### Contested Streets: A Case Study Approach to Understanding Bicycle and Car Politics in Toronto, Canada

by

Jennifer Tannis Hill

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Department of Geography and Planning
University of Toronto

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#### Abstract

Using qualitative interviews, this thesis examines bicycle and car politics in Toronto, Canada to understand: i) how automobility affects those engaged in contesting and supporting cycling initiatives; ii) why the installation of cycling infrastructure has been politicized; and iii) whether strategies used by cycling activists are effective. The paper concludes that contemporary cultural and economic values surrounding automobility are visible in those engaged in bicycle and car politics. Findings suggest that the politicization of efforts to install cycling infrastructure arise due to how these values manifest themselves in the political realm, and the interrelationship between a lack of coherent transportation policy, the institutionalization of automobiles in planning and a ward-based decision-making system that entrenches suburban and urban biases. Activist strategies could be more effective by moving away from a focus on cycling lanes to address cultural norms associated with automobiles and bicycles and by focusing on a 'complete streets' approach.

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### Chapter 1 - Introduction

### 1.1 Introduction

Bicycling for everyday transportation in urban areas addresses many of the social, environmental and health challenges produced by wide-scale private automobile use. Despite its potential for realizing affordable, non-polluting, active transportation for many, bicycling remains a marginal transportation mode in Canadian cities, while the private automobile dominates urban landscapes. With rising vehicle congestion, pollution-related health problems and increasing concerns over climate change, municipalities, policy-makers and academics are making efforts to identify and analyze motivations and barriers to increasing levels of utility bicycling. These research efforts have provided valuable empirical information on the influence of the physical and built form (Cervero & Duncan, 2003; Dill & Carr, 2003; Mouden et. al., 2005) and the role of subjective and demographic factors in choosing to cycle (Gatersleben, 2006; Parkin et. al., 2007; Pikora et. al., 2003; Xing et. al., 2009). However, many studies neglect to identify these results or efforts to promote bicycling as taking place within – or being limited by – automobile focused transportation systems or what is referred to as "automobility". <sup>1</sup>

<sup>&</sup>lt;sup>1</sup> The term automobility has its genesis in the early twentieth century where it referred to the "fact and experience of being auto-mobile, of driving a car" (Paterson, 2007, p. 25). While this individualistic definition is still sometimes used, the term has since evolved out of recognition of the complex ways in which automobile-use is sustained, to refer to the overall system or interrelation of socio-technical institutions and practices, ideologies and infrastructure that make the act of driving a car possible (Bohm et. al., 2006; Paterson, 2007). Urry (2004) provides a useful overview of this system and describes automobility as: i) "the quintessential manufactured object produced by the leading industrial sectors" in twentieth century capitalism; ii) "the major item of individual consumption after housing which provides status to its owner through its sign-values" such as speed, security, sexual desire, freedom and family; iii) "an extraordinarily powerful complex constituted through social and technological linkages with" industry, gas production, road-building, car repairs, suburban housing, law-making, advertising and urban design and planning; iv) "the predominant global form of 'quasi-private' mobility that subordinates other forms of mobility"; v) "the dominant culture of what constitutes the good life"; and vi) "the single most important cause of resource-use" (pg. 26). This description highlights that it is not the car itself that is central but rather the system of fluid interactions which sustain it. As Slater states in Urry (ibid., pg. 26): "a car is not a car because of its physicality but because systems of provision and categories of things are 'materialized' in a stable form." Bohm et. al. (2006) build on Urry's definition of the systemic aspects of automobility by highlighting the importance of "the relations of power that make the system possible" (pg. 6). The term automobility, as used throughout this thesis, is therefore meant to refer to the systemic and interconnected arrangements and practices that enable automobile use, while including analyses of the power relations at play to understand how automobile use has been facilitated and sustained in Toronto.

Aside from a small body of academic literature on cycling activism (see for example: Batterbury, 2003; Blickstein & Hanson, 2001; Furness, 2005; Furness, 2007) and a handful of studies examining the impact of broader transportation policy on cycling (Pucher et. al, 1999; Pucher & Buehler, 2005; Rietveld & Daniel, 2004), much of the existing cycling literature tends to downplay the influence of automobiles or omits them entirely. This demonstrates the extent to which automobiles have become ubiquitous and normalized in North American societies.

Transportation – or how we move through space – is embedded in our everyday life and practice. Its routine nature can mask the influence of socially encoded, normative and institutionalized views of different forms of mobility (Henderson, 2009; Hess, 2009). How goods and people move through space and how space is configured to facilitate that movement reflects how particular modes of mobility are favoured, encouraged and facilitated (Henderson, 2009). Promoting modes of transportation other than that which is dominant – in this case the automobile - can be contentious (Vigar, 2001). Alternatives challenge the organization of physical space as well as the "cultural space" that influences the ways people perceive different transportation modalities (Furness, 2005, 52).

Toronto provides an interesting case study of bicycle and car politics in a North American context. Congestion from automobile traffic and the resulting local air pollution, greenhouse gas emissions and lost time in transit are recognized and widely-acknowledged concerns (Lucas, 1998;Toronto, 2007a; Toronto, 2007b; Toronto 2007c). Municipal level policy shifts in the form of the *Toronto Bike Plan: Shifting Gears* (Toronto, 2001a) and the *City of Toronto Official Plan* (Toronto, 2001b) support reduced automobile use and increased cycling. Over the past ten years there has been a visible increase in the number of cyclists downtown. An organized and active cycling lobby also exists as evidenced by the formation of the Toronto Cyclists Union in 2007 and the Toronto Coalition for Active Transportation in 2006. In 2009, City Council voted to

<sup>&</sup>lt;sup>2</sup> For the remainder of this thesis the *Toronto Bike Plan: Shifting Gears* will be referred to as the *Bike Plan*.

<sup>&</sup>lt;sup>3</sup> Census data indicates that commuter cycling levels have increased from 1.3% of the population in 2001 to 1.7% in 2006 (Statistics Canada, 2001; Statistics Canada, 2006). This compares to a survey undertaken downtown during peak summer hours in 1999 that showed bicycle trips accounted for 8% of trips to work, 3% of trips to school and 17% of visiting, shopping and errands trips (Toronto, 1999). The variation in measurements is likely due to the spatial variation in cycling levels between the downtown core and suburban areas as suburban areas tend to have lower bicycle ridership (Pucher & Buehler, 2006).

increase the budget allocated for the installation of cycling lanes and the number of staff dedicated specifically to cycling issues.<sup>4</sup>

However, despite what appears to be a climate ripe for facilitating a meaningful shift towards cycling as a legitimate and acceptable alternative, tensions appear to be increasing. Clashes between drivers and cyclists are frequently reported in local media with by-lines such as "Mean streets: it's bike vs. car" (Levy, 2009) and "Road wars: can cyclists and motorists get along?" (Kalinoswki, 2009). The recent high-profile incident between former Attorney-General Michael Bryant and bike courier Darcy Allan Sheppard, in which an altercation between the two resulted in Sheppard's death, appears to have fueled the fire. <sup>5</sup> Following the incident, *Toronto Star* feature writer Kidd (2009) noted: "(f)ingers have been pointed and there is anger on the streets. Car versus cyclists. Pedestrians versus cars. Cyclists versus pedestrians. We have gone tribal".

The division between cyclists, auto drivers and pedestrians as articulated by Kidd (2009) may be exaggerated – after all, car drivers and cyclists become pedestrians once they park and cyclists and pedestrians are not immune to owning or driving cars. What is increasingly evident, however, is that efforts to promote cycling as a viable mode of transportation are being politicized and challenged. In Toronto, these efforts come primarily in the form of installing cycling lanes, which usually requires the removal of lane space and parking for automobiles. This has prompted negative responses from many businesses and business improvement associations, residents and resident's associations, citizens and city councillors (see for example Coorsch, 2008; Moloney & Vincent 2009; Weese, 2009). There is also general consensus that the target identified in the *Bike Plan* of 1000 kms of bikeways by 2012 is unreachable (Thorne 2009). Albert Koehl, a Toronto-based environmental lawyer and cycling advocate, has ironically commented that cycling lanes in Toronto are being installed on average at a rate slower than the world's glaciers are melting (Koehl, 2009a).

<sup>&</sup>lt;sup>4</sup> As part of the 2009-2013 capital plan the City approved a \$70 million commitment to fund the remainder of the bike network (Thorne, 2009).

<sup>&</sup>lt;sup>5</sup> The incident that took place on September 2nd, 2009 is still under review in terms of whether Bryant will be held criminally responsible for Sheppard's death. What is known is that an altercation led to Bryant driving the wrong way down Bloor Street with Sheppard hanging on to the car door. Sheppard was killed when he made contact with a mailbox and was subsequently run over by the rear wheels of the car.

