸⁰ David Leadbeater, "The Development of Elliot Lake, 'Uranium Capital of the World:' A Background to the Layoffs of 1990-1996," *Elliot Lake Tracking and Adjustment Study: Final Reports, Volume II* (Sudbury: Institute of Northern Ontario Research and Development 1999), 8

⁸¹ America, Resources for Freedom: Summary of Volume I, 20

⁸² The Elliot Lake turnoff from Highway 17 (i.e. the Trans-Canada Highway) to Highway 108, is roughly two hours from Sudbury and one and a half hours from Sault Ste. Marie.

⁸³ Dixon, 24-25

⁸⁴ Gray, 55

As a function primarily of the efforts of its mayor, George Farkouh, Elliot Lake has sought to reinvent itself as a retirement village of sorts and its ensuing strategy has involved upgrading or "polishing" its existing infrastructure to enhance its image and entice prospective residents. George Farkouh, "Elliot Lake," *At the End of the Shift: Mines and Single-Industry Towns in Northern Ontario*, Matt Bray and Ashley Thomson, Eds. (Toronto: Dundurn, 1992), 145-148

While the town was once structured solely to support the uranium industry, the closure of the final uranium mine in 1996 was met with little resistance. For the town's politicians had already been assiduously striving for years to reinvent the town as a retirement haven. The population of Elliot Lake, presently, is roughly, 14,000. Ibid, 145

⁸⁷ America, Resources for Freedom: The Promise of Technology, Volume IV, 20

⁸⁸ For most Northern Ontarians, I think, the provincial government's designation of "Improvement District" is simply a crude synonym for "community." Dixon 61

⁸⁹ Ciaran O'Faircheallaigh, *Uranium Demand, Supply, and Prices, 1991-2000: A Greenpeace Report* (Toronto: Greenpeace, 2000), 31

⁹⁰ After World War II, uranium mining in Ontario was dominated by the Elliot Lake mines found in the Algoma region. Figures for the 1955 to 1975 period were compiled using the following sources (though calculations and metric conversions were undertaken by the author): Ontario, 65th Annual Report of the Ontario Department of Mines (Toronto: Ontario Department of Mines, 1956), 23; Ontario, 66th Annual Report of the Ontario Department of Mines (Toronto: Ontario Department of Mines, 1957), 23; T.J. Kelley, Statistical Review of the Mining Industry for 1958: 67th Annual Report of the

Ontario Department of Mines (Toronto: Ontario Department of Mines, 1958), 22-23; G.S. Riddell, Statistical Review of the Mineral Industry and Mining Operations in Ontario: Annual Report for 1963 (Toronto: Ontario Department of Mines, 1965), 5; G.S. Riddell, Statistical Review of the mineral Industry and Mining Operations in Ontario: Annual Report for 1967 (Toronto: Ontario Department of Mines, 1969), 122; Ontario, Department of Mines Review 1970 (Toronto: Ontario Department of Mines, 1970), 4; Ontario, Department of Mines Review 1973 (Toronto: Ontario Department of Mines and Northern Affairs, 1973), 6, 41; Ontario, Ontario Mineral Review 1974 (Toronto: Ministry of Natural Resources, 1974), 3, 42; Ontario, Ontario Mineral Review 1975 (Toronto: Ministry of Natural Resources, 1975), 8, 24; Ontario, Ontario Mineral Review 1976-1977 (Toronto: Ministry of Natural Resources, 1977), 2, 6-7

Throughout its ongoing mining reports, the Ontario government did not indicate how much uranium had been mined in 1955. The figure is omitted, for example, in the 65th Annual and 66th Annual reports of the Ontario Department of Mines. Ontario, 65th Annual Report of the Ontario Department of Mines, 23; Ontario, 66th Annual Report of the Ontario Department of Mines, 23

⁹² Beginning in 1970-1971, the Ontario government refused to publish figures indicating the monetary value of uranium produced in the province. Doubtlessly alluding to the redundancy and lack of viability of the uranium industry by the 1970s, the provincial government, however, insisted in its *Ontario Mining Review 1976-1977* that "values of mineral output, for reasons of confidentiality of individual company data, do not include the values of produced uranium" though the reasons why it was now necessary to assure secrecy were not explained. Ontario, *Ontario Mineral Review 1976-1977*, 2

