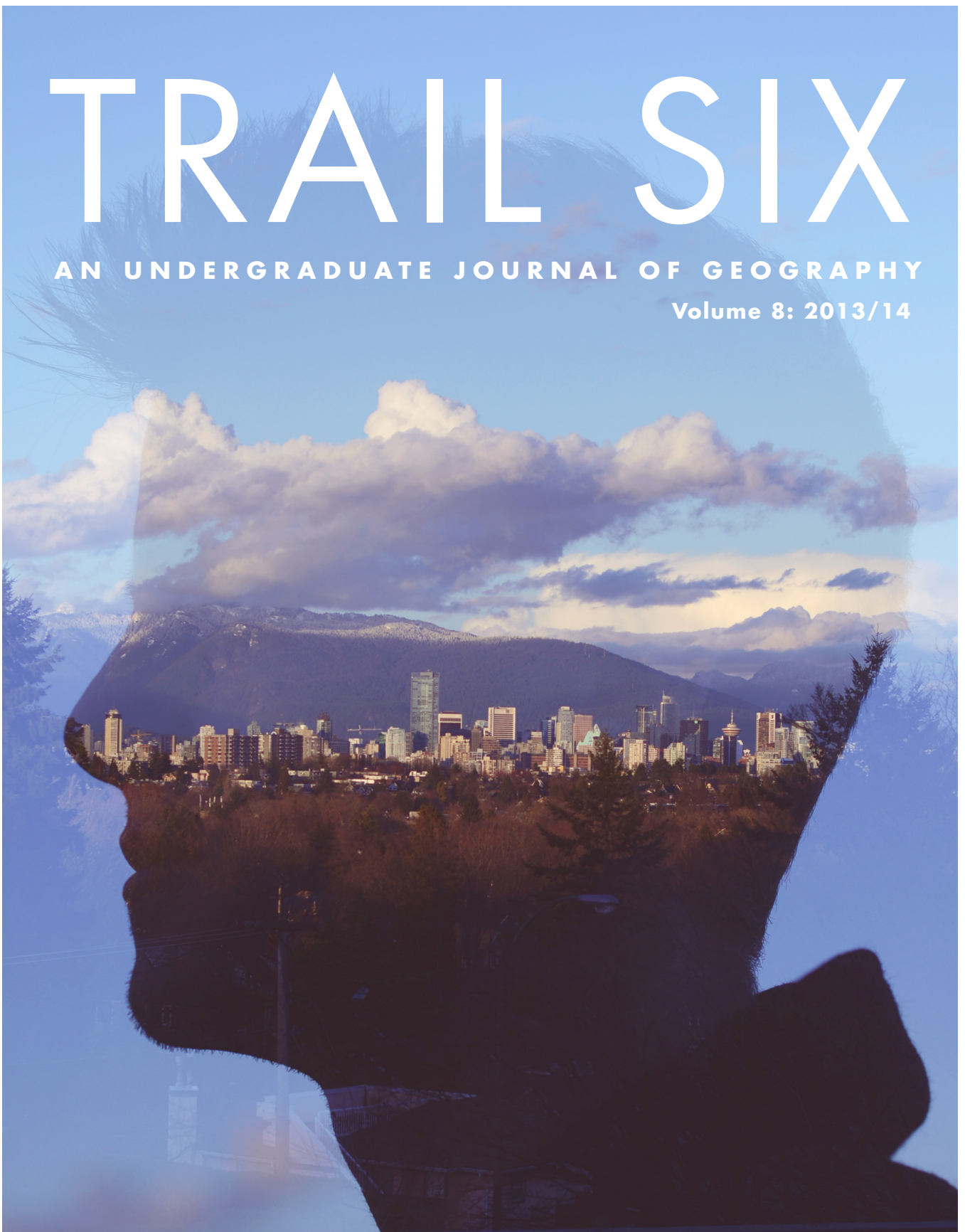


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LETTER FROM THE EDITORS

The spirit of academia is to continuously (re)produce knowledge as well as debate and discuss current issues. Academia is often problematically seen as the exclusive Ivory Tower, but it is in fact meant to encapsulate discussions and research relevant to society as a whole. The Department of Geography at UBC has rigorous undergraduate programs that encourage its students to push themselves to think more critically and challenge what they believe to be true in order to be better global citizens. Students are able to explore infinite topics through a geographical lens, yet most of their work sadly remains unshared. Thus, in the community spirit of academia, *Trail Six* has become a platform to showcase some of the excellent work of our department's undergraduate students.

We would like to thank our editors who tirelessly reviewed submissions, provided feedback on papers, and edited articles to make them more accessible to a broader public. We would also like to thank the professors who encouraged students to submit their papers to *Trail Six*, and to those who kindly shared their expertise with us by providing additional comments on the selected papers. Our designer, Jialin Yang, was extremely patient with the endless changes and delays and accommodated all of our requests. Lastly, thank you to the authors of this year's papers - without you, there would be no *Trail Six*. For many of you, this is your first time being published: congratulations! Thank you for allowing *Trail Six* to be part of your journey, and for contributing such rich texts.

It has been seven years since the first volume of *Trail Six* was published, and many have wondered what the origins of our title are. We want to honour the journal's beginnings by quoting the foreword written by Danny Oleksuk and Christopher Chan, the first two Editors-in-Chief, in April 2007:

Many of you have wandered down from UBC, off the Point Grey peninsula, past the Upper and Lower Quadra sands, and arrived at Wreck Beach. Presumably, you have also hauled yourself back up those same stairs. This is *Trail Six*. In some five minutes it takes you from the comfort of the academic campus to - depending on the time of the year - the cold, windy, and rainy ocean in the winter, or to the circus of sun, sand and skin that is Wreck Beach in the summer. The city is invisible from the beach; there is only the ocean, the sand, the mountains, and *Trail Six* leading back towards UBC and Vancouver. We chose it as the title because it is beautiful, it is local, and because in its limited space the trail reveals a spectrum of geographical issues

We hope you will enjoy discovering the many geographical stories in these pages.

Brittany Jang & Sarah Kristi Lone
Editors-in-Chief
March 2014

FOREWORD

This year's *Trail Six* contains eight articles covering three geographic themes: contesting power and space relations; identity, space, and place; and understanding issues in the urban sphere. These themes reflect the evolving dynamics of the discipline, particularly how humanity is becoming more interlinked. Interestingly, most of this year's papers focus on the local scale, examining how such diverse topics as skateboarding, sexual assault, and colonialism affect communities. This focus on the complex interrelations that take place at the level of cities or communities reflects a re-emergence in academia of the importance and value of place and space.

In short, this issue of *Trail Six* is not only demonstrates the research acumen and academic writing skills of our students, it is also a timely and valuable contribution to our wider understanding of geographic processes. On behalf of the Department, I offer my congratulations to the Geography Students' Association (GSA) on another excellent issue of *Trail Six*. Here's to many more!

Marwan A . Hassan
Professor and Head
Department of Geography, UBC

Trail Six: An Undergraduate Journal of Geography is an annual publication of the Geography Students' Association at the University of British Columbia that was launched in 2007. Its title is derived from a path of the same name - Trail Six - that connects UBC to Wreck Beach. Just as Trail Six symbolically links humans to their surroundings, urban life to ocean life, the journal explores these geographies as they are mapped in different spaces.

Contesting Power & Space Relations

Geographies of Sexual Assault: An analysis of the response to the sexual violence on the UBC campus and the Downtown Eastside

by H       Miles

This paper explores and compares the responses to the recent sexual assaults on the University of British Columbia (UBC) campus with the responses to the murdered and missing women in the Downtown Eastside in the late 1990s. In response to the sexual assaults at UBC, there was thorough, prime-time media coverage and immediate action from the RCMP and the University to address safety on campus. In the Downtown Eastside, there were similar issues of sexual violence but it took years before there were any investigations, news features, or even actions, to address the issue of safety. This paper deconstructs the raced, classed, colonial, and gendered spaces of these assaults. It concentrates on the reactions within the media, the University, and the general public and on the ways these reactions were framed by the specific geographies, politics and spaces in which the incidents occurred. Above all, this paper explores Razack's (2002a) question of "what is being imagined or projected on to specific spaces and bodies" to produce these uneven reactions and responses to sexualized violence in the two contexts (p.96).

INTRODUCTION

Of late, the subject of sexual assault has been a high-profile topic at the University of British Columbia (UBC). As the University attempts to address 'safety' on campus, women continue to be assaulted on its grounds. Sexualized violence is an important issue that needs to be addressed, but it cannot fully be explored until we deconstruct unquestioned and normalized inequalities and the abandonment of certain bodies. I cannot help but think that this conversation should be situated in the larger discussion of geographies of space and identity. How do we address sexualized violence when there are colonial, racial, and class hierarchies that lie embedded

in the discourse? How do I empathize or create change when my knowledge is produced from a space that has violent colonial histories? To address these questions, I want to un-map and denaturalize the space, bodies, and reactions related to the sexual assaults on the UBC campus. In this paper, I explore why the sexual assaults on campus were framed in a different way than the murders of women from the Downtown Eastside. By deconstructing why the sexual assaults and murders garnered uneven attention, I hope to foster a more nuanced understanding of the geographies that are entrenched in sexualized violence.

SEXUALIZED VIOLENCE ON CAMPUS AND IN THE DOWNTOWN EASTSIDE

The ways in which the spatial and political geographies of UBC and the Downtown Eastside have framed the sexual assaults and the murders have contributed to the difference in reaction and empathy levels within the media, the University and the greater public. There have been six sexual assaults reported on campus that have been linked to what is assumed to be just one perpetrator. He is described as a tall, white male student in his mid-to-late twenties (Bains, 2013). These assaults have spurred hundreds of newspaper articles, blog posts, and other social media discussions which frame the assaults as awful attacks on innocent students.¹ The RCMP and the University have responded promptly by issuing warnings and taking action on campus by increasing lighting and security presence, and by cutting hedges (Bigam 2013). The assaults, as well as the actions taken by the University and the RCMP, have raised many valid and needed conversations surrounding the problematic nature of the current measures used to address the sexual assaults on campus and gender

violence in our society.² However, there has been little awareness raised about the spaces that empower or dissuade these types of conversations or how the spaces in which sexual violence occurs affect the types of attention that the incident receives. I want to concentrate on how the specific geographies and spaces of sexual violence at UBC and in the Downtown Eastside framed the reactions within the media, the University, and the general public.

The space of UBC is far from neutral or innocent. The University's land itself is situated in a history of colonialism as it is located on unceded traditional Musqueam territory that was given to the University by the Government of British Columbia ("Contractual," 2009). The material and symbolic form of the University work together to constitute what Razack (2002b) defines as social space. The material form of the University is a physical manifestation of settler society attempting to create a permanent claim on the contested land that it sits upon. The symbolism of the provincial government granting the Endowment Lands to the University is a reproduction of violent colonial interactions between settler society and First Nations, where land was forcibly taken from First Nations. The physical structure of the University and

¹ For further reading on the response to the UBC assaults:

- Sexual Assault Support Centre (2013, Oct 18). Anti-Violence Ally Training. *Sexual Assault Support Center at UBC Blog*. Retrieved from www.gotconsent.ca/anti-violence-ally-training.html
- UBC Fraternities. (2013, Oct 20). We would like to extend a helping hand to make our campus a safer place ... [Facebook status update]. Retrieved from <https://www.facebook.com/UBCFraternities>
- The University Of British Columbia. (n.d.). Recent assaults and UBC response. *UBC Stay Safe*. Retrieved Jan 1, 2013 from <http://www.ubc.ca/staysafe/recent-assaults-and-ubc-response.html>

² For further reading on the discussions around the UBC assaults and sexual assault:

- N.A. (2013, Oct 20). I was sexually assaulted on campus, and this is my story. *The Ubyyssey*. Retrieved from <http://ubyssey.ca/news/ubc-safety-update-567/>
- Wong, C., Maleki, M., & Mottahed, A. (2013, Oct 23). Recent assaults should spur cultural dialogue on campus. *The Ubyyssey*. Retrieved from <http://ubyssey.ca/opinion/spur-cultural-dialogue-on-campus468/>

the symbolism of the gift of land work in tandem with colonial history to create a social space that naturalizes the relations of domination and entitlement. The spatial relations that link University land to domination and entitlement is, as Razack (2002a) would argue, codified in law. In this case, these spatial relations are also codified in the media, the University, and the greater public's reaction to the sexual assaults on campus. The echo of entitlement and domination that is naturalized in the space of the University is apparent in the immediacy of media attention to the sexual assaults and the prompt institutional action to address safety on campus. Providing media coverage and addressing safety are crucial steps in tackling the overwhelming cases of sexual violence in our society, but it is also important to notice how the prevalence of these factors changes in different spaces. The space of the University demands attention from the media and the public because of its privileged, colonial, and patriarchal position.

The privileged and colonial space of the University can be seen in the way that the media portrayed the sexual assaults on campus. The assaults were deemed as horrible freak events that were happening to innocent university students without conjuring up negative images of race or space (Ryan & Crawford, 2013). This is in contrast to Pratt's (2005) analysis of how the media portrayed the space of the Downtown Eastside and the bodies of its missing women as negative, racialized, and sensational. In 1978, women began to go missing from the Downtown Eastside in Vancouver. It was not until 1998, sixty-nine murders later, that the media and police began to pay attention to the un-

precedented number of violent and sexualized crimes that were taking place and continue to take place there (Pratt, 2005). The extremes of the location's reputation lent themselves to the police and media's representation of the missing women in the Downtown Eastside. The Downtown Eastside represents the poorest census tract in Canada, a "site of high concentrations of drug addiction, prostitution, HIV-AIDS and Hepatitis B" (Pratt, 2005, p. 1058). The missing women, many of whom were Indigenous, were portrayed as deviant bodies, not only because of their class and race, but also because of the means by which some of the women earned money (sex work). The insistence by the police that the women were merely transient upheld the derogatory assumptions in the media and in greater society that drug addicts, sex workers, and Indigenous people are inherently mobile because they are "subjects out of place": always en route to another city, or in the case of Indigenous Peoples, to the Indian Reserve (Pratt, 2005, p. 1059). The women were further criminalized through their portrayal on police websites and in the media, where their images were displayed in mug shot format (Pratt, 2005). This differs from the UBC case, in which the media and the police were not able to position the sexual assaults in opposition to a racialized Other, or project a negative classed image on to the space of assault because the attacks were executed in the elite spaces of the University by a white male attacker. To racialize the space of the University by speculating on the racial or class identities of those assaulted or that of the assaulter would be to question the entitled, patriarchal, colonial hierarchies that have been naturalized in the institutional landscape.

BIOPOLITICS AND BARE LIFE

The media coverage of the sexual assaults at UBC solicited empathy by locating the assaults within the narrative of the heteronormative middle-class family. Interviewers drew out details about how parents were calling students to make sure they were safe and how fraternity houses were volunteering their time to walk women around campus when it was dark (Ryan & Crawford, 2013; UBC Fraternities, 2013). These were stories that located the assaults in normative landscapes (privileged, heterosexual, white) so the assaults became an issue that drew empathy from across the province because it "allowed people to consider their own proximity to the danger and violence" (Pratt, 2005, p. 1062). Pratt (2005) notes that these were similar tactics used by the media in the case of the missing and murdered women in the Downtown Eastside, but it came long after the fact, and did not garner the same empathy and response from the RCMP or the public as did the sexual assaults at UBC. The work of artist Kati Campbell, who created an installation to commemorate the missing and murdered women, emphasizes that it is "our culture's refusal to empathise" with people who are low income, prostitutes, or drug addicts that turned media coverage of these women into more of a spectacle than a mechanism for connection and empathy (Laurence, 2004, para. 10). These seemingly opposite reactions to violence inflicted on female bodies raises Razack's (2002a) question of "what is being imagined or projected on to specific spaces and bodies" to produce these uneven responses (p. 96)?

Pratt's (2005) analysis of both Agamben's notion of 'bare life' and Foucault's

idea of biopolitics leads to an understanding of the unevenness of framework in which the geographies of these assaults were being addressed. Biopolitics is a production of citizenship through the extension of state power and sovereignty over both the life of physical and political bodies. As Pratt (2005) notes, modern biopolitics is characterized as a "generalized suspension of the law as a basis of liberal sovereignty" (p.1054). Therefore, modern biopolitics allows for the erasure or abandonment of certain categories of citizens who are not incorporated into the political system. Our political system is the framework of our lives. To not be incorporated into the political system is to be excluded from the places we inhabit, the education and healthcare we receive, the theoretically equal protection provided to us under law, and our representation in media coverage, among many others. Therefore, unincorporated groups are positioned as bare life which "describes a human life reduced to matter" (Pratt, 2005, p. 1054). Spatial geographies and discourses of gender, race, class, healthiness, and civility of the body are ways in which people and groups are reduced to bare life and therefore positioned as not politically relevant.

The discourse surrounding the missing and murdered women and the spaces that they inhabited conjures up images of poverty, drug addiction and race. This discourse racializes and classes the women who live in the Downtown Eastside and renders them as bare life, thus legally abandoning them (Pratt, 2005). The failure of the police to investigate the disappearances of the missing women in the Downtown Eastside, and the length of time it took for any justice to occur is an example of how the projection of bare life onto these women's

bodies and the spaces that they inhabited resulted in abandonment (Pratt, 2005). On the other hand, women at UBC occupy the opposite end of the relationship between those who are classified as bare life and those who occupy a place of sovereignty. The women who occupy the sovereign and powerful colonial spaces of the University are constructed in opposition to the women who occupy the racialized, gendered, and classed spaces of the Downtown Eastside. The efforts of UBC Security and the RCMP to address 'safety' on campus and the hundreds of newspapers and social media outlets that covered the story of the sexual assaults are evidence that if one occupies the space of the university and classifies within the geographies of UBC, one is not politically or legally abandoned.

CONCLUSION

Every case of sexualized violence inflicted on a body is extremely devastating. In order to address the complexity of sexualized violence, we should all be cognizant of the ways in which these issues play out unevenly across geographies. Both Pratt (2005) and Razack (2002a; 2002b) demonstrate how the political system can abandon people or groups in certain geographies, leading to a potential increase in their vulnerability to violence. By uncovering the uneven effects of abandonment and inclusion in the Downtown Eastside and at UBC, we are shown how race, space, class, and gender shape the reactions to events such as the sexual assaults that happened on campus. A critical inquiry into the spaces that shape our perceptions, views, and politics is thus necessary. By deconstructing the spaces that often remain unquestioned in our lives, such as our place of residence

or study, we begin to disrupt the normalized notions of hierarchies within space. This reflection is crucial to creating effective solutions and constructive conversations that actually address the root causes of sexualized violence, as opposed to just putting a band-aid over a festering wound.