### 1.2 Research Objectives and Rationale

This thesis examines bicycle and car politics in Toronto, Canada using a case study approach. Fifteen qualitative interviews, combined with document analysis and a literature review, describe how individuals are engaged in aiding or obstructing cycling promotion efforts and how these efforts are informed by the broader influences of automobility and activating for social change. Interviews were carried out with a sample of individuals that represent diverse opinions and affiliations related to initiatives to promote cycling in Toronto: city councillors who voted against and in favour of cycling infrastructure, cycling activists, a business improvement association, a resident's association and City of Toronto staff responsible for cycling promotion and infrastructure. The information from these interviews was analyzed and used to inform discussion around the research objectives and questions.

At its broadest level this research seeks to understand how phenomena become normalized and dominant and are sustained and contested. It has the specific intention of demonstrating that ideas and related practices are not necessarily 'natural' or inevitable, but rather are a result of specific actions, historical contexts and systemic influences. It is believed that this method of understanding phenomenon allows the opportunity to challenge them, if they are perceived as problematic, in spite of their appearance as self-evident or part of the natural order.

This thesis uses bicycle and car politics in Toronto as an empirical example to explore: i) how a particular phenomena - in this case automobility- has become the dominant mode in the transportation system, occupying a central place in conceptual and physical space; and ii) how efforts to increase cycling levels are limited by, and contest, the centrality of automobility. Thus, the overarching research question for this thesis is: *How do bicycle and car politics in Toronto contribute to understandings of the ways in which phenomena become normalized and dominant and how does this affect and influence efforts to support and contest them?* 

To respond to the overarching question, three embedded questions will be discussed, which address various aspects of the primary question:

- 1) In what ways does automobility influence the perspectives of those engaged in aiding or obstructing cycling activist activities?
- 2) In what ways is the installation of cycling infrastructure politicized in Toronto? Why?

3) What strategies are cycling activists using to support increased cycling levels? Are these effective? Why or why not?

Case studies provide in-depth analyses of how "larger processes manifest themselves in localized contexts" (Hamel, 1993, p. 33) through a "multi-perspective orientation" (Snow & Trom, 2002, p. 154) insofar as they allow for the consideration of all relevant actors and voices engaged in a particular phenomenon. In order to understand the 'larger processes' at work within this case study, the empirical aspects of the research will be contextualized within the academic literature on automobility, bicycling and social movement theory.

The literature on automobility describes what Robert Unger refers to as the "formative context" of automobile-focused transportation systems – or the "basic institutional arrangements and imaginative preconceptions that circumscribe our routine practical or discursive activities and conflicts and that resist their destabilizing effects" (Unger in Rajan, 1996, p. 19). That is, the automobility literature will provide a brief historical background on how transportation systems came to be focused on the automobile and how automobility has reached its present status despite the many problems it creates. This research takes the position that it is necessary to contextualize efforts to promote cycling within an understanding of automobile-focused transportation systems - otherwise there is the danger of developing anemic strategies for change. The literature on automobility will be followed by a brief historical account of the rise and fall of the use of bicycles for transportation, current municipal efforts to increase cycling and research on the impact of broader transportation policy and other influences on bicycle use.

The literature on social movements will provide a useful framework for understanding how existing norms arise and the strategies used to challenge those norms and the value systems from which they are derived. This will include a synopsis of the academic literature on cycling activism and strategies that have been successful in reducing auto usage and increasing bicycle usage.

#### 1.3 Relevance of Research

Analyses of urban mobility and transportation are fundamentally geographic as they ask questions about how we move through space, why cities are spatially designed as they are, for what purposes and for whom (Henderson, 2009). In Toronto, the clashes between cyclists and automobile drivers are, in part, focused on physical space in terms of what transportation

modalities should be allocated room on roadways. These valuations of different modalities can been seen as socially-produced insofar as they are an expression of the cultural space that influences how people perceive and want to experience the physical environment (Furness, 2005). In this way, cyclist activist efforts could be described as "discursive and performative contestations over the meaning and function of urban space" (Furness, 2005, p. 52). This research, therefore, contributes to geographic and academic discourses on the politics of mobility and the function of urban space through an examination of cycling and car politics in Toronto.

This research will additionally contribute to the social movement literature by providing the opportunity to examine a social movement in action through a detailed interrogation of how systemic and individual perspectives intersect to produce change or maintain the status quo. There is limited academic analysis of cycling activism, especially that which takes into consideration the influences of automobility. This research, therefore, is intended to facilitate organizational learning within cycling activist organizations to enhance strategies for promoting pro-bike transportation policies in Toronto and other similar cities in North America. While other cities may have different policy frameworks, levels of citizen engagement and governance structures than Toronto, many of the challenges occurring here will likely have parallels elsewhere as North American cities share common governance, institutional and cultural paradigms (Hess, 2009). Some may contest the idea that Toronto is an applicable model for other cities given its winter climate. It will be argued that it is the conception of the climate in Toronto, rather than the limiting effects of the weather itself, which contribute to this position.

Nearly all of the research participants involved in this project – regardless of their stance on cycling – acknowledged that the level of automobile use in Toronto was problematic and untenable. While this research does not have the scope to provide a full account of the challenges of automobility the most commonly cited concerns in the literature include: air pollution, greenhouse gas emissions, safety, significant infrastructural requirements (roads), inequality of access, geopolitics (with regards to oil), impact on the urban form (sprawl) and the challenges it poses for creating sociable and livable communities (Alvord, 2000; Bohm et. al.,

<sup>&</sup>lt;sup>6</sup> A more detailed presentation of the dialectical relationship between physical and social space as it relates to automobility will be presented in the literature review on automobility.

2006; Davison, 2004; Freund & Martin, 1993; Paterson, 2007; Rajan, 1996; Seiler, 2008). Specifically related to Toronto, city-commissioned studies point to the health and safety costs of an automobile-focused transportation system. A report from the Medical Officer of Health on the burden of illness from traffic in Toronto found that air pollution from vehicular traffic leads to 6,000 hospitalizations and 440 premature deaths each year (Toronto, 2007c). There were 13,475 collisions between cars and cyclists between 1986 and 1996; 38 of these were fatal (Lucas, 1998). Between 2000 and 2005, there were 12,673 collisions between cars and pedestrians, with 189 accidents resulting in death (Toronto, 2005). Therefore, understanding why initiatives to support cycling have been hindered and politicized is necessary for understanding how these tensions may be reduced and resolved so as to produce a safer and more "bikeable" city.

While the conflicts described in this research are localized in the sense that they often focus on specific stretches of road it could be argued that they are reflective of transportation politics at large within the City of Toronto and many North American cities. This analysis of the motivations, perspectives and actions of those engaged in supporting and contesting cycling infrastructure might, therefore, also provide a useful glimpse into how sustainable transportation policies will be received in the future in Toronto.

It must be emphasized that while a goal of this thesis is to illustrate opinions from all sides of the debate, this research is decidedly and intentionally normative in its approach. Its central theme and foundation is that the challenges and problems posed by automobility cannot be ignored or addressed through technological solutions alone, and that actions to support increased bicycle use are desirable. Cycling should be seen as an activity and mode of transport that can partially address some of the urgent need to reduce the effects of sustained automobility.

### 1.4 Thesis Format

This first section has introduced the research context, provided the research objectives and questions and framed the topic's relevance regarding existing gaps in the academic literature related to bicycle and car politics in Toronto and other North American cities.

The second section provides a review of literature in areas relevant to this research: automobility, cycling and social movements. The third section details the methods used to

undertake this research. This includes a rationale for using a case study approach and the specific methodologies used to gather data, strategies for participant identification and recruitment, methods of data analysis, validity and rigour in the research process and the researcher's positionality in relation to the research topic and participants.

The fourth section provides the results of the research. It is organized according to the three embedded research questions and discusses the findings in regards to the literature presented in the second section. Section five will provide an overall conclusion through responding to the overarching research question and will also identify limitations of the study and areas for future research.

### Chapter 2 - Literature Review

#### 2.1 Introduction

The objectives of this project situate this research at the intersection of a diverse set of literature. Material on automobility begins with a brief historical account of the rise of automobile usage in Toronto, followed by a presentation of perspectives on why this rise took place. Understanding the formative context of automobility, and the decline of cycling, will shed light on how a variety of trajectories came together to comprise and create today's transportation system where automobile use is the norm. This literature will serve an analytic function in terms of understanding the perspectives of the individuals interviewed for this research. It also serves a normative function insofar as it demonstrates that, as decisions were made at both the individual and systemic level that facilitated the growth of the automobile, decisions can also be made to facilitate alternative modes.

The social movement literature begins with a broad synopsis of what are referred to as the 'European' and 'American' bodies of theory within the discipline. The European trajectory, through an analysis of social, economic and political conditions, has focused largely on why certain types of movements occur at different points in history. The American trajectory has examined the movements themselves to understand how they operate (Melucci in Klandermans, 1997). The decision to employ these two approaches is directly linked to the critique stated at the beginning of this thesis - that research on cycling is rarely contextualized within a system of automobility. Understanding why initiatives to promote cycling fail or succeed is impossible unless we are aware of the types of societies in which they occur and what the broader structural influences are that influence the perspectives of engaged stakeholders (Weinstein, 2005). Once this background is articulated, analyses of specific strategies or actions have the potential to be more complete and fruitful. As Kebede (2005) notes, this allows for a dialectical conversation between the movement itself and the cultural, political and economic context in which it is situated. Combining both European and American traditions also responds to the shift within the social movement discipline to overcome potential polarizations between approaches while recognizing the value both perspectives bring to understanding social movements and how social change occurs (Buechler, 2000; Jordan et. al., 2002; Della Porta & Diani, 2006).

