NEW GEOGRAPHIES OF ELITE HOCKEY PLAYER PRODUCTION IN THE NEOLIBERAL AGE

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Abstract

Neoliberal forms of governance have impacted business, international trade, investment, finance, taxation and many other aspects of economic life since the 1970s. At its heart, neoliberalism puts emphasis on the market, not just in business but also in sport and in many other aspects of life. Private capital has increasingly gained access to the finance and provision of public services. An example of this process is the recent proliferation in privately operated/owned ice rinks in British Columbia. Private ice rinks constitute 46% of all ice rink construction in BC since 1990 and are largely located in urban regions. Concurrently, High Performance Training Companies (HPTCs), operating outside the auspices of Hockey Canada, have capitalized on the influx of private ice rinks and have begun providing services at a cost to prospective young hockey players. The following thesis utilizes a case study of BC to demonstrate how the deepening commodification of elite hockey in BC during the neoliberal age has created new geographies of elite hockey player production.

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Chapter 1

PROBLEMATISING SPORT IN THE NEOLIBERAL AGE

Introduction

Neoliberal forms of governance have shaped business, international trade, investment, finance, taxation and many other aspects of economic life since the 1970s. Perhaps less obvious is the way neoliberalism has also affected social life, recreation, and sport, although studies of sporting spectacles such as the modern Olympics, of professional football, and of basketball provide pointers to this commodification of sport [Sage, 2010; Smart, 2007; Andrews & Silk, 2012]. At its heart, neoliberalism puts emphasis on the market, not just in business but also in sport and in many other aspects of life. As a result, good players in many sports have become traded commodities, and around sport there have developed several ancillary commercial activities including sports trade shows, and spectacles ranging from the Kop at Liverpool Football Club to the opening ceremony at the Sochi Olympics. Gambling on sports (such as at Japan's keirin races) has also grown, along with the rise of major gambling centers. There is still much sport that is non-commercial, being played for personal fitness, pleasure, for the community, and to socialize with friends; this type of sport perpetuates a tradition going back for centuries. But at elite levels the financial rewards for professional star players, be they golfers, tennis players, basketball players, or footballers have reached astronomical levels, giving rise to a new class of specialized young athletes, all vying to make the big leagues. Developing and recruiting elite young athletes has become a priority for professional sports leagues and

amateur sports organizations, spawning a billion dollar industry centered on the production of elite athletes. This thesis therefore seeks to understand how neoliberal practices have affected Canada's national sport, specifically the deepening commodification of the production of its elite players.

This chapter examines the underlying processes that help to account for recent changes in the production of elite hockey players. But prior to an engagement with hockey's contemporary condition it is important to outline the sport's original ideological underpinnings. Amateurism functioned as an omnipresent disciplinary mechanism, structurally including and excluding particular classes of people from participating in hockey and sport in general (Metcalfe, 1987). But as the sport gained popularity in the first few decades of the twentieth century the adherence to amateurism gave way to open professionalism (Wong, 2005). Professionalism throughout the first two thirds of the twentieth century was relatively tempered. The absence of today's technological innovations (televisions, internet, smart phones) meant professional sports often lacked sources of ancillary revenue. Corporate entities recognizing sports increasing global popularity coupled with technological innovations in communication and technology begun investing large sums of money in sports advertisements in the 1970s. In 1978, the Coca Cola Company became the first large corporate entity to invest millions of dollars in return for exclusive marketing rights of a sporting event (1978 World Cup in Argentina) (Gulianotti & Robertson, 2007). This turned out to be a watershed moment in the business of sport and paved the way to the emergence of sport as a spectacle. The coming of sport as a spectacle was enabled by the advent of neoliberal forms of governance that came to dominate western political thought in the 1970s. Characteristic of such regimes is the

extension of "competitive" free markets to previously public goods and services, individual liberty, and an emphasis upon a globalized economy. Several studies have outlined the economic, political, and cultural ramifications of neoliberal governance (Peck &Tickell, 2002; Brenner, Peck, & Theodore, 2011; Harvey, 2005) and subsequent inter-city competition (Harvey, 1989, 2005). Privatization of public goods and services has particularly had an effect upon elite hockey player production. Public private partnerships (P3s) are a particular privatization scheme that has recently been used in the construction and operation of ice rinks in British Columbia. And as seen below, such schemes have had an impact on local municipal recreation and sport departments' ability to provide equitable access to all citizens.

Hockey has undergone a qualitative change in the neoliberal era. This time period has made for a perfect storm of sorts where private sporting facilities and associated services (high performance training companies) coupled with the emphasis placed upon specialized athletes and an increased willingness to use the body as a primary strategy of accumulation has spawned a billion dollar industry centered on the production of elite athletes. These processes have functioned to alter the geographies of elite hockey player production, from the rural hinterlands to the urban centers of BC. This thesis will draw on this literature, quantitative hockey player data, and qualitative interviews to explain the spatiality of elite hockey player production and how it has changed throughout the twentieth and twenty-first centuries. And will examine ways the neoliberalization of BCs' hockey landscapes have excluded perspective elite athletes on the basis of cost and geographic proximity to urban centers.

Amateurism and the Rise of Elite Sports

> *"One who has never competed in any open competition or for public money, or for admission money, or with professionals for a prize, public money or admission money, nor has ever, at any period of his life taught or assisted in the pursuit of athletic exercise as a means of livelihood, or is a laborer or Indian."*
> *-Montreal Pedestrian Club, 1873*

The amateur and the professional have played very different roles in sport since the Victorian era. Whereas in the Victorian era, elites tended to go to great lengths to preserve, and boast of their amateur status, professional status was accepted as a way to earn a living among other classes. Of course there were geographical differences such that, for instance, British cyclists lauded amateurism at a time when French cyclists chased after significant prize money. The cult of amateurism faded in the twentieth century and with the rise of neoliberal values after the 1980s, many sports became focused on creating elite specialized players (as opposed to the "all-rounders" held in high esteem in an earlier era).

Amateurism played out in a particular way in hockey. Today, what is often lost in the spectacle of elite hockey is its exclusivity. It is easy to get lost in romanticized narratives promoting hockey's "apparent naturalness and sheer ubiquity" (Gruneau & Whitson 1993:3). Rarely do you hear popular accounts of hockey as a predominantly white (sub) urban pastime. Elite hockey has always been deeply political and contested. Thus, prior to an engagement with the contemporary issues surrounding elite hockey, it is imperative to first problematize and challenge mythicized notions of hockey's celebrated past.

The formative years of many sports in North America were marked by a strict adherence to the British amateur ethic, which simultaneously promoted "the ethos of the gentlemen while systematically excluding non-Europeans, women, and the working class"

from their sport (Gruneau & Whitson, 1993:17). A classic example of this is equestrian polo, described by Matthews (2012) as the sport of "kings and khans". Originally a wild game played by the horseman in Middle Asia, it was "civilized" by the English officer class when they brought it back from the Indian Raj and adopted the "Hurlingham Rules" in 1874. The amateur ethic was exported from Britain to its colonies, and became the ideological underpinnings of early-organized sport in Canada and remained a prominent feature of the Canada's early sporting landscape until its demise in the 1930s (Kidd, 1996).

Hockey, and sport in general, was seen as a "civilizing cultural practice" (Gruneau & Whitson, 1993: 46) where one was expected to demonstrate "fearlessness, reckless heroism, sublimation of individualism, and acceptance of pain" (Metcalfe, 1987: 127). Winning or losing were not a central concern for amateurs. Amateurs expected the "behavior on the sporting field to be the reverse of behavior in business life – co-operation instead of competition, means rather than ends, (Metcalfe, 1987: 127). This is not to say that winning did not matter. Winning matter greatly, but it was the traits one showed to win that was most important. The process of winning was of more importance than the end result (Metcalfe, 1987).

To uphold notions of Amateurism assumed a privileged up bringing. There were no explicitly written guides to conducting oneself in the manner of a gentleman when playing sports. Canadian amateurism and its accompanying value system had been transmitted through various colonial institutions including the military, private schools, and universities. Only those sectors of society that were able to gain entry into such institutions were familiar with the tenets of amateurism. To approach sport as an activity to express ones gentlemanly qualities was only feasible for the middle to upper classes of Canada

(Metcalfe, 1987). Workers did not have the luxury of an abundance of leisure time to engage such ideals, as "for men caught in the bind of meaningless, unfulfilling work of the new industrial factories, sport was central to life itself instead of being simply a diversion," (Metcalfe pp. 128, 1987).

The rising popularity of organized sport amongst all classes of Canada directly challenged amateurism and its accompanying norms. Sport proved to be a lucrative market for entrepreneurs. Entrepreneurs built and rented athletic facilities to interested third parties, and held test matches, and various other one-day sporting spectacles (Metcalfe, 1987). Open professional hockey leagues were formed during the first decade of the 20th century. Senior amateur hockey teams began secretly compensating talented players in attempts to toe the rigid line between Amateurism and professionalism,. What became known as "shamateurism" ran rampant, particularly amongst senior hockey teams located in the industrial hinterlands of Canada. Owners recruited and paid talented players for their services (Wong, 2005). Winning took precedence over the ideals of amateurism. Players had become commoditized, playing for the highest bidder irrespective of community-based loyalties. The commodification of hockey was firmly established by the early twentieth century and continues to infiltrate hockey today, albeit in different forms.

Neoliberalism

Since the 1970s, an economic, political, and ideological climate change has been accompanied by the rise of the neoliberal mode of governance championing the "maximization of entrepreneurial freedoms within an institutional framework" characterized by free markets, privatization, and individual liberty (Harvey, 2006: 145) By the 1980s, neoliberalism became a politicized movement legitimized by the election of the Reagan and Thatcher administrations in the United States and the United Kingdom, respectively (Peck &Tickell, 2002). Public goods and services, previously immune to private capital in the era of Keynesian welfarism, were integrated into the private sector. National and local governments enacted policies "intended to extend market discipline, competition, and commodification throughout all sectors of society," (Brenner et al, 2011:32). Globalization, state cuts in social programs, deregulation, privatization, public private partnerships, the breaking up of organized labour, free trade, and an unencumbered drive towards competitive free markets ensued. The state's primary function shifted from providing public goods and services (housing, health care, education, transportation, public utilities, recreation facilities) to the establishment of a favorable business climate seeking to maximize individual utility and profits (Harvey, 1989). Many public services and state enterprises were privatized, more so in some settings than others.

The introduction of neoliberal policies introduced notions of zero sum inter-urban competitions for capital. In many instances, states were no longer the chief negotiator in attracting capital investment (Harvey, 1989). The unregulated flow of international capital permeated many urban regions. And the state's inability to regulate the flow of multinational capital led to unprecedented levels of speculative spending as "investment

increasingly [took] the form of a negotiation between international finance capital and local powers (small business, municipal government) doing the best they can to maximize the attractiveness of the local site as a lure for capitalist development" (Harvey, 1989:11). Cities want to be seen as innovative, entertaining, and safe places to live (Harvey, 1989). Speculative investments take precedence over securing equitable social provisioning. The construction of shopping malls, sports stadia, theatres, large development projects, and world trade centers were undertaken to attract capital and consumers. Local actor's inability, resistance, or failure "to lure highly mobile and flexible production, financial, and consumption flows into its space" faced disinvestment in built environments, unemployment, social strife, instability, and urban decay (Harvey, 1989: 11). In short, neoliberal restructuring and accompanying inter urban competition coercively forced cities (states) into adhering to the logics of neoliberal capitalism and in so doing created uneven sociospatial landscapes (Brenner et al. 2010). Rural regions are left behind as cities and suburban regions "become increasingly important geographic targets and institutional laboratories" of neoliberal policy (Brenner & Theodore, 2002:368).

The outmigration of white middle-class families from the city to the suburbs in the 1970/80s resulted in the weakening of the city center's tax and commercial retail bases. Properties lost value and many regions suffered from mass unemployment and social strife (Harvey, 2012). The devalued property that followed "set the stage for the movement of capital in a fixed built environment as new opportunities for value [arose] from the ashes of the devalued" (Weber, 2002; 523). The construction of large scale sports stadia and sport facilities have become an attractive means of doing so. Government's willingness to subsidize stadium developments is a "part of a larger strategy for local capital

accumulation" (Gruneau & Whitson, 1993; 235). Governments believe that such investments in the built environment will yield or spur further investments in finance, hospitality, tourism, construction and real estate (Gruneau & Whitson, 1993). The idea is that local absorption of multinational surplus capital will eventually "trickle down" to benefit all sectors of society. But, the construction of grand sporting stadiums largely serves the wealthy. The exorbitant ticket prices of sporting events, exaggerated real estate pricing of surrounding property, and the posh restaurants and bars that come to occupy previously affordable neighbourhoods are the playground of the rich and serve to displace marginalized populations to the periphery of cities.

Construction of Marlins Park, home to the Major League Baseball's Florida Marlins Franchise, was completed in 2012. The park is located in Miami-Dade County, 7th largest county in the US, and cost $634 million, but will eventually end up costing the taxpayer $1.2 billion (Zirin, 2013). Fracking magnate, Terry Pegula, gained ownership to the NHL's Buffalo Sabers and NFL's Buffalo Bills franchises in 2011 and 2014, respectively. In an attempt to rejuvenate and improve property values adjacent to the Sabres Ice rink in downtown Buffalo, Pegula financed the construction of a $172 million dollar hockey facility. The HarborCentre is home to two ice sheets, state of the art training facilities, hosts a hockey academy (Academy of Hockey), a bar and restaurant, Tim Horton's, and is slated to be home to a 205 bedroom Marriot hotel in the spring of 2015. These projects exemplify the increased speculative investment in the built environment associated with neoliberal forms of governance. Local governments view urban/suburban real estate as a lucrative means in which to accumulate capital. But, such investments are capital intensive. One way in which local governments have mitigated the cost of large infrastructure projects is

through the use of public private partnerships.

Public Private Partnerships

Public Private Partnerships (P3) are illustrative examples of the "eclectic" financial allegiances formed between local private and public actors and international financial capital for the development of cities and suburban places (Harvey, 1989). A retrenchment in intergovernmental relations has increased financial pressures on local governments (Brenner & Theodore, 2002). In the face of budgetary restraints and inter urban competition, municipal governments are either privatizing public facilities (often at fire-sale prices) or turning to the private sector for the construction of infrastructure and the provisioning of public goods and services (Harvey, 2005). It is within this context that municipalities have engaged in various forms of Private Public Partnerships (P3s). P3s are instances of cooperative agreements between private and public actors to construct, operate, and maintain public goods and services. For instance, in 1998, the B.C provincial government amended the Municipal Act to recognize local governments as an "independent, responsible, and accountable order of the government,"(Municipalities and the New Making, 2000: 2). The amendments, introduced by the New Democrat Party government of Glen Clarke, expanded municipalities' autonomy and ability to engage in various forms of P3s. The amendments made it possible for municipalities to engage in ten different forms of P3s (A Guide for Local Governments, 1999).

In collaborating with private interest, local governments are actively "[creating] new infrastructures for market oriented growth, commodification, and the rule of capital," (Theodore et al., 2011:32). P3s illustrate the states complicity in the "creative destruction

of urban built environments . . . to promote marketized land-use regimes," (Peck et al. 2009:64). P3s have been deployed in various sectors of B.C's economy including services such as garbage collection, waste disposal, transportation, road maintenance, water and utilities, and libraries (Municipalities and the New Making, 2000). Recently P3s have been extended into the realm of recreation and sport (ice rinks) and have had an operative impact on local government's recreation department's abilities to carry out respective mandates (Thibault at al. 2004).

Municipal Recreation Departments and NPM

Municipal recreation departments normally provide accessible and adequate sport and leisure activities to all citizens on a cost recovery basis, or less. Recreation departments thereby positively contribute to the physiological and mental health of the community. Equitable access to sport and leisure services contributes to a sense of community solidarity and effectively combats social and economic inequalities by allowing all citizens access to facilities at a low cost (Thibault et al. 2004). The current economic and ideological climate has strained recreational departments' ability to follow through effectively with their principal missions. Faced with pressure to reduce taxes, municipal governments, experiencing budgetary shortfalls, have become increasingly concerned with cutting costs and resorting to revenue generating services (Thibault et al. 2004).

From a neoliberal perspective, private companies are better positioned to raise the necessary capital and provide specialized services more efficiently than the public sector. As is seen in the recent proliferation of private ice rinks in BC, municipalities have outsourced various services to the private sector. Thibault, et al. (2004) use the term New

Public Management (NPM) to describe municipalities' relatively new approach to the provisioning of recreational services. NPM refers to municipal governments adoption of management ideals derived from the private sector (J. Harvey, 2002). A primary focus on the individual rather than citizens as a collectivity is characteristic of the NPM regime. Private companies seek profits over equitable distribution of services. In consequence, access to recreational facilities has become inequitably distributed among community members. The introduction of, or an increase in user fees naturally excludes low-income families from participating in previously affordable sport and leisure activities (Thibault et al. 2004). To justify fee increases, privately operated facilities employ professional coaches, purchase specialized training technologies, and utilize the latest equipment. In doing so, private companies are catering to the needs of middle and high income families (Coakley & Donnely, 2009), where surplus can be captured and profit made. Free or affordable public programs are liable to be cut to ensure that private companies make a profit. Low-income families are either relegated to using marginal services or excluded all together (J. Harvey, 2002). True to neoliberal form, entrepreneurs emphasize that they are simply offering alternative services. Their sole motive is to maximize the utility of their consumers through multiple market options. Yet, entrepreneur's drive to attain profits has blinded them to the exclusionary ways increased costs function. Low-income or geographically peripheral families are unable to afford or geographically reach costly alternatives.

The NPM regime reflects the neoliberal tendency towards greater market integration of previously public goods and services. Privatization is one of many legal means capitalists employ to ensure continuing capital accumulation (Harvey, 2010). The NPM regime has successfully decreased the cost of recreational services for municipalities,

but it also has been marked by reduced access for low-income and geographically isolated groups. The profit motive of privately owned companies that operate municipal facilities has created niche markets for the consumption of middle-upper class residents..

The Body as Accumulation Strategy

The critical study of sport must acknowledge the central role of the body. The professionalization of sport altered the way elite athletes viewed their bodies. Sport was no longer a platform in which athletes demonstrated their gentlemanly qualities and masculinity. Rather, athletes viewed sport as a means of making a livelihood (Metcalfe, 1987). In other words, professionalism allowed for elite (prospective) athletes to view their bodies as a central strategy for the accumulation of wealth. David Harvey indicates "the labourer sells her/his labour power to a capitalist in return for a money wage which permit the labourer to purchase goods," (Harvey, 1998; 415). For professional athletes, their labour power resides in their respective athletic prowess. It is a commodity that is willingly bought, sold, and traded by professional franchise owners. Players have begun investing significant sums of money into developing athletic prowess, with the hopes of one day selling their labour power to professional sport franchises. Athlete's willingness to financially invest in the training of their own body is counter to the accepted conceptions of athletic prowess during the majority of the twentieth century. For the most part athletic and sporting prowess was considered a natural talent which could be improved by training, but only to develop an already accepted aptitude. Thus investment went mainly into the retailing of sport, and less into the production of athletes. The commodification of the production process of elite athletes indicates a move away from earlier notions of natural

athletic aptitude.

The neoliberal era has seen the emergence of a market centered on producing elite athletes for professional sport franchises. The services of municipal recreational departments have been replaced with private athletic facilities and high performance training companies (HPTCs). HPTCs and privatized athletic facilities offer an eclectic mix of athletic services. Both are now ubiquitous features of elite sporting landscapes, whether it be hockey, soccer, basketball, or football. They provide prospective elite athletes platforms to further develop their bodies in hopes of selling their labour power to professional sport franchises. The willingness of a prospective athlete to navigate the elite athletic production process does little to guarantee their ability to sell their labour power to professional franchises. A slim minority of prospective elite athletes ever reaches the heights of professional sports. For example, only 113 (4.7%) of the 2,428 players who played major junior hockey in Canada or Division 1 collegiate hockey in the United States during the 1988-89 season became National Hockey League (NHL) regulars (Campbell, 2007). The elite athlete production process rarely produces professional athletes. Rather "deformities, pathologies, and sicknesses are often produced," (Harvey, 1998; 418).

The Body is an accumulation strategy, but it is also "the locus of political resistance," (Harvey, 1998; 420). Athletes, coaches, sport administrators, and various other actors have recently questioned the merits of professional sports and its accompanying production process. Neurologic findings have begun to shed light on the lifelong damage incurred from sport related brain injuries. USA hockey and the Swedish Ice Hockey Association have implemented development models that deter young athletes from specializing in one sport, professional athletes have challenged their dual role as producer and product of

entertainment, and in direct opposition to league officials, major junior hockey and collegiate football players have attempted to unionize.