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The Neoliberal and Corporate Academy

by Roya Bennett

“The neoliberal and corporate academy” examines colonialism’s continued presence in the modern university through a postcolonial lens. The neoliberal university is one that has been influenced by market logics. It therefore demonstrates the same pattern of development observed in the globalized world: with a core that disproportionately benefits from and influences the periphery. The core of knowledge development occurs within the Global North, with the Global South at its periphery. This is exacerbated by the predominant use of the English language in academia, research practices, and the subsequent dissemination of western knowledge. This in turn perpetuates colonialism through notions of otherness, dependence, inequality and exploitation.

INTRODUCTION

I was recently asked why I decided to attend UBC to pursue my undergraduate degree. Having grown up in Venezuela, Thailand, Kuwait, and Argentina, this was a valid question, to which I responded without much thought, “The universities in Argentina aren’t as good.”

The implications of what I had said caused me a great deal of anxiety; was I echoing a colonial sentiment? Why did I feel as though I had to be educated in the Global North? Having already been raised in the Global South, why did my imaginative geographies prescribe a perception of inadequacy to higher education outside of the Global North?

In order to answer these questions, it is important to explore the way structures within our globalized world influence how we perceive and connect to other cultures. Our current economy operates in a neoliberal framework, one that urges institutions to adopt policies that will make them more efficient and successful players in the global market (Harvey, 2007, p. 65). Neoliberalism, however, relies on “mechanisms

of uneven geographical developments” (p. 87) and has likewise aided in the proliferation of this uneven development.

My analysis of the emergence of the corporate university in the 1970s provides insight as to how knowledge production has been influenced by neoliberalism. I am interested in exploring whether or not the neoliberal and corporate university perpetuate colonialism.

First I will discuss the corporate university, and how corporatization has affected academia and the production of knowledge. Next, I will examine the neoliberal academy and the ways universities function as transnational corporations that benefit from the global market. Finally, I will explore how the neoliberal and corporate academy affects knowledge production, and the implications of this through a discussion of postcolonialism.

A BRIEF EXPLANATION OF NEOLIBERALISM

Neoliberalism has become the framework by which our global marketplace operates. Its proponents entrust markets

with the capacity to self-regulate, and argue that a country's profitability can be driven up by exploiting emerging markets in countries of the Global South (Gregory et al., 2009, 497).

The justification for exploitation lies in the notion that development should primarily be considered within a growth-first approach. Social-welfarist plans are consequently rendered as antagonistic to economic development due to their anti-competitive costs (Peck & Tickell, 2002, p. 394). As neoliberalism creates increasingly uneven geographies with regard to capital, it does so with academic knowledge and production as well; students and knowledge have become commodities to buy and sell.

THE CORPORATE ACADEMY

The emergence of the Canadian corporate academy began in the 1980s, after the university experienced a decade of 'chronic underfunding' (Buchbinder & Newson, 1990, p. 359). Appeals to the government for financial support were ignored, thus the university turned to the private sector for sources of income. This proved beneficial, as both parties could stay ahead of international competition: the corporation benefits from research, technology, and innovation, and well-funded institutions are able to garner profit from students eager to enroll in universities whose reputability is acquired through relationships with corporations.

Canadian universities are heralded as having a crucial role in "facilitating economic recovery and assisting [Canada's] transition into the high-tech era" (p. 360). The university has ceased to solely serve as a place for higher learning. It has in-

stead become a place for job training and for corporations to access the "latest exploitable scientific knowledge, particularly knowledge related to high-tech innovations and the growing biotechnology industry" (p. 360). This transition to the corporate university happened relatively quickly – between 1979 and 1988, there was an increase of 21.2% students who stated that their schoolwork was applied work, and a decrease of 20.8% students whose schoolwork was for the sole purpose of learning (p. 375). Higher education is now set on creating a productive labor force.

The partnership between the corporation and the academy was initially a short-term solution for financial deficit, but it has now become the *modus operandi* by which academia intends to 'advance.' In addition, the academy has become a corporation in itself (p. 377). It has adopted forms and methods to increase its efficiency, where success is evaluated by quantitative characteristics such as profit, benchmarks, and performance indicators. (Jazeel & McFarlane, 2010, p. 110-111). All decisions previously made to advance academic knowledge (such as which research initiatives to fund, which courses to teach, which enrollment policies to adopt) are "considered in terms of detailed cost-revenue calculations and [...] whether they represent good business decisions" (Buchbinder et al., 1990 p. 367).

THE NEOLIBERAL ACADEMY

The neoliberal academy is the corporate academy acting within the globalized world, and is an amalgamation of corporate interest, globalization, and their associated inequalities. It consequently introduces market logics into a sector previously assumed to be immune to said mar-

ket logics. Knowledge and students have become commodities to buy and sell.

Given the commodification of education, the transnational university benefits from marketing itself to international students. Canadian law stipulates that tuition for international students can technically be raised by any percentage: nationally, average tuition fees for international undergraduate students rose 6.8% in 2013-2014, compared to a 3.3% increase for Canadians (Statistics Canada, 2013).

IMPLICATIONS OF THE NEOLIBERAL AND CORPORATE UNIVERSITY (POST)COLONIALISM

Postcolonial theory provides a way to analyse the corporatization of the academy. It focuses on "the tangible means by which disparate parts of the world [become] subordinate to the drives and dictates of a separate imperial center" (Gregory et al., 2009, p. 94). The colonized are directed to imitate the ways of knowing and living of the West (p. 94): stereotypes of foreign lands and peoples become taken-for-granted; trait of differences become ascribed to particular spaces; and places, environments and natures, and 'other' people are deemed unable to represent or govern themselves (p. 94).

I will be exploring postcolonial theory in order to "expose colonialism's continued presence and exclusionary effects within the period we designate 'after-the-colonial'" (Jazeel, 2007, p. 17), specifically with regard to the neoliberal and corporate university as it inhabits a colonial present (Gregory et al., 2009, p. 96).

THE CORE AND PERIPHERY OF KNOWLEDGE DEVELOPMENT

According to Philip Altbach, powerful universities have always dominated the production and distribution of knowledge, while other institutions are at the periphery of knowledge production (Altbach, 2005, p. 64). Altbach argues that "most academic centers tend to be located in larger and wealthier countries and benefit from the full array of resources" (p. 64). The neoliberal university perpetuates the core and periphery model in knowledge production and research. Certain universities privy to advantages (such as global positioning or language of instruction) are top producers of academic knowledge, with other institutions placed at the periphery of knowledge production. I use the core-periphery model, as it is "a model of systemic patterns of uneven development in the geography of human activity, based on uneven distribution of power within and between societies" (Gregory et al., 2009, p. 115).

This disparity of knowledge production is a by-product of a colonial past and present; countries in the Global North were typically ones involved in colonial exploits of the past, and were the nations that benefited economically from those they colonized. In addition, colonial powers imposed European university education systems in Japan, Thailand, and Ethiopia (Altbach, 2005, p. 62). The exploitation of those countries remains prevalent today, albeit implicitly; there is and has always been an economic incentive behind colonial ventures. In the past, universities of the Global North were transnational in an attempt to solidify colonial rule over a nation, whereas presently, they are transnational to establish a monopoly on knowledge, and to generate revenue for its corporation.

Universities with access to more resources in the form of cutting-edge technology as well as the brightest minds are granted the funds for research, and are able to publish their findings. This results in the continued stratification of knowledge production, with those in the Global North at the forefront, which facilitates the notion that those academies of the Global South are inferior, perpetuating ideas of otherness and dependence. To exacerbate the issue further, the increased corporatization and neoliberalization of the university makes it increasingly difficult for other academies in the Global South to 'catch up' to those in the Global North, and to establish themselves as centers of academic production. Moreover, the price of entry has risen, and "few universities in countries lacking deep financial resources cannot become top academic institutions" (Altbach, 2005, p. 65). A university with more money can contribute to the production and dissemination of knowledge, thus having a positive feedback mechanism which further establishes that specific university as a top-tier institution.

The core-periphery model propagated by the neoliberal and corporate academy is reminiscent of the idea of otherness manifested in the self/other binary which was "central to imperial domination and its continued afterlife" (Jazeel, 2007, p. 17). This creates a dichotomy, where 'our' knowledge is superior to that of the other, thus allowing for the continued domination of one type of knowledge over another.

IMPLICATIONS FOR RESEARCH

The disparate distribution of resources across the Global North and South influence how research is conducted across these two arenas, and the type of knowl-

edge that is produced. As Tariq Jazeel and Colin McFarlane (2010) discuss, there is a certain amount of responsibility that must be ascribed to the academic when conducting research so as to close the gap between the subject and the observer, especially when the overwhelming majority of researchers are located in "EuroAmerican disciplinary academic communities" (p. 111).

Jazeel and MacFarlane (2010) acknowledge the "structural frameworks of the unevenly transnational academy [...which] places demands and pressures on what constitutes academic work [...this] [can] result in simultaneous movements away from accountability in the southern constituencies in which [...] research is grounded in the first place" (p. 111). In an increasingly corporate university, certain ways of knowing are valued over others, and this certainly places a demand on what kind of research is being funded, and what kind of knowledge is being disseminated. As Buchbinder and Newson suggest (1990) "industrial and private sector donors are overwhelmingly more inclined to contribute their research dollars to projects which have a technical or applied science payoff" (p. 367). This implies an exclusion of other forms of knowledge that are not as quantifiable, as scientific, therefore excluding Indigenous and local knowledge, as well as those disciplines in the humanities and the social sciences that question the legitimacy of funding largely technical ventures. This is problematic, as postcolonial theory is:

crucially concerned with the ability to write/speak back, because its object is not only the decentering of the West but crucially a re-balancing of the West with

the rest of the world[...]. It also seeks to re-constitute subject positions from which people around the world can find voice to speak about themselves. (Raghuram, Madge, & Noxolo, 2009, pp. 5-13)

When the allocation of research is disproportionately divided across the Global North and South, the Global South is often portrayed as the object of the Global North's research. Similarly, when certain forms of knowing are deemed irrelevant, the ability for those disciplines that do question the legitimacy of certain research practices is diminished. As a result, the voices of those with colonized pasts are left unheard, propelling them into a colonial present. This perpetuates colonial discourse as it "[exerts] authority by creating asymmetrical relationships between Western and 'other' knowledge systems" (Gregory et al., 2009, p. 95).

ENGLISH LANGUAGE AND THE NEO-LIBERAL ACADEMY

An enticing reason for international students to attend a university in the Global North is that they have the opportunity to conduct their studies in the primary language used in business transactions as well as in academic fields (Altbach, 2005, p. 65). The corporate university benefits from using English as the language of instruction, as it aids in conducting business across the world and attracts international student commodities who wish to improve their English skills. This offers a significant advantage to the wealthy English-speaking countries as they are able to maintain hegemony over academic knowledge production (p. 67). The implications of this include an awareness of difference between

those involved in top-tier, neoliberal academies of the Global North and those in the Global South. As a response, other countries in the Global South have begun to offer academic programs in English in order to attract international students who wish "to improve [their] English-language skills [...] thus enabl[ing] them to work in the international arena" (p. 66). This attempt to emulate the framework of a corporate academy of the Global North further asserts difference. It is as Frantz Fanon describes, the "colonized [are] constantly told of the superiority of the colonisers' values and that these should be aspired to and copied" (as cited in Sharp, 2009, p. 123). He argues that these values can never be copied successfully, which supports continued domination over the colonized, and maintains a space of difference between those in the core and the periphery. This distinction becomes ever-apparent to those at the periphery, as they are constantly reminded of their difference to the prevalent model for development (p. 123).

The place of English at the pinnacle of communication is reminiscent of colonialism, where the "European language of the colonisers was privileged over local languages. For example, British colonists believed that their scientific and technical knowledge could be transmitted to Indian students only via classes taught in English" (p. 123). Many of the common textbooks and materials used in academia are published in English by English-speaking countries (Altbach, 2005, p. 68). This is problematic, as the English-speaking universities maintain a monopoly on the production of knowledge. Human resources wishing to conduct business in the international realm are drained from the Global South and are inserted into the Global North. As postco-

lonial theorist Sharp (2009) purports, the predominant use of English in academia is even more problematic in that it allows for the 'speaking for/as the other' (p. 110). The 'other' is the Global North's knowledge and representation of the rest of the world, constructed through the domination of it. The use of English in the increasingly common corporate academy gains its influence by its association with powerful companies that use English as a language of transaction, as well as from its associations with countries in the Global North (p. 110).

THE DISSEMINATION OF WESTERN KNOWLEDGE

The neoliberal university entices international students to attend its institution through its reputation; however it also possesses the resources to assert dominance through 'buying' the very best scholars of the international world, helping the "North maintain its overwhelming lead in science and scholarship" (Altbach, 2005, p. 68). Not only is this reminiscent of exploitation colonies which were established for the purpose of economic extraction, but it also "[weakens] the academic institutions in many developing countries" (p. 68). This assists in re-affirming the dominance of academia in the Global North, and therefore the dominance of western thought.¹ These

'migrating scholars' retain contact with their country of origin through giving guest lectures or consulting with institutions in their home country (p. 68). Similarly, many international students return home permanently after completing their education.

This movement of scholars facilitates the dissemination of western knowledge throughout the globalized world. It leads to understanding the world through a western framework which prizes scientific, high-tech knowledge over others, therefore excluding other forms of knowledge (i.e. Indigenous and local). This is reminiscent of the European travellers who "found no [I]ndigenous written sources and so they presumed an absence of science and philosophical learning" (Sharp, 2009, p. 31). The mapping and measuring of the colonized world brought everyone under the umbrella of a western way of knowing, which proved to be exclusionary and did not benefit Indigenous communities. This created a sense of 'us' and 'them,' and the stratification of knowledge fostered a notion that Indigenous Peoples were somehow inferior and unable to understand the world, therefore needing governance. Colonial governance allowed for the exploitation of resources which aided in the economic success of those who colonized.

This dissemination of western knowledge perpetuates the notion that western education and knowledge is superior, and the only way for the individual to succeed is if they are educated in the Global North. Similarly, the notion held by the colonizers that Indigenous Peoples could

¹ Global North refers to richer, industrial countries generally located in the northern hemisphere - but it also includes Australia and New Zealand in the southern hemisphere (Gregory et al., 2009, p. 506) - whose dominant societies were historically part of a colonial power. Western knowledge refers to a specific history of knowing regarded as originating in Europe, and has now been taught in and imposed on cultures around the globe (p. 220). I thus use the term Global North to refer to places that uphold the colonial

systems of dependence and western knowledge to explain the knowledge that is propagated by these places.

be “taught to operate technology, but not to comprehend abstract science” (Sharp, 2009, p. 31) evokes a parallel to today’s production of knowledge; universities in the Global South are deemed as inferior to those in the Global North. Therefore, those who originate from the Global South are unable to contribute to the production of knowledge unless they are first educated in the western framework, as their lack of finance and high-tech resources somehow render them unable to make a valid contribution to the production of knowledge.

CONCLUDING THOUGHTS

The neoliberal and corporate academy is a manifestation of a colonial world. The world’s collective colonial past has resulted in the large disparity in the distribution of wealth between the Global North and South. The colonial past has resulted in constructing spaces of difference, where the marginalised are consistently reassured of the supposed superiority of the colonizers. This space of difference and the unequal distribution of resources have made it easier for the neoliberal university to establish itself in a world that already asserts western hegemony.

The neoliberal academy takes advantage of global relationships and exploits populations in the Global South under the justification that a free-market will fairly regulate the production of knowledge. This, coupled with the increased corporatization of the university, allows for the exploitation of this known difference, and propagates it through the production and distribution of knowledge. I believe, then, that the neoliberal and corporate university is not only a manufacturer of colonialism, but also a perpetuator of its existence. This further marginalizes non-western ways of

knowing, and continues to assert the west as a dominant power.

When the west is dominant, and the primary producer of academia, it removes the agency of other, non-western universities, and therefore non-western peoples, to widely express their ways of knowing:

The west’s knowledge and representation of the rest of the world were part and parcel of its domination of it; in other words, the west spoke for the other [...] knowledge and power are inseparable; power will be constituted in part through dominant ways of knowledge, which in turn gain their influence through their association with powerful positions within networks. (Sharp, 2009, p. 110)

In other words, the western world normalizes the corporate and neoliberal academy, and creates a powerful network where only those able to form relationships with influential businesses are considered worthy of academic production. This has implications for how non-western people and knowledge are understood and portrayed.

Academics have tried to mitigate this domination of western knowledge through offering a discussion of postcolonial theory. Although postcolonial theory helps, to some extent, explore colonialism and offering alternate accounts of the world, the fact of the matter is that postcolonialism in itself is a construct of the west. Therefore, I believe that postcolonial theory is inadequate for exploring the real, lived experiences of those oppressed by colonization. Postcolonial theory attempts to include other ways of knowing and meaning, however it falls short. This is because it ultimately ascribes certain western meaning to the

experience of the colonized; we ask about the lived experiences of these people, yet we only understand them through our own ways of knowing (Sharp, 2009, p. 112). My paper is just a starting point: although engaging in postcolonial theory might be a well-intentioned step in the right direction, it ultimately only manages to *theorize* about something that is a very real experience with critical consequences.

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Reimagining Skateboarding: Space, Meaning, and Transportation in Vancouver

by Stefan Raupach

Despite many attempts to subvert it, skateboarding is a rapidly growing cultural phenomenon, and has reached a point where it must be addressed in the context of urban and social policy. In doing so, this paper questions the importance of the lived experience and non-status-quo spatial meanings in policy. It also seeks to unpack the complexities within skateboarding itself, such as the differences between origin-destination transportation, “street” skateboarding, and skateboard parks. The scope of this paper is fairly broad, so as to draw attention to how skateboarding fits within the nexus of urban issues such as, “public space,” exclusion, identity, sense of place, transportation, and mobility. Because of these interconnections, skateboarding has influence far beyond simply the act itself, and has the potential to influence how cities are imagined and how spatial norms are created. Ultimately, this paper concludes that skateboarding is both an extremely unique cultural practice, and a viable transportation form that could bridge the gap between walking and cycling. As such, it requires further research and a more nuanced understanding.

Skateboarders see the built environment in an idiosyncratic way. Their subjective perceptual experience and performance are intimately tied to space, architecture and urban form. Furthermore, skateboarding interacts with people in a way that other activities do not, because it can occur in ordinary shared spaces, whose construction was not built to accommodate skateboarders. As such, it violates status quo norms about how certain spaces should function, and as a result, manifests itself as a strong visible loss of social and political control (Herbert & Brown, 2006). In this way, skateboarding is often criminalized, unless occurring in a ‘sanctioned’ skate park. However, skateboarding is not an intrinsic violation of ‘objective’ spatial laws. It is in fact socially contingent, as reactions to it are based on cultural perceptions, some of

which create powerful negative social connotations, which then preclude skateboarding as a legitimate transportation medium.

In what follows, I will first discuss skateboarding as place-based identity formation, and the historical significance of a particular space in Vancouver. In doing so, I will analyze discourse and policy, looking at how skateboarders’ histories and meanings are actively challenged. Next, I will explore how policy has dichotomized skate parks and street skateboarding. Finally, I will briefly assess skateboarding’s transportation potential.