### 2.2 Automobility and Cycling

# 2.2.1 The Rise and Institutionalization of the Private Automobile in Toronto, Canada

The last years of World War I and the years following represent the beginning of the boom of car ownership in Canada. In Ontario in 1904, there were 535 registered automobiles, by 1930 there were 490,906 (Davies, 1989). In 1914 in Toronto, a traffic survey at Dundas and Bloor intersection counted 349 automobiles and 248 horse drawn carriages. By 1925, a survey at the same intersection counted 7,943 automobiles and 15 horse-drawn carriages – nearly a 440% increase in the number of automobiles (Toronto in Davies, 1989).

Growing automobile congestion, combined with the effects of industrialization and urbanization, have been pointed to as causal influences in the birth of urban planning and traffic engineering disciplines (Davies, 1989; Hess, 2009). Cities were perceived as dirty and unhealthy (Hess, 2009) and there were new challenges associated with how to move and park automobiles (Davies, 1989). Planning and traffic engineering developed as a means to manage the physical environment of urban areas in order to "improve economic efficiency and to create orderly and healthy people and places" (Hess, 2009, p.5).

Attempts to accommodate the increased number of automobiles led to changes that significantly altered the urban form in Toronto. In 1925, the Toronto and York Road Commission stated that: "the constant dwindling, almost to the vanishing point, of horse-drawn traffic on the main roads, (points) to the conclusion that the main roads of the future must be designed primarily for motor traffic" (Toronto in Davies, 1989, p. 124). Toronto's chief constable made specific recommendations to input 'mechanical automatic controls,' which were installed at 71 intersections in 1928 (Davies, 1989). He also noted that as "our present streets were not laid out with any idea of the amount of traffic they would be called upon to carry" that revisions were needed to alter their patterns and that a primary need for the city was to develop appropriate road infrastructure for vehicular traffic (*ibid.*, p. 127).

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 $<sup>^{7}</sup>$  In 2008 there were 7.1 million cars registered in Ontario (Statistics Canada, 2009).

The professional consensus on street planning at the time was based on Clarence Perry's neighbourhood unit model which saw quiet residential streets organized for local use and larger arterial roads designed to move vehicular traffic (Johnson, 2002). This conception significantly altered the "social role of streets" as large streets were no longer a locus for business and social activity but became "increasingly seen as inappropriate places for almost all activities other than moving motorized traffic" (Hess, 2009, p. 6). Hess (2009) also argues that the legacy of these concepts and models expanded and became institutionalized in codes, regulations and professional practice and continue to exist in street planning in Toronto today. While many planners and urban designers have altered their perceptions to see these spaces as a "place for walking, shopping and socializing" their ideas compete with "institutional practices (that) continue to build streets much as they always have" (*ibid.* p. 1).

An intention of Hess' work is to shed light on the fact that despite progressive street building intentions on the part of the City of Toronto – as evidenced through policy documents such as the *City of Toronto Official Plan* (Toronto, 2001b) that identifies arterials as sites for revitalization and social activity – there exists "a structure of responsibilities and funding where long-standing institutionalized professional concerns continue to operate without much modification even in the face of new policies" (p.19). In their analysis of Toronto streetbuilding practices, Hess & Milroy (2006) note that the vision of reduced car use and an increase in transit and active modes of transportation are "almost a 180-degree turn around from what was championed and built last century" (p. 16). Implementing these high-level policies is further complicated by a lack of clear direction on how to translate policy visions into operational realities (*ibid.*).

Changing existing automobile-focused roadways to accommodate alternative modes is clearly challenging within this context. Opportunities for altering roadways typically occur when they are being resurfaced or rebuilt as part of ongoing maintenance or during new development. These opportunities are crucial for those interested in altering existing street patterns as it may be a full generation before the opportunity arises to redesign the purpose of the street (Giambrone, 2009; Heaps, 2009b; Hess, 2009). These maintenance operations are routine procedures unless substantial modifications are introduced - such as changing widths or lane configurations - which typically requires significant negotiation between different city departments and involvement from City Council, the affected community and other stakeholders (Hess, 2009). A specific event

or 'champion' is often required to spearhead the process as negotiations can become politicized, polarized and long-term in nature with no guarantee of success (*ibid.*).

A supportive institutional climate and professional code of conduct and practice is of key importance for creating streets that accommodate modes of transportation other than the automobile. Equally important is how institutional climates and professional practices become altered to support new paradigms and a recognition that paradigms do or can, in fact, change. As some institutional theorists note, institutional change can be hindered by the cultural and institutional frameworks that structure thought and action (Hess, 2009). Individual actors are seen by some as having agency through their ability to alter the frameworks themselves through everyday practice and actions (Healey, 2003; Streeck & Thelen, 2005). Healey (2007), clearly argues that more significant changes are likely when culturally embedded practices, professional discourses and access to power and resources by different groups are also modified. This is not to suggest this is an easy undertaking – as Harvey (1985) states when discussing the role of ideology in planning, "...the necessary knowledge for appropriate intervention and the necessary ideology to justify and legitimate action, has altered with changing circumstances. But ideology and circumstance do not change overnight" (p. 188).

### 2.2.2 Why the Automobile Became Dominant

There are divergent perspectives on how the automobile came to hold its position of primacy within North American transportation systems. At the extreme ends are those that describe the automobile's ascendancy as a natural extension of human freedom and autonomy and a consequent selection of travel mode choice by individuals – and those that argue its ascendancy was less an agglomeration of individual interests and needs to be contextualized and historicized within capitalist and libertarian ideologies with specific and deliberate actions taken by powerful state, corporate and individual interests to facilitate its growth. Additional perspectives exist that imbricate various aspects of the positions described above, to provide less extreme narratives or focus on other aspects, such as the success of autos due to their specific technological make-up. These perspectives are described below.

The most pervasive theme running through the 'pro-car' literature is that automobility compliments autonomy and restricting its use challenges individual rights of liberty and freedom. From this perspective, the automobile is seen as enabling individuals to have the capacity to

mobilize themselves with the intention of realizing their own valued ends more efficiently (Lomasky, 1997). Specifically, driving automobiles is identified as empowering as it enables an individual to have greater choice related to their personal mobility than if they didn't own a car (Dunn, 1998). The automobile is defended in terms of "its normative status as an (if not *the*) embodiment of human autonomy" (Paterson, 2007, p. 62). In this narrative, conceptions of 'the individual' are seen as pre-social and pre-discursive and represent a desired ethic (*ibid.*). A key argument within this perspective is that while automobility was supported to some extent by public investment, it is essentially the product of individual choice to buy cars and drive them (Dunn, 1998). Because the automobile is "the most popular means of personal mobility ever created" it is both politically unpalatable and undemocratic to restrict its use (*ibid.*, p. 3).

Those on the other extreme of the debate contest the notion that automobility achieved dominance as a "'natural' extension of the human urge for freedom and the connection of that freedom to movement" (Paterson, 2007, p. 29). It is argued that rather than being the "product of unmediated desire" (Rajan, 1996 p. 85) automobility has become hegemonic because of its ability to reproduce capitalist society – its *political economy* – and its ability to mobilize people as specific sorts of subjects – its *cultural politics*" (Paterson, 2007, p. 30). <sup>9</sup>

Regarding its political economy, there are a variety of ways in which the relationship between automobility and capitalism is articulated. First, transportation systems are seen as being related

<sup>&</sup>lt;sup>8</sup> Seiler quotes the sociologist Sidney Aronson in noting that the bicycle did "the dirty work for its mechanical successor" (p. 63) in terms of giving expression to a new, and individual, type of mobility. Thus, it should be noted that while this research seeks to crtitique the individual nature of automobile use it does so with an eye to the harmful and collective externalities produced by the auto through individual action as opposed to the idea of individual mobility itself.