⁹³ O'Faircheallaigh, 25

⁹⁴ The US government's "stockpiling" of strategic staples and "distorting" of natural resource development in the post-Paley Report period is vividly discussed by Clement and Williams. Clement and Williams, "Resources," 49

⁹⁵ Ibid, 49

⁹⁶ Ibid, 49

⁹⁷ Leadbeater, 8

⁹⁸ Ibid, 6, 8

⁹⁹ O'Faircheallaigh, 25

¹⁰⁰ Leadbeater, 9

¹⁰¹ For example, Gray argues that the cost of uranium increased \$2 per pound as a consequence of the efforts of the cartel by 1973. Gray, 146-147

¹⁰² Leadbeater, 9

¹⁰³ Farkouh, 144

¹⁰⁴ Ibid, 144

¹⁰⁵ Leadbeater, 11

¹⁰⁶ Walker, 137

¹⁰⁷ Ibid, 134

¹⁰⁸ Ibid, 135

¹⁰⁹ Ibid, 131, 136

¹¹⁰ Ibid, 131, 136

¹¹¹ Ibid, 137

¹¹² Ibid, 137

¹¹³ Governmental apathy to the health and safety of miners in Elliot Lake is evident in the fact that only one year after the "silicosis strike" of 1974, a survey of dust levels in the mines reveled that 67 of the 77 samples taken registered dangerously above the industry's guidelines, as did eight out of ten working areas. Ibid, 131-133

Bibliography

- America. *Resources for Freedom: Summary of Volume I.* Washington: The President's Materials Policy Commission, 1952.
- America. Resources for Freedom: The Promise of Technology, Volume IV. Washington: The President's Materials Policy Commission, 1952.
- Bradford, Neil and Glen Williams. "What Went Wrong? Explaining Canadian Industrialization." *The New Canadian Political Economy*. Wallace Clement and Glen Williams, Eds. Montreal and Kingston: McGill-Queen's University Press, 1989.
- Bray, Matt and Ashley Thomson. "Introduction." *At the End of the Shift: Mines and Single-Industry Towns in Northern Ontario*. Matt Bray and Ashley Thomson, Eds. Toronto: Dundurn, 1992.
- Clark-Jones, Melissa. *A Staple State: Canadian Industrial Resources in Cold War.*Toronto: University of Toronto Press, 1987.
- Clement, Wallace. "Debates and Directions: A Political Economy of Resources." *The New Canadian Political Economy*. Wallace Clement and Glen Williams, Eds. Montreal and Kingston: McGill-Queen's University Press, 1989.
- Clement, Wallace. "Introduction: Whither the New Canadian Political Economy?" *Understanding Canada: Building on the New Canadian Political Economy.*Wallace Clement, Ed. Montreal and Kingston: McGill-Queen's University Press, 1997.
- Clement, Wallace and Glen Williams. "Resources and Manufacturing in Canada's Political Economy." *Understanding Canada: Building on the New Canadian Political Economy*. Wallace Clement, Ed. Montreal and Kingston: McGill-Queen's University Press, 1997.
- Clement, Wallace and Leah F. Vosko. "Introduction." *Changing Canada: Political Economy as Transformation*. Wallace Clement and Leah F. Vosko, Eds. Montreal and Kingston: McGill-Queen's University Press, 2003.
- Dixon, Catharine. *The Power and the Promise: The Elliot Lake Story*. Elliot Lake: Gillidix, 1996.
- Dyck, Rand. *Canadian Politics: Critical Approaches*. Third Edition. Toronto: Nelson, 2000.