This paper will address questions of space and identity by exploring the experiences of skateboarders in space, and relating them to broader issues of trans-

portation, urban density, policy and law. I argue that skateboarding is an intricate cultural form with deep-rooted place-based connections, which operate to resist dominant norms of urban space. These resistant meanings are connected to both specific spaces in the urban environment and the act of travel itself. While many exercises of power occur in an attempt to subvert and control skateboarding, these attempts must be critically questioned, as understanding the lived experience of skateboarders is vital to creating a more inclusive public space and a successful transportation system (Nixon, 2012; Rajé, 2007; Taylor, 2003; Spinney, 2007). In this way, skateboarding must be understood as both a complex cultural movement and a unique transportation medium, with focus on the inexorable linkages between the two. Great potential for positive change exists, but this requires a new understanding, whereby these qualitative meanings are respected and integrated into policy.

SPACE, MEANING AND PLACE: THE HISTORICAL SIGNIFICANCE OF A VANCOUVER SKATE SPOT

As humanist Yi-Fu Tuan (1977) argues, 'place' is a set of socially constructed meanings inscribed in a particular space. Some claim certain spaces are devoid of meaning because of their ubiquity and lack of meaningful distinguishing features. Marc Augé argues that areas that satisfy these conditions are "non-places" (1995). He defines a place as "relational, historical and concerned with identity" (Augé 1995, p. 63). In this sense, non-places are non-anthropologically rooted places with no connection to history, and are devoid of real local meaning and identity.

The common set of stairs can be situated

within the framework of a "non-place." This is not to say it literally lacks a material history. Rather, this history is simply not included in the common imagination and understanding of the space. Some may associate stairs with memories of past homes or falling down. Yet, it is likely that for most, the stairs are simply performing a mundane and necessary function of allowing one to travel to a higher elevation plane. This is not the same for skateboarders. As one skater states, "We enjoy the stuff that nobody else even notices. What's wrong with that?" (Woolley & Johns 2001, p. 226). Skateboarders greatly enrich, and particularize, the meanings associated with a unique set of stairs or other skateable obstacles. Moreover, for skateboarders, sense of place and a historical chronology are specifically and intimately tied to a unique geographical area through videos, photos, and oral history. These meanings fit within Augé's notions of place, as they are deeply rooted in history and identity. Skateboarders call a space where 'tricks' can be done a 'spot.' This is because most skaters know what tricks have been landed there. If the spot is new, skateboarders' identities and sense of place can be created by performing new tricks, thereby creating new history.

The "CIBC rail" illustrated in Figure 1 exemplifies this phenomenon. This iconic downtown Vancouver skate spot carries with it an anthology of tricks that have been landed there. This anthology includes both the tricks and the individuals who performed them. Furthermore, this is not just about what tricks others have performed, but also what each person has done him- or herself, as these fuel his/her experiences and memories in space. performed them.



Figure 1: "CIBC Rail" 400 Burrard St. Vancouver, B.C

This example, however, is not to discount alternative meanings of the same space. Some critique Augé's non-place framework and maintain that all spaces may contain a multiplicity of meanings, which may render a space a place, many of these meanings unknown to the observer or researcher (Merriman, 2004). While this is valid, these other interpretations do not manifest in the same overt way as skateboarding does. Other meanings are "sanctioned" while skateboarders' spatial meanings are attacked. For instance, those who work in the CIBC building likely have their own sense of place and spatial meanings, such as memories of meetings, or eating lunch on the steps. Yet, these are not offensive to most and are not met with any resistance. The recent "skate-stopping" of the CIBC rail is an example of such resistance. These "skate-stoppers" are specifically designed metal brackets that cover different surfaces in an attempt to stop skateboarders from sliding/grinding on them.

SPACE AND POLICY: "STREET" SKATEBOARDING AND SKATE PARKS

The skate stopping of the CIBC rail, and countless other skate spots globally, fit within the broader conceptual framework of 'sanctioned' spatial meanings competing with subcultural meanings. In the context of globalization and global flows of capital, cities have a constant desire to remain attractive to investment (Mitchell, 2003; Németh, 2006). In addition, "this capital attraction is often embedded in economic strategies that prioritize visual coherence and order," such as, "heavy-handed upgrading and enhancement of security measures" (Németh, 2006, p. 305). A city's attempts to be attractive work to hide those who are not deemed to be so. This is legitimized through political discourses, such as the Broken Windows Theory. Broken Windows Theory suggests that visibly derelict areas with broken windows and other

damage emit the message that the government has no power over the space (Herbert & Brown, 2006). Street skateboarding is often cited as criminal damage (Borden, 2001), as well as a manifestation of loss of control and urban attractiveness. The threat that some feel skateboarders pose is evident in the deployment of rhetoric, which has even gone as far as equating skateboarders with 'rats' and 'vermin' (Németh, 2006, p. 304). These criticisms fit within Broken Windows ideology, positioning skateboarding as a stepping stone to other 'more serious,' 'deviant' behaviours.

Because skateboarding acts as a challenge to hegemonic notions of space and capital, various attempts to control and subvert it have been implemented. I have already mentioned skate stoppers as one physical technique for controlling space. However, there are also many more techniques being pursued through law and policy. Love Park, Philadelphia is a classic example of this. Though designer Edmond Bacon did not intend for the plaza to be used by skateboarders, it became a world renowned skate spot in the 1990s and early 2000s (411 Productions, 2004). Law and force were eventually utilized against the skateboarders. This occurred first through a fining policy, which was eventually followed by an \$800 000 closure and remodeling project that included 24 hour police presence after the project was completed (Németh, 2006, p. 301).

These types of hard-line policies and the Broken Windows philosophy may undoubtedly be attractive to some people, such as business owners with the desire to project an attractive space for consumers. While street skateboarding can potentially reduce attractiveness, it would be erroneous and

likely impossible to completely control or eliminate it. As such, instead of top-down policy, compromise is needed, incorporating both the voice of businesses and the growing voice of skateboarders as a unique social group in the city. Rather than assuming skateboarding is unattractive, compromise allows for new understandings to permeate. For example, it can fit within Jane Jacobs's framework of providing "eyes on the street" to actually police urban space (Jacobs, 1961; Woolley and John, 2001). Even in the context of capital fixing, skateboarding could be seen as one way to make the city *more* attractive, as a vibrant skateboard scene "retains young, tech-savvy residents, employees and business owners, the type of residents that desire downtown living" (Howell, 2008, p. 490).

One solution to perceived unattractiveness that is often pursued is the creation of purpose built parks. "A key [motivation for] the development of skateparks is the desire to relieve tension between the general public and skateboarders" (Freeman, 2002, p. 309). Parks provide a space for activity and socialization, which occur in a collective and peaceful environment, and there are features in parks that one cannot find anywhere else, such as ramps and bowls. Yet, finally receiving a legitimate space can be equally problematic. Skate parks fit within the context of shrinking subsidies and tax bases of municipal governments under the neoliberal governance paradigm (Howell, 2008, p. 492). Municipal legal liability over the space is removed, which puts the health and legal onus onto the skateboarder, effectively creating a "contractual citizen-state relationship" (Howell, 2008, p. 492). Skate parks, therefore, succeed at effectively removing skateboarders from sight and liability. This

works to absolve cities from confronting issues of space, identity, and how to integrate skateboarders into the broader urban fabric. It is important to note that this critique neither condemns purpose built skate parks nor does it suggest that all politicians or planners consciously manipulate space in a malicious way. Rather, it demonstrates that discursive apparatuses and ideologies must be considered so that policy, rhetoric and motivations can be critically situated.

However, even with purpose built parks, the deep and profound cultural desire for street skating can never be eradicated. This is supported by Freeman's study of New Zealand: "Although there was an initial decrease in numbers skateboarding in central public areas following the building of dedicated facilities, skateboarding in these areas generally returned to earlier levels within a month or less" (Freeman, 2002, p. 309). Street skating is a fundamental part of skateboarding and composes a large proportion of skateboarding today. Vancouver's purpose built downtown skate plaza exemplifies the fact that skateboarders desire the classic obstacles of the urban environment. The plaza is extremely popular because it has been designed to emulate the features commonly found in cities, such as stairs and ledges (Newline Skateparks, 2010). Yet, the compulsion for street skating is so strong that skaters in Vancouver still pursue it, despite having a purpose-built replica. In other words, not only are the obstacles themselves important, but also the unique spaces ('spots') in the city in which they are found. This is because the urban environment is more desirable for filming and taking photos, and allows for a higher level of individual creativity than a confined park.

One way to explain this phenomenon is that many skateboarders view street skateboarding and transportation as interdependent, and a park cannot satisfy the desire to utilize other aspects of the urban environment. As one skater states, "I've lived here [LA] for two years, and I've skated downtown many, many times but there's always new things I hadn't seen before. It's endless for sure" (as quoted in Lotti, 2005). Another conveys, "you could just hit one thing ['spot'] and then immediately there was something else. Whatever I got into, I got into" (as quoted in Lotti, 2005). These quotes reinforce the idea that place and meaning are not only limited to 'destinations' (Spinney, 2007). Specifically, they express the lived experience of spontaneity and a desire to be able to travel to and from many different spots in a day. These testimonies demonstrate that while skate park policies are important, despite being designed in an attempt to remove skateboarders from sight and absolve legal responsibility, they are not sufficient in meeting the needs of skateboarders.

SKATEBOARDS AS TRANSPORTATION

The transportation component of skateboarding is often overlooked. However, it is fundamental to understanding skateboarding culture, experience, and ultimately integrating it into policy so as to make cities more inclusive. Assessing problems such as access and mobility may be helpful to bridge these conceptual gaps. Namely, how do people get to the skate park or skate spot? It is very likely that skateboarders will use their board for transportation if they live in close enough proximity. Furthermore, the skateboard can

be used for destination-oriented transportation. But it is also frequently used for "cruising." "Cruising" involves long continuous movement down the street, often at high speeds. It is skateboarding with the intent to achieve a heightened phenomenological experience, in which that skateboarder feels his/her senses fully and completely while traveling through the urban environment (similar to "flow" and "peak" in Ford & Brown, 2006). It is about an overall feeling in the moment rather than any particular trick or space. However, this could and often does involve doing tricks along the way. Also, it could be aimed at traveling to a destination or could be undertaken for its own merit. Cruising and destination-oriented transportation are not mutually exclusive, and in fact many skateboarders express the pleasure they experience using this mode of transportation. As one skater recounts, "[when] you're pushing down the street and you really feel in control and you can swerve in and out of the traffic, up and down the curbs, [you] just feel free but dialed in" (as quoted in Lotti, 2005). Another states: "we didn't have cars or anything so we just skated [to] everything in our little 3 to 4 mile radius" (as quoted in Lotti, 2005). "Cruising," whether to a specific skate spot or park, or for its own sake, is part of the sense of place and phenomenology of skateboarders and must therefore be considered in policy. Furthermore, this type of pleasure travel is woefully absent in other transportation mediums. As Hanson (2004) puts it,

Although people do occasionally engage in travel for its own sake (as in taking a Sunday drive or a family bike ride), most urban travel occurs as a by-product of trying to accomplish some other

(nontravel) activity such as work, shopping, or mailing a letter. Only about half of 1% of all the trips made in the United States are trips for pleasure driving. (p. 3)

Current policies do not adequately account for skateboarding as a unique mode of transportation. While skateboarding has been legal on the streets in Vancouver since 2005 (Vancouver Skateboard Coalition, 2013), skateboarders do not act like pedestrians, cyclists, or cars, and cannot necessarily be treated as such (Nixon, 2012). They operate in a liminal space between being on the sidewalk and on the street, as they are constantly jumping up curbs and over obstacles. As such, there are still social tensions over skateboarding, despite its legality. Moreover, while it is unclear exactly how to represent this uniqueness in policy, it is worth considering and developing further in order to create a truly inclusive space. Mobility and accessibility are currently being considered through geographical distribution of parks and ease of travel to and from these locations (Vancouver Park Board, 2005), but these concepts must be more broadly integrated into all aspects of skateboarding.

Skateboarding can be seen as a complement to a dense and transportation friendly urban form, as it provides a reliable, portable and sustainable method of travel. This is supported by events like Go Skateboarding Day, in which large groups of skateboarders travel fairly large distances over the course of an afternoon. In the Vancouver Context, the route covers from the Downtown Skate Plaza between Quebec St. and Union St. to the CIBC Rail on Burrard St, and then back to Strathcona Skatepark. In a general

sense, more skateboarders on the street in a daily transportation context could be perceived as threatening to other users of the space, such as drivers and pedestrians. As such, to include skateboarders in our conception of cities, we must first overcome the barriers of stigma in order to enter a discussion about skateboarding as a legitimate transportation medium.

CONCLUSIONS: SKATEBOARDING, THE LIVED EXPERIENCE AND POSITIVE URBAN CHANGE

This paper has provided an overview of ways in which space is understood and controlled, and has examined the important interdependent aspects of street skateboarding, purpose-built skate parks and transportation. It should be noted that my analysis has been intentionally broad in scope in order to draw attention to the fact that skateboarding is a multifaceted cultural movement that intersects many segments of urban and social policy. My aim has been to synthesize these elements to create a more complete understanding of skateboarding and urban space. In addition, I recognize the biases that exist through my perspective as an active skateboarder. However, in line with Feminist Standpoint Theory, I suggest that research starting from within a marginalized group, as I have demonstrated skateboarders to be part of, is effective in uncovering power relations (Harding, 2004). I do also acknowledge the limitations of my phenomenological approach and the difficulties associated with 'speaking for' a complex social group. Yet, in order to effectively include skateboarders in public space, one must understand how they see space. As such, I am coming from inside the culture

to act as a mediator to articulate this information in a coherent way. Further ethnographic research into these topics could strengthen this understanding. I maintain that this is what is needed to take these issues seriously. This is especially important in policy, as law is often mobilized against skateboarders without full understanding or proper representation of their worldviews. While my argument is controversial, the need to properly consider skateboarding in urban policy is unavoidable.

In closing, landscape is intimately connected to those who live, work, play, and move there (Michael 2000, p. 110). In this sense, skateboarding is only one facet of the urban fabric, albeit an important and growing one. My aim is not to negate other social groups or issues, rather merely to assert that skateboarders are an important part of a vibrant urban environment and inclusive public space. Given the variety of meanings that people insert into space, it will be difficult to completely remove tensions between different users. However, skateboarding can be framed in a more positive light in an attempt to alleviate these. Ultimately, skateboarding has great potential and acts as a key example of the ways in which lived experience and meaning can be re-imagined and integrated into policy. Bottom-up approaches are vital in giving a voice to different spatial meanings. Therefore, we should critically evaluate and situate efforts to subvert skateboarding within the broader structures of discourse and power.

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Identity, Space & Place

Resisting Colonial Indigenous Identities: Clayoquot Sound, Northwest Coast Art, and a Modern Whale Hunt

by Jessica Stephens-Whale

In both Canada and the United States, colonial discourse has shaped Indigenous Peoples' experiences and culture since contact. Colonial discourse imposes identities that characterise Indigenous peoples as static and traditional. These 'authentic' identities place Indigenous Peoples in immutable positions within society that suggest that they are unable to diversify or adapt to new practices. However, as this paper argues and exemplifies through three case studies, First Nations and Native Americans are adapting to modern technologies and are moving beyond traditional and 'authentic' identities. The case studies include: the Nuu-chah-nulth's struggle for forestry co-management during a time when participation in industry was contrary to First Nations identities; Salish Artist Lawrence Paul Yuxweluptun's controversial, political and modern style art; and the Wakah of Cape Flattery, Washington who in 1999 embarked on their first whale hunt in seventy years. These three examples illustrate Indigenous Peoples' abilities to carve their own paths and identities outside of Western colonial control by challenging traditionalism and transforming culture to better fit their present status, values and ever evolving ways of life.

INTRODUCTION

Indigenous Peoples have long been subject to the dominations of colonialism. It permeates throughout both historical and modern North American society and plays a crucial role in their continued marginalization. Through colonial discourse, Indigenous identity is defined within constricting dichotomies that explicitly differentiate Indigenous People from white settlers. Static and traditional identities have been applied to Indigenous Peoples and used by white settlers to legitimize their own claims to knowledge and power (Maddox, 2002). As a result, Indigenous Peoples are depicted to be primeval and feminine, as well as in need of guidance and governance by the paternal state. These

depictions have resulted in the marginalization of Indigenous Peoples and the promotion of western cultural agendas (Braun, 2002). In what follows I will describe how colonial discourse has produced an Indigenous identity that is static and traditional and I will explain the implications associated with these identities for First Nations and Native Americans in North America. The second part of this essay will be looking at instances of resistance to colonial imposed Indigenous identities. Specifically, I will examine the Nuu-chah-nulth of Clayoquot Sound, Salish Artist Lawrence Paul Yuxweluptun and the Wakah of Cape Flattery, Washington. These three examples illustrate adaptation and a refusal to conform to colonial imposed identities. The groups exemplify this resistance by

rejecting the cultural limitations that have been imposed upon them and by doing so pave the way for their own identities.

HISTORY OF COLONIAL DISCOURSE IN FORMING INDIGENOUS IDENTITY

Colonial and postcolonial are two terms commonly used throughout this paper that need to be defined and differentiated. Colonialism refers to the violent actions taken by imperial powers against those they colonized (Young, 2001). I draw upon Braun (2002)'s use of the term postcolonialism to assess the cultural, economic and political issues that have arisen as a consequence of colonialism. Postcolonialism in this essay is meant to imply that today, colonialism is still dominant in the everyday lives of Indigenous Peoples; in no way should 'post' imply colonialism is no longer active in present day society. Additionally, it is important to note that when I refer to Indigenous Peoples I am including both First Nations of Canada and Native Americans in the United States.

Part of our understanding of colonialism stems from the idea of discourse which Foucault describes as the production of knowledge that has the power to legitimize some modes of knowledge while delegitimizing others (Young, 2001). Discourse acts to privilege one form of knowledge over another. In the case of North America, it privileges science demoting all other forms of knowledge as alternative or traditional (Young, 2001). Additionally, colonial discourse has worked to produce an Indigenous identity that is closely linked to nature. Nature too is primeval and antiquated as being untouched until colonial

contact. In order for settler society to legitimize their claims over North American lands, Indigenous Peoples were also identified as being wild and primeval, to the extent that their historical use of nature was erased (Braun, 2002). Imposing an identity that is savage and wild legitimized all attempts to civilize Indigenous Peoples. The paternalistic techniques employed inscribed an imagined identity that is weak, feminine and in need of domination.