The separation of 'political economy' and 'cultural politics' as made by Paterson will be used throughout this paper primarily for the purposes of exposition. This separation is not intended to be insensitive to the current debates (see for example Castree, 2004; Harvey, 2006; Jones, 2008; Ribera-Fumaz, 2009 and Sayer, 2001) surrounding the role of political economy approaches since the advent of 'the cultural turn' in the 1980s/1990s, which sought to address economic reductionism's dismissal of culture. While not intending to contribute to the on-going debate per se, this work specifically recognizes the interrelationship between culture and economy and thus could be described as using a 'cultural political economy' lens. As Ribera-Fumaz (2009) notes, this perspective "attempts to take seriously the importance of cultural processes, as the postmodern turn has provocatively highlighted, but that understands them to be closely linked to material political economy processes" (p. 13). Sayer (2001) notes that this makes for a somewhat fuzzy distinction as it is not about two externally related phenomena but rather the difference between two things that are related. He states, however, that "fuzzy distinctions, like that between the front of your head and the back of your head (where would you draw the line?) can be clear enough to be useful and even indispensable" (p. 690).

to economic growth insofar as the freedom of movement – whether financial capital, goods, and/or individuals as consumers or labour – is an essential underpinning of capitalist organization and automobility is seen to facilitate and reduce the cost of the circulation of capital (Freund & Martin, 1993). Second, the development of mass production techniques by Ford Motor Company fundamentally altered production and consumption regimes, resulting in what Harvey (1993) has termed "time-space compression" to describe the increase in product output per available time and space. In other words, speed is related to the notion that time is a scarce commodity and that it is desirable to transcend time and space, creating increased productivity (Freund & Martin, 1993). Finally, automobiles and the systems required to support them are big business and provide markets for the expansion of capitalism itself (Paterson, 2007). While these links to capitalism do not pre-determine automobility's rise, they indicate the extent to which it has been central and successful in re-producing capitalist modes of organization. As discussed further in the results section, the political economy of automobility is central to this research project – easing congestion is recognized as an economic concern, the removal of parking spots to install bike lanes is a contentious issue with businesses owners concerned about lost revenue and some cycling advocacy efforts have focused on making a business case for cycling.

Among those contesting the 'natural' rise of automobility, the state is seen as playing an integral role in its promotion through investment in road building, hidden subsidies relative to the automobile's competitors and neglect of other means of transport (Rajan, 1996). Paterson (2007) argues that given the role of the state in promoting accumulation it is not surprising given that once the technologies of the automobile were seen as able to accelerate accumulation, cars and their infrastructure were supported both directly and indirectly. Due to the "fixed" and long-term nature of investment in transportation infrastructure, the task of road building has largely been taken over by the state to create "a whole physical landscape for the purposes of production, circulation, exchange and consumption" (Harvey, 1985, p. 96). Whereas the transportation system in North America in the late 19<sup>th</sup> century was comprised of trains, horses, electric streetcars and bicycles, by the 1920s road building for the automobile had become the

<sup>&</sup>lt;sup>10</sup> Rajan (1996) notes that this line of argument is not to suggest that states act *only* in the interests of capital but does suggest a state that has developed policies to sustain an industry that is seen to accelerate capitalist ideologies.

largest government expenditure (Alvord, 2000). In addition to the actual physical infrastructure, governments indirectly supported automobility through state expenditure for the acquisition of land on which to build roads, the policing of roads and the development of a system of rules, regulation and licensing to manage automobility (Freud & Martin, 133). Regarding neglect of other means of transport, the *Bike Plan* (Toronto, 2001a) gives a good indication of the perceived importance of infrastructure for automobiles as compared to bicycles – it notes that while bicycles are recognized as vehicles under the Highway Traffic Act, and as such, should be "afforded the same consideration as motor vehicles on the City's street system" (p. 4-1), there has not been "an on-going City commitment to fund cycling programs and infrastructure improvements, similar to the way that Toronto funds capital road projects" (p. ES-2). <sup>11</sup>

Authors within this perspective assert that the political economy of automobility is necessarily related to its cultural politics. Paterson (2007) asks us to question how positive value has "been affixed to precisely those objects and practices which produce widespread environmental and social damage" (p. 15). Bohm et. al. (2006) ask similar questions in their work which queries how automobility has been sustained in spite of it being an "impossible" way to manage mass transit given the resulting congestion, environmental impact, oil dependency and high levels of accidents (p. 9). Seiler (2008) argues that for the emergence of a car culture to take place, it was necessary to create individual subjectivities that place a positive value on both mobility and automobility and that this has been achieved through the use of pro-car symbols, images and discourse in media and advertising as well as an "apparatus" of legal, technical, medical, cultural, economic, political, ethical and architectural/spatial elements that work to normalize automobiles (p.62). Others state that media and advertising have elevated the automobile from a mere means of transportation to a commodity that is "wholly imbued with feelings and desires that raise it to the level of a cultural symbol" (Sachs, 1992, p. 25) resulting in the association of cars with status, progress, sexual prowess, success and identity (Seiler, 2008). <sup>12</sup>

As previously noted, the 2009-2013 capital budget for the City was approved with a \$70 million investment to complete the bike network as described in the Bike Plan. The expenditure for the maintenance of roads is \$836.68 million. This does not include major renovations or new projects (Toronto, 2008a).

For further written and pictorial accounts of advertising and media campaigns to promote the automobile please see Paterson (2007) and Seiler (2008).

Other, more moderate narratives, tend to imbricate aspects of both perspectives above, describing the rise of automobile usage and ownership as a combination of individual choice married to specific historical circumstances, technological innovation and the rapid expansion of consumer credit. As Davison (2004) describes, both World Wars placed drastic limitations on people's mobility – fuel was rationed and public transit was overburdened and at a peak. Tickets were scarce, transit was crowded and uncomfortable and transit owners perceived as unscrupulous and monopolistic. By the end of WWII there was demand for a radical re-making, rather than restoration, of the preceding decades. Alvord (2000) points to concurrent technological advances in electric and internal combustion engines and the discovery and development of oil in Texas, which allowed for automobile expansion. Stimulation of the postwar economy and the advent and rapid expansion of consumer credit coupled with the decreasing costs of automobiles and rising wages to increase car ownership (ibid.). Urry (2004) argues that the development of the system of automobility led to the creation of subjectivities that favour automobility – or that the restructuring of "time and space" through the development of highways, suburbanization and malls necessitates car ownership (p. 26). He notes that cars have become dominant because they are flexible and allow drivers to individually travel where they please while they are concurrently coercive due to the restructuring of space which forces people to be mobile in a specific way. In this way automobility can be seen as "a system that coerces people into intense flexibility" (p. 28).

### 2.2.3 The Rise and Fall (and Rise?) of the Bicycle

When the bicycle was introduced as a mode of transportation in North America it was initially received with enthusiasm but soon became the object of various detractors. According to Alvord (2000) there were around four million bicycles on the continent in 1896. They were initially so popular that the were accused of diverting money away from other industries: shoe-makers complained that noone walked anymore, saloon-keepers complained that noone drank anymore and the consumption of cigars dropped by about 700 million a year during the bicycle's peak. This identification of the bicycle as a scapegoat caused Bicycle World to write in 1889: "Nowadays if there's an elopement, a stagnation in the peanut market, a glut in smoking tobacco or a small attendance in the theatres, everyone who is a loser points to the bicycle and says, "You did it" (quoted in Alvord, 2000, p. 26).

The bicycle was seen as a threat to trains, trams and trolleys and some even sued to stop its spread. The construction of a nine kilometer elevated cycleway from Pasadena to downtown Los Angeles was cancelled due to intense lobbying by the Southern Pacific Railroad which feared lost fares. Inadvertently, cyclists may have also contributed to their own eventual marginalization as they were the initial lobby group to advocate for improvements to the roadway – this improved conditions for the car and, it is argued, effectively pushed cyclists from the road.

Corporate interests also impacted the bicycle. Albert Pope, a bicycle manufacturer, joined forces with John D Rockefeller in 1899 to establish the American Bicycle Company, creating the largest bicycle company in North America. A bicycle price war saw prices fall from around \$125 to \$16, leading to a glut in the market, causing the company to go into receivership. Due to its monopolistic control of the retail market, one significant outfall was the closure of 400 small bicycle-related businesses that fed into the company's supply chain. Larger surviving manufacturers began concentrating on building cars and motorcycles and materials for the first World War. Bicycles soon became seen as children's toys and of little interest to individuals or large corporate interests.

In her analysis of the installation of bike lanes in Toronto, Neumann (2008) provides a history of bicycle planning in the city. In Toronto, cycling did not regain popularity until the 1970s and arose due to concerns about the environmental and social impacts of the automobile. City planning for the bicycle recurred in 1972 due to increasing levels of ridership and a resulting concern over the safety of cyclists. A bike plan was developed that sought to install 124 kilometers of mainly off-road cycling paths and by 1982, 84 kilometers were in place. That year, the Metropolitan Commissioner of Roads and Traffic recommended that the bike plan be terminated citing concerns over installing lanes in environmentally sensitive areas and opposition by railroads to having lanes near their tracks. Continued concerns over safety brought cycling back onto the agenda and by 1998 the City of Toronto had installed an additional 35 kilometers of on-street lanes.

Following the amalgamation of the city in 1998, staff from the downtown core developed the current *Bike Plan*, which was adopted by City Council in the summer of 2001 (Toronto, 2001a). The intention was to complement the *City of Toronto's Official Plan*, which identified the goal of

reducing automobile dependence through an increase in active and public transportation (Toronto, 2001b). The main challenges cited in the *Bike Plan* towards creating a bikeable city include the historical institutionalization of automobiles in transportation planning and funding and making space for bicycles given existing auto-focused infrastructure (Toronto, 2001a). However, as Neumann (2008) notes "a reduction in vehicle level of service was not considered an acceptable trade-off in the selection of bike routes" (p. 13) and the accompanying bike lane network was designed to create as little impact on car traffic as possible. She further states that this is in direct contradiction of both the *Official Plan* and *The Bike Plan* itself as if a reduction in auto use was desired then "impacts on car drivers should be treated as a positive outcome, since they can act as a disincentive to driving" (*ibid.*).