Sport as Spectacle: The Rise of Media and New Communication Technologies

Never has there existed a golden era of sports immune from profit seeking entrepreneurs. Organized sport has been a commercial enterprise since professional sport leagues first materialized in the latter half of the 19th century (Metcalfe, 1987). Early sources of revenue for professional sports teams centered on gate receipts and rental fees for facility use. But as the 20th century progressed, innovations in communication technologies (radio, television, internet) opened professional sports leagues to new streams of revenue turning sport into a spectacle, consumed by billions.

Professional sports teams and leagues have grown increasingly dependent upon ancillary streams of revenue in the last quarter of the 20th century. The money largely comes from corporate sponsorships, merchandising, and the selling of broadcast rights (Gruneau & Whitson, 1993). For example, profit gained from selling television broadcast rights accounts for 50% and 42% of the National Football League's (NFL) and the English Premier League revenues, respectively. Telecommunication companies expend billions of dollars (2011's NFL television deal worth $42 billion) to secure the broadcasting rights to sporting events and leagues (Sage, 2010). They do so knowing that corporations and related entities will line up for the rights to marketize their various products during broadcasts.

Sporting events and leagues are attractive marketing opportunities for corporate sponsors. They attract a predictive audience of millions or in some cases billions of

spectators from around the world. Providing corporations an international platform for corporate interest to peddle the "promotion of commodity consumption" (Smart, 2005; 131). A record audience of 1 billion viewers tuned into the 2014 World Cup Final between Argentina and Germany and 1.8 billion people watched coverage of the 2010 Vancouver Winter Olympics. The scope and reach of sporting events is largely unmatched. The demographic makeup of sporting audiences is predictable, thus presenting corporate sponsors an efficient means of marketing their products to target audiences (Sage, 2010). But more importantly, sports ubiquitous global popularity presents corporate entities an effective platform in which "to raise the global profile of their brands" (Smart, 2007; 17).

Television broadcast rights, corporate sponsorships, and merchandising are professional sports largest sources of ancillary profits. But, as technological innovations in communication continue to emerge, new platforms in which to deliver and consume sports are materializing (Sage, 2010). The NFL has been the first North American sports franchise to break up its broadcasting rights. They host separate bidding processes for television and streaming rights to broadcasting NFL games. The Fantasy Sports Trading Association estimates that 32 million Americans contributed $15 billion to fantasy sports in 2013. Beyond the direct benefits incurred through the various ancillary sources of profit, professional sports also receive around the clock publicity from media of all sorts. (Smart, 2007). The print media, blogosphere, sports radio, and 24hr television channels "coverage [are] blatant boosterism, designed to hype interest in the athletes and teams" (Sage, 2010; 167).

Clearly in this new world of sports dominated by spectacles that are hyped by the media before and after major events, producing new athletic stars is a priority, not only

because the team or state increases its chance of success, but also because the individual generates a mass of commentaries, twitter, blogs and even a cult following that reflects favourably on the team with which she or he is associated. This might be called the "Beckham effect", in that this football player (who in 2013 was listed as the best paid player in the world at over $50 million) led a following to Manchester United, Real Madrid, Milan, Los Angeles Galaxy and Paris-St Germain, and became the subject of a film, and endless media coverage. Producing rather than simply talent spotting a new star became a priority for highly leveraged sports.

But neoliberalism has also seen the player become a commodity traded globally. Beckham's career across four countries reflects this development, as has the career of numerous sports stars. Elaborate contracts define the terms of payment, hiring and firing, rights to sponsorships and endorsements of various sporting goods, and even the logos displayed on clothing. International moves are frequent. Indeed for some teams boasting of having a "local" player becomes a matter of pride, it being sufficiently rare. The trade in stars is normally regulated by international and national associations to prevent the market from being discredited by unsavory dealings. Indeed such has been the pressure from team owners to get the results they want, there have been cases in a number of sports of potential winners "throwing " the race or game in return for a large "under the counter" payment. In such instances, money has become more important than the game.

Owners and global sports organizations (International Olympic Committee & FIFA) have not been the sole beneficiaries of professional sports 20th century evolution from a local commercialized product into a 21st century billion dollar spectacle (Sage, 2010). Professional athletes have seen their salaries increase exponentially since the mid 20th

century. Much like professional sports owners, top professional athletes have also cashed in on ancillary sources of revenue. Of the ten highest paid athletes in 2014, eight make $23 million or more through endorsements (Forbes, 2014). But to merely cite the earnings of the top 1% of athletes does not do justice to the physical, mental, and financial struggles the majority of professional athletes face. The vast majority of professional athletes in North America do not compete in the National Basketball Association, National Hockey League, or the NFL. Most professional athletes experience a life of precarity, competing in affiliate leagues where the maximum salary rarely exceeds $45,000. The United States Bureau of Labor Statistics estimated the median pay for athletes and sports performers was $40,060 in 2012 (bls.gov). Moreover the shelf life of most athletes is short. The average length of NFL and NHL players career are 3.3 and 5.65 years respectively (Zirin, 2013; quanthockey.com, 2014). And when you consider the average salaries for NFL ($2 million) and NHL ($2.6 million) it amounts to $6.6 million and $14.58 million over the course of their careers, respectively (Gaines, 2014). It appears to be a large sum, but such amounts do not take into account taxes, agent fees, and financial service fees. It is thus no surprise that Sports Illustrated reported in 2009 that 78% of football players fall under financial duress after only two years of retirement (Torre, 2009). Moreover, most professional athletes have not attended post secondary institutions or left prior to having graduated, leaving them with little to no relevant work qualifications outside of sports. Problematizing athletic labour relationships along with new insights into head injuries and the long-term effects of head traumas (specifically in football and hockey) are contributing to the de-romanticizing of the lifestyle of professional athletes and questioning the value of investing significant financial resources to pursue a career in professional sports (Zirin, 2013).

Table 1.1: World's Highest Paid Athletes 1991 vs. 2014 (Earnings $ million)(Badenhausen, 2014)

1991	2014
1. Evander Holyfied – 60.5	1. Floyd Mayweather - 105
2. Mike Tyson - 31.5	2. Cristiano Ronaldo – 80
3. Michael Jordan – 16.0	3. Lebron James – 72.3
4. George Foreman – 14.5	4. Lionel Messi – 64.7
5. Ayrton Senna – 13.0	5. Kobe Bryant – 61.5
6. Alain Prost – 11.0	6. Tiger Woods – 61.2
7. Donovan Ruddock – 10.2	7. Roger Federer – 56.2
8. Arnold Palmer – 9.3	8. Phil Mickelson – 53.2
9. Nigel Mansell – 9.0	9. Rafael Nadal – 44.5
10. Jack Nicklaus – 8.5	10. Matt Ryan – 43.8

Youth Sport Specialization and Birth Effect

In 1993, Anders Ericsson argued, "many characteristics once believed to reflect innate talent are actually the result of intense practice extended for a minimum of 10 years" (Ericsson et. al, 1993). This concluding statement was recently popularized as the 10,000-hour rule in Malcolm Gladwell's 2008 book, Outliers (Gladwell, 2008). The 10,000-hour rule is the idea that expertise in athletics and music is gained through 10,000 hours of deliberate practice. This concept has prompted many parents, coaches, and sport administrators to encourage young athletes to specialize in a single sport at a young age. Parents want what's best for their children and "will do what they can to facilitate

prospects in school, sport, and other activities" (Malina, 2010; 365). To attain the prescribe 10,000 hours of deliberate practice, parents encourage their children to specialize in a single sport (or other activity such as music) at a young age to gain a competitive advantage upon other children within their cohort (Malina, 2010).

As is seen in hockey, parents seek supplementary hockey instruction beyond what is available through the local community non-profit minor hockey association. Hundreds of private high performance training companies market their various services (power skating, stickhandling and shooting coaches, off-ice conditioning) to prospective young hockey players promising them an edge over their competition. The additional training provides children an outlet in which to accomplish 10,000 hours of practice, and allows parents to realize (they hope) their own unfulfilled dreams.

The 10,000-hour rule has been heavily scrutinized in recent years. Its merits have been questioned and have led to fears of injury, "social exclusion", "over dependence", and "burnout" (Malina, 2010). National sporting bodies have recently implemented new approaches to youth sports that attempt to combat the ills associated with the 10,000 rule and early sport specialization. USA Hockey moved forward with a new approach to elite development in 2009. They implemented the American Development Model, which emphasizes the adherence to the Long-Term Development Model (LTDM). The LTDM rejects outright early specialization and seeks to reduce the emphasis placed on winning at a young age. Young athletes are encouraged to participate in multiple sports to nurture a positive affinity to sport and develop foundational physical literacy skills (USA Hockey, 2015). The Swedish International Hockey Association was the first of the international major hockey organizations to adopt the LTDM in 2003; Hockey Canada has also recently

adopted the LTDM.

The birth effect is a prevailing trend in hockey, as well as many other sports that demonstrates how athlete's birthplaces influences the likelihood of becoming an elite athlete (Baker et. al, 2007; Macdonald et. al, 2009; Bruner et. al 2011). The research suggest that cities that have populations that range from 100,000 to 999,999 people produce a disproportionately high amount of elite athletes. Whereas larger urban centers with populations over a million and small towns with a population less than 10,000 produce disproportionately small amount of elite athletes (Baker et. al, 2007). Suggesting a suburbanization of elite athlete production. But what is it about the developmental contexts in suburban regions that allows for athletic production to flourish? Through a quantitative and qualitative analyses, this thesis hopes to shed light on the underlying processes that account for the birthplace effect.

Summary

Like most other organized sports, the geographies of elite hockey player production have continually shifted since hockey first emerged as a popular form of organized sport in the late 1870s. At its birth, hockey was exclusively an urban activity engaged in by a small sector of society. Only after it shed its original ideological underpinnings (amateurism) did hockey spread to much of Canada to include the rural hinterlands (Metcalfe, 1987). Each successive shift has been preceded and shaped by external processes and struggles independent of hockey, and impacting on many aspects of economy and society. Technological innovation has developed new forms of transportation (railway, planes, cars) communication (radio, television, telephone, internet), and sports equipment such as faster skis, better skating ice, carbon fibre tennis rackets, golf clubs, and bicycles, and ever

faster running shoes. Class allegiances have promoted a specific ideological approach to sport (notably amateurism), class struggles introduced unionized labour (advocating shorter work weeks, increased leisure time etc.), western capitalism has deepened the commodification of sports and the emergence of sport as spectacle, and various international rivalries have prompted federal funding for sport and recreation. Overall, neoliberal governance has deepened the privatization of previously public goods and services and the deindustrialization of the hinterlands of BC (Gruneau & Whitson, 1993; Kidd, 1996).

And for the individual, neoliberalism has downloaded the cost of athletic production upon them. Athletes have become increasingly reliant upon privately owned/operated built environments and services. For hockey players, this takes the form of private ice rinks and high performance training centres. The spatial arrangement of said facilities and services has contributed to a geographic shift in elite hockey player production in BC, from the rural/industrial hinterlands to the major urban centres. Young hockey players lacking the financial means or those geographically situated in peripheral regions of British Columbia are excluded from engaging in the elite hockey process.

CHAPTER 2

METHODS OF INQUIRY

Central research questions:

Has the geography of elite hockey player production in British Columbia changed since 1950?

How has the privatization of ice rinks and hockey related services contributed to the geographic shift in elite hockey player production?

- What is the geographic distribution of privatized rinks and High Performance Training Centers (HPTCs)?
- How has the geographic distribution of P3 rinks and HPTCs affected access of rural and low-income families to elite hockey development?
- To what extent does the private system prevent talented young players who either cannot afford the HPTCs or are geographically remote from them gaining access to the higher echelons of professional hockey?

To answer my central research questions I employed a mixed research methodology. Drawing on census information, ice rink and elite hockey player databases, and the location of HPTCs I analyzed, through geographic information systems, how the distribution of privately owned ice rinks and HPTCs has affected the production of elite hockey players in BC. I also conducted semi-structured interviews with key informants and parents whose sons play(ed) professional hockey from an urban and rural community. My field research was conducted in a rural and urban location of BC.

Before elaborating further on my methodological approach, I am going to first acknowledge the biases I carried while undergoing this research project. I am a former elite hockey player. I played fours years of junior hockey in BC and following my junior career I played four years of NCAA collegiate hockey at SUNY Geneseo in New York. I have played in private ice rinks and have trained with HPTCs. My experiential knowledge directly influenced this thesis project.

Secondary Sources

Elite Hockey Player Database

The National Hockey League (NHL) is home to the best hockey players from around the world. All but one player from the rosters of the two teams competing for the 2014 Olympic gold medal played in the NHL. It is the world's premiere professional hockey league. Parents invest thousands of dollars in hockey training to provide their sons the best opportunity to play in the NHL. To better understand how the geography of elite hockey player development has changed through time, I created a database containing information about every BC born elite hockey player. For this study, an elite hockey player is a player who has played a single game or more in the NHL, been drafted in the annual NHL entry draft, and/or played one game or more in the Western Hockey League (WHL). Regrettably, I was unable to collect data about BC born collegiate players.

The value in recording players who have played a single game in the NHL is evident, however, the motives for recording those who were drafted or played in the WHL is not so clear. Since 1963, the NHL has held an annual entry draft. The entry draft is the primary means to which NHL teams restock their talent pools. It is for this reason that the NHL draft

is a good indication of where elite hockey players are coming from, as they are drafted because NHL teams deem them and/or project them to be the best of their age group (18-20 y/o). The majority of drafted players do not ultimately end up playing a game in the NHL. Of the 331 BC born NHL players, 28% were not drafted into the NHL. However, as indicated above, the draft is a benchmark all elite young hockey players hope to attain.

The WHL is a junior hockey league (16-21 years old) located in Western Canada. The league consists of 22 teams in BC (6), Alberta (5), Saskatchewan (5), Manitoba (1), the state of Washington (4), and Oregon (1). It is one of the three member leagues of the Canadian Hockey League (CHL). The CHL is the world's top developmental league in the world. There is not a league that rivals the CHL's ability to produce NHL hockey players. Since the NHL's inaugural draft in 1963, 60% of all NHL drafted players have come from the WHL, OHL, and/or the QMJHL and 53% of the 704 players that have played a game or more in the NHL this season (2014-2015) played for a CHL team prior to playing in the NHL. Since its inception in 1966, the WHL has been the top junior/development league in western Canada. It is for this reason I decided to include all players who have played a game or more in the WHL in my study.

To further demonstrate the shifting geographies of elite hockey player production I recorded the hometown and date of birth of every BC born hockey player drafted in the WHL's annual Bantam draft. The WHL Bantam draft began in 1992 and continues to be of importance to prospective elite players. It provides an accurate picture of whom the provinces best young prospects are and where they are coming from.

Data related to NHL games played was accessed through hockey-reference.com.

This *source* contains secondary data for every BC born hockey player that has played a game in the NHL. Hockey-reference.com's historical data is provided by Dan Diamond Associates. The archival data goes as far back as 1901 and is available up to, and including the current NHL season (2014-2015). Dan Diamond has served as the NHL's consulting publisher for the past 25 years. He publishes the annual NHL Official Guide and Record book. Given Dan Diamond's accolades, I feel his data is accurate.

NHL entry draft data was taken directly from the NHL.com website and the WHL data was taken from eliteprospects.com. Eliteprospects.com is a website based in Sweden, employing 114 people from 17 different countries. I collected all the data and recorded it in an Excel spreadsheet. The data set contained the following categories for 1484 players; player name, hometown, date of birth, whether they played a game in the NHL, WHL, or was drafted, and the latitudinal and longitudinal coordinates of their hometowns. I split the data into five different cohorts; players born in the 1940s, 50s, 60s, 70s, 80s, and 90s. It must be noted that I fully acknowledge that there will be instances where the hometown data will be problematic. On occasion players do not end up playing for their local hometown minor hockey association. Such noise is minimized by the volume and temporal range of the data. Additionally, when I collected the data for each player from a third party website it was assumed that the categories Birth Place and Hometown were synonymous. The data sets are imperfect, yet I still feel they provide a relatively accurate portrayal of the geographies of elite hockey development and how it has transformed through time.

BCAHA Championships Data

BCAHA provincial champions for the Senior, Junior A, Juvenile, Midget, Bantam, and

Peewee divisions were recorded to further contextualize the early geographies of elite hockey player production. All data related to BCAHA championships was extracted from BCAHA's official website.

Senior hockey teams in BC have been competing in provincial championships for the Savage cup since 1912 (bcaha.ca). The first BCAHA Junior A division provincial championships were held during the 1927-28 season. The first provincial minor hockey championships were held for the Midget and Juvenile divisions during the 1938-39 season, Bantam 1960-61, and Peewee 1969-70. Only championships up until the 1980 season are recorded. The BCAHA adopted a tier system in 1981 (Atwell, 1988). A tiered system segregated communities based on registration numbers. Meaning associations with less than 250 registrants within a division competed in AA whereas communities with 250 or more registrants competed in AAA. Thus, small town communities no longer competed against larger urban centers (Atwell, 1988).

Ice Rink Database

The presence of ice rink(s) is a key characteristic of the elite hockey landscape and a prime determinant as to whether a specific geographic region has the capacity to produce elite hockey players. The more ice available to prospective players the better. It was crucial to gain an understanding into how the geography of hockey's infrastructure has shifted from 1892-2006. I used two sources to record and map the geographic coordinates of every ice rink that has been constructed in BC from 1892-2006.

Through Hockey Canada (HC) and the Recreation Facilities association of BC (RFABC) I was able to gain access to the National Arena Census conducted in 2007. The

National Arena Census contained the following data for all the ice rinks in BC; location, ownership, date of construction, and months of operation. The National Arena census data only accounted for rinks that were currently under operation. Thus, the National Arena Census data was supplemented with data derived from Leo Atwell's self-published book on the history of the British Columbia Amateur Hockey Association (BCAHA). Atwell recorded the construction of every rink in British Columbia from 1892-1988. He was a past president (1958-1962) and was honored as a lifetime member of the BCAHA. For those reasons, I believed the book to be accurate portrayal of the BC's hockey infrastructure.

High Performance Training Company Database

HPTCs have evolved into a cornerstone of contemporary hockey landscape. They provide elite players a competitive advantage over others who cannot afford the staggeringly high cost of HPTCs or those who are geographically isolated from them. The abundance of ice time, professional coaching, and use of cutting edge training technologies and instruction are irreplaceable and have become a prerequisite for prospective elite hockey players aspiring to reach the heights of elite hockey.

I set out to collect the geographic locations of HPTC headquarters in BC. In collecting HPTC data I consulted a few sources. I mined BCs corporate registry and the BCAHA's and Hockeynow magazine's websites to locate all operating HPTCs in BC. I did not collect information on traditional weeklong summer hockey camp/schools. HPTCs are entirely different from weeklong summer hockey schools. They provide services throughout the year and take a far more specialized/micro approach to instruction, whereas, weeklong

summer hockey schools take a more holistic approach emphasizing a week long curriculum covering all aspects of skill development (Forward/backward stride, stickhandling, shooting, passing etc).

I was able to collect data for 60 HPTCs throughout BC. The following categories were used for the dataset; HPTC name, location of headquarters, location of services. The latter category was added because many HPTCs provide services in geographic regions outside of where their headquarters are located.

Field Sites

I set out to identify two field sites in BC illustrative of the current state of the production of elite hockey players in BC. A rural and urban site was chosen to contrast the hockey landscapes of two fundamentally different regions of BC. I identified a formerly successful producer of elite hockey talent, Trail, BC, and an emergent elite hockey hot bed, North Vancouver, BC. Private ice rinks and high performance training centers service current and prospective elite hockey players in North Vancouver, whereas Trail is void of such infrastructures and services. I conducted 10 semi-structured interviews in Trail and 7 in North Vancouver.

Trail, BC

The rural community I selected interview subjects from was Trail, BC. A proverbial 20th century Canadian company town, Trail has long been renowned for its rich hockey tradition. Trail teams competed in BC's first Senior hockey league in the beginning of the 20th century, was home to the largest artificial ice rink between Winnipeg and Vancouver in 1926, and was the location of on of BC's first minor hockey programs. The success of Trail hockey teams is staggering. From 1934, when minor hockey was first introduced in Trail, until 1968 Trail junior A teams were 21 time provincial champions, 10 time Juvenile champions, 11 time Midget champions, 5 time Bantam champions, and two time Senior World Champions (1939 & 1961) (Second Period, 2015). Trail held Canada's first "minor hockey week in Canada" in 1957. And at its height in 1950, Trail minor hockey had 500 male registrants (Sports History, 2012). Today, due to low registration numbers, Trail minor hockey has had to amalgamate with surrounding minor hockey associations Beaver Valley and Rossland to form the Greater Trail Minor Hockey Association (GTMHA). The GTMHA had 322 registrants during the 2013-14 season (BCAHA, 2014). Although its recent history may indicate otherwise, Trail exemplifies the ideal small town hockey community in BC.