Adaptation was a natural progression for Indigenous Peoples living in the colonial world; however, as they continued to adopt new practices, historians and anthropologists became increasingly interested in their history. Ethnographers were intent on reconstructing, collecting, and documenting Indigenous ways in the hope to preserve their traditions in text (Phillips, 1995). This vision of Indigenous culture as traditional and static held by anthropologists and ethnographers rejected any adaptations by Indigenous Peoples. Thus, Indigenous identity was regulated and authenticated by placing value on the old and traditional and by dismissing any evolution of Indigenous culture. Anthropologists and ethnographers participated in the culture purely as collectors, searching for artifacts of the highest rarity and value (Phillips, 1995). Items of the oldest fashion and made without any modern materials or methods were considered the most authentic. This definition of authenticity froze Indigenous identity and culture in a historical past denying Indigenous Peoples the ability to change or evolve. Many anthropologists and museums today continue to contribute greatly to the attachment of a false and ever silencing Indigenous identity that is primeval and static (Phillips, 1995).

INDIGENOUS RESISTANCE TO STATIC IDENTITIES

What I would like to focus on now is what happens when Indigenous people choose not to perform an identity that is static and traditional. By resisting these identities and embracing certain aspects of modernity, Indigenous identity is redefined. This part of the essay will be looking to Indigenous groups who have resisted imposed identities by acting outside of what is deemed authentic and I will analyse how these actions have worked to contest colonial-imposed identities of Indigeneity. The paper will begin by analysing resource development by the Nuuchahnulth (commonly known as the Nootka) in Clayoquot Sound, British Columbia, follow by examining the work of Salish Artist Lawrence Paul Yuxweluptun, and finish with analysing the grey whale hunt controversy of the Makah of Cape Flattery, Washington.

CLAYOQUOT SOUND AND CO-MANAGEMENT

In present day environmental discourse, Indigenous identities are often utilized for the benefit of environmentalist agendas. Due to romanticized primeval identities, environmentalists equate environmental degradation with the destruction of Indigenous culture (Braun, 2002). For that reason, environmentalists frequently side with Indigenous groups on issues concerning land rights and resource autonomy (Takeda et al, 2010). Tensions then exist when First Nation and Native American groups like the Nuuchahnulth and the Makah wish to both preserve the integrity of their resources, and capitalize on them. This

tension is outlined well by Braun (2002):

for First Nations in BC, to forge a modern future as participants in the region's resource economies is to risk losing what many non-Natives consider authentic indigenous culture and thereby also their right to speak as indigenous peoples for their lands. (Braun, 2002)

The close relationship Indigenous identity has with nature in colonial imaginaries sets limitations for the kinds of claims Indigenous people can make (Braun, 2002). Simon Lucas, Chair of the West Coast District Council of Indian Chiefs, stated that "we feel more isolated from the resources to which we have claim than at any time in the past" (Braun, 2002, p. 30). This statement highlights the difficulties Indigenous groups face within the environmental paradigm when trying to develop land that they do have claims to. For this reason and others, Clayoquot Sound became a war ground for clashing identities.

The Nuuchahnulth Nation consists of fourteen different bands that span across the western coast of Vancouver Island; three of the fourteen bands occupy territories surrounding Clayoquot Sound (see figure 1) and have lived in the area for thousands of years (Mabee and Hoberg, 2006). This unceded traditional territory has been centre stage in environmental debates since the early 1990s when a large amount of forest shares were sold to MacMillan Bloedel, a Canadian forestry company (Suedfeld and Lavallee, 1997). Intense protests broke out, and many protesters were arrested for their



Figure 1: Map showing location of Clayoquot Sound. Source: Nikater. (2007). Vancouver Clayoquot Sound de. Wikimedia Commons. Retrieved from http://commons.wikimedia.org/wiki/File:Vancouver_clayoquot_sound_de.png.

efforts to protect the pristine old growth forests (Mabee and Hoberg, 2006). The Nuuchah-nulth diverged from environmental sentiment during this time by producing maps indicating historic sites of culturally modified trees (CMT). These maps illustrated their long standing history of land and resource use. Many non-Natives responded similarly to anthropologist Philip Drucker, who questioned the authenticity of First Nations like the Nuuchah-nulth due to their use of modern technologies and disregard of 'Indian ways' (Braun, 2002). However, as Braun mentioned, what the map of CMTs should represent is not a 'rupture' in Nuuchah-nulth culture, but rather an 'adaptation' that illustrates their continued evolving land use practices.

Unlike in the rest of Canada, most First Nations in British Columbia do not have treaty relations with the state. For that reason, participation and chances to benefit from resource extraction is extremely important to most First Nations survival, with forestry being a necessary part of their economy. While until recently it was thought that First Nation participation in resource extraction industries did not exist, many First Nations, including the Nuuchah-nulth, have been able to prove a long standing interest in these industries (Mabee and Hoberg, 2006). Colonial imposed identities that imagine First Nations as passively existing within nature can be challenged by bringing to light past histories of forest management. A map of CMTs

illustrates the Nuu-chah-nulth's ability to modify and manage their environments.

CHALLENGING TRADITIONALISM IN NORTHWEST COAST FIRST NATION ART

Lawrence Paul Yuxweluptun is a Coast Salish artist whose use of oil pastels on large canvasses diverge from the Native art most are used to seeing. Yuxweluptun's art is big, colourful and controversial, one example being "New Chiefs on the Land" showing politicians dressed in suits with heads resembling different Native animals. Due to his works being so different when compared to most Northwest Coast First Nations artists, many question whether his is really Native art (Milmine, 2006). It is interesting to note however, in most First Nation languages, there is no word to describe 'art'. Historically all objects upon which decorative art had been painted, carved or weaved had a function and purpose (Milmine, 2006). Thus to describe such objects as a spruce root basket or a standing pole as art is questionable. Yuxweluptun's critics consider Northwest Coast First Nation art from a colonial lens that places value only on traditional and static aspects of Indigenous identities (Milmine, 2006). Yuxweluptun states:

Some artists say that [because I'm doing modernism and not traditionalism] I'm not doing anything native, but then when they see the images it's just a modern version of native identity ... I've probably changed the Northwest Coast forever. (Milmine, 2006)

To those who criticize Yuxweluptun's work

for not being reminiscent of Northwest Coast styles, he argues that he is only adapting his art to match that of the present day lives of First Nations people. Why should Native art that diverges from the traditional by incorporating modern landscapes, features, or politics raise insecurities about its authenticity (Milmine, 2006)? These issues have arisen from increased interest in Native art by non-Natives and this curiosity has spurred commodification and the creation of tourist art culture (Phillips, 1995). Due to this interest, many First Nations people, including artists, feel protective of Native-style art and see divergence from tradition as a loss of culture.

Clearly, controversy surrounds First Nation artwork and this is in part due to its intimate connection to Indigenous identity. Much controversy can emerge as a result of departures from traditional styles as well as adoption of these styles by non-Native individuals (Milmine, 2006). To sum up the complications inherent in First Nation artwork, I quote from author and anthropologist William Sturtevant in Milmine's (2006) paper.

The Indian artist faces an ambivalence between, on the one hand, being allowed and able to compete on an equal basis in contemporary cultural movements of the larger society, gaining recognition as an artist tout court rather than as a special, separate 'Indian artist' [discriminated against or in favor of], and on the other, being able and allowed to maintain and express in art his special Indian or even tribal identity, and to have that special status recognized and valued by the rest of the society, not just by tourists and an-

thropologists. (Milmine, 2006)

This quote encapsulates the struggles that arise for marginalized identities who must work within mainstream society. How does one remain Indigenous and culturally distinct while participating in modernity? This artwork by Yuxweluptun illustrates adaptation and evolution in First Nation art. Doing so resists the static identity imposed by colonial discourse.

A MODERN GREY WHALE HUNT

For the Makah of Cape Flattery, Washington, the grey whale (*Eschrichtius robustus*) hunt was a traditional practice that had not been performed for over seventy years. Although the Makah are guaranteed whaling rights by treaty, it was not until 1999 that a ban on whaling was lifted and the band finally received permission from the International Whaling Commission to resume their hunt (Roberts, 2010). Leading up to the first hunt in 1999, the Makah were met with intense scrutiny from the public, and a debate ensued over the ethics of whale hunting. This debate quickly accelerated from a discussion of ethics to overt racial slurs and anti-Indian campaigning (Roberts, 2010). Because the Makah made use of modern day technologies such as guns and motor-powered boats, the public interpreted this as the Makah taking advantage of their Indian Status (Raibmon, 2005). In the imaginations of the public, the Makah should have carried out the hunt using traditional methods. In utilizing modern technology, the Makah performed inauthentically and, to the public, this was a perceived violation of the conditions upon which they were given permission to continue the hunt (Raibmon, 2005). These expectations, however, further disadvantaged

Native Americans, who were already marginalized, by constricting them within a paradigm that cannot shift or change.

During this time, Makah culture was considered by critics as 'de-evolution' (Roberts, 2010) and many activists called for the Makah to conform to the popular environmentalist sentiments. It is clear that where claims by Indigenous Peoples for resources are legitimized on the grounds of historical cultural identity, non-Natives may look for ways to invalidate those claims if they disagree with them. In the case of the Makah Whale hunt, activists petitioned against special status for Native Americans, and called for zero allocation of whale hunting rights to anyone (Marker, 2006). In response to the negative backlash incurred from the hunt, a Makah mother gave a presentation to her son's class about Makah culture and the whale hunt in the hopes of teaching tolerance. However, many parents of the children made complaints equating Makah knowledge and history with "religious presentation" calling for a scientific presentation to be offered to counter the perspective provided by the Makah mother (Marker, 2006). This reaction further illustrates the delegitimization of Indigenous knowledge, while at the same time showing not only a preference for scientific knowledge but the belief that scientific knowledge is culturally neutral and objective (Marker, 2006).

Asserting their right to hunt using modern technologies exemplified the Makah's capacity to participate in modernity while remaining identifiably unique. The Makah hunt symbolizes a resistance to assimilation and an assertion of treaty and its encompassing resource rights to ancestral lands. As one Greenpeace ocean specialist stated,

it is important to put the Makah whale hunt into context as greater threats exist and “no indigenous hunt has ever destroyed whale populations” (Marker, 2006, p. 502).

CONCLUSION

Colonial history has played every part in positioning Indigenous Peoples on the periphery and it continues to do so through colonial discourses that produce static and traditional Indigenous identities. They have aided to sustain their marginalization in the present and as a result, Indigenous Peoples are inhibited from fully engaging in present North American economies. These identities are strictly imposed on Indigenous Peoples and engagement in traditional practices is seen as a necessity in order to prove one’s identity, when it should be left up to individuals to choose whether or not they wish to engage in them. In opposition to colonial discourse, this paper looked at three examples where Indigenous Peoples have resisted static and traditional identities. Between the Makah and the Nuuchahnulth, environmentalists have alternated between seeing Indigenous practices as inherently environmental and wanting Indigenous practices to conform to western notions of environmentalism. These differences suggest environmentalists only elevate the importance of Indigenous identity as it relates to their goals, which proves to be problematic in the creation of postcolonial identities. The Nuuchahnulth of Clayoquot Sound challenged primeval identities as passive subjects by proving the existence of past forest management practices and by participating in modern co-management regimes. Northwest Coast artist Lawrence Paul Yuxweluptun engages with modern materials creating art that diverges from traditional stylistic expressions.

By doing so Yuxweluptun challenges the static and traditional identities placed on First Nations. Finally, the Makah of Cape Flattery, Washington asserted their guaranteed right to hunt whales and did so by engaging with modern technologies. Michel Foucault advises that the way in which to challenge this dominant discourse is:

to criticize the working of institutions which appear to be both neutral and independent to criticize them in such a manner that the political violence which has always exercised itself obscurely through them will be unmasked, so that one can fight them. (quoted by Takeda, 2010, p. 179)

I believe that Indigenous Peoples today are demonstrating their rights and values by rejecting the identities that have long been imposed on them through colonial discourse. Asserting their rights, practicing their traditions, and participating in modernity are all ways to challenge colonial imposed identities. Engaging in these forums undermines the authority science and colonialism have while demonstrating the strength and resilience of Indigenous groups today.

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How Consumers Experience Ethnic Commercial Spaces: A Case Study of Asian Theme Malls in Richmond, B.C.

by Cherie-Nicole Leo

with Matthew Chung, Susana Orozco Escobell, Nicholas Khoo

This study examines the consumer experience of ethnic commercial spaces, namely the “Asian theme malls” of Aberdeen Centre and Parker Place located in Richmond, British Columbia (B.C.). While previous research on consumption has often ignored ethnic dimensions, the increasing number and diversity of immigrants, in addition to the development of numerous “ethnoburbs” – suburbs inhabited by ethnically diverse populations – warrants further investigation into ethnic consumption patterns. We hypothesize that ethnic dimensions play an important role in consumer experience within these ethnoburbs, and will centre our study on the ethnoburb of Richmond, B.C.. Through the analysis of data gathered by participant observation, soundscapes, surveys, and semi-structured interviews, three main conclusions were reached. First, consumers’ ethnicity and preferred language influence their experiences of Asian theme malls. Second, consumer experiences in Asian theme malls interact with their perceptions of these spaces, (re)producing a particular geography of inclusion and exclusion along ethnic and linguistic lines. Third, there is a discrepancy between the perceptions of these malls as exclusively Chinese linguistic spaces, and the actual linguistic geographies of these malls as bilingual Chinese and English spaces. Asian theme malls function as significant cultural and commercial spaces where the Canadian project of multiculturalism is simultaneously promoted and subverted. Thus, the study of these malls serves to enhance our understanding of the particular ethnic, linguistic, and social landscapes within the context of the Canadian ethnoburb.

INTRODUCTION

The purpose of this research is to determine how consumers experience ethnic commercial spaces. This study focuses on the experiences of consumers who have visited the “Asian theme malls” of Aberdeen Centre and Parker Place in Richmond, BC. We aim to understand how consumers’ ethnicity and preferred language influence their experience of these malls. Through an investigation of consumers’ experiences and perceptions, we also consider the dynamics of inclusion

and exclusion that may characterize these unique cultural and commercial spaces. By doing so, we determine how studying consumer experiences in Asian theme malls can enhance our understanding of the social fabric of ethnoburbs and contribute to Canada’s project of multiculturalism.

Canada’s immigration policies have created an ethnically and linguistically diverse country (Boyd and Vickers, 2000). Under the Canadian Multiculturalism Act (1988), immigrants were encouraged to maintain their ethnocultural traditions, in



Figure 1: Aberdeen Centre Exterior (left) and Interior (right) (Cherie-Nicole Leo)

contrast to assimilationist policies demanding that immigrants replace their ethnocultural identity with that of the host society (Teixeira, Li, & Kobayashi, 2012). Established to facilitate long-term integration of first-generation Canadians, the effects of Canada's multicultural policies can be discerned in the presence and vitality of ethnic communities throughout the country.

Richmond reflects a specific type of ethnic community that has emerged in North America in recent decades, the "ethnoburb". An ethnoburb is defined as a "suburban ethnic [cluster] of residential areas and business districts in large metropolitan areas" (Li, 1998, p. 482-83) and develops as a "desired and chosen residential destination of prosperous immigrants and cultural minorities wishing to live among others from the same group" (Bunting, 2010, p. 82). Ethnoburbs foster a vibrant and conducive environment for immigrants to live and do business with their co-ethnics, enabling them to speak their own language, eat their own food, and shop at ethnic stores (Li, 1998). The formation of ethnoburbs, however, often leads to social tensions between newly settled ethnic immigrants and the original residents of a neigh-

bourhood (Rose, 2001; Wang S., 1999). These tensions often revolve around protection of local identities, use of community services, educational opportunities, and access to commercial spaces (Rose, 2001).

When ethnoburbs formed on the fringes of major Canadian cities, ethnic businesses began spreading outward from their traditional spaces within older inner city enclave economies to the suburbs (Wang S., 1999). In addition to their spatial diffusion, ethnic businesses have diversified to provide more specialized products and services such as legal, medical, and immigration consultation services (Li, 1998; Wang S., 1999). The appearance of these specialized products and services in Canadian ethnoburbs is a reflection of a globalizing consumer landscape, where commercial developers aim to cater to both niche ethnic markets in light of increased immigration and neighbourhood diversification, as well as the desires of people of other ethnicities to consume an "authentic" ethnic experience (Dressler-Hawke & Mansvelt, 2009).

The expansion of immigrant commercial activities in the suburbs has been linked to a new wave of urban development and



Figure 2: Parker Place exterior (left) and interior (right) (Cherie-Nicole Leo)

a sharp transformation of the built environment (Preston & Lo, 2000; Wang S., 1999). Proposals to build Asian theme malls, like Aberdeen Centre and Parker Place, attracted much public debate, with municipal planning authorities rejecting them by citing breaches in established planning regulations (Preston & Lo, 2000; Wang S., 1999). While some residents have argued that these malls would disrupt their quiet suburban lifestyle, others have described the issue as part of an "ethnic invasion" of the neighbourhood (Preston and Lo, 2000; Wang S., 1999, p. 31). Within public discourse, Asian theme malls are often framed as "specialty shopping centres" that serve only a specific segment of the population (Wang S., 1999, p. 32). In Richmond, residents from non-Chinese ethnic backgrounds often interpret Asian theme malls as exclusive and unwelcoming places due to their prominent Chinese signage and the primarily ethnic products and services that they offer (Edgington, 2003; Rose, 2001).

Asian theme malls are distinct from typical suburban malls as they usually contain

a large number of small retail units, have a high proportion of eateries, are more likely to be enclosed, and lack anchor stores (Preston & Lo, 2000). Moreover, in Asian theme malls, retail units tend to be individually owned rather than leased from a single property manager (Preston & Lo, 2000; Wang S., 1999). These characteristics are strongly influenced by the consumers they cater to. Yet, previous studies on Asian theme malls have centred, to a greater extent, on their development rather than on the consumption that drives them. Therefore, our study will enhance current knowledge on Asian theme malls by studying consumer experiences.

Since the 1990s, studies of consumption have paid increasing attention to cultural dimensions (Barnes, 2003; Blomley, 2009). These studies have contributed to the understanding of a "new retail geography" which takes into account cultural values and meanings embedded in consumer experiences, and so is particularly relevant to understanding how consumers' ethnicity and preferred language influence their experience of ethnic commercial spaces

(Wrigley & Lowe, 1996). Wang and Lo (2007) note that cultural variables, including store layout, service languages, and interaction with co-ethnics, have a stronger influence on consumer choice than does economic rationality. Thus, ethnic commercial spaces function not only as venues where economic exchange takes place, but also as sociocultural sites where an immigrant's sense of ethnic identity can be expressed, preserved, and negotiated (Blomley, 2009; Wang & Lo, 2007).

Our study aligns with previous literature which suggests that the experience of commercial spaces involves "complex social interaction[s] between people, places and commodities" (Williams, Hubbard, Clark, & Berkeley, 2001, p. 204). Consumers' perceptions of these malls as spaces of inclusion or exclusion are produced and reproduced through the emotions that consumers experience as they interact with the people, products, and layout of commercial spaces (Williams et al., 2001). However, in their focus on socioeconomic factors, Williams et al. (2001) fail to recognize the significance of ethnocultural dimensions to the consumer experience, which are integral to achieving an understanding of the unique spaces of ethnic malls.