Neumann's analysis provides numerous recommendations for realizing the *The Bike Plan's* goal of installing 1000 kilometers of bike lanes by 2012: i) reinforcing the consideration of bike lanes as a city-wide manner rather than on a ward-by-ward basis; ii) increasing funding and hiring new staff devoted specifically to bicycling; iii) improving institutional coordination by integrating cycling into the broader transportation planning structure; and iv) improving public consultation and increasing cyclists' involvement in the planning process. Neumann's thorough analysis concludes that "bike lane planning and building in Toronto has revealed (that) political and structural challenges to building bike lanes have a close relationship. Structures, such as the bike lane approval process and the ward-based system of governance, affect how politics influence the decision-making process. Politics also influence the formation and maintenance of those structures, whether they involve governance, funding allocation or other aspects of bike lane building" (p. 44).

### 2.2.4 Key Messages and Discussion

While there are divergent narratives describing the ascendance of the automobile, what is clear is that it has become central in North American transportation systems. Practical and ideological factors wove together in such a way that automobile use became habitual for many – and sometimes necessary – given changes to the built environment that favour automobiles and marginalize other modes. Concurrently, bicycle ridership decreased and cities were not designed to support their use. Because of this it can be hard to imagine our cities organized differently. A dialectical relationship exists between physical and cultural space in which ideology influences

the built form as the built form concurrently influences ideology. In other words, preference (whether individual or systemic) for the automobile enabled the construction of auto-focused physical infrastructure; likewise, auto-focused physical infrastructure now limits the conceptual space for normalizing other types of modalities, such as the bicycle.

Despite its current ubiquitousness, the ascendance and normalization of automobility has not been totalizing. Although automobiles and the system to support it have become the dominant mode of transportation, it has been a contested technology since its invention. Anti-auto activist efforts in the early 20th century were primarily associated with the automobile's "danger, noise and dirt, and (the threat) to established modes of urban life" (Paterson, 2007, p.33). <sup>13</sup> These early efforts were largely swept aside as the popularity of the automobile increased (ibid.). A second period of contestation arose in the 1960s and 70s – which could be said to be continuing today – and is comprised of many of the same concerns, in addition to the automobile's impact on the environment, unequal access and the need for securing access to foreign oil (see, for example, Jacobs, 1961; Mumford, 1963; Nader, 1965). The Toronto City Cycling Committee, comprised of activists, city councillors and volunteers, was established in 1975 as a response to "increasing public awareness of the environmental and social impacts associated with automobile use, urban sprawl and the need for change" (City of Toronto, 2001a, p. 2-1). These efforts are working to challenge the centrality of automobiles and/or work to show the viability of other options. And as the historical background shows, cars have not always been central. Changes were made to accommodate them and they can again be made to accommodate other, more sustainable modes.

Neumann's thorough analysis of the efficacy of the process for bike lane installation in Toronto is informative for understanding the inner workings of the procedures and challenges involved in getting bike lanes approved. However, while it identifies politics as a major influence in the process it does not incorporate or analyze in detail how broader ideas influence the politics. Likewise, the word 'structures' is used in a thin sense insofar as it refers to the processes and

These concerns became present in popular culture. Following is a widely quoted passage from Toad in Kenneth Grahame's *The Wind in the Willows*: "It is the motor car that overturns innocent stability, the golden age; aboard a car Toad becomes 'the terror, the traffic-quellar, before whom all must give way or be smitten into nothingness and everlasting night" (Patereson, 2007, 33: quoting from Grahame, 1908).

organization of this specific political process as opposed to the influence of systemic social and economic structures. This observation will be seen again in the literature on social movements, where analyses of political processes and how they influence change have been criticized for failing to take into account larger systemic ideas. These critiques are not intended to discount Neumann's findings but rather seek to add to her work by suggesting there is another 'layer' in understanding cycling politics in Toronto.

### 2.3 Social Movements and Cycling

The literature on social movements is extensive and composed of diverse theories for understanding how and why social change occurs and the role of social movements in facilitating that change (Noble, 2000). Sidney Tarrow provides a definition of social movements that is useful and relevant to this research project. He states they are "collective challenges by people with common purposes and solidarity in sustaining interaction with elites, opponents and authorities" (Tarrow in Klandermans, 1997, p. 2). Tarrow additionally identifies four key aspects of social movements: i) that they challenge authorities, other groups and cultural codes; ii) that they possess common or similar claims; iii) they are rooted in feelings of solidarity or collective identity; and iv) that they become a social movement through sustained action (*ibid.*).

Della Porta and Diani (2006) flush out this definition by identifying social movements as arising due to the co-existence of contrasting value systems. While every person is born or received into a community with established – and often stable and durable – beliefs, changes do occur. As traditional norms no longer satisfy current conditions or structures of behaviour, new ideas are generated that challenge the normative basis of the existing social order. Social movements, therefore, are necessarily accompanied by new rules and norms and are attempts to alter existing norms. Della Porta and Diani note this can sometimes lend a utopian dimension to social movements as participants bring forward perspectives that the dominant culture may exclude at the outset or deem unrealistic.

### 2.3.1 American and European Schools of Thought

Historically, social movements have been categorized into two clusters for the purposes of exposition – the 'American' tradition and the 'European' tradition. <sup>14</sup> Crossley (2002) identifies the European trajectory as rooted in the "Marxist/Hegelian tradition of the philosophy of history" (p. 10) while the American trajectory has "adopted a more scientific and, to a degree, empiricist frame" (*ibid*.). Otherwise stated, the European debates tend to focus on the type and character of movements that occur in different types of societies from a historical vantage point - the *why* of social movements - while the American tradition is more explicit in describing the movements themselves and what conditions facilitate and inhibit their development - the *how* of social movements (Barry et. al., 2006).

### 2.3.2 New Social Movements – Addressing the 'Why' Question

The main focus of the literature from the European tradition is centered around what are referred to as 'new social movements'. Theories on new social movements emerged as a response to the perceived inadequacies of classical Marxism to understand non-class and labour based movements in the 1960s such as environmentalism, the peace movement and animal rights (Della Porta & Diani, 2006). Touraine (1980), a leading new social movement theorist, argues that post-industrial society has created a setting for a new culture and a field for new social movements that are not directly related to class-based politics. Rather than identifying the sphere of production as the sole locus of revolution, new social movement theorists have looked to additional logics of action based in culture, ideology and politics (Melucci, 1985). Networks and identity formation are seen as central insofar as contemporary individuals are seen to exist in a splintered society that cannot be delineated along class lines alone (*ibid.*). Through the development of extensive cultural ideologies, new social movements place significant focus on personal and social values and lifestyle (*ibid.*).

Jordan et. al. (2002) also identify a third cluster – which is more recent and diffuse – and includes studies in the fields of feminist theory, anarchist studies, sexuality studies, queer studies, post-colonial theory and parts of race and ethnicity studies. This includes authors such as Donna Haraway, Nancy Fraser and Stuart Hall.

As Crossley (2002) notes, the use of the word 'new' in new social movements is "rapidly approaching its sell-by date" (pg. 149) given that this way of analyzing movements has its genesis in the 1960s.

As noted in Footnote 9, this research takes on board the exhortation by academics to incorporate both cultural and economic perspectives - and the relationship between them - within frames of analysis in the social sciences. Thus, the choice to use literature on new social movements as a framework for this research may seem an odd choice given its heavy cultural, as opposed to material, character. However, it is argued that new social movement theorizing still provides a useful lens for this research. Through the notion that existing ways of explaining social mobilization (i.e. classical Marxism) were not adequate to understand protests of the 1960s, new social movement theorizing began asking bigger questions about how different social eras produce different types of movements (Jordan et. al, 2002). By stepping back from the inner workings of the movements themselves, and their immediate interaction with the political process, new social movement theorists were seeking to identify their problems and issues with the general economic, social and political trends of society, thus reconnecting "movement analysis with a broader focus on order, change and structure" (Crossley, 2002, p. 152). Being cognizant of the historical context in which social movements and change occur allows for the recognition that social forces, ideas and practices vary across time and space (Jordan et. al., 2002). It also allows the opportunity to draw out the normative significance of the movement participants' challenge as it can be more readily compared to existing norms or the status quo (Habermas in Crossey, 2002).

### 2.3.3 Political Process Approach – Addressing the 'How' Question

Within the American debates, there has been less of a concern to situate social movements within a historical or overall structural context, and more focus has been given to the specific conditions that enable or inhibit the development of movements themselves (Crossey, 2002). The dominant model that has emerged is what is referred to as the 'political process approach' (Goodwin & Jasper, 2004; Morris, 2004). In this model, the focus is on the relationship between the institutional and political environment and the social movement (Della Porta & Diani, 2006), what facilitates and constrains political activity (Crossey, 2002) and how movement leaders influence the political process and opinion in observable and tangible ways (Barry et. al., 2006).