Unlike urban and suburban regions of BC, Trail does not have a privately owned ice rink and the presence of HPTCs in Trail and the surrounding regions is minimal. Trail has one municipally owned ice rink, Memorial Arena. However, there are ice rinks in the nearby communities of Fruitvale (1) and Rossland (1). Unlike North Vancouver, the ice rinks in Trail and the surrounding region only remain open 9 months of the year.

I am well positioned to conduct research in Trail. I lived and played three years of junior hockey from 2005-2008. I have existing relationships with many of the leading hockey figures in the community and was able to gain access to the most influential hockey people in Trail.

North Vancouver, BC

The urban community I conducted interviews in was North Vancouver, BC. The community of North Vancouver epitomizes the newly emerging hockey landscape of BC. North Vancouver is home to 4 ice rinks containing 6 ice sheets, two of which are privately operated: Canlan Ice Sports and North Shore Winter Club (NSWC) (Canadian Recreation, 2006). Three of the 5 ice sheets in North Vancouver remain open year round. There are 4 HPTCs headquartered and servicing local prospective elite hockey players in North Vancouver. North Vancouver is also home to one of the most prolific private winter clubs in North America, NSWC. Since 2002, the NSWC has won 5 Peewee and Bantam provincial championships, and 3 Western Canadian Bantam Championships (BCAHA.org). Furthermore, since the WHL began recorded the previous team data for draftees (2010), the NSWC has had 22 players selected in the bantam draft. North Vancouver has morphed into one of the leading hockey communities in Canada.

I was also well positioned to conduct key informant interviews in this region. From the age of 6 to 17 I played hockey within the North Vancouver Minor Hockey Association. I have deep ties with members of the North Vancouver hockey community and was able to gain access to some of its hockey leaders.

Semi Structured Interviews

Elite player, ice rink and HPTCS data allowed me to conduct a historical analysis of BC's production of elite hockey born from 1893 to 1998. Quantitatively, I was able to identify whether geographic relationships exist between elite hockey players hometowns, privately operated/owned ice rinks, and HPTCs. Information extrapolated from the secondary data sources directly informed the series of semi-structured interviews I performed in Trail and North Vancouver.

I conducted 15 semi-structure interviews with parents of current/former professional hockey players and key informants. Key informants included former professional hockey players, current/former junior and minor hockey coaches, and junior team presidents'. Parental interview subjects remained anonymous, but former professional hockey players, current/former junior and minor hockey coaches, and junior team presidents' participants were given a choice of remaining anonymous within the written informed consent document I presented them.

Table 2.1: Semi Structured Interviews

	N=	North Vancouver	Trail
Parent(s) of Current/Former Professional Hockey Players	7	4	3
Key Informants	10	4	6

Parents of Current/Former Professional Hockey Players

Parents of current and former professional hockey players provide a unique perspective into production process of elite hockey players. They are the primary investor in the process. I attempted to understand their rationale for investing significant time and money into the careers of their children. But, I was more interested in the trajectories of their children's hockey careers. I wanted to fully grasp their son's minor hockey experience and development trajectory. Whether they played spring hockey and why? Why they chose specific junior (minor) hockey programs? And where they felt the majority of their child development took place, during the winter or summer months. All interviews were semi-structured and were conducted from May-June 2014.

Key Informants

Through key informant interviews I had hoped to gain a firmer grasp of what is occurring on the ground. I wanted to better understand how the elite hockey process has changed over the past 50 years and where it is going. I identified members of both communities who play(ed) amajor roles in North Vancouver and Trail.

Unfortunately I had a poorer response securing interviews with key informants from Trail. Many people I approach in North Vancouver were not comfortable participating in my study. But, my experiential knowledge from having participated in the elite hockey process in North Vancouver from the time I was 9 until I was 17 helped supplement the qualitative portion of the study.

CHAPTER 3

THE RISE OF ELITE HOCKEY PLAYER PRODUCTION

Professionalization of Hockey

Hockey emerged in the last quarter of the 19th century as an urban upper class endeavor enjoyed by students and members of exclusive sporting clubs. British colonial officers, commercial and mercantile middles classes, and college students formed sporting clubs in which intra and inter club challenge matches took place. Sporting clubs were private institutions reserved for members of the middle and upper classes of Montreal and Toronto. Through dues, clubs constructed specialized sporting facilities (ice rinks and playing fields), hosted challenge matches, and established governing institutions to ensure the observance of a constitutionalized set of rules and regulations centered on a rigid interpretation of the British amateur ethic (Metcalfe, 1987). A strict adherence to the British amateur ethic served as a de facto means of excluding undesirables from participating in organized hockey. "Farmers, habitants, lumberman, fur traders . . ." and urban working class residents did not partake in formal hockey matches (Metcalf, 1987: 29). Upper middle class residents were afforded the financial means, social networks, and necessary amount of leisure time to engage in organized amateur sports (Kidd, 1996).

The exact whereabouts of where hockey was first played is highly contested, but the first official hockey game with an institutionalized set of rules took place in Montreal on the Victoria ice rink in 1876 between members of the Victoria Skating Club. Soon after hockey was included in the Montreal Winter Carnivale in 1883. In 1893 the then Governor-General, Lord Stanley, donated and a year later awarded the first Stanley Cup to the best amateur

team in Canada (Wong, 2005). By 1895, intra-city leagues could be found in Montreal, Toronto, Winnipeg, Halifax, Saint John, Quebec City, Peterborough, and Ottawa. The first openly professional hockey match was played in Sault St. Marie, Ontario in 1906 (Metcalfe, 1987). Hockey was quickly becoming Canada's most popular organized sport, yet still limited to certain sectors of society.

Rink owners immediately recognized hockey's potential as a profitable commercial venture. Inter club matches for the Stanley Cup drew thousands of paying spectators (Wong, 2005). A box seat ticket for the 1896 Stanley Cup final between the Winnipeg and Montreal Victoria's cost $12, at that time a very large amount (Kidd, 1972). Entrepreneurs began constructing specialized hockey facilities with increased seating capacities. In 1896 Dey's Skating rink was constructed in Ottawa and in 1898 The Montreal Arena was constructed in Montreal; these rinks could hold 3500 and 7000 paying customers respectively (Coleman, 1966; Kitchen, 1999). Rink owners rented ice to local clubs and provided the teams with a certain percentage of the gate receipts, thus providing teams a financial incentive to win. More wins meant more money. And in fear of losing top end talent, hockey clubs began providing employment to players or secretly compensated them (Metcalfe, 1987. Instead of relying upon an exclusionary system based on class, professionalism/shamateurism relied on profit margins, contingent on fielding a competitive team. Whether a player conducted himself as a gentlemen mattered less, winning became hockey's raison d'etre. Clubs scoured the country in search of top end talent. A player's skill mattered far more than his social pedigree (Metcalfe, 1987; Kidd, 1972). The tenets of amateurism were quickly eroding, but tensions between amateur and professional factions would persist until the NHL emerged in the 1930's as the dominant

presence in the hockey world.

The professionalization of hockey democratized the sport. It brought the game to the masses. Newspapers and informational brochures, distributed as early as 1904 by the Spalding Corporation, informed and described the exploits of the professional athletes (Metcalfe, 1987). Increasing numbers of children began replicating the exploits of their professional heroes. Hockey was incorporated in school curricula and local parishes established local youth house leagues (Kidd, 1996). The game was becoming accessible to members of society who would otherwise have been barred from consuming or playing it. Hockey was an urban middle and upper class creation but soon spread to the industrial hinterlands of Canada to include working class men (Kidd & Macfarlane, 1972). Company towns sponsored local senior teams and exhausted significant resources to field competitive hockey teams to compete in the various Canadian Amateur Hockey Association (CAHA) administered senior leagues littered across the country. Senior leagues were only amateur in name. Teams provided under the table compensation and/or employment at local mills/mines/smelters in return for the on ice services of talented players.

The popularity of professional hockey was on the rise by the 1920s and by the 1930s tensions between amateur and professional factions was coming to a climactic end (Metcalfe, 1987). The CAHA, facing significant financial difficulties related to the Great Depression and unable to compete with the big salaries or media coverage of the NHL, decided to break away from the Amateur Athletic Union of Canada (AAUC) and signed an agreement with the NHL in 1936 (Metcalf, 1987). The agreement stated: "Players may capitalize on their ability as hockey players for the purpose of obtaining legitimate employment and to accept compensation for time lost from playing hockey," (Kidd &

McFarlane, 1972). The CAHA allowed NHL clubs to sign CAHA affiliated players to a contract. The NHL agreed to pay $250 for every player signed and an additional $250 for every player who made an NHL roster. Also stipulated in the agreement was that CAHA sanctioned leagues would adopt NHL rules, ensuring the reproduction of NHL's brand of hockey. The agreement signified the CAHA's surrender to the NHL and acknowledgement of its future role as "as a gigantic hockey slave farm" for the NHL (Kidd & Macfarlane, 1972:55).

This means by the end of the 1930s the NHL had supplanted the CAHA as the leading entity in hockey, dictating how the game was to be played and controlling where players would play. Through the establishment of minor professional leagues across North America and its agreement with the CAHA, the NHL monopolized access to players. In so doing, this laid the groundwork for a rationalized mode of producing hockey players.

Beginnings of a Rationalized Mode of Elite Hockey Player Production

NHL hockey teams are "interdependent profit maximizers," (Jones, 1969; 17). They do not experience high revenue streams without producing a competitive on ice product and a competitive product is useless unless the league has achieved a certain level of parity. If league results become too predictable, demand along with profits will drop (Jones, 1969). Thus, it is in the leagues interest to "promote competitive equality between clubs primarily through the redistribution of players," (Jones, 1969; 4). Having open access to the country's best young hockey players is fundamental to the NHL's financial success. The NHL has sought and achieved monopolistic power over elite hockey players in Canada. This has permitted the NHL to have direct influence of where and how elite hockey players are

produced in Canada and increasingly the world.

The NHL began recruiting junior aged (16-20 years old) players in the late 1920s. Retainer fees, enrollment in local high schools, and employment were the means by which NHL teams induced amateur hockey players (Kidd, 1972). The NHL needed a steady flow of talented players to maintain public interest, but still had to compete with CAHA senior teams for the countries top players. By the late 1930s the NHL attempted to gain control over the countries talent pool. The 1936 agreement between the CAHA and the NHL set the stage for the landmark 1947 agreement between the two parties and established a rationalized mode of producing elite hockey players (Kidd, 1971).

The 1947 agreement allowed NHL teams to sponsor up to 2 CAHA Junior "A" clubs. NHL teams financially supported Junior "A" clubs, but in return they were granted the exclusive professional rights over all players associated with the Junior "A" club they chose to sponsor. In reality, however, NHL teams controlled 8 or 9 amateur junior "A" teams through ownership of and affiliation with minor professional league teams (Jones, 1969). Not only were NHL teams able to sponsor Junior "A" clubs, but the agreement defined a "club as consisting of senior, intermediate, junior, "A", junior "B" or Juvenile, midget, bantam, and all house league players affiliated with them," (Kidd & McFarland, 56:1972). By 1966, NHL teams sponsored 50 Junior "A" teams in Canada, granting them direct ownership to hundreds of young amateur hockey players. For example, in the 1965-66 season the Montreal Canadians sponsored two Junior "A" teams (Montreal Junior Canadians, Peterborough Petes), but through their various affiliations with minor professional league teams (Cleveland Barons, Providence Reds, Quebec Aces, Seattle Totems, Houston Apollos) they actually had direct access to 21 Junior "A", Junior "B",

Juvenile, and Midget clubs (Jones, 1969). The state of amateur hockey was poignantly expressed in a memo written to Prime Minister Lester Person by Duncan Stewart, a member of the Federal Administrative body entitled Amateur Sports Directorate:

> The whole Agreement indicates that the sole purpose of the CAHA in the eyes of the NHL is to *produce* hockey players on standards compatible with the NHL style of play. The CAHA is therefore nothing more than a gigantic pool of natural resources from which the NHL can draw without fear of competition, the natural resources at its own price, trained to its specification on terms satisfactory to the NHL. (Conlin, 1994: 57)

The 1947 agreement cemented a rationalized mode of elite hockey player production ensuring a continual flow of the best young Canadian prospects to the NHL. The sponsorship system lasted until 1966 when the NHL abolished it due to league wide expansion. The NHL expanded from 6 to 12 teams in 1967. The sponsorship system, with its extensive networks that permeated all of Canada, clearly represented an insurmountable competitive advantage for the original 6 teams (Kidd & Macfarlane, 1972). The sponsorship system was replaced by an annual universal entry draft. Eligible players were 21 years or older (Macintosh et al. 1987). The order of the draft was determined by the previous season standings. The last place team drafted first, second last team drafted second and so forth in the inverse order of the previous season's standings. The draft still serves as the primary means for restocking NHL team rosters with junior aged prospects.

The dissolution of the sponsorship system in 1966 made room for the establishment of regional major junior hockey leagues that would replace junior "A" sponsored teams as the primary breeding grounds for NHL talent. Western Canadian manifestations included the Western Canada Junior Hockey League (WCJHL) formed in 1966 and later renamed the Western Hockey League (WHL) in 1978. The junior hockey landscape was altered

dramatically by the emergence of Major junior hockey leagues in Western Canada, Ontario, and Quebec. In 1970, the Ontario Major Junior Hockey League (Later renamed the Ontario Hockey League (OHL)), Quebec Major Junior Hockey League (QMJHL) and the WCJHL's removed themselves from the auspices of CAHA to form a separate entity, known today as the Canadian Hockey League (CHL). The formation of the CHL divided junior hockey into two tiers. Major junior hockey, representative of the OMJHL, QMJHL, and WCJHL, became known as tier 1 and Junior "A" leagues from across Canada, which included the British Columbia Junior Hockey League, became known as tier 2 junior. Tier 1 junior hockey players receive monetary monthly stipends from their respective hockey teams, while tier 2 junior players maintained their amateur status and thus National Collegiate Amateur Association (NCAA) eligibility to compete for Universities/Colleges in the United States (CJHL.com).

The development of an extensive pan-Canadian network of tier 1 junior hockey leagues in the mid-1960s centralized the top young talent into three leagues (WHL, OHL, QMJHL). This allowed NHL hockey teams to efficiently identify and gain rights to the next generation of NHL hockey players without expending as much financial resources as they previously had under the sponsorship system (Jones, 1969). The NHL annual entry draft is the primary means by which the NHL does so. Since the inception of the annual NHL entry draft in 1963, but specifically following the demise of the NHL sponsorship system in 1966, 60% of all NHL drafted players have been from teams in the CHL, 14% from NCAA teams, 14% from European club teams, 4% from American junior "A" teams, and 4% from Canadian tier 2 junior team's, as Table 3.1 shows.

Table 3.1: Previous Leagues of NHL Drafted Players (1966-2014)

Previously League	% of Players Drafted
Canadian Hockey League	61%
NCAA University/College	15%
European Club Team	15%
American Junior "A"	4%
Canadian Junior "A"	4%

(Data compiled and calculated by author)

The sponsorship system established in 1947 allowed NHL clubs to directly participate in the elite hockey production process. Grants and various other forms of material support contributed to the success of certain NHL sponsored minor hockey associations and their players. The NHL's newly placed emphasis on the annual entry draft marked an alteration in its mode of producing elite hockey players. They no longer materially supported entire minor hockey associations, yet still depended on them to produce talent. The vacuum had, and continues to be, filled primarily by the CHL and its member teams.

The Canadian Hockey League

The CHL is made up of 52 Canadian and 8 American teams playing in the WHL, OHL, and QMJHL. There are CHL teams in BC (6), Alberta (5), Saskatchewan (5), Manitoba (1), Ontario (17), Quebec (12), New Brunswick (3), Nova Scotia (2), PEI (1), Pennsylvania (1), Michigan (2), Washington (4), and Oregon (1) (chl.com, 2015). It is the world's top developmental league. No other junior, collegiate, or European league sends more players to the NHL than the CHL. As previously mentioned, 60% of all NHL drafted players since 1966 have come from the WHL, OHL, or QMJHL and 53% of the 704 players that have played a game or more in the NHL this season (2014-2015) played for a CHL team prior to playing in the NHL. Beyond the CHL's advertised role as the world's top developmental league, it is also big business.

Table 3.2: **Previous League of Current (2014-2015) NHL players**

Previous League	% of Players
Canadian Hockey League	52.8% (372)
NCAA University/College	25.1% (177)
Swedish Elite League	8.3% (59)
Finish Elite League	3.2% (23)
Russian Elite League	3.1% (22)
Czech Elite League	1.2% (9)
Swiss Elite League	.8% (6)
German Elite League	.5% (4)
Slovak Elite League	.4% (3)
Canadian Junior "A"	.2% (2)

(Data compiled and calculated by author)

In the 1970s CHL franchises were being sold for as little as $50,000, whereas today with deepening capitalization of the game, CHL franchises are worth upwards to $20-25 million (Quebec Ramparts) (Gazette, 2014). This past year, the CHL surpassed 9 million in attendance and signed a 12-year television agreement with Rogers's media (chl.ca). Moreover, as per the CHL-NHL agreement, the NHL provides developmental fees in the form of $50,000 grants to each CHL team. CHL teams are also compensated for having players drafted into the NHL. The amount a team is paid depends on the round in which the player was selected (1st round picks fetch from $15,000-17,000) (Spencer, 2004). The CHL's continued dominance over the junior hockey market along with ancillary benefits such as national/regional broadcast agreements, advertisement, and development feels are

contingent upon the CHL securing North America's top young talent. And much like the NHL, the CHL has developed mechanisms to ensure they capture the best young talent within each CHL geographic jurisdiction.

All three CHL (WHL, OHL, QMJHL) leagues conduct annual drafts in order to gain the rights to midget and bantam aged prospects. The OHL first held a midget draft prior to its inaugural season in 1970, the QMJHL's first draft was in the mid-1970s, and the WHL held its first Bantam draft in 1990 (CHL.com). The OHL is permitted to draft players from Ontario, New York, Michigan, and Pennsylvania (ohl.ca). The QMJHL may draft midget aged players from Quebec, the Maritimes, and the New England states of the US (qmjhl.ca). WHL teams may draft prospective players from BC, Alberta, Saskatchewan, Manitoba, Yukon, Northwest Territories and all states west of the Mississippi. In addition to an annual bantam/midget draft, all CHL teams are permitted to protect 50 players within their respective geographic jurisdictions. The player protection lists include each teams current rosters. Once a player has been drafted or has been placed on a player-protected list, he may not play for or attend another CHL teams training camp. That player effectively becomes the property of whichever team has placed him on their player-protected list (whl.ca). Teams scour their respective jurisdictions in hopes of restocking their talent pool. Where they go, however, has changed.

Emergent Neoliberalized Elite Hockey Landscape

Hockey Canada functions as the sole governing body of amateur hockey at all levels across Canada (www.hockeycanada.ca). It is comprised of 13 regional branches; BC Hockey, Hockey Alberta, Saskatchewan Hockey Association, Hockey Manitoba, Hockey Northwestern Ontario, Ontario Hockey Federation, Hockey Eastern Ontario, Hockey Quebec, Hockey New Brunswick, Hockey Nova Scotia, Hockey Newfoundland and Labrador, Hockey PEI, and Hockey North. The central mission of regional branches is to administer HC programs within their respective jurisdictions (Hockey Canada, 2012). Each regional branch of HC is made up of non-profit minor hockey associations representative of cities, municipalities, and districts. Minor hockey associations are volunteer run organizations materially supported by HC (equipment, coaching, funding), registration fees, external sponsorships (money), and local governance (infrastructure and subsidies). Minor hockey associations offer competitive and non-competitive hockey to geographically delineated constituents in the form of Rep and house leagues, respectively. This study is concerned with the competitive component of minor hockey or what HC terms its High Performance Programs (HPP) within the context of British Columbia. As indicated in table 3.3, the HPPs' include; Peewee AAA, Bantam AAA, Midget AAA, Junior B/C/D, Junior A, Canadian Hockey League (CHL), Canadian Interuniversity Sport (CIS), Senior Amateur Hockey, and Junior and Senior National Teams (Canadian Development Model, 2012).