Our research also complements studies that have used the "new retail geography" perspective, by highlighting ethnocultural aspects of consumption. Asian theme malls, with their distinctive characteristics, represent a unique cultural landscape. Thus, our research follows Wrigley and Lowe's recommendation to "move beyond a homogenous view of shopping malls and to focus instead on the various ways in which they strive to establish their unique identity" (Wrigley & Lowe, 1996, p. 26).

The unique identity of Asian theme malls is produced through the interaction between the consumers and the space. As Crang et al. (2003) state, "consumers bring their own transnational imaginaries and geographical knowledges to the practices of consumption" (p. 450-451). It is this dynamic relationship of mutual influence between people and space that makes the study of consumer experience significant to the discipline of human geography.

METHODOLOGY

Our area of study is Richmond, B.C., an ethnoburb in Greater Vancouver, which has one of the highest concentrations of immigrants in Canada, including a significant Chinese population accounting for 45% of Richmond residents (City of Richmond, 2008). A previous study identified 49 Asian theme malls in Richmond (Lai, 2001), from which we chose to focus on consumer experiences of Aberdeen Centre and Parker Place. Aberdeen Centre was the first major Asian theme mall in Richmond and it was soon followed by Parker Place (Ley, 2010). Both malls were built in the 1990s, and in 2009, a light-rail station was constructed nearby, thus increasing accessibility. Both malls were developed, with the idea of providing a "multicultural retail experience," by Fairchild Group, a company with strong roots in Hong Kong (Aberdeen Centre, 2013). Our research provides evidence to evaluate whether they have fulfilled this ideal.

Consumer experiences were studied through participant observation, soundscapes, surveys, and interviews. We conducted one-hour participant observation sessions at both malls, recording sights, smells, and sounds in field notes. To complement this, we conducted five-

minute soundscape recordings, allowing us to investigate audio components such as language and background music.

The survey contained fifteen close-ended questions that investigated whether consumers had an enjoyable experience while visiting Aberdeen Centre and/or Parker Place, whether they preferred them to non-Asian theme malls, factors influencing them to visit the malls, purpose and frequency of visit, and languages used. These data were analyzed against demographic variables of language fluency, ethnicity, and length of residence in Canada. The survey also contained two open-ended questions that asked respondents to describe a positive and negative experience they had at the malls, allowing for more detailed and subjective responses from different consumers. Sixteen printed surveys were distributed to passersby outside Aberdeen Centre and Parker Place. 131 online surveys were collected via advertisement on Reddit, Craigslist, and Facebook.¹ The survey was made available in English, simplified Chinese, and traditional Chinese.

Semi-structured interviews were conducted with nine volunteers who had completed the survey. Open-ended questions gauged what participants liked/disliked about the mall, their impression of the mall, and how they felt while vis-

iting the mall. Each interviewee was assigned a numeric alias (Persons 1 to 9).

LANGUAGE

Of 147 respondents, 44% were fluent in English and 39% were fluent in Chinese. However, English language usage in the malls rose to 68%, suggesting that consumers fluent in languages other than English, mainly French and bilingual Chinese speakers, chose to speak English in the malls over those other languages.

For Mandarin-English and Cantonese-English speakers, 33% of each group spoke only English in the malls. Following this, for Mandarin-English speakers, 27% spoke both English and Mandarin and 27% Mandarin only, while for Cantonese-English speakers, 28% spoke both English and Cantonese and 29% Cantonese only. Since Chinese-English bilingual speakers use both English and Chinese in these malls, it appears that these spaces do not conform to the perception that they are exclusively Chinese linguistic environments. They are nonetheless unique linguistic environments in Canada since the predominant languages spoken there are English and Chinese rather than Canada's official languages, English and French.

ETHNICITY

53 of 147 respondents (36%) self-identified their ethnicity as Chinese and 32 respondents self-identified as White (22%), making them the two largest groups. Respondents were asked to identify all the factors that influenced their decision to visit Aberdeen Centre and/or Parker Place (Figure 3). For both Chinese and White consumers, "they have products/services not available elsewhere" was

¹ While allowing for a larger sample size, online distribution may have resulted in inauthentic or inappropriate responses due to the anonymous nature of the Internet. Distribution through Craigslist, Facebook, and Reddit biased our sample toward users of these websites, specifically a younger demographic. Online distribution may also account for a larger proportion of non-Richmond residents in the sample, which may have skewed results on the "frequency of visit" survey question.

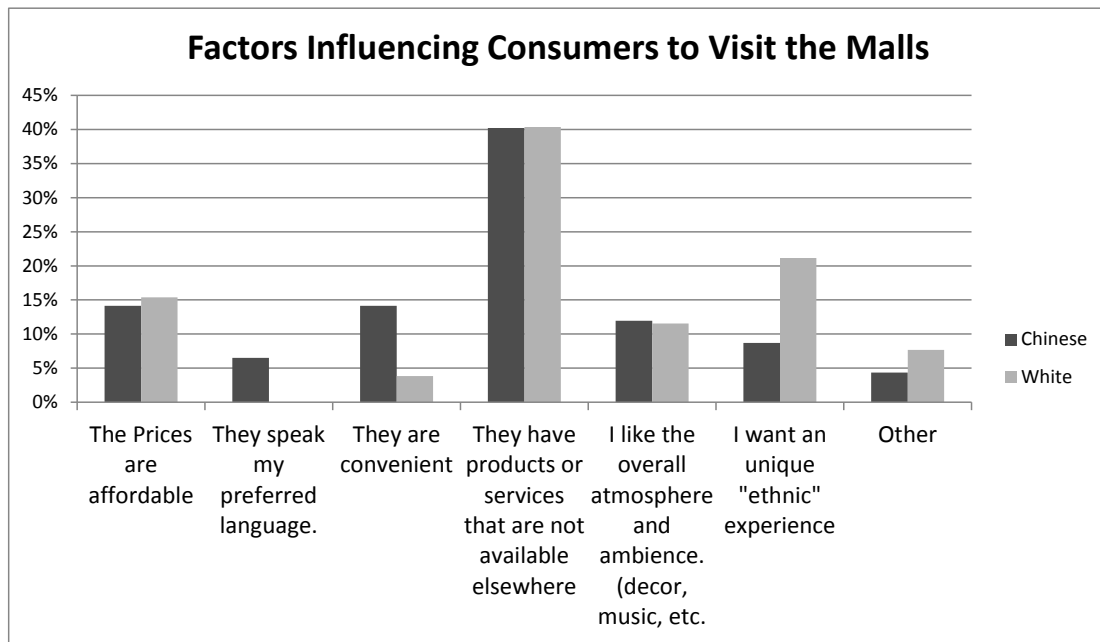


Figure 3: Factors Influencing Consumers to Visit the Malls

the most influential factor, accounting for almost 40% of total responses for each group. For the Chinese group, the second and third highest responses (tied at 14%) were price affordability and convenience, while for the White group, "I want a unique ethnic experience" ranked second (21%), followed by price affordability (15%). In addition, the factor, "they speak my preferred language" was influential for only Chinese respondents (7%), indicating that the linguistic environment of these malls is conducive to Chinese speakers.

In terms of frequency, the Chinese group tended to visit more often than the White group, as the majority of Chinese consumers (40%) visited the malls once a month while the majority of White consumers visited every 2-3 months (41%), once a year (22%) or only once (31%) (see Figure 4).

Only Chinese respondents reported visiting the mall at least once a week (13%). This finding indicates that, because of their ethnic background, Chinese consumers may be more inclined to visit Asian theme malls, while White consumers may see these malls as tourist attractions, reporting "wanting a unique ethnic experience" as a key factor influencing their decision to visit Aberdeen Centre and/or Parker Place.

From this analysis, it becomes evident that the variables of language and ethnicity do indeed influence consumers' experience of Asian theme malls. English and Chinese were the predominant languages spoken in the malls. Most consumers, including the majority of Chinese-English bilingual respondents (60%), spoke English in the malls. This contrasts with many respondents' perception that only Chinese is spoken in

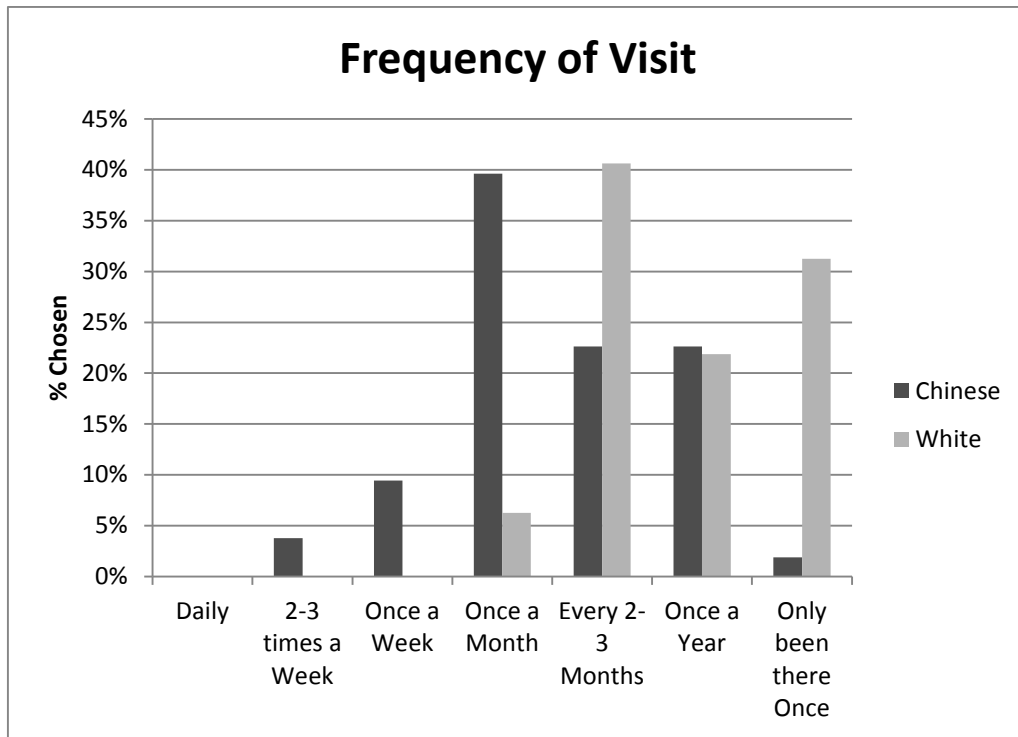


Figure 4: Frequency of Visit

these malls. For both Chinese and White consumers, these Asian theme malls offered products and services that they could not find elsewhere. This contributed to their general enjoyment of the mall but did not seem to lead to a preference for Asian theme malls over non-Asian theme malls.²

GEOGRAPHIES OF INCLUSION AND EXCLUSION

The geography of these malls involves dynamic forces of social inclusion and exclusion. These forces are closely linked to the languages used in the

malls, as well as consumers' ethnic identity. Chinese-speaking consumers reported feeling a sense of belonging:

"The shopkeepers... speak only Chinese and to some people this may be kind of [an] exclusion tactic, a negative thing. But, for people like myself, it has the positive byproduct of being an environment which happens to be very homogenous [and] welcoming." (Person 6)

Conversely, consumers who did not speak Cantonese or Mandarin complained about the lack of English usage in signage and service, which contributed

² This is a shorter version of the paper that does not feature data on enjoyment or preference.

to a sense of exclusion from the space:

"The majority of people aren't speaking English, and the majority of the products aren't in English and I really don't know what I'm doing." (Person 3)

"You know, as an English speaking person born and raised in this country, should I be locked out?" (Person 5)

Similarly, many consumers perceived that the malls catered primarily to ethnic Chinese consumers, at the expense of consumers from other ethnic groups:

"I noticed a strong Chinese presence as many of the shops had Chinese signage with some English mixed in, some were Chinese only and some...were only in English but operated by Chinese." (Participant Observation)

"I feel many of the shopkeepers don't even keep a pretense of wanting to appeal to anyone but Chinese people." (Person 6)

"It was like I shouldn't be there because I'm White. They exclude people." (Survey)

When discussing their views on these malls, most respondents linked them to broader discourse surrounding immigrant integration into Canada. For some, these malls represented assaults on Canadian values and were seen as negative spaces that made it convenient for immigrants to ignore Canadian customs:

"Aberdeen Centre allows non-

Canadians to form a cultural and [linguistic] ghetto that does not reflect the values of Canada." (Survey)

For at least one Chinese immigrant, however, the languages and products made available in these malls created a positive transnational space that connected him to his homeland. For instance, while the food choices at the malls represented an exotic dining experience for some, for immigrant consumers, the enduring cultural linkages that these malls foster allow them to maintain, celebrate, and reinforce their cultural identity:

"Whereas... other people [would] say 'this place is ugly, this place is garish' but... I'm like 'that might be true, but it was like that when I was a kid too, so it has a different value for me'." (Person 6)

"I get my weekly dose of Asianess. I get to eat food that I don't normally get to eat. Even though I was raised in a Chinese family I go to the cafeteria at UBC, so we don't get many things that I grew up eating." (Person 6)

An investigation of consumers' perceptions reveals that the geography of these malls is one of inclusion and exclusion. For some consumers who identified as ethnic Chinese and spoke Chinese, these malls were spaces of inclusion where they felt a sense of belonging and connection to their homeland. In contrast, for other consumers who did not identify as ethnic Chinese and did not speak Chinese, these malls were spaces of exclusion largely due to the

perceived absence of a shared language. Therefore, these Asian theme malls function as multicultural spaces by allowing certain consumers, particularly Chinese immigrants, to maintain and celebrate their cultural identity. However, they are simultaneously non-multicultural spaces due to their exclusion of certain groups, in this case, non-Chinese or non-Chinese speaking groups, leading to discourses of ghettoization and calls for assimilation.

CONCLUSION

Through our analysis, we arrive at three conclusions. First, we have found that the ethnic dimensions of consumption, specifically the ethnicity of consumers and the cultural landscape of Asian theme malls, have a significant impact on the experiences of consumers. This finding is in line with previous studies on consumption, which highlight how shopping spaces, and in particular Asian theme malls, function as cultural sites of exchange and social interaction.

Second, we have discovered that consumers' experiences in Asian theme malls dynamically interact with their perceptions of these spaces, leading to the formation of a particular geography of inclusion and exclusion based on consumers' ethnic background and preferred language. In return, these perceptions influence the consumers' experience, producing and reproducing this dynamic of inclusion and exclusion each time consumers visit these spaces.

Third, there is a discrepancy between the perceptions of some consumers who see these malls as exclusively Chinese linguistic environments and the

actual linguistic geographies of these spaces where our data shows that there is, on the contrary, a high degree of English language usage in these malls.

Through our research, we conclude that Asian theme malls are not only significant cultural-commercial spaces, but important indicators of the ethno-linguistic landscapes of the ethnoburb which supports them. By understanding consumers' experiences of inclusion and exclusion in Asian theme malls, we hope to contribute to a greater understanding of how multiculturalism is played out in Canadian ethnoburbs. Our study of two Asian theme malls in Richmond has shown that Asian theme malls may allow certain ethnicities (i.e. Chinese) to preserve their cultural identity but they do so at the cost of excluding other ethnic identities. Further studies can expand on our work to achieve a greater understanding of the role that ethnic malls such as Aberdeen Centre and Parker Place play in promoting or subverting cross-cultural communication and understanding in a multicultural context

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Understanding Issues in the Urban Sphere

The Lights at Night: Strategies for Further Mitigation

by Rachel Schott

The excessive use of night-time artificial lighting in modern cities impacts human health, wildlife behaviour, resource consumption, and celestial visibility. Although this form of pollution is largely associated with developed urban areas, it has produced negative consequences that are not confined to its sources. Light pollution is a global phenomenon that affects nearly every country in the world. Moreover, as the world's urban population continues to increase, more individuals will contribute to and be affected by light pollution. This paper examines the social, health, and environmental impacts of light pollution, defines light pollution, and explains how it has emerged as a global issue. It then follows with an assessment of light pollution impacts, and an overview of Canada's current governmental approaches to mitigation.

INTRODUCTION

In 1879, Thomas Edison placed a carbonized cotton thread inside a glass bulb leading to one of the most influential discoveries in human history - the electric light bulb. Nearly 150 years later human societies continue to use this invention to dramatically transform landscapes in ways that would be unimaginable to Edison. From shifting labour patterns to public safety, electric lighting was prescribed for several urban issues, although it created many unexpected consequences. It has allowed cities to lengthen working hours by extending the day's light, increase 'around the clock' economic activity, and encourage night-time use of public areas by creating visible spaces. Despite its long list of perceived benefits, this technology is accompanied by a distinct set of negative externalities - mainly in the form of light pollution. The over-illumination of modern cities impacts human health, wildlife behaviour, resource consumption, and celestial visibility. While

approaches to mitigating light pollution are becoming common in urban areas, these issues continue to persist and - if left unchecked - may worsen in the near future.

In 2009, worldwide, the total number of people living in urban areas exceeded the total number in rural areas - a first in human history (UN, 2009). This is important because the rapid growth of urban areas exposes a larger population to light pollution hazards, while also exacerbating the issue by increasing the demand for artificial lighting. In order to reduce the vulnerability of urban populations and ecosystems, mitigation strategies must be explored and implemented. This essay will first define light pollution and explain how it emerged as a global issue. This will be followed by an assessment of light pollution impacts, and then by an overview of Canada's governmental approaches to mitigation. In doing so, this paper will argue that current Canadian legislative strategies inadequately address key issues relating to light pollution.

DEFINING LIGHT POLLUTION

Light pollution is defined as the "excessive" or "inappropriate" use of artificial lighting caused by highly illuminated urban areas and poorly designed infrastructure. As such, light becomes excessive or inappropriate once it enters into areas where it is not desired. Light pollution has several forms, including 'sky glow', 'light intrusion', and 'over-brightness'. Sky glow is caused by the reflection and refraction of light from the atmosphere and is commonly seen as dull grayish glow. Light intrusion refers to the entry of light in an area where it is not wanted, such as a bedroom window during the night. Over-brightness is frequently seen in urban areas where buildings or signs appear over-illuminated (Berg, 2009; Morgan-Taylor, 2012). Although it is important to note these differences, this essay will focus on light pollution in general.

RISE OF THE 24-HOUR CITY

As global markets became increasingly inter-connected, cities were more likely to consider alternative approaches to economic development. In Jane Jacobs' *The Death and Life of Great American Cities* (1961), she argues that mixed-use spaces, dense neighbourhoods, and safe public spaces create vibrant urban communities that encourage high levels of activity and development. Her insights shaped the economic development of many urban centers during the slow economic period of the late 1960s (Tan & Klaasen, 2007). With the emergence of Western neoliberal ideologies in the 1970s and 1980s, the rates of urban consumption, globalization, deindustrialization, economic growth, and market competitiveness began to rise quickly (Lovatt, 1995). And during the

early 1990s recession, the 24-hour city emerged as a solution to economic decline since it collected the benefits from both day- and night-time activity (Roberts & Turner, 2005). Moreover, the deindustrialization of major global cities - such as New York and London - re-shaped economic activities by shifting focus to finance, service and leisure industries rather than the manufacturing sector. This shift in the global industrial profile increased 'around the clock' productivity to accommodate to international demands. As the tourism industry grew, so too did the night-time economy. Cities began developing night-time activities in order to attract tourists and accommodate their spending power and irregular sleep patterns (Tan & Klaasen, 2007). Fluorescent lighting became increasingly prominent, often used instead of incandescent and fire lighting to illuminate and attract people to the goods and services provided by 24-hour cities (Lovatt, 1995). Not only did this increase the quantity of night lighting but it also changed the quality and type of light, to ones which may prove more harmful.