- Farkouh, George. "Elliot Lake." At the End of the Shift: Mines and Single-Industry Towns in Northern Ontario. Matt Bray and Ashley Thomson, Eds. Toronto: Dundurn, 1992.
- Gidengil, Elisabeth. "Diversity Within Unity: On Analyzing Regional Dependency." *Studies in Political Economy.* (29) Summer 1989.
- Gilpin, Robert. *The Political Economy of International Relations*. Princeton: Princeton University Press, 1987.
- Gray, Earle. The Great Uranium Cartel. Toronto: McClelland and Stewart, 1982.
- Haglund, David G. "The New Geopolitics of Minerals: The Changing Significance of Strategic Minerals." *World Politics: Power, Interdependence, and Dependence.* David G. Haglund and Michael K. Hawes, Eds. Toronto: Harcourt Brace Jovanovich, 1990.
- Hawes, Michael K. "Assessing the World Economy: The Rise and Fall of Bretton Woods." *World Politics: Power, Interdependence, and Dependence.* David G. Haglund and Michael K. Hawes, Eds. Toronto: Harcourt Brace Jovanovich, 1990.
- Hettne, Björne. "Introduction: The International Political Economy of Transformation." *International Political Economy: Understanding Global Disorder*. Robert W. Cox et. al., Eds. Halifax: Fernwood, 1995.
- Howlett, Michael and M. Ramesh. *The Political Economy of Canada*. Toronto: McClelland and Stewart, 1997.
- Kelley, T.J. Statistical Review of the Mining Industry for 1958: 67th Annual Report of the Ontario Department of Mines. Toronto: Ontario Department of Mines, 1958.
- Kierans, Eric. *Report on Natural Resources Policy in Manitoba*. Winnipeg: Government of Manitoba Secretariat for the Planning and Priorities Committee of Cabinet, 1973.
- Leadbeater, David. "The Development of Elliot Lake, 'Uranium Capital of the World:' A Background to the Layoffs of 1990-1996." *Elliot Lake Tracking and Adjustment Study: Final Reports, Volume II.* Sudbury: Institute of Northern Ontario Research and Development, 1999.
- Mearsheimer, John J. "Back to the Future: Instability in Europe After the Cold War." *International Security.* (15:1) Summer 1990.

- Nelles, H.V. The Politics of Development: Forests, Mines, and Hydro-Electric Power in Ontario, 1849-1941. Toronto: Macmillan, 1974.
- O'Faircheallaigh, Ciaran. *Uranium Demand, Supply, and Prices, 1991-2000: A Greenpeace Report*. Toronto: Greenpeace, 2000.
- Ontario. *A Focal Point for Economic Development in Northern Ontario*. Toronto: Ministry of Northern Development and Mines, 2001.
- Ontario. *A New Approach to Economic Development in Northern Ontario*. Toronto: Ministry of Northern Development and Mines, 1999.
- Ontario. 65th Annual Report of the Ontario Department of Mines. Toronto: Ontario Department of Mines, 1956.
- Ontario. 66th Annual Report of the Ontario Department of Mines. Toronto: Ontario Department of Mines, 1957
- Ontario. *Department of Mines Review 1970*. Toronto: Ontario Department of Mines, 1970.
- Ontario. *Department of Mines Review 1973*. Toronto: Ontario Department of Mines and Northern Affairs, 1973.
- Ontario. Ontario Mineral Review 1974. Toronto: Ministry of Natural Resources, 1974.
- Ontario. Ontario Mineral Review 1975. Toronto: Ministry of Natural Resources, 1975.
- Ontario. *Ontario Mineral Review 1976-1977*. Toronto: Ministry of Natural Resources, 1977.
- Riddell, G.S. Statistical Review of the Mineral Industry and Mining Operations in Ontario: Annual Report for 1963. Toronto: Ontario Department of Mines, 1965.
- Riddell, G.S. Statistical Review of the Mineral Industry and Mining Operations in Ontario: Annual Report for 1967. Toronto: Ontario Department of Mines, 1969.
- Riddell, G.S. Report on Mining Operations in Ontario: Annual Report for 1968. Toronto: Ontario Department of Mines, 1969
- Vadney, T.E. *The World Since 1945*. Second Edition. Toronto: Penguin, 1992.

- Walker, Brian. "Government Regulation of Health Hazards in the Ontario Uranium Mining Industry, 1955-1976." *At the End of the Shift: Mines and Single-Industry Towns in Northern Ontario*. Matt Bray and Ashley Thomson, Eds. Toronto: Dundurn, 1992.
- Waltz, Kenneth N. "Reflections on *Theory of International Politics*: A Response to My Critics." *Neorealism and its Critics*. Robert O. Keohane, Ed. New York: Columbia University Press, 1986.
- Watkins, M.H. "A Staple Theory of Economic Growth." *Approaches to Canadian Economic History*. W.T. Easterbrook and M.H. Watkins, Eds. Ottawa: Carleton University Press, 1986.
- Watkins, Mel. "The Political Economy of Growth." *The New Canadian Political Economy*. Wallace Clement and Glen Williams, Eds. Montreal and Kingston: McGill-Queen's University Press, 1989.
- Weller, Geoffrey. "Politics and Policy in the North." *The Government and Politics of Ontario*. Fifth Edition. Graham White, Ed. Toronto: University of Toronto Press, 1997.