Table 3.3: Hockey Canada's Canadian Development Model

Professional Hockey (NHL, AHL, ECHL) Age 18+
Canadian Interuniversity Sports (CIS) Age 21+
Senior Amateur Hockey Age 21+
Canadian Hockey League (CHL) Age 16-21
Canadian Junior A Hockey Age 16-21
Junior B/C/D Hockey Age 16-21
Midget AAA Hockey (Minor Hockey) Age 15-17
Minor Midget AA Hockey (Minor Hockey) Age 15-17
Bantam AAA Hockey (Minor Hockey) Age 13-14

The local non-profit minor hockey association has traditionally been the site of elite hockey development and sole supplier of elite hockey talent to the CHL and the NHL. Prospective elite players relied upon Hockey Canada's (HC) Canadian Development Model to advance to the professional leagues. The Canadian development model alone is no longer sufficient for hopeful young elite hockey players. It has become increasingly apparent that the Canadian development model must be supplemented by additional privately provided built environments, services, and leagues to maximize a player's opportunities to advance within the Hockey Canada's HPP. But within these developments lie issues of geographic

and social accessibility.

Privately owned/operated ice rinks are almost exclusively located in urban regions of BC and are more likely to remain open year round. HPTCs are highly specialized private companies, equipped with professional coaches and state of the art technology operating outside the auspices of HC, that provide on and off ice services (power skating, stickhandling & shooting instruction) related to elite hockey development. HPTC services are clustered almost exclusively around privately owned/operated ice rinks in the major centers of BC and cost exorbitant amounts of money. Parents with the financial means or those located in major centers of BC are presented with various year round services to supplement HC Development Model. While players residing in rural regions of BC are either relegated to the services of Hockey Canada or have to move to urban locations inundated with private ice rinks and HPTC services. The privatized route to elite hockey provides players in urban regions or those with adequate financial resources an alternate route to elite hockey and in the process has shifted the geography of elite hockey player production.

Summary

The trajectory of elite hockey player production is a frightening one. It has seemingly come full circle. Evolving from exclusive sporting clubs in the late 19th and early twentieth century into inclusive non-profit minor hockey associations in the mid-twentieth century, it is now transforming into an exclusive neoliberal hockey landscape characterized by the emergent privatized route to elite hockey and the demotion of non-profit minor hockey associations to an anachronistic platform for elite hockey development. Local capital plus shared community inputs have been replaced by corporate capital. Illustrative of this process is the emergence of privately owned and/or operated ice rinks and HPTCs. Chapter 4 will employ quantitative and qualitative data and a case study to further illustrate the ways recent developments have served to exclude prospective young hockey players lacking the financial means or those geographically situated in peripheral regions of BC from engaging the elite hockey process.

Chapter 4

Shifting Geographies of Elite Hockey Player Production: From Corporate Hockey to Neoliberal Hockey

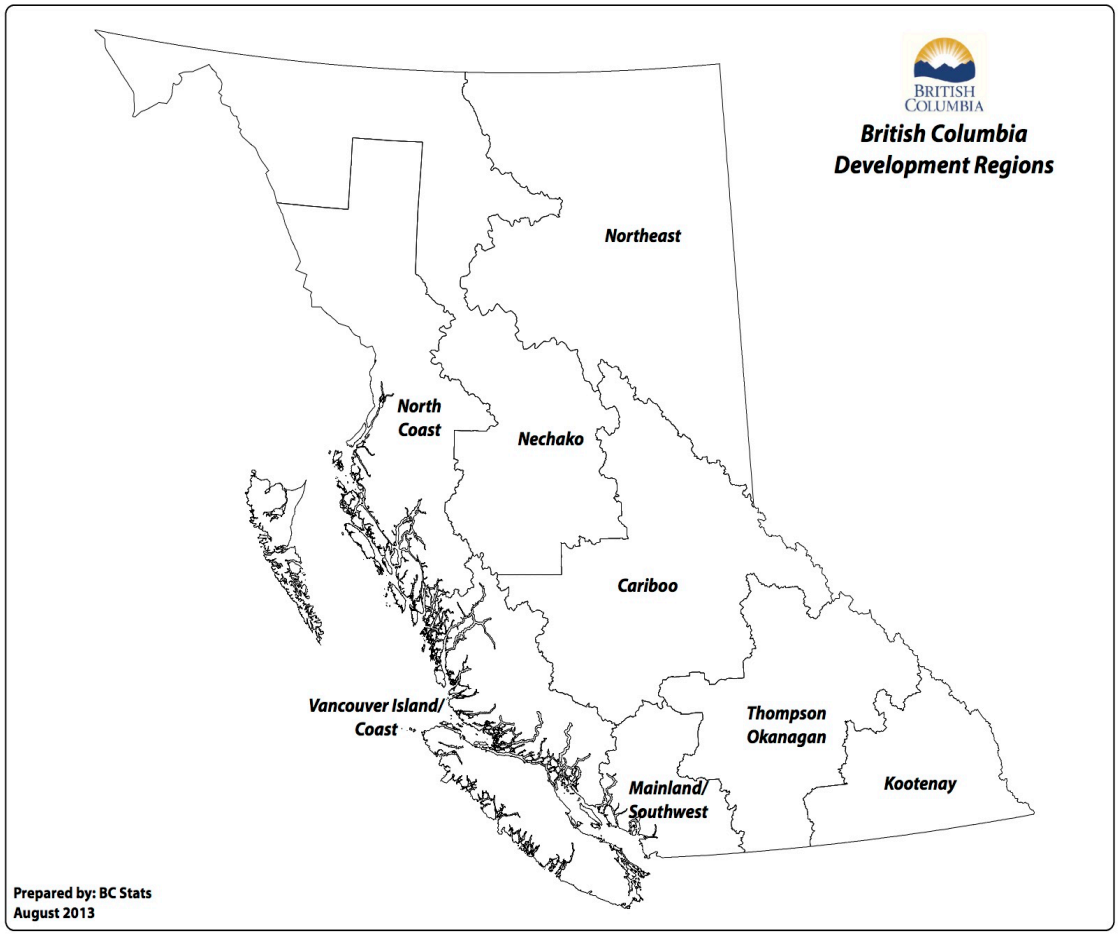
Elite hockey players are produced within specific developmental contexts that vary geographically. When and where elite hockey players are produced is contingent upon the availability of certain infrastructures. Ice rinks, coaching expertise, competition (leagues), and training facilities provide prospective elite players the necessary material and immaterial infrastructures for success. Access to these infrastructures presents regions with competitive advantages. Yet the nature, form, and location of said infrastructures change as new technologies arise and supplant or expand upon previous approaches to the production of elite hockey players. For example, in the absence of artificial ice, cold climate provided regions a competitive advantage in the early-mid twentieth century. Whereas today, in the age of artificial ice ubiquity alongside neoliberal governance, close geographic proximity to year round privately operated artificial ice rinks and high performance training companies (HPTCs) is the competitive advantage. This chapter seeks to understand the recent geographic shift in elite hockey player production in BC through a case study of two distinctly different regions of BC. A thorough examination of the elite hockey landscapes of a town in the Kootenay and Mainland/Southeast regions was undertaken to better understand the changing dynamics of BC's elite hockey.

Geographic Shift

I recorded the hometowns of British Columbian elite hockey players born between 1941-1995 and grouped them into one of 8 BC development zones to trace the geography of player production. A longitudinal approach elicited interesting geographic patterns. A marked geographic shift in elite hockey player production has occurred, with a shift from the industrial hinterlands (Kootenay's & Okanagan) to the major (sub) urban centers of BC (Mainland/Southeast).

In 1951 the Mainland and Vancouver Island accounted for three quarters (75.5%) of BC's population, yet only produced 46.5% of BC's elite hockey players born between 1951-1955. The majority of elite hockey players came from hinterland regions and small towns of BC. Although accounting for only 16.0% of the population in 1951, 38.1% of elite hockey players born between 1951-55 were from the Kootenay (21.3%) or Thompson-Okanagan (16.8%) regions of BC. Remarkably, the Kootenay region produced 21.3% of elite hockey players while only making up 7.5 % of BC's population in 1951 (yielding a remarkably high location quotient of 2.8). Today, the majority of elite hockey players are produced in urban regions of BC. Of elite players born between 1991-1995, 56.91% are from the Mainland/Southeast region. The Thompson-Okanagan region has remained relatively stable. However, their large share of elite players is attributable to Kelowna and Kamloops, the 4th and 7th largest urban centers in BC, respectively (BC Census). Surprisingly, the Vancouver Island region's share of elite hockey players has dropped from 18.5% to 9.23%.

Figure 4.1: Map of British Columbia Development Regions



http://www.bcstats.gov.bc.ca/StatisticsBySubject/Geography/ReferenceMaps/DRs.aspx[i]

Table 4.1: Elite Hockey Player's Hometowns 1951-1955 and 1991-1995 (See Appendix A: Elite Player's Hometown born between 1951-1995)

Development Region	% of BC Population (1951)	% of BC Elite Hockey Players (1951-55)	% of BC Population (1991)	% of BC Elite Hockey Players (1991-95)
Mainland/Southeast	56.1	**28.0**	55.8	**56.9**
Vancouver Island/Coast	19.4	**18.5**	18.5	**9.2**
Thompson-Okanagan	8.5	**16.8**	11.8	**15.4**
Kootenay	7.5	**21.3**	4.1	**7.2**
Cariboo	2.4	**5.3**	4.6	**7.7**
Nechako	1.0	**4.0**	1.2	**1.0**
North East	1.3	**1.3**	1.6	**.5**
North Coast	.8	**2.7**	1.3	**1.**

(Data compiled and calculated by author)

The Western Hockey League (WHL) has held an annual Bantam draft since 1992. Analyzing the birthplace of all BC born hockey players drafted in the annual WHL draft further illustrates recent geographic trends. The Mainland/Southeast is the only region that experienced significant growth over the first 11 years of the drafts existence. From 2003-2014 the majority of (56.4%) WHL draftees were from the Mainland/Southeast region. The Thompson-Okanagan and Vancouver Island/ Coast region contain the largest urban areas outside of Mainland/Southeast BC.

Table 4.2: Place of Birth of Western Hockey League Draftees (1992-2014)

Development Region	% Of Players Drafted (1992-2002)	% Of Players Drafted (2003-2014)
Mainland/Southeast	37.7	56.4
Vancouver Island/Coast	15.7	10.9
Thompson-Okanagan	24.3	21.2
Kootenay	12.6	3.2
Cariboo	6.3	4.7
Nechako	2.0	1.5
North East	1.1	.9
North Coast	.29	1.1

(Data compiled and calculated by author)

Elite hockey player production largely occurs in (sub) urban centers of BC today whereas, despite disparities in population, from 1950 through to the1970s the majority of elite hockey players came from rural regions of BC. Producing 21.3% of players born between 1951-55, the Kootenay's has only produced 7.18% of elite players born between 1991-95. In contrast, the Mainland/Southeast region has produced 28% of players born between 1951-1955 and 56.91% of elite players born between 1991-1995. The early establishment of a thriving hockey landscape in rural BC allowed the region to produce a disproportionate amount of players. *Today, the Mainland/Southeast region has become BC's hockey factory, churning out the majority of BC born elite hockey players.*

Case Study

The process of elite hockey player production in BC has been fundamentally altered. In the past, the provisioning of elite hockey was left to non-profit minor hockey associations (MHAs), was played in public rinks, and the season lasted from September to March. Private winter clubs and hockey academies have replaced non-profit MHAs. Private ice rinks operating year round have replaced municipally owned ice rinks. Professional coaches and companies specializing in the production of elite hockey players have replaced volunteerism. Players are products of their surrounding elite hockey landscape. As such, it is imperative to analyze the changing nature of BCs elite hockey landscapes. The following case study demonstrates how the neoliberal transformation of BC's elite hockey landscape has affected urban and rural region's ability to produce elite hockey players.

Kootenay Region

A geographic analysis of senior, junior, and minor hockey provincial champions illustrates the Kootenay regions sheer dominance at all levels from the 1912-60. The Kootenay region won 53% of senior provincial championships, 74% of junior provincial championships, and 71% of minor hockey championships played between 1912-1960. During this period, a Kootenay based team (Trail Smokeeaters) also won 2 World Hockey Championships (1939 & 1961) (bcaha.org).

Championship teams are stocked with an area's top players. It is thus no surprise that the geographies of Provincial Championship teams align closely with the geographies of elite hockey player production. As with the early championship teams, BCs first elite hockey players were disproportionately produced in the hinterland regions of BC. The

Kootenay's success is a product of the vast hockey resources the region possessed relative to others at the time which is linked to corporate support in the resources sector.

Table 4.3: Mens Senior Championship by Region (1912-1980) (Data compiled and calculated by author)

# of Championships by Region	1912-20	1921-30	1931-40	1941-50	1951-60	1961-70	1971-80
Kootenays	**0**	**6**	**10**	**6**	**2**	**6**	**4**
Mainland/South east	**8**	**4**	**0**	**1**	**0**	**0**	**0**
Thompson-Okanagan	**0**	**0**	**0**	**1**	**6**	**0**	**0**
Cariboo	**0**	**0**	**0**	**0**	**0**	**0**	**0**
North East	**0**	**0**	**0**	**0**	**0**	**0**	**0**
North West	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Vancouver Island/Coast	**0**	**0**	**0**	**1**	**1**	**0**	**0**

Table 4.4: Junior A Champions by Region (1931-1980)

# of Championships by Region	1931-40	1941-50	1951-60	1961-70	1971-80
Kootenays	**8**	**6**	**7**	**2**	**0**
Mainland/South east	**2**	**0**	**0**	**3**	**3**
Thompson-Okanagan	**0**	**0**	**3**	**4**	**6**
Cariboo	**0**	**0**	**0**	**0**	**0**
North East	**0**	**0**	**0**	**0**	**0**
North West	**0**	**0**	**0**	**0**	**0**
Vancouver Island/Coast	**0**	**1**	**0**	**1**	**0**

(Data compiled and calculated by author)

Table 4.5: Minor Hockey (Peewee, Bantam, Midget, Juvenile) Provincial Champions by Region (1941-80)

# of Championships by Region	1941-50	1951-60	1961-70	1971-80
Kootenays	**15**	**13**	**21**	**0**
Mainland/South east	**1**	**1**	**5**	**20**
Thompson-Okanagan	**1**	**7**	**4**	**13**
Cariboo	**0**	**0**	**2**	**2**
North East	**0**	**0**	**0**	**1**
North West	**0**	**0**	**0**	**1**
Vancouver Island/Coast	**0**	**0**	**2**	**5**

(Data compiled and calculated by author)

In the first three quarters of the twentieth century, the Kootenay's were characteristic of most early Canadian hockey landscapes. The region had/has a suitable climate, high volume of ice rinks, early establishment and institutionalization of inter-regional leagues and minor hockey, and industry sponsored senior hockey teams. All of which gave the Kootenays a competitive advantage over other regions of BC in the first three quarters of the twentieth century. This region produced 22% of all BC born NHL hockey players from 1940-1979, a remarkable number considering the regions proportion of BC's population (table in Appendix) . Their success during the first half of the twentieth century is unrivalled.

During the first decades of the 20th century, artificial ice had yet to become widely available. In its absence, climate was the prime determinant of whether specific regions had the capacity for hockey. Located in southeastern BC, the Kootenay region experiences long and cold winters conducive to ice formation. BC's first covered ice rinks were constructed in the Kootenay Region in Sandon and Nelson BC in 1893 and 84, respectively

(Atwell, 1988). By 1920, 71% (15) of BC's operational ice rinks were located in this region. And in 1960**,** 42% of operational ice rinks in BC were located in the Kootenays (Atwell, 1988). The relative abundance of ice rinks provided residents ample opportunity to play hockey in a structured setting and allowed for the formation of the provinces first inter regional senior hockey leagues.

Table 4.6: Location of Ice Rinks in 1960 (See Appendix B: Ice Rink Construction in BC 1893-1988 and Appendix C: Ice Rink Construction 1988-2007) (Data compiled and calculated by author)

Region	% Of Ice Rinks Residing in Region	Location Quotient
Kootenay	42%	6.7
Thompson-Okanagan	21%	2.3
Mainland/Southeast	16%	.29
Vancouver Island/Coast	11%	.59
Cariboo	8%	2.2
North East	3%	2.7

Formal hockey games were first played between Sandon and Nelson in 1895. By 1905, the Kootenay region was home to four ice rinks and BCs first senior inter town hockey league, the Kootenay Hockey League (KHL). The KHL featured teams from Sandon, Nelson, Rossland, and Moyie BC (Overtime, 2015). Other competitive inter regional leagues sprang up shortly after the founding of the KHL. In 1908, the Boundary Hockey League (BHL) was formed. The Phoenix Hockey Club were crowned Boundary Cup champions in 1911 and subsequently issued a challenge, albeit unsuccessfully, for the Stanley Cup. The BHL absorbed the Nelson, Rossland, and Trail teams of the KHL in 1912 (Kelly, 2013). The West Kootenay Hockey League was formed in 1922 and the league's champion would go on to win the BC senior championship every year during its existence until the league was renamed the Western International Hockey League (WIHL) in 1942.

Illustration 1: 1938-39 World Champion Trail Smokeeaters Hockey Team (www.trailsmokeeaters.com)

In the first half of the 20th century regional senior hockey leagues compared favorably with the NHL. The WIHL was one such senior hockey league. The WIHL had four teams located in the Kootenays (Nelson, Rossland, Kimberly, and Trail). All four teams were industry teams. Industry sponsored teams paid well and were thus able to attract players from all over Canada. For example, 1 of the 16 players on the 1939 World Championship roster was from Trail; the remainder of the players were recruited from other regions of Canada (1 player was from Junction City Oregon). On top of compensation related to hockey, teams would provide prospective players jobs at local mines or in public services such as firefighting.

> "This is about these small town athletes and why our baseball programs and hockey programs were so good. It goes back at the turn of the century and especially for those 2 sports, for hockey and baseball. I am talking way back in the early 1900s; small towns that had industry would bring in athletes to glorify their companies. So my dad was a ball player so he worked up in the gold mines,

the gold mines in Manitoba, northern Manitoba. They brought him up there because he was a ball player. And here in Trail, the Smokies were in existence back in the 30s for sure . . . every time there was a good hockey player in the prairies, they would bring these guys here, Saskatchewan most notably and Manitoba, Alberta. These guys would come in, get a job at Cominco and they would make more money than if they played in the NHL in those days." – Former Nelson Leaf Senior Hockey Player

"The major force behind NHL guys, it does not matter if it is NHL or a Jason Bay, is that thing on the hill there, Teck. That makes this place spin; you look at these players that came in here. They don't necessarily all come from Trail. They came to Trail because they were offered something to be here. And I think that that's something that is probably, I don't want to say not acknowledge because it is, but a lot of people forget. Okay, yeah he is here now and retired but he also has a $600,000 Teck pension and he got a trade on the hill and he worked there for 35-40 years on the hill and yet he did play for the senior Smokies, but that smelter made this place run and it is probably the same for, I would suggest all of rural BC whether it be logging on the island or the west coast, north coast." – Former Junior A Coach

The smelter reimbursed its players for time missed from playing and/or practicing. The WIHL presented hockey players with flexible working hours, elite level hockey, and competitive salaries which were often more lucrative then one could hope to attain playing in the NHL.

"So the guys used to, yeah, they used to go to work at 7, if they had to go to Kimberly or Cranbrook we would usually leave at about noon or 1 o'clock. Guys would leave work and get paid for the whole day that is how the company treated the hockey club. That was the donation they made to support the team, good paying jobs. Kimberly was the same way, it was a Cominco town and they did the same thing. That is exactly what happened in the old days. And that is why Trail had such a great hockey history and I attributed to Cominco, Teck treated the hockey club like one of their own sons. They protected them, supported them with the jobs. Some great guys came through here. There are guys that came through here to play that told me they made more money working for Teck and playing here than they could playing in the NHL . . . [they] were all treated like gods." – President of local junior team

"Yep, they told me over the phone, I was never near interested, but he says, we have a staff job for ya, this is not union, this is staff. And he says, it is the only one that Cominco is ever going to give again. I did not know what he was talking

about. I went straight into research with a grade 11, as a technician . . . so I was working metals research and than I ended up in plant reformation and that was my forte." – Played for 1961 World Championship Trail Smokeeater team.