Although this phenomenon emerged primarily in developed urban settings, it has produced negative consequences that are not confined to its source. In reality, light pollution is a global problem that affects nearly every country in the world (Cinzano, Falchi, & Elvidge, 2001). In order to reduce light pollution impacts, it is important to understand the various ways that artificial lighting interacts with society and the environment.

ASSESSING IMPACTS

Public safety

While poorly lit or dark areas are

commonly associated with high crime rates, there is little significant evidence or research that validates this assumption (Morgan-Taylor, 2012; Public Buildings Law, 2013; Riegel, 1973; Rozell, 2009). Research regarding public safety and night lighting is so contradictory and there have been cases where a reduction in public lighting resulted in the decrease of criminal activity. It is also argued that night lighting creates a sharp contrast between light and dark areas, producing darker shadows that may attract criminal activity (IDA, 2013). Further, bright lights may reduce the safety of motorists through disability glares or distracting illuminated signs (Berg, 2009; Morgan-Taylor, 2012).

I recognize that the struggle to control the night is the driving force behind light pollution in public spaces. This need for control is understandable that illuminating public areas is crucial for upholding at least a perceived sense of public safety. For example, roads and transportation conduits require night-time lights in order to avoid collisions. Since light is only problematic in excess or intrusion, installing fixtures that control and redirect excess light will provide adequate lighting for safe public areas while reducing unwanted light pollution (Chepesiuk, 2009).

Human health

Night-time exposure to artificial lights disrupts human circadian rhythms, a process that is otherwise known as the '24-hour biological clock'. The circadian rhythm is responsible for regulating human physiological processes and preventing performance, sleep, and metabolic disorders (Falchi et al., 2011). Weakening of these rhythms due to light exposure at night is strongly associated with increased

risks of cancer and tumor growth, obesity, diabetes, depression and other mental illnesses (Chepesiuk, 2009; IDA, 2013). In particular, the risk of breast and prostate cancer significantly increases with higher levels of exposure to night-time lighting. A study conducted in Israel found that women who live in brightly lit neighbourhoods have a 73 percent higher chance of developing breast cancer (Kloog et al., 2008). Additionally, night shift workers are highly vulnerable to these health risks since they experience constant disruptions to their circadian cycles (Cheney, 2011; Morgan-Taylor, 2012). The ongoing economic pressures have forced many low income families to work multiple jobs, often working night shifts in 24-hour cities (Otto, 2000; Tan & Klaasen, 2007). As such, 24-hour cities exacerbate the vulnerability of low income families - who are less likely to have access to adequate health care - by exploiting their need to earn an income.

Ecological behaviours

Not only does artificial lighting disrupt human circadian cycles, but it also disturbs the circadian rhythm of wildlife. Light pollution disrupts animal circadian cycles and negatively impacts the reproduction, feeding, nesting, and migration behaviours of many species, including insects, reptiles, amphibians, mammals, and birds (IDA, 2013; Holker, Wolter, Perkin, Tockner, 2010). For example, artificial lighting influences female frogs to be less selective about their mating partners - often resulting in rapid reproduction. For rodents, bats, fish and invertebrates, high levels of lighting reduce foraging and disrupt predator-prey relationships (Rich & Longcore, 2004). Illuminated areas also often deter many species from nesting and force

females to abandon their nests (Morgan-Taylor, 2012; Rich & Longcore, 2005). However, the negative impacts of light pollution have been most recognized in wildlife migration patterns. Artificial light has been proven to disorient the navigation of reptile, bird, and insect species (Rich & Longcore, 2004). The result of these accumulated effects is the decline in species populations and together posing a threat to biodiversity (Cheney, 2011; Holker et al., 2010). Despite the amount of strong evidence that proves the negative ecological impacts of light pollution, addressing environmental consequences has been absent from political approaches to mitigation (Morgan-Taylor, 2012).

Energy consumption

It is intuitive that increased use of artificial lighting will create higher levels of energy consumption with past and present technology. In the context of global climate change, mitigating light pollution is an effective way to lessen greenhouse gas emissions while reducing urban dependence on fossil fuel energy. Although alternative energy resources are often considered the ideal approach to sustainable development, controlled lighting fixtures capture wasted light and use it in a more efficient manner that reduces energy consumption. According to the Mont-Mégantic Reserve in Quebec, Canada - the first Dark Sky Reserve designated by the International Dark Sky Association - the energy costs of wasted light in North America amount to nearly one billion dollars annually (Mont-Mégantic ASTROLab, 2007). It has also been estimated that the typical lighting fixture wastes 50 percent of light by shining into areas where it is not needed (Chepesiuk, 2009). Moreover, it has been estimated that in the

United States, over-illumination wastes two million barrels of oil per day (Law Reform Commission of Saskatchewan, 2007). Controlled lighting and improved design will redirect this wasted light and reduce consumption of fossil fuels (Chepesiuk, 2009; IDA, 2013; Falchi et al., 2011).

Stellar visibility

In 1994, a 6.7-magnitude earthquake occurred in Los Angeles, California and resulted in high amounts of injuries, fatalities, and infrastructural damage. While the electricity was out, residents had the chance to experience something they were long missing - a true night sky. The darkness invoked public fear and curiosity as residents overwhelmed emergency phone lines with reports of UFO sightings. A similar situation (but without the earthquake) happened in Ontario during the Northeast blackout of 2003. What these people were actually seeing was the Milky Way (Chepesiuk, 2009). Unfortunately, as urban populations continue to grow and develop, this reaction to the night sky will become increasingly common. According to "The First World Atlas of the Artificial Night Sky Brightness", over two-thirds of the world's population live in areas where the night sky is above the threshold for polluted status, with Europe and the United States having the highest concentration of people living in the world's worst light-polluted cities (Cinzano et al., 2001). As a result, current and future generations will lose the opportunity to become inspired by their night skies (Cheney, 2011). Moreover astronomers are hindered in their ability to make observations and discoveries, limiting their contribution to scientific research (Cinzano et al., 2001; Public Buildings Law, 2013; Riegel, 1973).

POLITICAL APPROACHES

The mounting evidence illustrating the negative consequences of light pollution is influencing governments to consider mitigation policies and development. In Canada, municipal bylaws and local governments deal with light pollution mitigation (Law Reform Commission of Saskatchewan, 2007). While the Royal Astronomical Society of Canada (RASC) - a non-profit organization that is dedicated to preserving dark skies and advancing astronomical research - is largely responsible for implementing bylaws for developing strategies for further mitigation. Through initiatives like the Dark-Sky Preserve program and the 'Sample Bylaw', RASC works with national, provincial, and regional parks, as well as municipal governments to establish lighting development agreements to mitigate light pollution. The Sample Bylaw is one of RASC's most effective tools, which places restrictions on certain outdoor lighting fixtures (RASC, 2013b). This is similar to the International Dark-Sky Association's (IDA's) model lighting codes and ordinances, which provide several sample lighting regulations for various applications. However, one weakness of the RASC and IDA is that both of these organizations neglect non-outdoor sources of light pollution and are inadequate for reducing environmental impacts. The following sections will examine each of these criticisms in detail.

LEGISLATIVE CRITICISMS

Indoor Sources and Fluorescences

Although outdoor lighting is a major source of light pollution, commercial and industrial buildings produce a significant amount of light pollution hazards indoors.

The largest sector for 24-hour operations are multinational corporations that are involved in transportation, trading, finance, hospitality, and services (Otto, 2000). Along with the employees of these firms, these buildings often have security, cleaners and other night staff who require the use of artificial night lights. It is this constant and direct exposure to night-time lights that poses a high risk to human health, especially to those who work night shifts (Cheney, 2011; Chepesiuk, 2009; Falchi et al., 2011; IDA, 2013; Morgan-Taylor, 2012).

In Canada, compact fluorescent lighting (CFL) is commonly used for indoor spaces such as offices, public areas, hospitals, and homes (Environment Canada, 2012). And many of these spaces employ night time workers such as cleaners or staff. Of particular concern are hospital staff and patients with weakened immune systems, who are repeatedly exposed to white-blue lights by CFLs. Fluorescent lighting has a high composition of light at white-blue wavelengths, which significantly reduces the production of melatonin and increases the human risk of cancer (Falchi et al., 2011; Morgan-Taylor, 2012; Riegel, 1973). On January 1st, 2014, the Canadian Conservative government implemented an aggressive ban on non-halogen incandescent light bulbs as an initiative to reduce greenhouse gas emissions. This ban will remove the majority of incandescent light bulbs from retail stores in exchange for costlier CFL and halogen light bulbs (Beeby, 2013) - both of which emit spectrums towards the blue wavelengths. While it is necessary to reduce greenhouse gas emissions, the removal of these light bulbs may create harmful health effects.

Light pollution regulation must extend beyond its outdoor sources and include

indoor lighting fixtures. The increased risk to night shift workers is recognized by some governments, but is mostly absent from Canadian politics. Legislation must reconsider the use of indoor CFL lighting, as well as equip night shift workers with stronger protection from artificial night lights. This may include the reconsideration of the use of indoor CFL lighting in facilities with night shift workers or reducing the ban on incandescence lighting.

Inadequate environmental service

Considerations for the natural environment have been mostly unaddressed by legislative approaches (Morgan-Taylor, 2012). This omission may be due to a lack of research regarding the larger environmental consequences of light pollution. However, there is extensive research on individual ecological impacts, where countless studies show that light pollution affects multiple species in various ways. Meanwhile, a knowledge gap exists at the larger scale, as studies on macro ecosystem functions are largely absent from academic research. Light pollution remains unexplored as a cause of changes in population dynamics and ecosystem services (Lyytimäki, 2013; Lyytimäki, Tapio, & Assmuth, 2012; Rich & Longcore, 2004; Rich & Longcore, 2005). Without understanding the broader ecological effects of light pollution, current legislative approaches do not offer an adequate solution to environmental impacts.

IN SUM

The rise of the 24-hour city has produced several unintended consequences, including the rapid development of urban economies and infrastructure. Since the 1970s, light pollution has become a major dis-

turbance to human health, wildlife behaviour, and star-gazers while also causing increasing levels of fossil fuel consumption, contributing to climate change. Although light pollution is well researched by scientists and academic researchers, there are many aspects of this phenomenon that remain unknown and absent from mitigation strategies. Macro-scale analysis is necessary for fully understanding the impacts on broader ecosystem functions and providing guidance for lighting regulations. Bylaws must include prevention of excess artificial indoor lighting, especially in the form of fluorescent bulbs, and provide protection for night-shift workers and other vulnerable groups of people. Once these gaps are filled, political legislation can begin to adequately mitigate and reduce the far-reaching effects of light pollution.

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A Spatial Analysis of Traffic Accidents in Vancouver, 2007-2011

by Conor McLellan & Thomas Meisner

This study examines the spatial distribution of traffic accidents in Vancouver, British Columbia using Insurance Corporation of British Columbia (ICBC) data regarding traffic accidents in the Metro Vancouver area as the primary data set. Additional data included the British Columbia road network, red light camera locations and census tract information. We performed several spatial analyses including Local Morans I Cluster/Outlier, Gi Hotspot, and Kernel Density to identify variations in crash count and cartographically illustrate density, clusters, and hotspots. We then performed regression analyses including exploratory regression, Ordinary Least Squares and Geographically Weighted Regression to determine what characteristics of the built and social environments influence crash count the most. We applied this analysis to identify intersections in Vancouver that would likely benefit from the installation of red light cameras.*

INTRODUCTION

When it comes to road safety, identifying and monitoring problem intersections and roadways with abnormally high accident rates is integral to developing strategies to increase public safety. The purpose of our study is to visually display the intersections where accident occurrences are high, to display hot and cold spots of accident events, and produce a density map showing a relative measure of magnitude by implementing various spatial distribution tools in ESRI's ArcGIS 10.1. From these visual outputs the next step of our analysis aims to identify physical and social characteristics that might help explain why certain intersections and areas of the city are more prone to traffic accidents than others.

There is extensive academic literature that attempts to explain spatial distributions of traffic accidents, and scholars have used many different methods to display these distributions. Before the more sophisticated software for visually repre-

senting data were developed, simple visual maps showing the locations of accident events juxtaposed with a map of the road network were the most widely used methods of displaying accident distributions (Nicholson, 1997). However, with the technological advances that have been made in Geographic Information Science (GIS) software, more sophisticated methods have been developed. ESRI's Spatial Analyst and Spatial Statistics tool packs allow the user to explore and then visually display spatial distributions using several techniques. It is now possible to calculate and visually display spatial auto-correlation using Moran's I and hotspots using Getis-Ord Gi* statistical techniques, two methods that are used in this study. Another method is the kernel density function that "aims to produce a smooth density surface of spatial point events over a 2-D geographic space" (Xie & Yan, 2008, p. 396).

Simple visual maps can be effective methods for displaying traffic accident

sity, but attempting to explain why these areas experience such high numbers is perhaps the most effective way to identify strategies to reduce the number of accidents. There are a number of variables that can be used in a regression model to predict traffic accidents. For the purpose of this study, we have adopted simplified bivariate models for social and physical characteristics. Our social models use age and recent immigrants (as percentages of the total population) as indicators of accident events. We chose recent immigrants as a variable because studies in the United States (Outcalt et al., 2003), Israel (National Road Safety Authority, 2004) and Australia (Dobson et al., 1999), all found that accident events among recent immigrant groups occurred at higher rates per person than long-term residents and native citizens (Factor, Mahalel & Yair, 2007). Age was chosen as a variable because studies in Canada and the United States conducted by Stewart & Sander-son (1984) and Massie et al. (1995) suggest that "crashes are three to four times higher for 16-19 year old drivers than for driver's in their 40s (as cited in Doherty, Andrey, & MacGregor, 1998, p. 45).

There has also been extensive research looking at the physical characteristics of the road network and how they play a role in predicting traffic accidents. Of these, speed is perhaps the most important variable to include and almost all existing studies can confirm that speed has a positive relationship with traffic accidents (Taylor et al., 2002; Quddus, 2013) and that risk of involvement in an accident more than doubled for every ten kilometres an hour faster one drives (Kloeden et al., (2001). Another study by Thomas (1996) examined to what extent the length

of road segments influence the number of accidents. It is upon these two variables (average speed of the road segments in the road network as well as the sum of the length of the road segments) that we base our physical characteristics models.

The purpose of these analyses is not only to visually represent the spatial distributions of traffic accidents in Vancouver, but to compare the areas and intersections we have identified as highly prone to accidents to areas with traffic cameras.

DATA AND METHODOLOGY

Our study focuses on the city of Vancouver where, according to available data from ICBC, a total of 109,386 individual accident events occurred between 2007 and 2011. Table 1 provides an overview of the data used in our study.

In an effort to perform the hotspot, density and regression analyses we needed to summarize our data by census tract, and this included calculating a total crash count (per year) for each census tract which would act as our dependent variable in the regression analyses. In order to summarize the crash count (and the explanatory variables) by census tract we performed multiple table joins to ensure that all the required data was organized into one table for each year, from 2007 to 2011. Before we attempted any table joins we experimented with several Spatial Analyst tools in ArcMap (including Hotspot, Kernel Density and Morans' I) and then performed preliminary regression analyses to see if we could visualize any spatial distributions or patterns based on the crash counts and the physical and social variables that we have hypothesized influence crash count.

Data	Type	Description	Source
Metro Vancouver Car Accidents	Vector Point	Point data geocoded to the nearest intersection, divided into Casualty/Property Damage and including crash counts for Vancouver intersections from 2007-2011	ICBC (Intersection Safety Camera Program)
British Columbia Road Network	Vector Line	Line data for each road segment including length, speed limit, travel times and road hierarchy (CARTO)	DMTI Route Logistics, UBC Geography Department
Red Light Camera Locations	Vector Point	Locations of currently installed red light cameras in Vancouver	ICBC (Intersection Safety Camera Program)
2006 Census Data	Tabular	Census information by Census Tract, Age/Gender, Recent Immigrants	Statistics Canada, UBC Geography Department
ESRI StreetMap World 2D	Basemap	A base map of the Vancouver area to provide contextual cartographic information	ArcGIS Server

Table 1: Summary of the data used in our study.

All of the car accidents were geo-coded to the nearest intersection and because many roads fall directly on the boundary of a census tract, there is no way to tell which census tract the accident occurred in. To get around this problem, we randomly moved each accident event by up to five metres by generating random numbers within ArcMap and adding them to the original coordinates, thus relocating each accident location into a census tract. Since each accident was now displayed separately from other accidents at the same location, we could easily calculate the crash count at each of these points and summarize the crash count for each census tract. We then divided the crash counts for each census tract by year in order to analyze temporal changes.

Using the crash count data, we were able to cartographically illustrate various spatial distributions of car accident occurrences in Vancouver using a variety of methods in ArcMap. To further prepare our data for the regression analyses we standardized the census variables into percentages of total population (age 15-24, recent immigrants) and summarized these variables per census tract. Average speed of all road segments in each census tract was calculated as well as total road length of all road segments in each census tract. Once the variables were calculated and standardized appropriately and joined to the census tract table, we conducted an exploratory regression in ArcMap to find the best model to use for the Ordinary Least Squares (OLS) analyses. Model design errors were found so

we decided to separate the physical and the social characteristics into two separate models. We then conducted an OLS analysis with physical characteristics for each year, and an OLS with social characteristics for each year. This was followed by Geographically Weighted Regression (GWR) analysis again using physical and social characteristics for each year.

DISCUSSION/RESULTS

To begin our analysis, we experimented with several methods for displaying accident hotspots in order to visualize problem intersections throughout Vancouver. We first created a simple graduated symbol map for all crash counts from 2007 to 2011 to get a preliminary sense of the general pattern of traffic accidents throughout Vancouver.

We then conducted a Local Morans I (LMI) Cluster/Outlier analysis to identify statistically significant clusters of crash count values. The results from this analysis identify clusters of similar values by measuring the similarity between nearby features. The output feature class only generates features where there is a measure of statistical significance indicating cluster outlier type (COType). COType is characterized as HH (high, high values), HL (high, low values), LH (low, high values), LL (low, low values) and is categorized based on z-scores and p-values that indicate statistically significant clusters of similar values (HH or LL) or outliers of dissimilar values (HL or LH). It is important to note that the LMI tool does not include the value of the individual feature being analyzed, therefore it measures values within the threshold distance (default in this case was 822 m) and looks for statistically significant similarity between the values within this distance. Instead of characterizing every feature, the LMI

method eliminates the features whose values are not statistically significant in terms of similarity. The highest concentration of HH clusters are in the downtown area and areas surrounding False Creek. Only a few areas with LL clusters were found, mainly in the Kitsilano area and even less LH outliers scattered throughout the city.