The main formulators of this model – McAdam, Tarrow and Tilly - have identified three basic theoretical components which account for a movement's origin, the power generated by the movement, the emerging cultural content of movements and the outcome of the movement: i)

mobilizing structures; ii) the political opportunity structure; and iii) cultural framing (Buechler, 2000).

Mobilizing structures refer to "those collective vehicles, informal as well as formal, through which people mobilize and engage in collective action" (McAdams in Morris, 2004, p. 234). These structures can include informal networks, existing institutional structures and formal organizations. Engaged actors are organized to recruit additional members, acquire resources and coordinate action (Morris, 2004).

The political opportunity structure "refers to the consistent but not necessarily formal or permanent dimension of the political environment that provides incentives for people to undertake collective action by affecting their expectations for success or failure" (Tarrow in Morris, 2004, p. 235). This perspective argues that movements are likely to occur only when favourable conditions exist or emerge within the political system. These could be a result of division among political elites, an alliance between new external allies or when new space opens up in the political system (*ibid.*).

Cultural framing is the least developed aspect of the political process approach. While it was slow to develop, political process theorists are increasingly recognizing that cultural dynamics are significant and they see "ideas, belief systems, rituals, oratory, emotions and grievances as central" in social movements (Morris, 2004, p. 235).

While the political process approach is the dominant model within the American cluster – or perhaps because of this - it has numerous critics. First, and as already stated as a concern of this research, this perspective fails to acknowledge and identify underlying structural patterns within society and why different movements emerge as they do (Flacks, 2002). In the political process literature, while structures are referred to in terms of political and mobilizing structures, these are generally considered thin conceptions that fail to connect with broader conceptions of the structures of society at large (Goodwin & Jasper, 2004). Second, this approach often has a significant focus on the state. This can be problematic as the state is often conceptualized as a unified actor rather than a dynamic institution infused with divergent opinions, perspectives and intentions (Goodwin & Jasper, 2004). A state-focus can also be analytically limiting as there are many audiences for the actions and words of activists (*ibid.*). Related to this is a third critique, which is that there can be a tendency towards "political reductionism" in this line of analysis

(Melucci in Della Porta and Diani, 2006, p. 10) resulting in a failure to acknowledge that the political arena is only one site where movements are fought (i.e.the media) (Crossey, 2002).

Finally, although there has been an attempt to incorporate cultural understandings within the political process approach, critics argue that the articulation of culture is subsumed within the political process and takes a back-seat to the centrality of the political and mobilizing structures in analysis (Morris, 2004). Goodwin & Jasper (2004) argue that this is due to a long-standing division within the field between a dominant structural approach that emphasizes political structures, formal organizations and social networks <sup>16</sup> and the constructionist tradition which focuses on frames, meanings, identities and emotions. This had led to a substantial debate around the distinction between the 'political' and the 'cultural' and how they are manifested in activism and social movements.

To address this division, Buechler (2000) suggests that it is unnecessary to dichotomize movements into either camp and proposes that we recognize movements as containing both political and cultural elements.<sup>17</sup> In order to demonstrate their interrelationship he provides two definitions of 'the political' – 'state politics' and 'social politics'. State politics refer to conventional power struggles where activists seek to influence state policy and leaders. Social politics refers to action focused on challenging power relations inscribed in social institutions and cultural practices, including the actions of everyday life. As compared to the first conception where power is centralized, in the latter, power is diffuse and decentralized and requires a different suite of tactics for facilitating change. However, it is important to note that culture affects state politics while political norms and processes also influence cultural or social politics.

### 2.3.4 Cycling Activism

As noted, there is a dearth of literature on cycling activism and how to address the challenges inherent in implementing strategies for increasing cycling in a transportation system designed for

While the convention within the discipline to refer to this as the "structural" approach it has already been noted that this is a thin conception of structure and does not refer to broad economic, social and political structures of society.

<sup>&</sup>lt;sup>17</sup> Buechler (2000) incorporates the 'economic' element in his definition of state politics insofar as he identifies the contemporary state as an institution with a central role in facilitating and reproducing a capitalist economy.

the car. As Neumann (2008) notes, this is surprising given the struggles that cities face in reaching satisfactory compromises between providing for cyclists and car drivers. Professional bike manuals tend to sidestep structural and political issues and instead focus on technical specifications such as appropriate lane widths and markings and supportive programs such as education, promotion and enforcement (*ibid.*).

The following sections will provide a presentation of existing literature in terms of discussing both *why* cyclists advocate (larger systemic economic, political and social trends) as well as *how* they go about doing so (specific strategies). It will be evident that there is not a clean bifurcation between these two aspects as strategies are necessarily embedded within larger systemic processes and, therefore, reflect those influences. Additionally, as the volume of literature on social movements is vast while that on cycling activism is not, the following sections will not address all of the perspectives raised in the literature on social movements. Linkages back to the social movement literature will be made more thoroughly and explicitly in the results and conclusion sections, where the findings from this research are presented.

### 2.3.4.1 Why Cycling Advocacy?

Tarrow's definition of a social movement provided at the beginning of this section indicated that participants must possess common or similar claims in order to be considered part of the same movement. However, between cycling advocacy individuals and organizations there is some divergence in why individuals choose to participate and what they hope to achieve through their actions.

Some see cycling simply as an effective form of transportation – an efficient and convenient way to get from A to B - and they are interested in generally improving conditions for safe cycling (Furness, 2005). At the other end of the spectrum – and there are many gradients in between – promoting cycling is additionally a consciousness raiser about broader issues such as equality, democracy, capitalism and environmental justice (Mapes, 2009). Some cycling activists are

Note that there is no specific empirical evidence to substantiate these claims – Horton et. al. (2007) note that

while there have been some studies to understand why individuals choose not to cycle and what might encourage them to do so – there is limited analysis of existing cyclists. This information, therefore, is taken from Furness's (2005) PhD dissertation on cycling advocacy and cycling politics and is corroborated by the researcher's own participation in cycling advocacy, reading cycling blogs and cycling publications and from talking to other cyclists.

interested in promoting a different type of society, with bicycles as the material centerpiece - "to make the bicycle stand for something, to communicate messages through technology" (Furness, 2005, p. 60). In the same vein, Rosen (2008) states that "cyclists argue there are particular technologies that are part of a broader vision of democracy and social change, such as the bicycle, and there are other technologies that hinder the capacity for progressive change, such as nuclear power and/or the automobile" (p. 4). Furness further argues that activist's actions are contestations over the function and meaning of urban space and intuitively engage in Henri Lefebvre's notion of the 'right to the city' which is "the right to participate in urbanity, the right to appropriate the city not merely as an economic unit, but as a home and an expression of lived experience" (Lefebvre in Furness, 2005, p. 52).

These latter reasons for cycling activism can be seen as a direct response to our current social and economic context insofar as activists are explicitly stating their desire to challenge the status quo and suggest alternatives for "remaking city life on a humane and ecological basis" (Carlsson, 1995). These challenges are sometimes articulated as direct responses to automobility and car culture itself but also are characterized as part of a vision for broader societal change (Furness, 2005). However, not all cyclists are explicitly political and some activists and organizations intentionally, and perhaps unintentionally, do not actively politicize the bicycle (or the automobile) as a technology (*ibid.*). There are those that suggest, however, that an everyday decision like riding a bicycle or driving a car is never apolitical, because these acts are always embedded within larger societal ideas, systems and influences (Paterson, 2007).

#### 2.3.4.2 Cycling Advocacy Strategies – Addressing the 'How' Question

While they are limited in number, there are some examples of academic research which seek to understand how efforts to promote bicycle use have been impacted or influenced by automobility. Pucher et. al.'s (1999) examination of cycling in six cities in North America notes that cycling is currently impeded by a lack of tradition of bicycling and the presence of legal, cultural and infrastructural systems that favour automobility. In terms of policy development that favours automobiles over bicycles, Pucher & Buehler's (2005) examination of cities in Canada, the United States and Europe indicate that land-use and transport policy differences are

crucial for explaining different levels of ridership. <sup>19</sup> Specifically, they identify the biggest obstacle for increasing cycling in North America as the "political infeasibility of using any of the really effective policy 'sticks' that deter car use in Europe" (p. 278) such as raising gasoline prices, creating car free centres and comprehensive traffic calming in residential neighbourhoods.

Pucher et. al (1999) note that most interventions in North America have focused on non-conflict measures that do not directly challenge the centrality of automobiles, but rather try to increase levels of cycling within an automobile focused system. They contrast this approach with European cities that have high levels of cycling, and find that these cities have implemented policies that sharply restrict car use in favour of cycling and walking. Likewise, Rietveld and Daniel (2004) found in their analysis of the impact of municipal policies related to cycling and automobility in the Netherlands, that the most effective policies have been those that increase the competitiveness of the bicycle against the car by making driving expensive and inconvenient.