"Got a job up at Teck (Cominco). Got a job right away . . .packed a bunch of stuff and drove out here and I got here on a Friday night and on Monday morning I had my interview and I started work on Tuesday and then that is what I wanted to. I wanted a job where I could make a few bucks and at that time, money was really good. I started at $2 an hour and boy, I tell ya, after coming from the prairies where your wages were really low. That was just like a gold mine." – Former Trail Smokeeater

"No doubt about it, there were guys offered full contracts to go to the show (NHL) . . . good business move by them, they stayed in Teck and had huge pensions but they gave up the opportunity to play at the NHL level because they [could] make more here, how unreal is that. It is hard for you and I to understand. Its become a rich man's game and it is too bad." – Former junior coach in the region

After their careers many players kept their jobs at the local smelter and became members of the local communities. As a former member of the 1961 World Championship team put it, "It is like you plant that seed." The community of Trail quickly bore fruit. By the time the Trail Smokeeaters won the 1961 World Ice Hockey Championships, 9 players from the roster were born and raised in Trail[ii]. Unheard of in an age where the majority of players were recruited imports from all across Canada. As many interview participants noted, success begets further success.

"I think champions produce champions . . . I look at the people in this area that coach our kids. I remember my son was being coached by a guy that played for the Habs (Montreal Canadians). Norm Dennis, Darrel Waterstreet, these guys would have been hanging around the arena. I look at the ex-NHL guys that came to play for the Smokies. I look at the kind of guys that would coach these kids. These guys got coaching that was unbelievable." – President of local junior hockey team

"These athletes foster athlete. So these kids that are products of their dads, played ball and/or hockey and they also improved the abilities of the local athletes, you know. So, it is no coincidence really that Trail has had all of these winning teams. It is just amazing excellence in athletics . . . So those athletes came into these towns for wages and hockey wages and [ultimately] fostered

> great athletes." – Former Nelson Leaf and Trail Smokeeater senior hockey player

Just as industry develops external economies by recruiting workers with high human capital, and by clustering, so hockey, too, develops advantages by recruiting young talent and creating a group skilled in the game. Upon retirement, many of the former players contribute to grassroots hockey through coaching, officiating, and volunteering with the local minor hockey association.

> "I am just thinking about, the hockey brats . . . When all those kids, their dad's came here to play for the Trail Smokeeaters, the senior team . . . Terry Jones dad, that is why he moved here. He wanted to go to college in Nelson. They had a University in Nelson called Notre Dame, David Thompson University. The Nelson Leafs said, okay you come to play and we will pay for your school. So he comes here, meets Darlene and he lives here. And he influences 15 kids. Teck Cominco gave them jobs as firemen. You can come here and play for the Smokeeaters and give you a job as a fireman. Seth Martin, most famous goalie around, was a fireman. He just moved here and stayed here. That is Pat's grandpa, so there is another brat. His grandpa is the 2nd goalie in the world to wear a mask for the St Louis Blues (NHL Team) and he played for Trail. Jimmie Maniago, the ref, Caesar (former NHL player) is his cousin." – Former junior coach in the area

> "Well Teck brought in so many good hockey players and their genetics ran through here and that was one thing, was just the genetics, like for example. Trevor Johnson, his dad played pro hockey, Trevor played pro hockey. Steven McCarthy (former NHL defenseman), his dad played semi-pro hockey" – Assistant coach of local junior team

Industry proved to be the most significant competitive advantage in the first half of the twentieth century. The Kootenay region's early prodigal success was closely tied to the mining/mineral industry. Industry sponsored local senior hockey teams and invested in the local minor hockey associations, attracting some of the countries top players by offering secure employment on top of financial inducements related to hockey. Following their hockey careers many players settled in the region and directly contributed to the

hockey landscape by passing along their experiential knowledge to the next generation of hockey players. What proved to be the regions key to success would also prove to be their demise. The level of senior hockey dropped off significantly by the 1970s. Elite hockey landscapes were undergoing fundamental changes. Older elite players were no longer playing in CAHA sponsored senior leagues. Rather they opted for the expanding NHL and/or minor pro leagues throughout Canada and the US. The younger players went to the newly formed major junior hockey leagues. The growing significance of the NHL from late 1960s onwards diminished the level of play of the senior leagues. The region no longer had the luxury of having players pass along their expertise to other generations of hockey players. The influx of elite players ended, along with the regions ability to produce disproportionate amounts of elite hockey players.

Regions Decline: Industrial Decline Drives Change

Industry was the driving force behind the regions success. The demand for BC's vast natural resources reached new heights during the post-war boom of the 1950s and 60s as employment in mining doubled between 1951-1981. Moreover, BC's provincial government mandated large corporate entities to directly participate in community building (Young, 2008). Corporations provided towns with needed amenities and infrastructures. For example, Cominco donated the land and contributed $500,000 to the construction of the Trail Memorial Arena in 1949 and later provided the town $275,000 for the construction of a gymnasium in 1955. (Memorial Centre, 2015) Competitive sports (hockey) presented corporations a means to build civic pride amongst residents. Cominco materially supported and actively recruited talented players from across Canada and the

US to ensure competitive teams. Such towns provided secure and lucrative employment to prospective elite hockey players. The dynamics of the workforce and capitalism have since changed. Shareholders are interested in short term gains, they want their firms to put profits into dividends rather than local community infrastructures. And the omnipresent threat of remaining "competitive" in the global market has prompted companies to restructure their firms, resulting in a reduction of people employed in BC's resource sector. The percentage of people employed in the BC mining dropped 50% from 1980-1999 (Young, 2008). Many of the interview participants alluded to the changing dynamics of the workforce as the fundamental reason for the decline in elite hockey player production.

> "These huge labour forces, we could do a whole sub category, mechanization of industry. So you are looking at Teck, I think there is about 1100 guys there right now, and then you have contractors and all the rest of it. But back in the heyday there was over 5000 guys on the hill and there was not one thing that was done, made, brought in [there] that wasn't made there. There were no contractors, so you had to have everything done at Teck. And there were so many trades and different guys up there that made that place work and now we are down to a fifth of that work force . . . That disposable income it was everywhere. And you also had the businesses that were there to support the minor hockey, minor baseball, track and field, and soccer. Whatever it was, there was tons of money, tons, it was fucking ridiculous – Former Junior A Coach

> "This smelter, found gold in Rossland and they tried smelting in Northport (Washington), it didn't work out in the states, so they built this one down here. That was at the turn of the [twentieth] century. And that has been going every 2 weeks, paying people, every 2 weeks. It was just persistent, unchanging security and all the benefits. It was terrible to start with, smelter itself was terrible, but billions of dollars . . . Now it is automated down to 1700, in order to compete against the 3rd world countries they had to automate and get rid of employees and do it through automation. I mean, the Kootenay plant down there is 3 football fields long. They used to have 100s of guys 4-5 in the morning pull the anodes and strip the zinc off and put it back in the acid, so that type of thing." – Former member of 1961 Trail Smokeeaters

The work force at the smelter is a fraction of what it once was. The region is having a difficult time attracting young families. A quarter (25.1%) of Trails population is 65 years

or older and the median age of the town is 49.8 compared the national average of 40.6. The decline of its smelter has affected the regions demographics[iii].

> "But Teck, Teck the average age now is over 50, which tells you there is not a lot of young kids up there. So the young kids are not, the young families are not living here. I mean what is happening, Alberta is taking all the young families out of BC. From the areas like Trail, especially. I mean a guy that was making $100,000 at Teck is going to Alberta and making $200,000. Some of them take their families and some don't. But the young kids are just not evolving like they used too." – President of local Junior A team

Mechanization, contract work, and out sourcing have reduced the labour force at the lead-zinc smelter in Trail, with a direct impact upon the areas demographics and regions grassroots minor hockey. Interview participants often cited a decline in numbers as a reason for the regions inability to produce elite hockey players.

> "I think that the # 1 reason is pure population; our population in this area has reduced. Probably from, overall regional, you know, from maybe 40,000 to 30,000 people . . . it is an older community, there are a lot of retirees. The dynamics of the work force have changed. And so there are less young people with families living here. And uh, I think that across the board, you know, all sports, you have less kids playing . . . I think in general there has been a change in the numbers. Pure numbers of kids that are involved in hockey. Whether it is rep hockey or house hockey, there are in general less kids playing. When I grew up, the competitiveness amongst the Trail, Beaver Valley, Castlegar, and Nelson teams was fierce. And, that was always the case for years and years and years. And now there is just that, because there are not the same numbers, we do not have that same level of competition from town to town to town at the highest level. We do not even have it at any level, to be honest." – Junior B coach in the region

> "Rossland had their own minor hockey, Trail and Fruitvale. Now we are all one. And they are struggling to get, yeah I think they are struggling to get 300 players you know, through 5 communities. Whereas, in the heyday Trail had to have their own association, back in the heyday." – President of local Junior A team

Trail, Rossland, Fruitvale, and Genelle's respective MHAs have agglomerated in recent

years to form the Greater Trail MHA. All four communities used to have their own MHAs. Trail alone had 400 registered minor hockey players in 1948 and over 500 in 1950 (Atwell, 1988). Today, Greater Trail MHA has only 322 male registrants spread amongst 5 different levels (BCAHA, 2014). The agglomeration has resulted in an increase in cost for competitive hockey. Parents must travel further distances to attend practices and games. And for competitive teams, they must compete in Okanagan hockey leagues, as the surrounding region no longer offers sufficiently competitive minor hockey leagues. Many interview participants attributed the agglomeration of MHAs as a fundamental obstacle to elite hockey production.

> "And for a lot of families it is pricey now, hockey is pricey now, it is expensive. Well it is getting to the point, minor hockey maybe is not so bad, but the amount of travelling they have to do to participate. They go to the Okanagan; there are tournaments on the coast. They travel a lot, a lot more than they should have too." – President of local Junior A team

> "The increase in cost is because, you had a team in trail, [Fruitvale] and than you had a team in Nelson and Castlegar, so your [tournaments] were all local. You would have a [tournament] in Fruitvale, Trail, Nelson Castlegar and maybe Nakusp and you bring other teams in . . . than you played your league games within the region. The kids were playing every week, these kids [now] have to go away every weekend to play league games." –

The level of competition in region has diminished significantly in recent years. The midget rep team competed in the Okanagan midget leagues this past year where the nearest team is a 4-hour drive away. In addition to registration fees, parents must also budget for increased cost associated with transportation and accommodations.

> "It is money, like parents, they cut the number of tournaments, now kids have to travel to the Okanagan every weekend to play because there is no leagues anymore. When I was growing up, we used to play the house division a year above and that was a real skill development. Twice a week we had a house game against older players and it was hitting to, as much as we hated it, but it was more local, our competition was Cranbrook, they were phenomenal. They had 6

> players play in the WHL, Scotty Niedermeyer. We did not have to go very far to get good competition, now you have to go a lot further, you have to go to big cities." – Current Assistant Junior B coach

The challenges presented by the agglomeration of MHAs is not the only obstacle elite hockey players face in the region. The area is void of any rinks that operate throughout the year. The ice is removed at the end of March and put back in in mid-late August. Meaning the spring and summer hockey opportunities are not nearly as accessible as they are in urban regions. Elite hockey is a year round activity. Spring/summer hockey cost a premium for those elite players who play, as most spring tournaments and elite teams are located in urban regions of BC. Many players opt to play for teams based in Vancouver. This requires a weekly 8 hour commute to participate in games and practices in Vancouver. Additionally, players do not have access to HPTCs, the majority of professional coaching and state of the art training facilities are also located in urban regions of BC.

> [Spring hockey] is not necessarily possible, we do not have the arenas open . . . I know that in the past, players like Craig Cunningham, Kyle St. Denis, and Mitch Labrech, who were 1990 age players, went to Vancouver and played with the Vipers select team." – Current Junior B Coach

> "He played on our Viper team by the way too. He would come down from trail with a kid from Nelson and St. Denis and they would, they had a lot more head aches, driving 7-8 hours to come down on the weekend and we would throw a few practices and they would go back and the parents would take turns. We had a kid from Spokane, Tyler Johnson and stayed at my house every weekend. Drive through the night Friday after school and be ready to practice and drive back Sunday afternoon for three practices. Two on Saturday and one on Sunday. He would do it every time." – Parent of Professional Hockey player

> "They play 2 routes I believe right now. They play, they put a Kootenay team together, east and west Kootenay and they go play in the spring leagues down on the coast and there is another one in the States, Murray Baron coaches a group of kids, he coaches from Montana I believe now and he coaches this Pacific Northwest team. I know I have 3 kids that play on that spring league that is down in the states." – Current Junior B Assistant Coach

Elite players migrate to the Mainland/Southeast region for the opportunity to play elite spring hockey. The most prestigious spring hockey tournament is

located in Burnaby, BC. The Challenge Cup attracts spring hockey teams from all across North America and Europe. The region is also home to state of the art training facilities that are staffed with professional coaches. Such infrastructure and expertise is tough to find in the hinterlands of BC.

"Now, why do I think the Lower Mainland is dominating, is money. I really think that they can offer summer hockey. Kids play year round, parents are spending so much more money on them. They have all these professional coaches down there that people can do all summer long."
– Current Junior B Assistant Coach

"I think that the specialized training is in the cities in the major centers. Because I think that you can get a real good amount of talent built up. Because of instruction, coaching. That is where the money is at."
– Former Junior A Head Coach

"You know, it is a year round development now, it is not 6 or 7 months. And a lot of the good kids that make it, I am sure you aware too, they come from high end programs that are hockey first and everything else second." – President of Junior A team

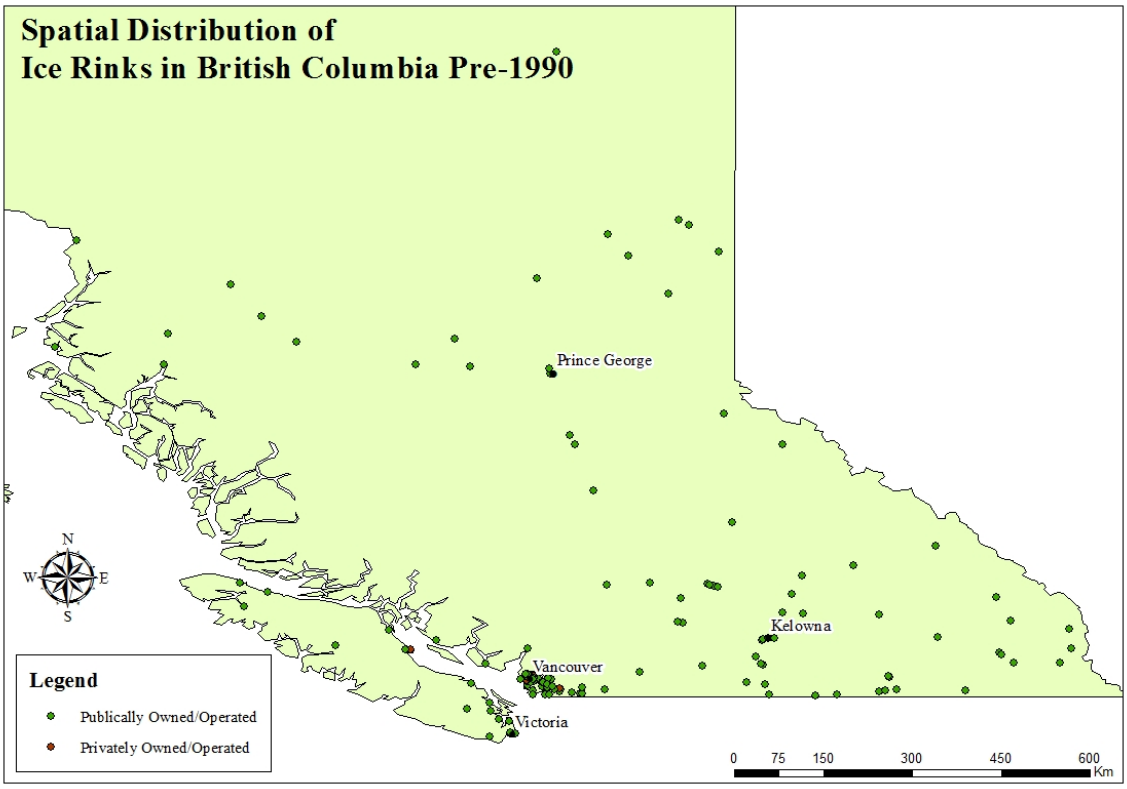
In the early to mid twentieth century the Kootenays were the crown jewel of BC's elite hockey landscapes. The region epitomized a thriving Canadian hockey landscape. They were blessed with sufficiently cold and long winters, a high proportion of the provinces ice rinks, and world-class senior hockey league. The neoliberal era has proven challenging for them. The Kootenays no longer produce players at the rate it once did. Its once celebrated hockey landscape, like many other hockey hotbeds in the hinterlands, has become antiquated. Elite hockey players are at a distinct disadvantage from their counterparts in urban regions of BC. Far removed from year round operated ice rinks, HPTCs, spring hockey leagues and even competitive winter hockey leagues, it is no wonder the region's production of elite hockey players have declined.

A Neoliberal Hockey Landscape: Mainland/Southeast

Hockey was foreign to Vancouver residents in the early twentieth century. The region's climate did not lend itself to the formation of ice. Despite environmental constraints, the region is home to a rich and peculiar hockey history. Canada's first artificial ice rinks were constructed in Vancouver and Victoria in 1911 and 1913, respectively (Atwell, 1988). The Patrick brothers of Nelson, BC financed the rinks for the sole purpose of the formation of a major league professional hockey league on the Pacific coast. For a time the Pacific Coast Hockey Association (PCHA) mounted a legitimate challenge to the National Hockey Association's (NHA) dominance as hockey's premier professional hockey league. The Vancouver Millionaires won the Stanley Cup in 1915. The PCHA was unable to keep pace with the newly founded National Hockey League (NHL) surging budgets following expansion into the United States and ceased operations in 1924. The Vancouver and Victoria franchises joined the Western Canadian Hockey League, but that league closed operations in 1927 (Bowlsby, 2012). Competitive professional or senior hockey would not return to the Mainland region until the NHL expanded to Vancouver in 1970.

An unsuitable climate deterred the early emergence of hockey in the mainland/southeast region. The region was only home to 16% of operational ice rinks in BC in 1960. Once artificial ice became widely available, rinks began to proliferate in the Mainland/Southeast. There were 45 ice rinks constructed in the Mainland/Southeast region between 1961-1990, all but two of which were publically owned by municipalities or regional districts (Atwell, 1988; Canadian Recreation, 2006). The 1990s marked a new era of ice rink construction. Hockey's built environment was radically transformed, subsequently altering the process of elite hockey player production.

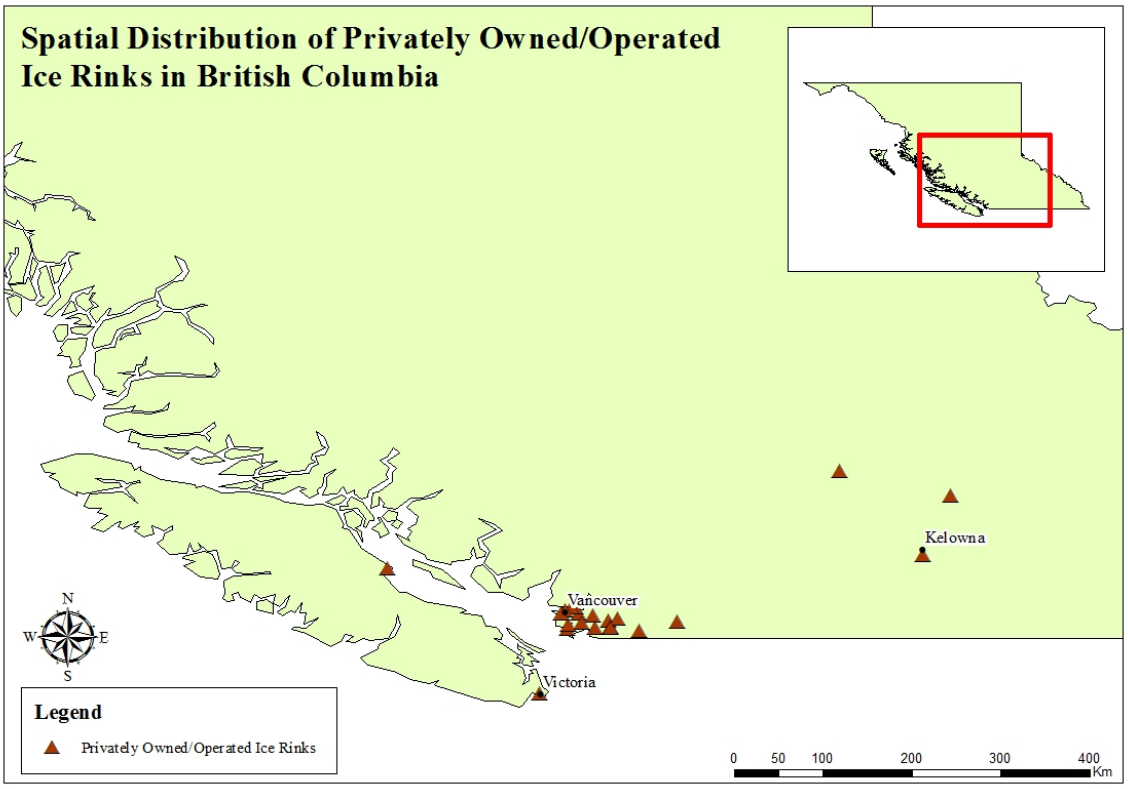
Figure 4.2: Spatial Distribution of Ice Rinks in BC Pre-1990



With the exception of two winter clubs, ice rinks constructed before 1990 were owned and operated by municipalities and regional districts (Canadian Recreation, 2006). Public facilities are mandated to serve their constituents. As such, hockey is but one of many activities held in public ice rinks. The traditional hockey schedule begins in late September and finishes by late-March. At which time the ice would be removed to make space for various other programming (camps, lacrosse, roller hockey). Hockey was limited to seven or eight months. The influx of privately operated/owned ice rinks extended the hockey season to twelve months. Since 1990, 43% of constructed ice rinks are privately owned and/or operated. Privately operated/owned ice rinks are disproportionately located in the Mainland/Southeast, providing players in these regions a distinct competitive advantage over other players (Canadian Recreation, 2006). Private ice rinks

can only be found in the Vancouver Island/Coast, Thompson-Okanagan, and Mainland/Southeast regions. Unsurprisingly, these regions are home to BCs most densely populated cities. Private ice rinks provide these regions with advantages similar to that which natural ice afforded the Kootenay region in the early to mid 20th century.