Next, we employed the Getis-Ord G_i^* method. This method measures the concentration of high or low values, indicating hot and cold spots with the output feature class illustrating the deviation of all values from the average. Hotspots are determined using accident points characterized by z-scores greater than 1.96 within the predetermined search threshold distance of 822 metres, conversely, cold spots are points with z-scores less than -1.96 within the same distance. A z-score between -1.96 and 1.96 is not significant to the hot and cold clusters because it does not satisfy our confidence level of 95%. These results are consistent with the LMI analysis with the downtown area being a hotspot and the Kitsilano area designated as a cold spot. Other hotspot areas include the south Granville/Oak Street area right before the Oak Street Bridge as well as the South East Marine Drive at Knight Street intersection.

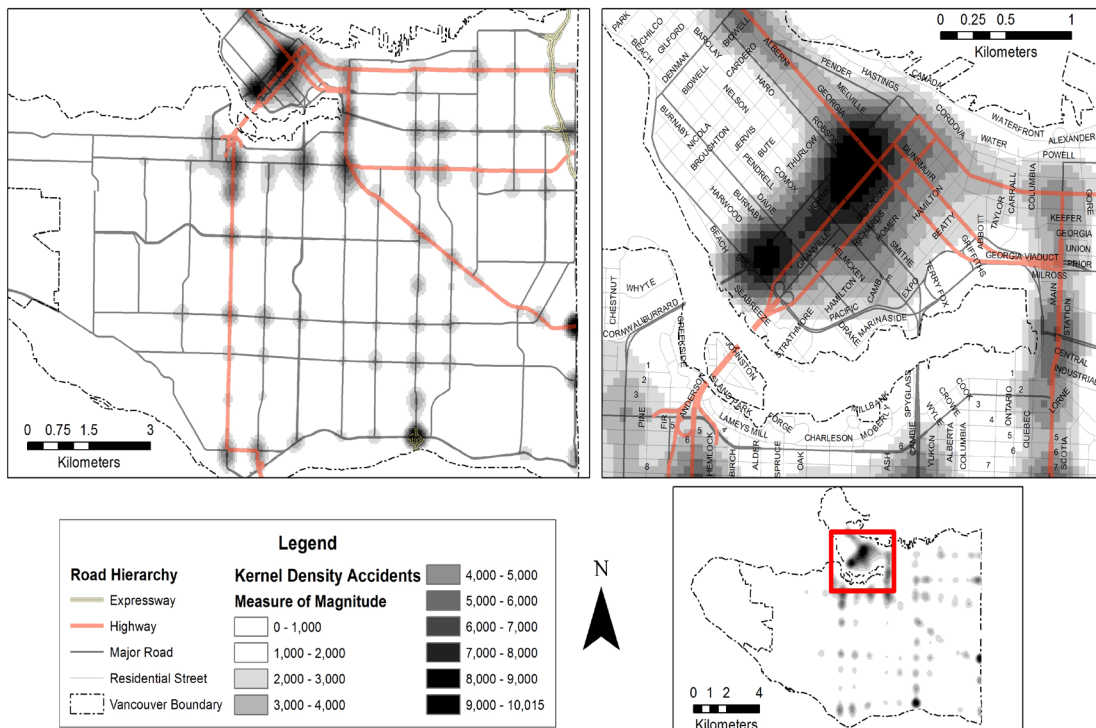
Our next step was to perform a Kernel Density analysis which generates a raster output that indicates a magnitude measure of crash counts (see Map 1). The output values represent a measure of magnitude of crash counts per unit area, which was set to 406 m. In order to improve cartographic visualization, the lowest density classes were eliminated from the output. The resulting map shows density patterns that closely follow highway and major road corridors and that the downtown area is denser in terms of crash counts

than other areas of Vancouver. Another interesting pattern is that the Kernel Density method shows dense areas radiating out from nearly all intersections where major roads intersect other major roads.

The next step in our analysis of Vancouver car accidents was to investigate potential social and physical characteristics that might explain why accidents are occurring in these areas. Our model design included social variables (percentage of population aged 15-24, percentage of population designated as recent immigrant) as well as physical variables, (the average speed limit and sum of all road length segments).

We then conducted an OLS analysis for each year using both the physical and social models followed by a GWR analysis in order to explore local variations in the models. The results for both models for 2007 and 2011 can be seen in Table 2.

By showing the results for these two years, we get a sense of the trend over a five year period. The results of the OLS and GWR analyses for 2008, 2009 and 2010 also show similar patterns in terms of GWR model improvement upon the OLS models; indeed, the GWR for both models for each year resulted in a higher R^2 value, indicating that more accidents



Map 1: Kernel density surface indicating magnitude measures of crash counts.

2007 Adjusted R ²			2011 Adjusted R ²		
Model	OLS	GWR	Model	OLS	GWR
Physical	0.383	0.812	Physical	0.383	0.890
Social	0.003	0.534	Social	0.0006	0.396

Table 2: Results of both models for 2007 and 2011.

are explained at a more local level than the entire study area as a whole. Map 2 shows the spatial distribution of the standard residuals¹ for the physical and social models for 2009, representing areas where there are higher/lower-than-expected crash counts. In both cases, the GWR analysis improved upon the OLS method by reducing spatial autocorrelation².

Overall in 2007, it was found that the physical variables are better indicators of crash count as seen by the larger area of darker values (Map 3), explaining up to 81% of crash count, while the social model only explains up to a maximum of 53%.

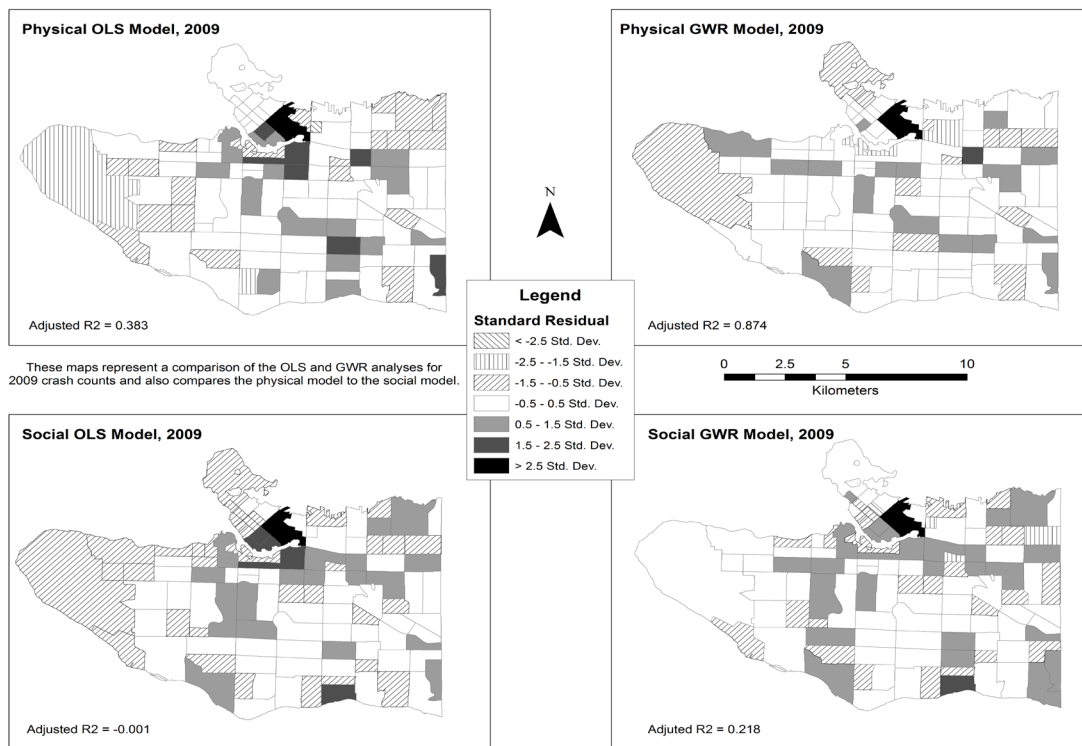
In 2011, we had similar results when comparing the local R² values for both the physical and social model (Map 4). Once again the physical variables were better at predicting crash counts which is illustrated by areas with a higher concentration of darker values. In the physical model, up to 89% of crash counts are explained by the physical variables and in the social model

only 39% of crash counts are explained by the social variables. What is interesting from these results is that from 2007 to 2011, the physical variables have become stronger indicators of crash counts while social factors over the same time period have become less influential on crash counts.

Moreover, ICBC is a crown corporation in British Columbia that provides vehicular insurance across British Columbia, and has a strong interest in collecting road safety information including the car accident data used for this project. This data also includes locations of all red-light cameras installed by ICBC at the “highest-risk intersections” to “reduce crashes, injuries and deaths” (ICBC). We have identified several intersections based on the results of the Kernel Density Analysis that we feel could potentially benefit from red light cameras. Specific intersections that could potentially benefit from the installation of red light cameras include: South East Marine Drive at Knight Street, Kingsway at Boundary Road, West Broadway at Granville Street, West Broadway at Cambie Street and Hornby Street between Dunsmuir Street and Smithe Street. Map 5 displays the same kernel density surface with existing red light cameras overlaid on top. As seen on the map, there are several major intersections as well as a large area in the downtown core where intersections could potentially benefit from the installation of red light cameras.

1 Standard residuals refers to “the difference between an observed value and its estimated value that is returned by the GWR model” (Esri help files)

2 Spatial autocorrelation is “a measure of the degree to which a set of spatial features and their associated data values tend to be clustered together (positive spatial autocorrelation) or dispersed (negative spatial autocorrelation)” (Esri help files)

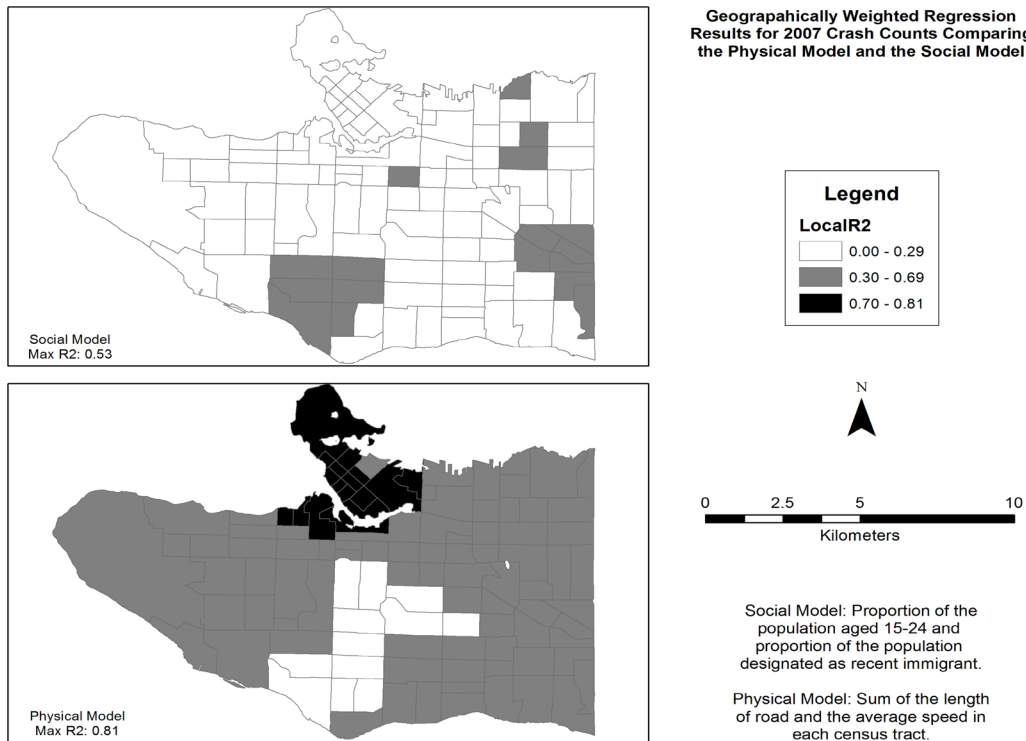


Map 2: Comparison of OLS and GWR results for 2009.

UNCERTAINTY

Some level of uncertainty is inevitable in any spatial analysis and should be considered when interpreting results. In our analysis we have attributed all variables, both physical and social, to census tracts, including the crash count calculation, and while this does not pose a problem for our physical models, it does for our social models. The social variables, percentage of people age 15-24 and recent immigrants, are linked to a specific census tract; however, in reality, we know these people could potentially get into an accident somewhere other than their home census tract, possibly in an area that is dominated

by an older age group or longer term residents. Thus, in cases where the accident occurs outside the home census tract, the underlying social characteristics no longer correlate with the crash according to our models. However, studies suggest that the majority of car accidents occur within eight kilometres of the home. The inherent problem associated with assigning crash points to census tracts is due to the use of a random number generator to scatter crash points. Some points may have moved more than others and once the new coordinates were displayed it was clear some points may have moved to census tracts that they may not have actually occurred in. The Kernel Density parameters were gener-



Map 3: Comparison of social and physical GWR models for 2007.

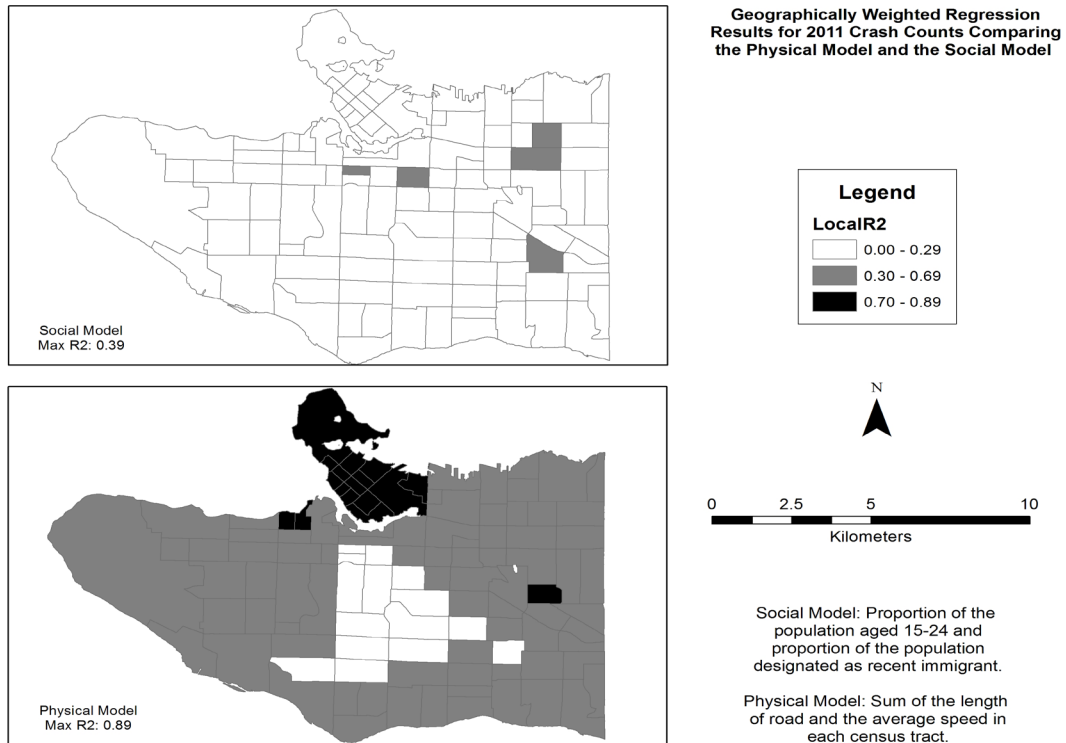
ated by ArcMap but these numbers are arbitrary and different values could yield different results. We also eliminated the lowest class for the sake of cartographic visualization and to highlight the areas of highest density creating the impression that there are no accidents in the white space.

Furthermore, we were unable access information regarding traffic volume which would have been an important variable to include in our analyses. Additionally, spatial aggregation of the data, as with any type of spatial analysis, is another area of uncertainty. We aggregated our data to census tracts, but could have used dis-

semination areas or Vancouver neighbourhoods; potentially yielding different results. This type of uncertainty is a product of the Modifiable Areal Unit problem (MAUP) that is inherent in most spatial analyses.

CONCLUSION

Through the use of several different methods, we have been successful in displaying the spatial distributions of traffic accidents in Vancouver. As we have illustrated and described, there are many different methods to cartographically display density, clusters and hotspots of traffic accidents in Vancouver. Although we have adopted simplified regression models us-



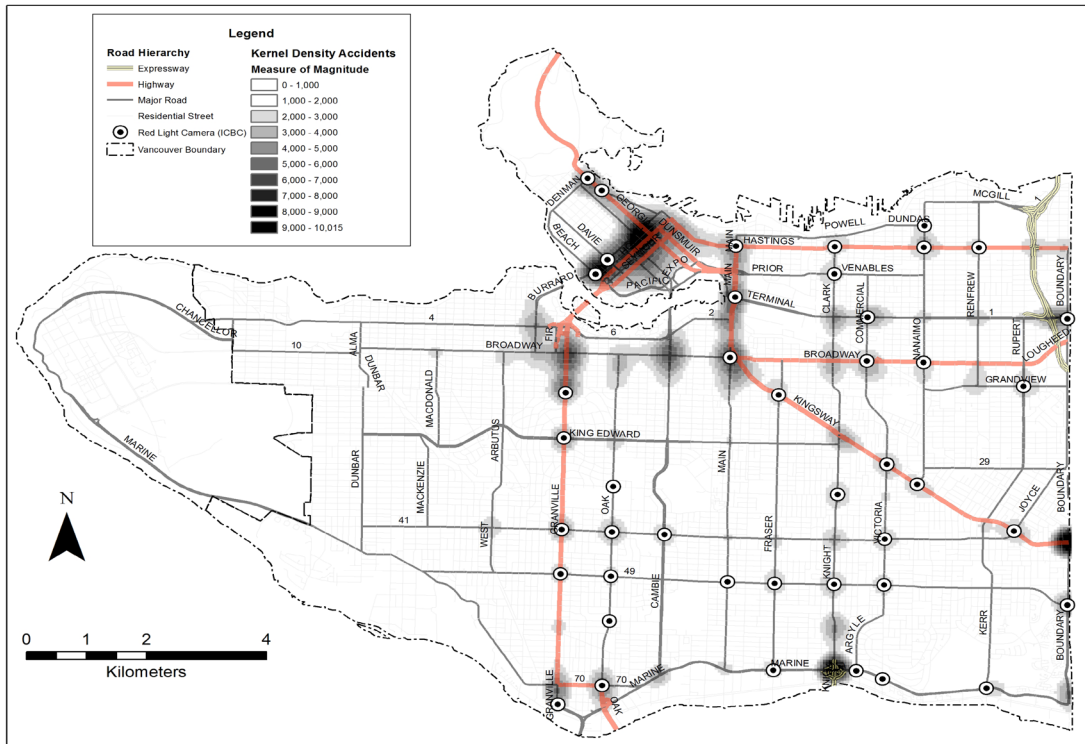
Map 4: Comparison of social and physical GWR models for 2011.

ing both physical and social variables, we have been able to explain some of the variations in crash counts throughout the study area. As expected, the physical characteristics of the built environment are stronger indicators of crash counts in all areas. We have been able to identify some of the most dangerous intersections in Vancouver which is consistent with ICBC's findings; however we have also been able to suggest some intersections that would benefit from the installation of red light cameras. As a result of the constraints of this project, inevitably there are several areas for further research. In our analysis, we identify several physical/social factors that were

continually identified as being significant variables when predicting car accidents. However, further research using data such as traffic volume, road condition at time of accident, vehicle ownership and road curvature would likely yield more accurate results and stronger regression models leading to more accurate visual representations of traffic accident density and hotspots.