In his presentation at the 2009 Bike Summit in Toronto on Vauban, Germany, Buehler (2009) pointed to a multitude of municipal measures that have resulted in bicycle ridership levels of nearly 70%: i) the reversal of government policies to subsidize road building beyond what is collected in taxes; ii) city planning that places people close to their employment; iii) the expansion of transit which additionally links to bicycle infrastructure, installation of cycling infrastructure; iv) the creation of 177 zones where cars are able to travel only 7 kms/hour; v) high gasoline prices; and vi) true cost parking prices (individuals pay \$40,000 per spot). He noted that a major key to success was that policies were introduced incrementally over 30 years, allowing people to adapt to change while providing the opportunity to see what was, or was not, effective. In a follow-up question period, Buehler also noted that he felt there was value in starting with "the low hanging fruit" as smaller initiatives are those that gradually change

<sup>&</sup>lt;sup>19</sup> Using 2001 Census data, Pucher & Buehler (2005) found that overall bike share of work trips in Canada is three times higher than the U.S. (1.2 vs. 0.4%). This is in comparison to Western Europe where the bike share of travel averages about 5-10% of urban trips and reaches highs of 20% in Denmark and 32% in the Netherlands (Pucher and Dijkstra in Pucher and Buehler, 2005).

Individuals in Toronto also typically pay for parking if they purchase an apartment or a condominium and the cost is comparable. However, given the supportive infrastructure for alternative methods of travel in Vauban, paying \$40,000 for a parking spot is extravagant given that the automobile is not typically used for everyday transport.

people's ideas over the longer term. This strategy of taking the path of least resistance - and having a focus on mileage rather than connectivity - has also been used in Toronto due to the amount of staff resources that have been invested in inputting lanes in wards with councillors who block the process (Neumann, 2008).

There have been few studies examining the political process and how cycling advocacy at the municipal or city level can affect change. In his examination of campaigning for bicycles and alternative transport in West London, Batterbury (2003) found that, in contrast to the oppositional stance more commonly found among social movements, cooperation with the local state has been found to be the most successful strategy. This finding is also lightly supported, although not explicitly, in Neumann's (2008) analysis of efforts to increase cycling infrastructure in Toronto. The impact of transportation policy and the approvals process for cycling lanes within the City are identified as central to improving cycling infrastructure. This highlights the potential importance of having a cooperative, as opposed to antagonistic, relationship with the City. However, Neumann does not speak explicitly to the role of activists or the extent to which their efforts could, or have, facilitated change.

In regards to the social politics of cycling, nearly all studies assessing motivations and barriers to cycling indicate that subjective, cultural and social factors – or the cultural politics of cycling – likely play a large role in the decision to cycle (for example see Moudon et., al., 2005; Parkin et. al., 2007; Pucher et. al., 1999). No research could be found on specific links between cultural associations with bicycles (and cars) and how this affects people's engagement in the political process – this research intends to fill that gap. However, it is reasonable to state that the way in which people perceive these different technologies will likely have an effect on how they engage in supporting or obstructing them. Thus, understanding the cultural landscape of bicycling and how this affects cycling decisions could be informative in terms of how these influences play out politically.

In terms of cultural associations with bicycles, Dill & Voros (2007) found that individuals who ride bicycles as children were more likely to cycle as they get older and that seeing others cycling and having co-workers that cycle also elevated levels of ridership. Placing bike lanes in visible areas is recommended "to create a cultural impact and effect multiplier" through the demonstration that bike lanes do not necessarily slow traffic but increase safety and access

(Sirkis, 2000). Xing et. al. (2009) found that the perception that bicyclists look like they are "too poor" to own a car has a limiting factor on an individual's decision to cycle (p. 8).

To create positive associations with bicycle use, Furness (2005) notes that activists often employ what are referred to as 'culture jamming' strategies, or attempt to change how people perceive a particular commodity by changing the images, texts and associations made to it. For cycling activists, this can simply be about working to alter perceptions of bicycles themselves, but also can be an attempt, as already mentioned, to present bicycles as part of a suite of ideas focused on broader cultural and structural changes (*ibid.*). Horton's (2006) work on environmentalism and the bicycle furthers this point by describing how the bicycle - as an ordinary materiality - contributes to both the development and performance of cultural and political identities related to environmentalism.

One of the most visual cycling activist strategies is Critical Mass – a monthly event that takes place in over 100 cities wherein bicyclists briefly take over city streets in what Furness (2007) calls "both a performative critique and a critical response to automobility" (p. 299). He argues that Critical Mass produces what is referred to in social movements theory as the 'radical flank effect' insofar as the radical nature of the protest allows for the emergence and success of more moderate initiatives, such as inputting bike lanes. This perspective is supported by Blickstein and Hanson (2001) who found that although not all of the press surrounding Critical Mass has been positive, it appears to have advanced the cause for cycling in San Francisco by getting more people on bikes and getting more people involved in cycling activism, thus resulting in changes within the city to support cycling.

Despite the importance of the cultural politics of bicycling, Cox (2005) notes that the promotion and marketing of cycling does not always address the complex and variable subjectivities and motivations or barriers to cycling, rendering it sometimes ineffective. Additionally, Skinner & Rosen (2007) have argued that cycling policy and promotion have largely ignored the important role that identity, preferences and attitudes play in the decision to cycle and have mistakenly focused primarily on the provision of built infrastructure with the assumption that this will automatically translate into higher levels of cycling. While there have been studies supporting the idea that the provision of bike lanes positively affects levels of cycling (Dill & Carr, 2003;

Nelson, 1997) there are also those that have found the relationship to be insignificant (Moudon et. al., 2005; Rodriguez & Joo, 2004).

### 2.4 Key Messages and Discussion

The literature review of social movements has provided a framework of analysis for examining the small body of cycling and cycling activism literature through a presentation of existing understandings of why and how activists engage in cycling promotion activities. While the focus has been primarily on cycling it is meant to be implicit that, whether intended or not, cycling activists efforts are a reaction to a dominant set of norms, ideas, practices and behaviours that normalize car usage over bicycle usage as described in the section on automobility.

As noted by Della Porta and Diani (2006) at the beginning of this section, activating for change takes place when traditional norms are no longer satisfactory and are challenged by a new normative basis. Whether activists are attempting to simply 'make space' for cyclists on roadways or have loftier goals in mind in terms of the desired outcome of their protest, they are all working towards challenging the normative basis of automobility in some way.

Another observation to pull from this section is that the strategies employed by activists are necessarily influenced by broader systemic conditions, whether this is implicitly a goal or not. For example, the conclusion that more robust policy 'sticks' to regulate against car use are politically unfeasible is due to the centrality of automobiles in many North American's economic and social imagination. Regarding physical infrastructure, a focus on building bike lanes is a result of historical decisions that have produced built environments that favour automobiles. While these may seem banal observations, there are few examples within the literature that make this link explicit. Installing lanes is often examined as a technical issue or simply as an apolitical strategy for increasing ridership. And even with those studies that do examine the 'politics' of inputting lanes, there is little to no consideration given to understanding *why* a technology like the bicycle – with all its potential benefits – is so politicized in the first place.

Therefore, greater attention needs to be given to understanding what challenges the bicycle makes to the existing normative order, what traditional norms it upsets and what types of strategies are robust enough to respond to the current centrality of automobiles.

## Chapter Three - Methods

## 3.1 Introduction

This section describes the methodological framework that was used to undertake this research and details why various methods were employed. This research used a case study approach and multiple methods were used including a literature review, qualitative semi-structured interviews and document analysis. The first part of the section provides the rationale and methodological implications of using a case study approach and the three embedded methods. This is followed by a description of how these methods were specifically used and includes a description of the selection of case studies, participant recruitment, the interview process, data analysis and validity, rigour and communication of results. The section concludes with a presentation of the researcher's positionality in relation to the research topic and the research participants.

## 3.2 Methodological Rational and Data Collection Methods

## 3.2.1 Case Study Approach

This research was undertaken using a case study approach. Snow & Trom (2002) define a case study as "a research strategy that seeks to generate richly detailed, thick, and holistic elaborations and understandings of instances or variants of bounded social phenomena through the triangulation of multiple methods" (p. 152). Case studies have a "multi-perspective orientation" insofar as they allow for the consideration of all the relevant actors and voices including the protagonists, antagonists and bystanders/audience (*ibid.*, p. 154). By examining the conjuncture of events that produce a local situation, case studies serve as "the most complete and detailed presentation of the subject under investigation" allowing an examination into how "larger processes manifest themselves in a localized context" (Hamel, 1993, p. 33). Or, put another way, Yin (2008) identifies a case study as "an empirical inquiry that: investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (p.18). The case study approach is used when a researcher wants "to understand a real-life phenomenon in depth, but such understanding encompasses important contextual conditions – because they (are) highly pertinent to your phenomenon of study" (Yin, 2008, p. 18).

Given that this research is interested in contextualizing current cycling and car politics within broader understandings of social movements, and how this relates to transportation and automobility, a case study approach is the ideal research methodology.

### 3.2.2 Multiple Methods and Triangulation

Case study approaches require the use of more than one data collection method – or triangulation – to strengthen research results (Yin, 2008). This is based on the logic that social contexts are complex and multi-faceted and cannot be adequately understood or grasped by any single method (Snow & Trom, 2002). For this project a literature review, qualitative semi-structured interviews and document analysis were used to triangulate data in the research process.