Figure 4.3: Spatial Distribution of Privately Owned/Operated Ice Rinks in BC (2007)



As a former public MHA President commented, "The ice rinks came so the opportunity came to play 12 months a year. The private rinks they wanted the cash flow." And HPTCs and elite spring hockey leagues would come to provide one of the means to which private ice rinks would profit. All of the parents I interviewed in North Vancouver confirmed that their son played some form of spring/summer hockey.

> " . . . The transition from house league or regular hockey at North Van minor to spring hockey was pretty much immediate and than the spring hockey could go until august so probably 11 months a year. Might have been a month off

somewhere in August before try outs in September for the following year" – Father of current NHL player

"Yes, he played from the age of 8 all the way through to 14. Practiced a lot, we had a very competitive team and put a lot of time into that team, it was a very good team." Father of current professional hockey player

"I think by the time he was 12/13 pretty much the coach began to insist you had to pick one and if you wanted to play another sport at the same time, you play the house level. So he gave up the soccer and baseball and he might of played baseball a little but, but he gave that up to play hockey basically 12 months of the year whether it was organized hockey in the summer or all of the effort he put into training and playing on travelling teams, which is a phenomenon that happens in all sports." – Father of current professional hockey player

The proliferation of private ice rinks also opened up a space for elite hockey players to gain access to supplementary training that was previously unavailable through local non-profit MHA. HPTCs operate year round and provide a wide array of services to elite young hockey players. A few of the services include: power skating, stickhandling instruction, skating treadmills, shooting mechanics, consulting, sports psychology, game assessment, and off-ice physical training. As public entities, MHA must serve the wider public. They are required to do so and thus do not have the capacity for such HPTCs.

They (non-profit associations) are funded, they are subsidized by the tax payers, it is hard, it was always a challenge, I mean we would have some people saying, you need more ice time for the elite kid, we need to make them more special and yet at the same time. Our real mandate was to get as many kids on the ice that wanted to play hockey, it was always a balancing act, we could never, ever supply enough coaches or expertise or ice time that would satisfied the [the elite players] that really want to excel at the game. And that is why you always had crazy parents with the credit card that were willing send their kids to all of these elite programs, you know down to the skating treadmill or go to see all the goalies schools, I took my son to all over the province . . . But, yeah, the rep parents were always lobbying for more ice for their kids and the house parents were lobbying for more house teams and to let more kids play . . . It was really hard to justify rep teams, when you got 800 kids on the waiting list. For every rep team that we had, we could have had another whole team of kids playing hockey that were sitting looking in the window watching the elite guys . . . if we did that (HPTCs) then it would mean probably 300 less kids playing every year and that wouldn't have been fair to those kids. The idea is to have a community

program so everybody could play and participate."
– Former President of Non-Public MHA

Non-public MHAs inability to provide elite hockey players a platform in which to refine and build upon their respective skillsets allowed private entities to establish themselves as viable off and in season options for players looking to further their development. I asked key informants and parents of professional hockey players when the majority of development takes place. I wanted to hear whether development took place during the winter season or the summer months when players engaged with HPTCs and spring hockey leagues.

> "In the spring, elite hockey. Because, I think at the minor hockey unfortunately you get coached to the lowest common denominator because there is such a mix of players on the team. The elite players do not really get the attention because the coach is working with the more average player and I think where you got the excellent coaching. And you were pushed because you could easily be the best player on, or top two player on your minor hockey team but then when you go to an elite team you could be the 12th player and so they put you in a different position. He was always driven more and I think that the coaching was for the most part better at the elite level because you got people that are real keen doing the coaching and because the common denominator was higher, everyone got the same coaching. His development for the most part was through the elite hockey." – Father of current NHL hockey player

> "I do not want to take anything away from North Van minor, but I think that there were the kids that made those rep 'A' teams because they were good athletes but they were not playing summer hockey, they were not going the extra mile. So I think he would, I think that he was good enough to make those teams, but he would not have played as well as he did on those teams without the extra work." – Father of Current Professional Hockey player

> "Skating and doing those extra things. Shooting the puck, yeah . . . You took advantage of it when there was open ice and then in the summer, you know, the ice is open a lot. You utilize the ice in the summer. You took advantage of it, going out on the ice . . . I do think, like anything in life, the more you put into it the more you will get out of it. There are those people that you know, probably could shut down hockey and pick it up three months later and they will be fine too, but in the bigger scope that is the exception to the rule. I think it has changed. My buddies is good friends with Trevor Linden, he never played

> hockey in the summer time. They played baseball and did their thing. But times have changed, for him it totally helped him be a better player. – Parent of current professional player

HPTCs and spring hockey leagues are contingent upon year round availability of ice. Year round ice rinks are centrally located in the Lower Mainland or Thompson-Okanagan (Kelowna & Kamloops) regions of BC. HPTCs are also centrally located in these regions, providing players of these regions a distinct competitive advantage upon players residing in regions void of such infrastructures. Of the 60 registered HPTCs in BC, 73.3% of them were located in the Mainland/Southeast, 11.8% on Vancouver Island/Coast, 11.7% in Thompson-Okanagan, and 3.3% in the Caribou region (See Appendix D: High Performance Training Companies. Interview participants were asked whether players from rural regions of BC were at a disadvantage being far removed from HPTCs and spring hockey.

> "I have a friend in Vanderhoof, the ice does not go in there until October 1st. They played in the tier 2 provincials this year. The NSWC A2 team played in the tier 2 provincials this year, those kids are on the ice doing bantam prep camps in the middle of august and they are on the ice 3 times a week. So they are already 6 weeks ahead. I think that has to be a disadvantage . . . Hockey starts down here and in Kelowna in the middle of August, you know. Those top kids, it does not start up there for anybody until October 1st. I think that has to be a disadvantage . . . When you get to be 14 or 15 and you want to be that hockey player you probably should make a move of some kind. Or make sure you get on a spring team or make some connection where you get access to facilities, because the facilities here (North Vancouver), as far as rinks and gym's, obviously Trail and Vanderhoof they do not have it. So there is pro and cons, but I think, yeah, there definitely comes a point in their development they have to kind of reach out and make their move. No doubt about it, when they are younger, I think that it is fine." – Current President of Hockey Operations of Youth Hockey Organization

> "I think it is just purely opportunity. You know, when the ice melts in PG, I don't know how many indoor arenas there are in the interior, but they go play baseball or soccer you know. Where Vancouver, the kids play hockey 12 months a year because there is so many private indoor rinks." – Former President of Non-Profit MHA

A common theme present in the interviews conducted in Trail and North Vancouver was the importance of coaching. Formerly, elite players in Trail had direct access to former elite senior hockey players who, following their hockey careers, settled in Trail and the surrounding area and volunteered their time to coach youth hockey. In doing so, they were able to pass along their invaluable hockey experience and knowledge to the next generation of elite players. Today, coaches are no longer volunteers, but highly paid professionals. Prospective players are willing to pay a premium to get the best coaching. And the best coaching (HPTCs) are located in urban regions of BC.

Private ice rinks, HPTCs, and spring hockey characterize the contemporary neoliberal hockey landscape. Geographic proximity to said private infrastructures is not the only factor determining accessibility to elite hockey. The influx of private ice rinks, HPTCs, and spring hockey has also significantly increased the cost associated with elite hockey. In addition to minor hockey registration, parents are also paying for supplementary programming (HPTCs & spring hockey). The price of which can be a significant obstacle for most families. Twist conditioning offers an 8-week elite training program in the summer for $3500 and High Performance Centre offers a similar 5-week summer program for $1800 (Twist, 2015). Prior to incurring these costs, parents must also purchase equipment. Top of the line skates and sticks sell for $800 and $300, respectively. Clearly, such costs are not accessible or sustainable for the vast majority of BC's population. The exorbitant cost of elite hockey equally affects prospective players in the hinterlands and urban regions. This is different from the minimal cost associated with elite hockey in the first three quarters of the 20th century.

Summary

The geography of elite hockey player production has shifted from the industrial hinterlands to urban regions of BC. Following this geographic migration there has been a transformation in the hockey landscapes that produce elite hockey players. Rural regions have been unable to keep pace with newly emerging infrastructures of contemporary elite hockey. Suitable climates conducive to ice formation, non-public minor hockey associations, corporate sponsored elite senior hockey, and municipally owned ice rinks are no longer representative of elite hockey. Rather, privately owned/operated ice rinks, HPTCs, and spring/summer hockey leagues characterize contemporary elite hockey. This development has prevented players from engaging in the elite hockey process on geographic and financial grounds. The inevitability and further proliferation of today's model is not guaranteed. There are voices of resistance that have emerged within the current manifestation of BC's elite hockey landscape. Hockey coaches, parents, sports psychologist, medical specialist, academics, and administrators are beginning to question the merits and sustainability of year round extensive hockey training. The United States and Swedish national hockey bodies have recently implemented alternatives paths to elite hockey. And the increasing costs of hockey in Canada have become mainstream issues. The final chapter will further examine some of the emerging dissenting voices in hockey and attempt to trace the future trajectory of elite hockey in BC.

CHAPTER 5

CONCLUSION

Introduction

Minor hockey and the mode of elite hockey player production has recently been subject to a qualitative change that has had an immense impact on the game at a local level by creating structural barriers that prohibit many prospective young players from participating and thriving in Canada's "national sport." The restructuring of elite hockey has been marked by a shift in how and where elite hockey players are produced. The rural/industrial hinterlands of Canada are no longer producing elite players at the rate they once did. Rather, the majority of elite hockey player production in BC is occurring in the major urban regions of the province. Players are produced within specific developmental contexts. And developmental contexts (availability to coaching, all-season training facilities, competition) are shaped by external circumstances. Thus, one cannot begin to understand where elite players are produced without grasping the wider political, economic, and social context in which player production takes place.

Urban Neoliberalism and Elite Hockey Player Production

The geographic shift in elite hockey player production in BC cannot be understood in isolation from the wider political, economic, and social forces of the past 40 years. This time period has been characterized by a neoliberal mode of governance promoting unfettered free markets, privatization, globalization, and individual liberty. Previously public goods and services have been incorporated into the private sector (garbage collection, waste disposal, transportation, road maintenance, water and utilities, and libraries) (Brenner et al, 2011:32). In the process, national and local governments have rescinded their roles as chief provider of public goods and services (housing, health care, education, transportation, public utilities, recreation facilities) and are now preoccupied with cultivating an inviting business environment in hopes of attracting multinational investment (Harvey, 1989). State cuts in social programs, deregulation, privatization, public private partnerships, and an unencumbered drive towards competitive free markets have ensued.

In posturing for multinational investment, national and local governments have unleashed an inter-urban competition for capital. In an attempt to lure capital, places offer ever-generous financial inducements that take the form of tax incentives, aid packages, and land. What has followed is a race to the bottom as competition for capital has curtailed cities' capacities for social programming. The restructuring of municipal recreational departments is emblematic of this process. Facing budgetary restraints, municipal departments have outsourced the provisioning of some previously public goods and services to the private sector (Harvey, 1989). This has had a direct impact on elite hockey

player production as the sheer volume of registered male hockey players in Canada (548,280) along with the cultural valorization of the sport has presented private capital with an attractive market to advance continuing accumulation (Hockey Canada, 2014). Prior to 1990 all but two ice rinks in BC were owned and operated by local municipalities or regional districts (the other two ice rinks were owned by private winter clubs). As of 2007 there are 34 privately owned or operated ice rinks in BC, all but two of which are located in major urban regions of BC. Moreover, 43% of new ice rinks since 1990 are privately owned or operated (Canadian Recreation, 2006). Privately owned/operated ice rinks are open year round, and present players who live in close geographic proximity with an obvious competitive advantage with the availability of ice 365 days a year. The privatization of ice rinks is not a new phenomenon. Exclusive social clubs of Montreal and Toronto privately built the first rinks of the late 19th and early twentieth century (Metcalfe, 1987). But those rinks were not made for public use. They were exclusive property of due paying members. The recent proliferation of year round private ice rinks for public use is unprecedented and has functioned to deepen the privatization of elite hockey production.

The availability of year round ice has spawned an industry centered on the production of elite hockey players. The traditional non-profit MHA has proven to be an antiquated platform for the production of elite hockey players in the twenty-first century. Superseding it has been a cadre of high performance training companies (HPTCs) and spring hockey teams. It is no longer enough for prospective players to compete for their local MHA from September to March and expect to reach the heights of elite hockey. Players must invest 10-12 months of their year to hockey. HPTCs and spring hockey provide the platform in which to do so. HPTCs offer an assortment of in and off-season services to

prospective players. Services include off-ice conditioning and weight training, power skating, shooting mechanic consultation, stickhandling and skills coaching, nutrition, and sports psychiatry to name a few. Spring hockey teams are yet another manifestation of the new elite hockey landscape. The spring hockey season runs from late March until July. Unlike the MHA season, this is not a regular season. Rather, teams practice 1-2 times a week in preparation for a series of weekend long tournaments located in cities across North America. Spring hockey provides elite players a stage on which to compete against the top players of their respected cohort and grants them exposure to Western Hockey League (WHL), British Columbia Hockey League (BCHL), and BC Major Midget teams/scouts.

Non-profit MHAs and municipally owned ice rinks are unable/unwilling to keep pace with private ice rinks and HPTCs. MHAs are publically subsidized entities that are mandated to provide recreational/competitive hockey to all of their constituents. And municipally owned ice rinks must provide a wide array of services outside of hockey to its residents (Lacrosse, indoor soccer, ball hockey, youth camps). It would be politically unjust of both of them to invest their finite resources in HPTC services and year round ice at the expense of recreational youth hockey players and other sport enthusiast (Lacrosse, indoor soccer). Budgetary restraints prevent MHAs and municipally owned rinks from acceding to the demands of elite hockey parents, driving said parents to seek supplementary hockey services from HPTCs, spring hockey, and/or private winter clubs. Such services would not be possible if it were not for profit seeking private ice rinks.

The private ice rinks, which increasingly began to mark the (sub)urban landscapes

of BC in the 1990s, provided the built environments required for year round hockey. Many private ice rinks are hockey factories, equipped with the state of the art facilities required for player production. Canlan 8 Rinks, located in Burnaby, BC, is home to 7 ice hockey surfaces, a gym, pro shop, and a skating treadmill. Year round availability injected further life into young hockey player's dreams of playing in "the show." Players are now presented with the opportunity to invest 12 months of the year to developing their skills. And HPTCs and spring hockey have proven to be the two most sought after "off-season" hockey related services. The majority of these services, like private ice rinks, are located in close geographic proximity to (sub)urban regions of BC and cost a significant amount of money. Thus, players lacking the financial means and/or those geographically isolated from such services are prevented from engaging the current elite hockey process, fueling the current geographic trend in elite hockey player production.

Table 5.1: Elite Hockey Player's Hometowns 1951-1955 and 1991-1995

Development Region	% of BC Population (1951)	% of BC Elite Hockey Players (1951-55)	% of BC Population (1991)	% of BC Elite Hockey Players (1991-95)
Mainland/Southeast	56.1	**28.0**	55.8	**56.9**
Vancouver Island/Coast	19.4	**18.5**	18.5	**9.2**
Thompson-Okanagan	8.5	**16.8**	11.8	**15.4**
Kootenay	7.5	**21.3**	4.1	**7.2**
Cariboo	2.4	**5.3**	4.6	**7.7**
Nechako	1.0	**4.0**	1.2	**1.0**
North East	1.3	**1.3**	1.6	**.5**
North Coast	.8	**2.7**	1.3	**1.**

(Data compiled and calculated by author)

Industrial Heartland/Rural Neoliberalism and Elite Hockey

The ways in which urban neoliberalism have played out have been well documented, but the ways industrial/rural regions have been affected is less clear. BC's economy is dependent on its vast reserves of natural resources. As such, company towns have long been a common feature of BC's industrial landscape. Company towns are single resource towns located in remote regions of BC, centered on smelting, forestry, fishing, sawmilling, canneries, and/or pulp and paper industries. They "exercised ownership and control of land, housing, recreation, and all assets and facilities of the community," (Bradbury, 1979; 54). Natural resource production involves intensive investments in grounded capital (built environment). Thus companies sought long-term labour stability to ensure continuing return upon their investment. Companies invested significant resources

into social programs to avoid high turnover rates and to ensure labour productivity. Residents often materially benefited from such investments in the form of modern leisure and sporting facilities, schools, electricity, indoor plumbing, and various other amenities and infrastructures (Bradbury, 1979).

This is not to say that things were all rosy in twentieth century company towns. Sole ownership permitted companies' supreme authority over their constituents. Union Activity was discouraged and even suppressed and communities were often racially segregated fermenting xenophobic sentiments (Barman, 1991). But, many company towns did provide local residents adequate infrastructures, as is evidenced by the availability of covered ice rinks in the industrial/rural hinterlands of BC in first three-quarters of the twentieth century. In 1960, 74% of roofed ice rinks in BC were located in industrial/rural regions (Kootenay, Thompson-Okanagan, Cariboo, North East) of BC (Atwell, 1988). Cominco contributed $500,000 to the construction of Trail Memorial Ice Rink in 1951 and later donated the rink to the city of Trail. An abundance of rinks coupled with the subsidization of competitive senior hockey teams, as means of building civic pride, fostered rich hockey landscapes (Memorial Centre, 2015). These regions, in turn, produced a disproportional number of elite hockey players that were born in the first three quarters of the twentieth century. For example, the Kootenay region produced 22% of all BC born NHL hockey players born between 1940-1970. These numbers have not persisted into the twenty first century. The industrial/rural hinterlands have been subjected to neoliberal induced restructuring, which has in turn hampered the ability of these towns to compete with the emergent elite hockey system of the (sub) urban regions of BC.

Since the 1980s a wedge has been driven between the previously paternal

relationship between a company and its surrounding town and residents. The resource sector initiated a series of restructuring measures in the mid 1980s. Companies cited the need to increase productivity and remain competitive in the global market. Restructuring measures included increased mechanization, "the reorganization of production (closing of mines and mills, and/or their refurbishing for flexible specialization), as well as the rewriting of labour contracts to enhance flexibility in shift-work and hours worked," (Young, 2008;10). Such measures have had a significant effect upon the BC's resource sector; employment in forestry and mining declined 25% (23,000) and 50% (11,000) between 1980-1999, respectively (Young, 2008). Following the restructuring of the 1980s, companies no longer felt bound to their previous social contract with the surrounding community. Community's demographics and economies have been altered. Once thriving communities are now becoming retirement communities, tourism has replaced industry as the focal point of local economies, and formerly state of the art facilities are now dilapidated old buildings. And where company towns still persist, fixed labour has been replaced with precarious migrant labour. Company no longer behave like paternalistic fathers .