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Map 5: Current Locations of red light cameras and potential sites for future cameras.

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Urban Entrepreneurialism and Gentrification in San Francisco

by Chester Hitz

This paper examines San Francisco's use of its advantageous proximity to Silicon Valley and unique cultural assets to attract tech workers and firms to the city since the late 1980s. This strategy was largely successful and led to two periods of distinct economic growth in the technology and internet sector in the late 1990s and late 2000s. While this did bring growth and development to the city, the investment also caused gentrification and unaffordability in certain neighbourhoods. It is argued that this transformation is a piece of a larger trend toward civic entrepreneurialism and diminished urban democracy in the neoliberal regime.

If there is one city that became the undisputed epicenter of the "New Economy" hype of the late 1990s, it was San Francisco. Bolstered by their proximity to Silicon Valley's high-technology industry, certain neighbourhoods in eastern San Francisco became outposts for tech companies and "live-work" playgrounds for young, hip, and very rich tech workers¹. Over time, San Francisco became more reliant on the technology sector's ability to attract investment and drive the housing market, setting the industry at the heart of its economy. In order to grow and retain these tech companies, the city provided a number of economic incentives and policy exceptions to tech companies and workers.

This process of urban transformation has not been without contention. Profits made in the technology industry have been reinvested in housing in working-class neighbourhoods, spurring evictions and gentrification. While developers, politicians,

and tech workers have benefitted from the waves of investment and economic revitalization that transformed certain neighbourhoods, a more homogenous and unaffordable city has emerged. Today the tech industry is enjoying a second wave of growth, and the city government continues to provide handouts and incentives to tech companies to keep them in the city in light of increased regional and national competition from other cities looking to capture a share of the technology industry that has flourished so mightily in San Francisco. Furthermore, the city government has offered tax breaks to companies for locating in specific neighbourhoods deemed "blighted" or in need of "revitalization," effectively utilizing the tech sector's demand for development to address social problems that the government itself is unable to address.

In supporting and conceding to the needs of the tech industry, the government of San Francisco is responding to its own increased role in fostering investment and development, and therefore government revenue. This makes San Francisco an excellent case study of what David Harvey has identified as the shift from manageri

¹ The usage of the word "tech" throughout this paper is analogous to "high-technology industry" in all cases.

alism to entrepreneurialism in urban governance in the neoliberal era (Harvey, 1989).

This case study has three parts. The first will discuss the transformation of San Francisco spurred by the technology industry during the "New Economy" phase, from the early 1990s to the dot-com crash of 2001, and the impact on the political economy and various neighbourhoods of the city. The second part will examine emerging development in light of increased competition, beginning in 2002 with the "Web 2.0" phase until present, in addition to further ways in which the city government has facilitated tech industry development. In the concluding portion, I will relate the observed trends to broader ideas of urban entrepreneurialism in the neoliberal era.

WEB 1.0: DEVELOPMENT AND GENTRIFICATION IN SAN FRANCISCO DURING THE "NEW ECONOMY" PERIOD

By the late 1980s, San Francisco had emerged as a center of international banking and corporate administration, linking the west coast of the United States to the booming economies of the Pacific Rim (Godfrey, 1997, p. 316). This was coupled with a unique countercultural "tradition of nontradition" in the city, beginning in the 1950s with the Beatniks and continuing through the 1970s as the city became a bastion of distinctly liberal and occasionally radical city politics (Godfrey, 1997, p. 331). This gave rise to a number of distinctive neighbourhoods and "an active coalition of anti-development communities" dedicated to protecting the city from "Manhattanization" and battling a "powerful and pro-development mayoralty" (Graham & Guy, 2002, p. 372). These anti-devel-

opment groups had voted in growth-restricting legislation that stood in contrast to other regions of the Bay Area where job and housing growth were booming. Due to these restrictions on growth and other processes, San Francisco had, by the late 1980s, lost its importance as a regional economic headquarters. The city was facing economic decline and increased competition, particularly from the booming suburban tech region of Silicon Valley (Glaeser, Kolko, & Saiz, 2001, p. 34).

After the Second World War, Silicon Valley, particularly the area surrounding Stanford University, was transformed from an agricultural hinterland into an international center of high tech innovation. Multiple key technologies, including the microprocessor and Internet, were pioneered in the region, bringing prosperity and further investment. What suburban Silicon Valley had in prosperity however, it lacked in culture and nightlife for the young, skilled workers who were making their fortunes there. San Francisco, only an hour's drive away, became an attractive option for housing the tech worker population. This gave rise to the reverse commuting phenomenon, where Silicon Valley tech workers would live in San Francisco to enjoy its cultural amenities, but commute south every day to work in Silicon Valley (Glaeser, Kolko, & Saiz, 2001, p. 33-35; Casique, 2013, p. 31).

By the mid-1990s, this model had shifted and resident tech workers developed agglomerations of small tech firms in San Francisco itself, primarily in the South of Market area commonly known as SoMA. Many of these firms were related to the booming internet economy and attracted large amounts of venture capital. Due to this, the city's total work force grew 12%

and average household income grew 15% during this period from 1996 to 2000 (Centner, 2008, p. 201). This growth attracted attention to San Francisco as an urban capital of the booming internet business and other cities began to compete for a share of the activity, offering incentives to lure in the lucrative and hip industry (Temple, 2013).

On the ground in San Francisco, neighbourhood transformations, rooted in the growing demand for housing and office space by tech workers, had occurred most visibly in the South of Market (SoMA) and Mission neighbourhoods (see Figure 1), which were both located on the outer edges of the downtown core. These changes were both very visible in terms of new developments, but also less visible with rents in San Francisco surging 175% from 1990 to 2000, causing evictions and shortages of affordable and social housing (Casique, 2013, p. 44). Much of this was a result of a limited supply of housing mandated by the strict anti-growth legislation that had been voted in prior to the tech boom (Hartman, 2002).

SoMA underwent the most radical physical transformation, transitioning from an area of industry and transient worker housing to an area of "live-work" mixed use development attractive to tech firms and workers nicknamed "Multimedia Gulch" (Godfrey, 1997, p. 325). Ironically, the planning policy that preferred live-work type housing was originally intended to provide flexible housing for low-income artists, but the vague laws were seized upon by developers to build housing and office space en masse that was attractive to the incoming tech class, furthering gentrification in SoMA (Casique, 2013,

p. 46). Due to strong pressure from developer's associations and the economic benefit that tech was providing to the city, the city did nothing to strengthen its original policy. In addition, this transformation was further aided by the city government who facilitated the development of a convention center and arts complex in the neighbourhood despite heated anti-displacement battles (Godfrey, 1997, p. 323).

Transformations in the Mission in this period were less physically transformative in terms of new developments but more violent in the quickness and severity of the sweeping waves of evictions. Traditionally a bastion of working class Latino immigrants, the Mission bordered on the south of Mission and became a key site of consumption and recreation for the emerging tech class in San Francisco (Centner, 2008, p. 207). Tech workers moved into subdivided Victorian homes in the neighbourhood, and due to their ability to significantly outbid the previous working class residents for housing, displaced many of the long-term residents of the neighbourhood (Casique, 2013). Casique notes that "while the mythology of the economic boom was likened to the Gold Rush, the displacing effects of the ensuing gentrification were more akin to frontier relocation" (Casique, 2013, p. 49). He further notes that the "presence of uniformed police officers intensified as gentrification ramped up through the mid-1990s" in the Mission neighbourhood. Specifically, police officers patrolling the streets late at night targeted Latino males while ignoring white males, suggesting an institutional preference for who belonged in the neighbourhood (Casique, 2013, p. 452).

The failure of the city government to

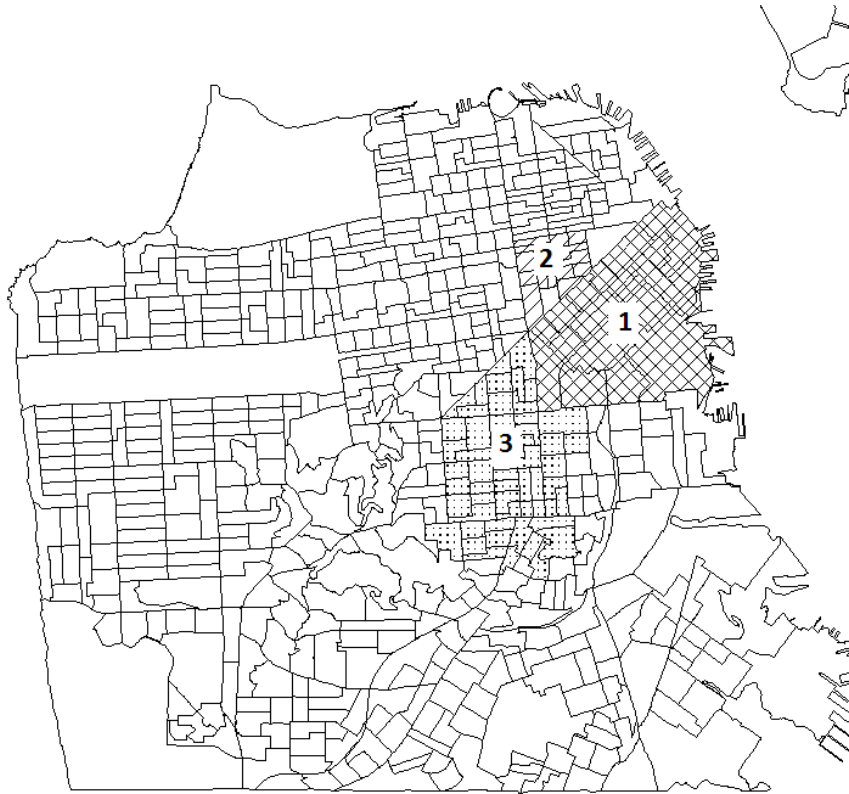


Figure 1. Map of San Francisco with approximate areas of discussed neighbourhoods , SoMA (1), the Tenderloin (2) and The Mission (3). Basemap from ESRI. Modified by author.

ameliorate the displacing effects of the housing boom during this period shows how comfortable city elites had become with the tech industry as a center of San Francisco's economy. In addition to a reluctance to solve the housing crisis (Hartman, 2002, p. 325), by 1995, San Francisco's civic leaders chose to further attract the tech industry by planning for increased telecommunications infrastructure, increased parking, and publicly-funded multimedia centers in SoMA and surrounding neighbourhoods (Marshall, 1995). This was largely a response to in-

creased incentives for high tech industrial development in other American metropolitan regions, many of whom were offering tax breaks and other policy initiatives. In order to stay competitive, the city government perceived that it was necessary to let the tech class run roughshod over the housing market or risk losing them all together.

WAVE 2.0: RECENT DEVELOPMENTS 2002 – 2013

After the collapse of the technology industry shortly after the turn of the millen-

num, there was a substantial exodus of tech firms from San Francisco, leading to record commercial vacancy rates. The party funded by wild speculation and venture capital came to a close as overinflated internet companies' stocks crashed upon the realization that few, if any, of these newfangled companies were at all profitable (Casique, 2013, p. 100) (Mann & Nunes, 2009). By 2004 however, Silicon Valley was showing signs of recovery from the recession and by 2008, employment was 17% below pre-collapse levels and growing, with 69% higher wages being paid to employees of internet companies (Mann & Nunes, 2009). Investment was once again pouring into the region and San Francisco's tech employment started to rise (Mann & Nunes, 2009). Though the academic literature on the most recent of these developments is sparse, several significant moves by the San Francisco city government to retain tech companies, especially in certain 'blighted' neighbourhoods, can be connected to similar turn of the millennium policies to increase investment and the overall competitiveness of the city.

As SoMA and the Mission became gentrified and rents rose, fledgling tech firms began to seek out more affordable areas to locate. One such firm, the now infamous Twitter, launched in 2006 out of its headquarters in the Tenderloin, a district adjacent to SoMA described by Robinson as a "low-income slum in the heart of San Francisco" (Robinson, 1995, p. 486) (see Figure 1). As Twitter grew and expanded, city officials wrung their hands, worried that San Francisco's high taxes and unique payroll tax would make the growing company flee the city, a sentiment explicitly stated by both Twitter executives and city officials. In 2011,

San Francisco gave Twitter a substantial tax break in exchange for staying in the city, along with Twitter agreeing to pursue a number of loosely defined goals to alleviate the effects of gentrification in the area (Temple, 2013). Despite this apparent success in convincing Twitter to stay, the San Francisco Chronicle reported that the city government lost an estimated \$22 million in revenue as a result of the deal, prior even to the initial public offering of Twitter in 2013, which they estimated would have brought an additional \$34 million to the city (Temple, 2013). The city has extended similar tax breaks to other companies willing to locate in the Tenderloin, despite rising rents and evictions in the area.

It is clear that San Francisco has come to rely on technology and internet businesses for its overall economic health. In this second wave of development however, the city government is taking a more active role in guiding the growth of the tech sector into certain neighbourhoods with tax incentives and other means. Despite token gestures by the tech companies, they continue to have displacing effects on these previously working class, low-income neighbourhoods. By ignoring the plight of these low-income neighbourhoods, the local state follows the ideologies of 'roll-back' neoliberalism and develops a new form of public-private partnership that allows the market to 'fix' the social problems of the inner-city neighbourhood. David Harvey writes that in the traditional late capitalist version of a private-public partnership "the public sector assumes the risk and the private sector takes the benefits" such as in sporting arena, waterfront, or neighbourhood improvement projects (Harvey, 1989). I would argue that the Twitter case in San Francisco represents a new kind of

public-private partnership where municipal governments, rather than fix the structural problems that underpin inner-city poverty and homelessness, offer policy incentives to attract companies to neighbourhoods in hopes of improving them. While in some ways these neighbourhoods may be revitalized when companies move in, this is mainly the result of the displacement of the former residents and the masking of social problems rather than actual progress for the neighbourhood. This embrace of market means to solve urban problems is familiar not only in San Francisco, but in neoliberal urban regimes as a whole.

COMPETITIVE SAN FRANCISCO: HOSTAGE TO ITS OWN SUCCESS?

David Harvey traces the formal roots of urban entrepreneurialism to a conference he attended in 1985 and describes the consensus of the conference as such: "urban governments [have] to be much more innovative and entrepreneurial, willing to explore all kinds of avenues through which to alleviate their distressed condition and thereby secure a better future for their populations" (Harvey, 1989, p. 4). San Francisco has also had to respond to this "distressed condition" of abandonment of city by retail, business, and residents, though this effect was not as strong in San Francisco as in other municipalities thanks to its mature banking sector (Godfrey, 1997, p. 316). Furthermore, federal funding rollbacks further strained the ability of municipal governments to provide social services and encouraged cities to act as entrepreneurial agents in attracting investment (Harvey, 1989).

Using Harvey's paper as analytical lens, it can be argued that San Francisco used its cultural capital and proximity to Silicon

Valley as a competitive strategy to become a key center of both consumption and production in a growing regional economy. Consumption in this case refers primarily to the use of capital to transform and gentrify neighbourhoods such as the Mission and the Tenderloin, as Harvey notes that gentrification is a key aspect of consumption in a city (Harvey, 1989, p. 9). While it started and continues to be a key site of consumption, San Francisco's use of its competitive strategy to attract firms and other elements of tech production has put it in competition with its southern neighbor, as there is the constant threat of tech firms moving operations to a breezier suburban Silicon Valley campus. Faced with such stiff competition, the city has been forced to provide further incentives, as was apparent in the city's dealings with Twitter.

The changes occurring in San Francisco cannot be explained by economics alone, and it is necessary to also look at how the city and its population have framed its urban problems. Neil Smith's ideas on the 'revanchist city' can make some sense of the cultural changes occurring in San Francisco at this time. Smith's proposal is that cities in the late 1980s were adopting a kind of "ruthless urbanism" as middle-class residents in gentrifying neighbourhoods struggled with the daily urban realities such as homelessness. Smith predicted that "deepening vilification of working-class, minority, homeless and many immigrant residents of the city, through interlocking scripts of violence, drugs and crime" would become common (Smith, p. 288). While this occurred somewhat in the first wave of tech gentrification, it is much more obvious in the more recent wave, partly due to social media which has allowed both wealthy and poor residents to have

a public voice on local issues. Some statements by tech workers have nearly fulfilled Smith's predictions of the vilification of marginalized urban residents, with one prominent figurehead publicly posting about the "grotesque" nature of downtown and the need for the homeless to "stay out of your way" and "realize it's a privilege to be in the civilized part of town and view themselves as guests" (Lamb, 2013). While it is dangerous to extrapolate from this, this posting and many others show growing resentment in the tech industry for those in San Francisco who are perceived as a hindrance to the flow of innovation and capital that the tech industry brings to the city.

This reliance on the tech sector for both consumption and production shapes the city. As San Francisco seeks to use its competitive advantage to attract even more investment to the city, concerns are arising over the question of who is benefitting from the economic growth and whether the rising tide in the bay really does lift all the boats. Though San Francisco has an enviable economic position, it must contend with the pitfalls of what it means to be a 'successful' city where who gets to participate and benefit from success is determined by what is contributed to the local economy. At the end of this process, a distorted picture of urban democracy and a dangerous precedent emerge.

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Miki edited Jessica Stephens-Whale's "Resisting Colonial Indigenous Identities: Clayoquot Sound, Northwest Coast Art, and a Modern Whale Hunt."

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Chester edited Conor McLellan and Thomas Meisner's "Spatial Analysis of Traffic Accidents in Vancouver, 2007-2011."

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YIDA LIN is finishing up his degree in Human Geography with a focus on urban issues. A city map enthusiast, he intends to continue his work experience as a map editor at ITMB publishing in Richmond after previously editing street maps for Vancouver and Boston last summer. His current interests lie in investigating ethnic enclaves in North America as his favorite trips so far were spending time in Chinatown, San Francisco and Harlem, New York. Possible future destinations include Nunavut and Nauru, the world's smallest island nation.

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Special Thanks:

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Victor joined the team for reviewing and proofing rounds.

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