In Trail, the largest employer, Teck Cominco, has reduced its workforce significantly since its peak in the 1950s and 60s. Today there are 1,700 residents of Trail employed at the lead-zinc smelter, down from just over 5,000 in the 1950s[iv]. Younger families are no longer moving into the area. The average age of the community is 49.8 years old, compared to the national average of 40.6. This has directly affected hockey registration. Trail alone had more than 500 registered hockey players in 1950. Today, citing low registration, Trail along with 3 other regional minor hockey associations have had to amalgamate into the

Greater Trail MHA. In 2014, Greater Trail MHA only had 322 male registrants. Amalgamation has increased traveling cost associated with competitive hockey, as elite Greater Trail MHA teams must play in Okanagan Rep leagues. Moreover, resource constraints of local municipally owned ice rinks prevents them from remaining open year round, forcing elite hockey players to migrate to Vancouver, Kelowna, or Kamloops for spring/summer hockey and HPTC services. Urban shift demonstrated in table 5.1 has accelerated in recent years. Low registration numbers have decreased local competitiveness and scarce or non-availability of ice during spring and summer months have forced elite players to seek out urban markets to gain access to competitive year round hockey. This has increased the cost associated with elite hockey and has deterred many families located in peripheral regions of BC from entering the elite hockey world. And has accelerated the trends demonstrated in table 5.1

The neoliberal period has transformed the mode of elite hockey player production. Production no longer takes place through public facilities. Rather a private system made up of private ice rinks, HPTCs, and spring hockey has taken root. Moreover, the availability to year round hockey has deepened the aspirations of prospective elite hockey players to use their bodies as strategies of accumulation. But this process has given rise to issues of accessibility. Elite hockey infrastructures and services are disproportionately located in urban regions of BC, Thereby providing players with deep financial resources or those located in close geographic proximity a competitive advantage over other players of their cohort. The concentration of (sub) urban rinks is not necessarily bad, it is the minimal access to such facilities for communities that are not centers of real estate capital accumulation. And this is reflected in the ways the geographies of elite hockey player

production have shifted in recent years from the industrial/rural hinterlands to urban regions of BC.

Trajectory of BC's Elite Hockey Landscape

Hockey Academies

The privatized route to elite hockey has evolved in recent years to include private hockey academies. The Canadian Sports School Hockey League (CSSHL) was founded in 2009 with the promise of "[enabling] like-minded players increased level of competition and exposure" (Canadian Sports, 2015; Homepage). The league consists of 11 hockey academies with teams in 5 different divisions (Bantam Prep, Bantam Varsity, Elite 15s, Prep, Varsity). Beyond hockey, the players are enrolled in local high schools where the curriculum includes a mix of academics and on and off ice training (Canadian Sports, 2015).

In many ways the hockey academy model is ideal for young student athletes. Ice times are before school or immediately after school, thus avoiding inconvenient late night practices and providing ample time in the evening to complete homework. Hockey academies, however, become problematic when you take into account tuition costs. Table 5.2, which lists the cost of tuition for the hockey academies competing in the CSSHL, indicates that a parent would probably pay around $20,00 a year for tuition: Given that Statistics Canada reports that the median individual income in Canada is currently about $27,600, it is clear that the cost of this level of hockey is prohibitive for the majority of Canadians (Scoffield, 2013). Undoubtedly, the cost of tuition is unaffordable for the vast majority of families with sons hoping to play elite hockey. The tuition is for ten months of the year. Elite hockey is a 10-12 month endeavour. So on top of hockey academy tuition,

families would also have to budget for HPTCs services, spring hockey, and equipment. Tuition does not account for the additional hidden cost associated with hockey academies. Many of the academy players are not local players, rather they migrate from within BC and Canada. For example, Okanagan Hockey and Pursuit of Excellence Academies only have 1 and 6 local players on their U-15 elite rosters, respectively.

Table 5.2: Hockey Academy Tuition

School Name	Location	Annual Tuition
Delta Hockey Academy	Delta, BC	$12000.00 CDN
Edge School For Athletes	Calgary, AB	$15,000.00 CDN
Okanagan Hockey Academy	Penticton, BC	$24,500 CDN*
Pursuit of Excellence	Kelowna, BC	$15,000 CDN*
Burnaby Winter Club Hockey Academy	Burnaby, BC	$13,000.00 CDN
Pacific Coast Hockey Academy	Victoria, BC	$17,000.00 CDN
Yale Hockey Academy	Abbotsford, BC	$8,2000.00 CDN
Banff Hockey Academy	Banff, AB	$ 31,000.00 CDN
Compete Hockey Academy	Coeur d'Alene, ID	NA
Swiss International Sports & Education Center	Cochrane, AB	NA
Shawnigan Lake School Varsity	Shawnigan Lake, BC	$42,000.00 CDN

* Unofficial figures (Data compiled and calculated by author)

Hockey academies are indicative of a new way forward in elite hockey. Under one roof, players are exposed to all the services and infrastructures they could find in a typical

HPTC. Hockey academies are staffed with professional coaches, strength and conditioning coaches, and physical therapist. For example, the Okanagan Hockey Academy's coaching staff has three former NHL hockey players, a former Division 1 collegiate head coach, and former NHL goaltender and WHL coaches. Hockey academies appear to be streamlining the elite hockey player production process. They provide elite hockey players willing to pay the exorbitant tuition costs with an excellent platform to further their careers.

Players may opt to continue to develop within the non-profit local minor hockey association, but at their own peril. Since its inception in 2009, the CSSHL has proven a highly effective producer and supplier of elite hockey talent. Over 200 former CSSHL players have gone on to play in the Canadian Junior Hockey League, WHL, NCAA, and 7 players have been drafted into the NHL, 2 of whom are currently playing for NHL teams. And 55% of players drafted in the 2014 WHL bantam draft were from either hockey academies or private winter clubs. The private hockey academy model has spread all throughout Canada and the USA. Recent hockey academies have opened in Minnesota, Buffalo, and Toronto and many more are slated to open in the next year. Players able to afford it will continue to seek the services of the academies as long as they continue their young tradition of success.

Resistance

The hockey season no longer runs from September to March, rather it extends far into the summer months. And the investment of thousands of dollars into the developmental/production process has become a taken for granted reality. Players are encouraged to engage in the HPTCs, to be on-ice 10-12 months a year, and to relinquish all other sporting commitments in order to specialize in hockey at an increasingly younger age. The unabated way in which private capital has entered hockey may appear discouraging. But its inevitability is far from ensured. Various voices of resistance have arisen, questioning prevailing and taken for granted attitudes towards elite hockey production. For instance, national hockey bodies have implemented new development models whose chief aim is the promotion of fun and the avoidance of year round specialized athletes. Hockey coaches have questioned the merits of the current rep/house dichotomy of minor hockey, and the professionalization of WHL players has been problematized in recent years.

American Development Model

USA hockey, the governing body of hockey in the US, overhauled its youth hockey development model in 2009, replacing it with the American Development Model (ADM). The ADM is a player-centered approach to youth development that encourages multi sport athletes, age specific activities, fun in sport, and ultimately the creation of "life long players." It is the antithesis of prevailing attitudes towards elite hockey development that promote single sport athletes and year round hockey players**.** In the spring/summer month's players are encouraged to hang up their skates to participate in a range of sports.

The ADM believes that multi-sport athletes are more apt to learn a diverse range of physical literacy skills, rather than a highly specific set. For younger players, all activity is centered on fostering a true sense of enjoyment and love for the game. The ADM curriculum emphasizes age-specific activities, cross-ice practices/games, and a higher practice to game ratio. The ADM also invest heavily in ensuring adequate coaching/instruction for all of USA hockey's constituent regions. A regional manager is appointed to each of USA Hockey's 6 geographically delineated regions. Regional managers are responsible for ensuring that the ADM is properly rolled out in each of their respective regions as well as providing guidance and information to local coaches and association officials. Of course USA hockey would like to produce as many NHL hockey players as possible. But the process by which they advocate appears to be a positive step forward by questioning the merits of the prevailing private elite hockey industry (USA Hockey, 2015).

In many ways the ADM is an offshoot of the Swedish Ice Hockey Association's (SIHA) development model. The SIHA implemented a new development model in 2002 as part of an initiative to improve the performance of its junior aged players. The SIHA invested significant resources into the education of coaches, recruitment, and retention of young players. A hockey curriculum for all age groups (7-20 years old) was designed to provide coaches instruction on how to manage on and off ice activities. Coaches must participate in a rigorous certification process prior to becoming a coach. Prospective coaches are put through a series of multiple day classes. Class content varies amongst levels, but includes materials such as fundamental training, physiology, hockey and pedagogical philosophy, and goal scoring. Upon completion of a course, coaches submit to retesting every three years to maintain eligibility. There is a regional "Coach in Chief" in each of SIHA 12

geographic zones. Coaches in chiefs are responsible for educating local coaches and directly engaging in the player development process. They must visit each club within their zone at least twice a year to ensure the SIHA curriculum is properly adhered to (Morreale, 2011; Haraldson, 2015).

The Swedish government provides subsidies to all national sporting agencies. The SIHA allocated its funding towards furthering the education of its coaches at all levels. The Tre Konor Hockey School was created for the purpose of recruiting and retaining perspective players. The hockey school is financed by SIHA for players up to ten years old (Haraldson, 2015). Moreover, like many European countries, the SIHA does not introduce competitive (rep) hockey until the age of 12, opting to provide all young players equal developmental opportunities. This is in stark contrast to the way Hockey Canada approaches youth hockey development. Young Canadian hockey players are encouraged to specialize at a much earlier age and are segregated into competitive/non competitive hockey at the age of 8 in BC. SIHA also departs from Hockey Canada's junior hockey model. In Sweden, junior hockey is run through a club-based system. A senior parental club manages junior clubs. And the goal of all junior clubs is to graduate the greatest number of players to the senior league. Winning is important, but not at the cost of developing its players to eventually play in the senior league. Whereas, the CHL teams are for profit entities preoccupied with the financial ancillary benefits associated with winning.

CHL Hockey Players: Producers and Products of Entertainment?

Recent class action suits against the OHL, WHL, and QMJHL has problematized young elite hockey player's dual role as producers and product of entertainment for for-profit organizations (CHL). The claims argue that players are paid well below minimal wages for their services they provide to their respective hockey teams. CHL teams do provide monthly stipends to their players, the amount of which depends upon a players seniority; 16-20 year olds can expect roughly $220 and 20 year olds $600 a month (Allingham, 2015). Players typically work 35-40 hours a week. Thus, such allowances are not representative of the hours players work. These teams are not "ma and pa" owned franchises; rather they are large for-profit entities that, in some cases, manage to fill 8-10,000 seat stadiums for weekly hockey games (36 home dates a year). And as is evidenced by the recent selling of the Quebec Ramparts QMJHL franchise for $20-23 million and the recently signed 5 year television broadcast agreement ($5 million a year) with Rogers Entertainment, the CHL is big business and could afford to better compensate their players (Gazette, 204). The CHL and its member branches (OHL, WHL, QMJHL) refute notions that their players are professionals. They are adamant that their players are amateur student athletes, often citing their "Champions Program." Through the "Champions Program" former CHL players are eligible to receive $10,000 towards post-graduate studies for every year they played in the CHL. This program is a worthy one, but the way in which it is structured is flawed, functioning to minimize player utilization (Westhead, 2014).

Unlike Hockey Canada, USA Hockey believes that collegiate hockey (NCAA), whether it be division 1 or 3, should be the ultimate aim for all college aged elite players. Hockey Canada actively encourages its elite college aged players to pursue the CHL and ultimately a

career in professional hockey. But 90-95% of aspiring young hockey players do not make it to the heights of professional hockey. Having invested a significant amount of energy towards accomplishing their goal, many hockey players end their young careers lacking basic skills for the world outside of hockey. The CHL did implement the "Champions Program" in 2011 as an attempt to provide former players post-secondary education. But in order to remain eligible, players must enroll in a post secondary institution within 18 months of their final CHL game, which leaves many players contemplating whether they should pursue their professional dreams or attend a post secondary institution. Having only known the world of hockey, many opt for the latter, disqualifying themselves from the CHL post secondary aid package. This marks a distinct difference between USA Hockey and Hockey Canada's approaches to elite hockey players. Sure, USA Hockey would like to maximize its production of NHL hockey players. But at least, the promoted avenue in which to accomplish this involves a post-secondary education (CBC, 2015).

Rep/House Dichotomy

Minor hockey associations across Canada hold try outs every year at the end of August to determine whether players are to play Rep or house hockey. Rep hockey is the competitive and house hockey the recreational stream of minor hockey in Canada. Rep teams typically have 2 practices and games a week while house teams practice and play once a week. In addition to league schedules, Rep teams also compete in multiple tournaments over the course of the season. In BC, youth players become eligible for Rep hockey at the age of 8 (atom). This means that players are segregated into the competitive or recreational streams of hockey before an adequate amount of physical development has

taken place.

Rep hockey provides players with a significant competitive advantage over players who wind up playing house. Rep players receive far more ice time than their house counterparts. As such, Rep players are afforded more on-ice development. It is no surprise then that players who initially make Rep hockey in atom (8 years old) are more likely to play Rep hockey as Midget players (17-18 years old). Streaming young players at such an early age is yet another barrier preventing many players from entering the elite hockey process. A few of the interview participants acknowledge this barrier and had a few recommendations to remedy such obstacles.

> "I do not think we have done a good enough job of house hockey . . . I have always thought that we could of done a better job with house hockey. At the levels of novice, atom, and peewee, especially, I think that the focus of parents for their kids is to make rep teams. By the time those kids are peewee rep players, if they do not make the peewee rep team, a lot of the times those kids quit . . . I have seen a lot of kids go through and if they don't make that rep team when they are in peewee and when they do not make the rep team in bantam, while they are not playing midget rep. Around here that is a definite factor because if those kids are not on rep teams they quit . . . parent investment seems to stop and so then kids won't play house hockey because there is no joy in it and it is regarded as a lower level and people say what is the point . . . I think that attitude change is rampant in every little community around here (Trail)." – Current Junior B and former minor hockey coach in Trail area

> "We have to focus on house hockey. When the kids are 10 or 11, if they don't make Rep when they are 10, if they don't make the Atom Rep team, which is fucking ridiculous, they don't make it, they quit. They quit hockey, so you have these 15,16,18 25 guys that go on play Atom rep, Peewee rep, Bantam rep, and Midget rep and then go on in their careers and all the other kids have quit hockey which is so sad because it is such a great sport. We have to develop players at the house hockey level. The rep teams will take care of themselves. And, so my theory was that every player plays house hockey. At the end of January you pick an all-star team and they go on to provincial finals (much like little league baseball)." – Former Trail Senior Smokeeater and minor hockey coach

A greater investment in house hockey would better serve all young hockey players

and would further encourage participation. In line with the respondent above, I believe that non-public minor hockey associations should move away from the current rep/house dichotomy. Or at least wait until players are older before streaming players into Rep or house (similar to Sweden). Much like little league baseball's current model, all players should play house for the course of the season. At the end of the season, try-outs could be held for a provincial showdown. This way, a player who is developmentally behind at the beginning of the season has the opportunity to catch up with his peers, as he would be granted the same amount of ice time.

Summary

Most elite youth hockey players (and their parents) aspire to play in the NHL. And the NHL expects players to be produced in a certain way to ensure the best on-ice product and ultimately, increased financial returns. The way players are produced has changed in recent years. The restructuring of elite hockey player production has come at a time of wider political, social, and economic change. The past 40 years have been marked by the rise of diverse neoliberal modes of governance aspiring to extend competitive free markets to various previously public goods and services (Harvey, 2005).

The privatization of ice rink facilities opened up a market for year round hockey activities that have come to be occupied by HPTCs and spring hockey teams. Their services are marketed as part and parcel of the elite hockey production process by providing prospective players a platform to maximize skill development under the tutelage of professional coaches. This is markedly different from past modes of producing hockey players centered on a 7 month season played in publically owned ice rinks and coached by

volunteers. This distinct qualitative turn in elite hockey player production resulting from the deeper penetration of capital into the sport has made elite hockey inaccessible to a large portion of players. The shifting geography of elite hockey player production in BC is a manifestation of the restructuring of the elite hockey production process. Cost and geographic isolation has eliminated player's opportunity to play elite hockey.

So what is the way forward? Reformation of BC's current hockey environment may seem unlikely. The recent introduction and proliferation of private hockey academies, newly constructed private ice rinks, and the growth and accepted ubiquity of spring/summer hockey may be evidence of a further deepening of the commodification of youth hockey. But, I do believe there are ways in which the demand for such services could be curbed. And it begins with deromanticizing the current system of elite hockey and its ultimate ends, the NHL.

Demand for HPTCs, hockey academies, and private winter clubs is driven by players, and their parents, aspiration to play professional hockey. All elite young hockey players dream of replicating the experiences of the players they watch hoisting the Stanley Cup, biting the Gold medal following a World Junior Hockey Championship, and/or posing for an Olympic Gold Medal. But the likely trajectory of most hopeful young hockey players is far less glamorous. A small minority of players ever reach the NHL. And even for those who do make the NHL, life in the big leagues is not as glamorous as is projected on television and the media. The average NHL career is 5 years long in which a player can expect to make $15 million. But these totals do not take into account taxes, agent and financial service fees. Additionally such sums of money are given to a player well before they reach 30 years of

age. The majority of Canadian NHL players arrive from major junior teams meaning they have had none or minimal exposure to a post secondary education or a grasp of how to manage their money. A career in the NHL is often filled with several hardships. Lifelong debilitating injuries, specifically brain injuries, and a life of precarity are mere certainties. Players often find life after hockey difficult to navigate. Anxiety and depression are a reality for many players after their NHL careers, as is evidenced by the recent rash of tragic suicides of former NHL hockey players. The road to the NHL is equally problematic. Youths become dehumanized tradable commodities as early as 15-16 years old. Their worth is measured in their abilities to contribute to the successes of their respective teams. Moreover, junior players are expected to move away from home at the age of 15/16 whereupon they are exposed to a world of hyper masculinity and verbal abuse from peers, coaches, and management. Undoubtedly not all players experience such hardships and many even have glowingly positive experiences in their junior and NHL careers. The reality is that many don't and this is becoming increasingly clear through the recent efforts of major junior hockey players to unionize as well as many first hand accounts of former and current NHL players through such avenues as the player's tribune website. The current elite hockey system will continue moving forward, but efforts to deromanticize the road to the pros may be a means to deter future demand for HPTCs, hockey academies, and private winter clubs, Parents may begin questioning their significant financial investments related to their son’s hockey.

With that being said, I still think players should continue to dream of playing in the NHL. Such aspirations are healthy and develop life skills and habits (hard work, goal setting, team work, positive social skills, discipline) that translate to a successful life

regardless of vocation. But they should do so in a positive environment where winning is not a primary concern. This is difficult to accomplish in a setting where coaches have become professionalized and HPTCs, hockey academies, and winter clubs successes are measured by wins and the amount of players they successfully move on to higher levels of hockey. The focus of the youth hockey industry has moved away from the kids to the parents and professional coaches who's livelihood depends on the success of the very kids that they are coaching. Within such an environment it is easy to lose sight of who the game is for.

Hockey must be about the kids playing the sport. The coaches, managers, and parents must take a step back. In addition to moving away from the current house/rep dichotomy, I believe another effective means of accomplishing this may be through adopting some of the measures taken by USA Hockey and the Swedish Ice Hockey Association. These organizations place a premium upon coaching, emphasize development, and oppose year round single sport athletes. They hire regional head coaches responsible for ensuring that grassroots coaches adhere to the respective organization's developmental philosophies. Hiring regional coaches could also provide the peripheral regions of BC adequate coaching, similar to what Trail experienced during the first three quarters of the twentieth century. It may also weed out supposed "hockey gurus" who do not have the players best interest in mind. Now do not be fooled, these organizations have implemented such measures because they want successful programs, not for charitable purposes. But they have proven that such measures can be implemented without taking away from success.

Currently youth hockey is structured towards producing elite hockey players. This is done at the expense of recreational players. Ultimately, only a small percentage of hockey players ever make it to the heights of elite hockey. Hockey Canada should not attempt to keep pace with private entities. Instead, they should allocate their resources towards making the game affordable and accessible to the greatest number of people. In doing so they will increase the number of youths participating in hockey, inevitably leading to increased competition. But more importantly, the promotion of fun and positive youth development should be Hockey Canada's raison d'etre, and would make hockey a vehicle for positive social and physical development. And that is what the great game of hockey should ultimately be about.

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Appendix A: Elite Player's Hometowns Born Between 1951-1995

Vancouver Island/Coast

Regional District	% of BC POP (1951)	% of Elite players (1951-1955)
Capital	10.43	9.3
Alberni-Clayoquot	1.52	1.3
Mount Waddington	0.731	1.3
Nanaimo	1.9	5.3
Cowichan Valley	2.11	0
Comox-Strathacona	1.78	0
Powell River	0.93	1.3
Total	19.401	**18.5**

Mainland Southeast

Regional District	% of BC POP (1951)	% of Elite players (1951-1955)
Greater Vancouver	48.27	24
Fraser Cheam	2.43	4
Sunshine Coast	0.55	0
Squamish-Lilloet	0.72	0
Dewdney-Alouette	1.75	0
Central Fraser Valley	2.38	0
Total	**56.1**	**28**

Cariboo

Regional District	% of BC POP (1951)	% of Elite players (1951-1955)
Cariboo	1.12	**5.3**
Fort Fraser George	1.27	0
Total	**2.39**	**5.3**

Nechako

Regional District	% of BC POP (1951)	% of Elite players (1951-1955)
Bukley-Nechako	1.04	4
Total	**1.04**	**4**

North Coast

Regional District	% of BC POP (1951)	% of Elite players (1951-1955)
Kitimat-Stikine	0.83	2.7
Total	**0.83**	**2.7**

North East

Regional District	% of BC POP (1951)	% of Elite players (1951-1955)
Peace River	1.26	1.3
Total	**1.26**	**1.3**

Kootenay

Regional District	% of BC POP (1951)	% of Elite players (1951-55)
Central Kootenay	2.86	5.3
East Kootenay	2.14	8
Kootenay Boundary	2.51	8
Total	**7.51**	**21.3**

Thompson/Okanaga

Regional District	% of BC POP (1951)	% of Elite players (1951-55)
Columbia-Shuswap	0.13	1.3
North Okanagan	1.8	5.3
Okanagan-Similkameen	2.44	3.5
Thompson-Nicola	2.33	6.7
Central Okanagan	1.82	0
Total	**8.52**	**16.8**

1961-1965

Vancouver Island/ Coastal

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Capital	9.94	8.5
Alberni-Clayoquot	1.59	2.5
Mount Waddington	0.56	0.847
Nanaimo	2.03	2.54
Cowichan Valley	1.89	4.24
Comox-Strathacona	1.9	1.69
Powell River	0.867	0
Total	**18.777**	**20.317**

Mainland/Southeast

Regional District	% of BC POP (1961)	% of Elite players (1961-1965)
Greater Vancouver	48.54	38.1
Fraser Cheam	2.33	0.85
Sunshine Coast	0.45	0
Squamish-Lilloet	0.61	0
Dewdney-Alouette	1.83	0.85
Central Fraser Valley	2.31	0
Total	**56.07**	**39.8**

Cariboo

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Cariboo	1.66	2.54
Fort Fraser George	1.95	4.24
Total	**3.61**	**6.78**

Nechako

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Bukley-Nechako	1.07	0.85
Total	**1.07**	**0.85**

North Coast

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Kitimat-Stikine	1.41	1.69
Total	**1.41**	**1.69**

North East

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Peace River	1.92	5.08
Total	**1.92**	**5.08**

Kootenay

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Central Kootenay	2.54	2.7
East Kootenay	1.83	2.54
Kootenay Boundary	1.93	5.08
Total	**6.3**	**10.32**

Thompson/Okanagan

Regional District	% of BC POP (1961)	% of Elite players (1961-65)
Columbia-Shuswap	1.23	3.34
North Okanagan	1.58	0
Okanagan-Similkameen	2.06	0
Thompson-Nicola	2.75	5.93
Central Okanagan	1.69	4.24
Total	**9.31**	**13.51**

1971-1975

Vancouver Island/ Coastal

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Capital	9.37	3.66
Alberni-Clayoquot	1.45	0
Mount Waddington	0.05	2.41
Nanaimo	2.2	0
Cowichan Valley	1.78	2.44
Comox-Strathacona	2.17	0
Powell River	0.85	1.2
Total	**17.87**	**9.71**

Mainland/Southeast

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Greater Vancouver	47.07	42.68
Fraser Cheam	2.11	0
Sunshine Coast	0.44	0
Squamish-Lilloet	0.6	0
Dewdney-Alouette	1.84	0
Central Fraser Valley	2.67	0
Total	**54.73**	**42.68**

Cariboo

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Cariboo	1.8	2.45
Fort Fraser George	2.95	6.02
Total	**4.75**	**8.47**

Nechako

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Bukley-Nechako	1.24	0
Total	**1.24**	**0**

North Coast

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Kitimat-Stikine	1.71	4.82
Total	**1.71**	**4.82**

North East

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Peace River	2.01	3.61
Total	**2.01**	**3.61**

Kootenay

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Central Kootenay	2.05	4.82
East Kootenay	1.82	10.84
Kootenay Boundary	1.44	6.02
Total	**5.31**	**21.68**

Thompson/Okanagan

Regional District	% of BC POP (1971)	% of Elite players (1971-75)
Columbia-Shuswap	1.4	1.2
North Okanagan	1.56	3.61
Okanagan-Similkameen	1.96	1.2
Thompson-Nicola	0.44	1.2
Central Okanagan	2.3	3.64
Total	**7.66**	**10.85**

1981-1985

Vancouver Island/ Coastal

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Capital	9.09	5
Alberni-Clayoquot	1.89	0
Mount Waddington	0.53	1.25
Nanaimo	2.81	1.88
Cowichan Valley	1.92	3.13
Comox-Strathacona	2.5	0.63
Powell River	2.02	0
Total	**20.76**	**11.89**

Mainland/Southeast

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Greater Vancouver	42.63	47.5
Fraser Cheam	2.07	0.63
Sunshine Coast	0.56	0.63
Squamish-Lilloet	0.69	0.63
Dewdney-Alouette	2.26	0.63
Central Fraser Valley	4.19	3.75
Total	**52.4**	**53.77**

Cariboo

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Cariboo	2.16	2.5
Fort Fraser George	3.26	1.25
Total	**5.42**	**3.75**

Nechako

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Bukley-Nechako	1.4	1.88
Total	**1.4**	**1.88**

North Coast

Regional District	% of BC POP (1971)	% of Elite players (1981-85)
Kitimat-Stikine	1.5	1.25
Total	**1.5**	**1.25**

North East

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Peace River	2.02	0
Total	**2.02**	**0**

Kootenay

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Central Kootenay	1.9	2.5
East Kootenay	1.96	2.5
Kootenay Boundary	1.21	3.13
Total	**5.07**	**8.13**

Thompson/Okanaga

Regional District	% of BC POP (1981)	% of Elite players (1981-85)
Columbia-Shuswap	1.46	3.75
North Okanagan	1.98	0.63
Okanagan-Similkameen	2.08	1.88
Thompson-Nicola	3.59	6.25
Central Okanagan	3.11	5
Total	**12.22**	**17.51**

1991-1995

Vancouver Island/ Coastal

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Capital	9.13	3.59
Alberni-Clayoquot	0.95	0.51
Mount Waddington	0.42	0.51
Nanaimo	3.1	3.59
Cowichan Valley	1.85	1.03
Comox-Strathacona	2.52	0
Powell River	0.56	0
Total	**18.53**	**9.23**

Mainland/Southeast

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Greater Vancouver	47.01	45.13
Fraser Cheam	2.09	2.56
Sunshine Coast	0.63	0.51
Squamish-Lilloet	0.71	0.51
Dewdney-Alouette	2.74	0.51
Central Fraser Valley	2.66	7.69
Total	**55.84**	**56.91**

Cariboo

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Cariboo	1.86	1.54
Fort Fraser George	2.76	6.15
Total	**4.62**	**7.69**

Nechako

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Bukley-Nechako	1.17	1.03
Total	**1.17**	**1.03**

North Coast

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Kitimat-Stikine	1.28	1.02
Total	**1.28**	**1.02**

North East

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Peace River	1.62	0.51
Total	**1.62**	**0.51**

Kootenay

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Central Kootenay	1.56	2.05
East Kootenay	1.6	3.08
Kootenay Boundary	0.95	2.05
Total	**4.11**	**7.18**

Thompson/Okanagan

Regional District	% of BC POP (1991)	% of Elite players (1991-95)
Columbia-Shuswap	1.27	3.08
North Okanagan	1.88	1.54
Okanagan-Similkameen	2.03	4.1
Thompson-Nicola	3.18	1.03
Central Okanagan	3.41	5.64
Total	**11.77**	**15.39**

Appendix B: Ice Rink Construction in BC (1893-1988)

Location	Natural Ice	Artificial Ice	Date Opened
Sandon, BC	1	0	1893
Nelson, BC	1	0	1894
Rossland, BC	1	0	1898
Fernie, BC	1	0	1900
Grand Forks, BC	1	0	1906
Vernon, BC	1	0	1906
Greenwood, BC	1	0	1907
Pheonix, BC	1	0	1907
Nakusp, BC	1	0	1908
Nelson, BC	1	0	1908
New Denver, BC	1	0	1908
Slocan City	1	0	1908
Fernie, BC	1	0	1909
Trail, BC	0	1	1911
Vancouver, BC	0	1	1911
Victoria, BC	0	1	1913
New Westminster, BC	0	1	1918
Salmon Arm, BC	0	1	1921
Enderby, BC	0	1	1933
Kimberly, BC	0	1	1935
Spokane, Elk St	0	1	1935
Nelson, BC	0	1	1937
Vancouver, BC	0	1	1938
Vernon, BC	0	1	1939
New Westminster, BC	0	1	1940
Nanaimo, BC	0	1	1941
Delta	0	1	1945
Victoria, BC	0	1	1946
Creston, BC	0	1	1947
Lac La Hache	1	0	1948
Kelowna, BC	0	1	1949
Rossland, BC	1	0	1949
Victoria, BC	0	1	1949
Kamloops	0	1	1949
Kerrisdale	0	1	1949
Trail, BC	0	1	1950
Whitehorse	1	0	1950
Williams Lake, BC	0	1	1951
Cranbrook, BC	0	1	1952

Natal Michel	1	0	1953
Quesnel, BC	1	0	1953
Penticton, BC	0	1	1954
Fernie, BC	0	1	1954
Summerland, BC	1	0	1956
Dawson Creek, BC	0	1	1956
Trail, BC	0	1	1957
Powell River, BC	0	1	1957
Armstrong, BC	0	1	1957
Castlegar, BC	1	0	1957
Merrit, BC	0	1	1957
North Vancouver, BC	0	1	1958
Burnaby W.C	0	1	1958
Prince George, BC	0	1	1959
Richmond, BC (2)	0	1	1961
Smithers, BC	0	1	1961
Vanderhoof, BC	0	1	1962
Burnaby, BC	0	1	1962
Chilliwack, BC	0	1	1962
Fernie, BC	0	1	1963
Kimberly, BC	0	1	1964
Esquimalt, BC	0	1	1964
North Shore WC	0	1	1964
Revelstoke, BC	0	1	1965
West Vancouver, BC	0	1	1965
Coquitlam, BC	0	1	1965
Killarney, BC	0	1	1966
Vancouver, BC	0	1	1966
Kamloops, BC	0	1	1966
Vancouver, BC	0	1	1966
Vancouver, BC	0	1	1966
Burnaby, BC	0	1	1966
Kitimat, BC	0	1	1967
Richmond, BC	0	1	1967
Vancouver, BC	0	1	1967
Surrey, BC	0	1	1967
North Vancouver, BC	0	1	1967
Port Alberni, BC	0	1	1967
West Vancouver, BC	0	1	1967
White Rock, BC	0	1	1968
Victoria, BC	0	1	1968
Cassiar, BC	0	1	1968
Grand Forks, BC	0	1	1968

Golden, BC	0	1	1968
Maple Ridge, BC	0	1	1969
Burns Lake, BC	0	1	1970
Oliver, BC	0	1	1970
Valemont, BC	0	1	1970
Chemanius	0	1	1970
Lumby	1	0	1970
Mission, BC	0	1	1971
Saanich, BC	0	1	1971
Vancouver, BC	0	1	1971
Hazelton, BC	0	1	1971
Abbotsford, BC	0	1	1971
Gold River, BC	0	1	1971
North Cowichan, BC	0	1	1971
Nakusp, BC	0	1	1971
Cloverdale, BC	0	1	1971
Fort St. James	0	1	1972
Port Coquitlam, BC	0	1	1972
Cowichan Lake	0	1	1972
Creston Valley, BC	0	1	1972
Fraser Lake, BC	0	1	1972
Houston, BC	0	1	1972
Port Alice, BC	0	1	1972
Prince George, BC	0	1	1972
Prince Rupert, BC	0	1	1972
Stewart, BC	0	1	1972
Surrey, BC	0	1	1972
Burnaby, BC	0	1	1972
Campbell River, BC	0	1	1972
Cranbrook, BC	0	1	1973
Canal Flatts, BC	0	1	1973
Fort Nelson, BC	0	1	1973
100 Mile House, BC	0	1	1973
Fort St. John, BC	0	1	1973
Kamloops, BC	0	1	1973
Logan Lake, BC	0	1	1973
Marysville, BC	0	1	1973
North Delta, BC	0	1	1973
Penticton, BC	0	1	1973
Port Moody, BC	0	1	1973
Sechelt, BC	0	1	1973
South Delta, BC	0	1	1973
Sparwood, BC	0	1	1974

Juan De Fuca, BC	0	1	1974
Watson Lake, BC	0	1	1974
Aldergrove, BC	0	1	1974
Burnaby, BC	0	1	1974
Chetwynd	0	1	1974
Kitimat, BC	0	1	1974
Kamloops, BC	0	1	1974
Langley, BC	0	1	1974
Rutland, BC	0	1	1974
West Vancouver, BC	0	1	1975
Enderby, BC	0	1	1975
Fruitvale, BC	0	1	1975
Granisle, BC	0	1	1975
Kersley, BC	1	0	1975
Mill Bay, BC	0	1	1975
Mckenzie, BC	0	1	1975
North Vancouver, BC	0	1	1975
Osooyoos, BC	0	1	1975
Parksville, BC	0	1	1975
Princeton, BC	0	1	1975
Ashcroft, BC	0	1	1975
Boundary	0	1	1975
Castlegar, BC	0	1	1975
Abbotsford, BC	0	1	1975
Clearwater, BC	0	1	1975
Courtenay, BC	0	1	1976
Elkford, BC	0	1	1976
Hope, BC	0	1	1976
Kaslo, BC	0	1	1976
New Westminster, BC	0	1	1976
Oak Bay, BC	0	1	1976
Prince George, BC	0	1	1976
Sardis, BC	0	1	1976
Sooke, BC	0	1	1977
Vancouver, BC	0	1	1977
Westbank, BC	0	1	1977
Winfield, BC	0	1	1977
Chilliwack, BC	0	1	1978
Delta, BC	0	1	1978
North Delta, BC	0	1	1978
Invermere, BC	0	1	1978
Kitsilano, BC	0	1	1981
Nanaimo, BC	0	1	1981

Vancouver, BC	0	1	1982
Vernon, BC	0	1	1982
Cranbrook, BC	0	1	1984
Logan Lake, BC	0	1	1984
Port McNeil, BC	0	1	1987
Sidney, BC	0	1	1988
Duncan, BC	0	1	1988

Appendix C: Ice Rink Construction in BC (1988-2007)

Ice Rinks	Ownership	Year of Construction
Royal LePage Place (Mount Boucherie Complex) (Kelowna, BC)	Public	2007
Armstrong/Spallumcheen Arena (Armstrong, BC)	Private	2005
Prospera Centre (Chilliwack, BC)	Private	2004
Save-On-Foods Centre (Victoria, BC)	Private	2004
Capital News Centre (Kelowna, BC)	Private	2003
Oceanside Place (Parksville, BC)	Public	2003
Alberni Valley Multiplex (Port Alberni, BC)	Public	2001
Art Holding Memorial Arena (Chase, BC)	Public	1999
Cranbrook Rec Plex (Cranbrook, BC)	Public	1999
Langley Sportsplex - Westcoast Roller & Ice Hockey Ltd. (Langley, BC)	Private	1999
Shaw Centre (formerly Sunwave Centre) (Salmon Arm, BC)	Public	1999
Centre Ice Multiplex (Abbotsford, BC)	Private	1998
Elk Valley Leisure Centre (Sparwood Arena) (Sparwood, BC)	Public	1998
Excellent Ice (Surrey, BC)	Private	1998
Ice Box Arena (Kamloops, BC)	Private	1998
Kin Arena (Dawson Creek, BC)	Public	1998
Planet Ice - Total Sport Entertainment (Maple Ridge, BC)	Private	1998
Tilbury Ice (Ladner (Delta), BC)	Public	1998
Bill Copeland Sports Centre (Burnaby, BC)	Public	1997
Abbotsford Recreation Centre (Abbotsford, BC)	Public	1995
Burnaby Winter Club (Burnaby, BC)	Private	1995
CN Centre (formerly Prince George Multiplex) (Prince George, BC)	Public	1995
Planet Ice - Total Sport Entertainment (Coquitlam, BC)	Private	1995
Planet Ice Delta (formerly Great Pacific Forum) (Delta, BC)	Private	1995
Cliff McNabb Arena (Beban Complex) (Nanaimo, BC)	Public	1994
Richmond Ice Centre (Richmond, BC)	Public	1994
Interior Savings Centre (formerly Sport Mart Place) (Kamloops, BC)	Public	1993
Meadow Park Sports Centre (Whistler, BC)	Public	1992
Pitt Meadows Arena (formerly Pitt Meadows Twin Rinks) (Pitt Meadows, BC)	Private	1992
South Surrey Arena (Surrey, BC)	Public	1991

Appendix D: High Performance Training Companies

VOS Hockey Development	Abbotsford, BC
Yale Hockey Academy	Abbotsford, BC
ART Hockey Limited	Abbotsford, BC
Bo Knows Hockey	Abbotsford, BC
Peter Hay Development	Abbotsford, BC
Advantage Hockey	Burnaby, BC
Base Hockey	Burnaby, BC
Dynamo Hockey Development	Burnaby, BC
Extreme Hockey Academy	Burnaby, BC
International Ice Hockey Systems	Burnaby, BC
Peak Centre	Burnaby, BC
Sully's Hockey	Burnaby, BC
Burnaby Winter Clun Hockey Academy	Burnaby, BC
Xceed Training Centre	Chilliwack, BC
Next Level Training	Campbell River, BC
Company name	Company Headquarters
Elite Level Development Group	Coquitlam, BC
Elite Hockey Shooters	Delta, BC
Pro4Sports	Delta, BC
Hockey Kamloops	Kamloops, BC
Kamloops Ice Pirate Youth Hockey Development	Kamloops, BC
Crash Conditioning	Kelowna, BC
Hockey Development International	Kelowna, BC
Redline High Performance Hockey	Kelowna, BC
Pursuit of Excellence Hockey Academy	Kelowna, BC
All Pro Hockey Limited	Langley, BC
Hockey Magic Development Services	Langley, BC
TNT Hockey Performance Training	Langley, BC
Impact Hockey	Langley, BC
National Hockey Training	Langley, BC
JC's Extreme Hockey	Langley, BC
SPS Power Skating	Langley, BC
Sharp Shooter Hockey Training	Langley, BC
Complex Hockey Training	Langley, BC.
Paragon Hockey Development	Maple Ridge, BC
RPM Hockey Company	Maple Ridge, BC
Euro Elite Hockey	New Westminster, BC
Hockey Dynamics	North Vancouver
High Performance	North Vancouver, BC
	North Vancouver, BC

Hockey Dynamics	North Vancouver, BC
Twist Conditioning	Penticton, BC
Okanagan Hockey Academy	Qualicum Beach, BC
Acres Hockey Training	Richmond, BC
Pacific Elite Hockey School	Surrey, BC
Precision Hockey Development	Surrey, BC
Puckmasters	Surrey, BC
Young Gun's Hockey Training	Vancouver, BC
Inside Edge Hockey Training	Vancouver, BC
Leslie Global Sports	Vancouver, BC
Vancouver Hockey School	Vancouver, BC
Wall Professional Hockey Training	Vancouver, Prince George, Powell River
Hockey Factory	Victoria, BC
Island Centre of Hockey Excellence	Victoria, BC
Len Barrie Hockey College and Academy	Victoria, BC
Performance Plus Hockey	Victoria, BC
ProQwest Hockey Development	Victoria, BC
Pacific Coast Hockey Academy	Prince George, BC
Sharper Edge	Prince George, BC
Magic Hockey Training Centre	