#### 3.2.2.1 Literature Review

Social movement theory, automobility literature and cycling literature were the three main sources subjected to review and analysis. This information was used to direct research and identify the broad themes of discussion that formed the basis of the interview guide.

The intention in reviewing these particular areas of literature were as follows. First, there was an interest in contextualizing this research within broader understandings of social change – or how and why individuals work to contest or support dominant systems of organization – in this case automobile focused transportation systems. Next, a review of automobility literature provides a historical perspective of how personal transportation came to be focused on the automobile, and how that dominance is maintained despite widespread acknowledgment of the health, social and environmental costs. Finally, the cycling literature review was undertaken to determine existing research gaps and to develop familiarity with empirical perspectives on how and why cycling levels increase or decrease.

#### 3.2.2.2 Semi-Structured Interviews

Semi-structured interviews are a common methodological tool in social movement research as they allow for the "exploration, discovery and interpretation of complex social events and processes" (Blee & Taylor, 2002: p. 93). Semi-structured interviews are utilized when a researcher wants to obtain information related to people's views, opinions, ideas and experiences (Arksey and Knight, 1999). This approach also provides the opportunity to explore new issues or themes as they arise given that certain questions may evoke responses from participants that

are unanticipated (Berg, 1998; Snow & Trom, 2002). While the themes for the interviews were based on the literature review and media and document analysis, there were few examples of previous research focusing on car and bicycle politics or cycling activism. Thus it was anticipated that new themes would emerge throughout the research process.

#### 3.2.2.3 Document Analysis

Document analysis is used in case study approaches to analyze textual materials with the intention of making transparent "the relationships between movement discourse and the discursive field of the broader culture" (Johnston, 2002: p. 69). Hodder (2002) notes that analyzing material culture can be a useful method for exploring "multiple and conflicting voices, differing and interacting interpretations" (p. 268). Reviewing what has been produced for public consumption can also vary widely from what took place 'behind the scenes' with the difference providing an informative space of analysis. This technique is also useful for data triangulation, to identify key themes and positions while developing the interview guide, and to facilitate conversation and focus in on relevant subject matter.

#### 3.3 Methods

## 3.3.1 Recruitment of Research Participants

In semi-structured interviewing, Blee & Taylor (2002) note that individuals are chosen in a deliberate and rarely random sampling process as the intention is to find those that have a particular and significant engagement in the topic being explored. The selection of individuals for this research followed Rubin & Rubin's (2005) suggestion that participant's should be asked to participate based on: i) their level of knowledge about the topic under investigation and that interviewees should continue to be added until the topic is saturated; and ii) that sampling should follow the principle of similarity and dissimilarity, or in other words, perspectives should be taken from those that hold differing opinions on the topic being researched.

The researcher compiled an initial list of potential research participants through the internet, media sources and cycling blogs to determine those individuals engaged in cycling and car politics in Toronto. The goal was to find people representing all sides of the debate including those that have actively supported and those that have actively contested the installation of cycling lanes. Participants from a variety of different organizational affiliations were included

and contact was made with City of Toronto staff, local councillors, cycling activist organizations and individuals, business improvement associations and resident's associations. Individuals were contacted by email with a project description and follow-up emails or telephone calls were done as necessary. Of those contacted, five didn't respond – three city councillors, one cycling activist and one business improvement association. <sup>21</sup>

The researcher clearly indicated that she was a cyclist interested in seeing improvements to cycling infrastructure but that the intention of the research was to undertake analysis of all perspectives related to the issue (please see the section on positionality for more discussion).

#### 3.3.2 Interviews

Fifteen interviews were completed from June to September of 2009, and ranged in length from ten minutes to one hour, with the majority taking approximately 45 minutes. <sup>22</sup> The participants consisted of four councillors (two 'pro' and two 'anti' cycling), two City of Toronto staff, six cycling activists, one resident's association, one business improvement association and one private-sector transportation consultant/engineer. <sup>23</sup> Participants indicated an appropriate place and time that was convenient for them and all but one interview was done in person and took place primarily in participants' offices and at local coffee shops. <sup>24</sup> One took place at the participant's home. All were given a consent form to review and sign and all agreed to have their interviews recorded (except as noted in footnote 24) with none requesting confidentiality.

The interviews were semi-structured and used an interview schedule, as opposed to a full script, as a guide. Because of the participants' different relationships with the issues being addressed, and their widely dispersed opinions and backgrounds, the questions were not uniformly

<sup>&</sup>lt;sup>21</sup> These included Councillor Oates, Councillor Saundercook, Councillor Rae, Dave Meslin – Co- Founder of the Toronto Cyclists Union, and the Bloor/Annex BIA.

<sup>&</sup>lt;sup>22</sup> The City of Toronto went on strike the day that the researcher began contacting potential participants. Following the six week strike City staff indicated their interest in participating but interviews were pushed back due to heavy staff workloads and vacations.

23 For a list of research participants and their affiliations please see Appendix A.

<sup>&</sup>lt;sup>24</sup> Councillor Holyday initially indicated via his assistant that he would not participate in this research. Subsequent to a follow-up request, Holyday phoned and indicated that he would participate. The researcher requested to meet for an interview so that it could be recorded to ensure accurate representation. This request was not granted. The researcher followed up with a consent form via email. The consent form was signed and returned by scanned pdf.

presented but selective. Further, as Blee & Taylor (2002) note – semi-structured interviewing in case study approaches is an on-going process. Analysis and interpretation of earlier interviews gives an opportunity to alter questions for later interviews as non-productive areas are identified and new avenues for inquiry are initiated. This brings refinement to the research focus while working to remove bias and ensures the research direction is grounded in participant's perspectives as opposed to that of the researcher. Effectively, a new interview guide was developed for each interview.

The interview questions focused primarily on five areas of inquiry. The first examined participants' stance on cycling and car driving as primary modes of transportation, why they choose this mode and whether cycling could fill a significant portion of everyday transportation needs. The second sought their perception of the provision of cycling infrastructure by the City of Toronto generally, or in specific areas that have been particularly politicized. The third focused on participant's perceptions of the City's transportation policies and whether these adequately addressed the City's transportation needs. This included questions surrounding the political process for the approval of cycling infrastructure. The fourth area of inquiry covered the political economy of cars and bicycles and participant's perceptions related to the provision of auto parking and regulation against automobiles. The final line of questioning explored the cultural politics of cars or bicycles or the ways in which cars and/or bikes are seen as effective and "normal" method of transportation.

## 3.3.3 Analysis

Data analysis and interpretation were on-going throughout the research process. Field notes were taken during the interviews and any thoughts and observations were noted immediately following interviews. Field notes are an integral and essential part of the research process as they allow the researcher to begin analyzing data while it is still fresh (Strauss & Corbin, 2008). It also allows for refinement of questioning for later interviews as key themes begin emerging. Interviews were transcribed by the researcher soon after they were completed to facilitate this process.

<sup>&</sup>lt;sup>25</sup> The two areas that were most commonly brought up by participants or by the researcher were efforts to install bike lanes along the Bloor/Danforth corridor and Jarvis Street.

A two-step process was used to code interviews. As interviews were transcribed a 'first-pass' was done using an open coding technique to begin developing a coding framework. Open coding employs the identification of concepts and themes in the data rather than approaching it with a pre-conceived list of categories. This enables the researcher to 'allow' rather than 'force' the data to speak (Strauss & Corbin, 2008). Both descriptive and analytic/theoretical codes were used. Descriptive codes identify ideas or patterns that are more surface or obvious in the data and analytic/theoretical codes identify themes related to the overall context or processes being described (Yin, 2008). As a coding framework was developed a 'second-pass' was done to ensure that themes identified in later interviews had not been missed in the initial review of earlier interviews. All of the coding was done manually as it was determined there was not sufficient data to necessitate the use of coding software.

To corroborate the information provided in the interviews, data was triangulated with media documents, policy documents and minutes and voting records from City Council meetings. These documents were not coded but rather were reviewed to corroborate specific facts or stated opinions from the interviews. Interview transcripts were also read against the social movement, automobility and cycling literature. This was done to determine the extent to which the cases under review aligned or differed from findings of previous research efforts – not simply to determine veracity or consistency.

## 3.3.4 Validity, Rigour and Communication of Results

Although debate continues over the best means to evaluate the validity of qualitative research efforts in Geography (Crang, 2002), rigour and validity are imperative if credible and verifiable research results are to be produced (Berg, 1998). To ensure rigour throughout the research process, strategies identified by Baxter and Eyles (1997) were used as follows.

First, triangulation was used throughout the research process to verify and corroborate statements made by participants against existing documentation. Triangulation of participant statements against each other was also used. However, as one of the intentions of this research project was to interview individuals with varying perspectives there were numerous occasions where perspectives differed in regards to the same phenomenon. It is felt that this served to strengthen the research findings insofar as a conclusion of the research is that one of the challenges for

moving forward a cycling agenda is that there are differing perspectives and viewpoints on the same issues.

To minimize the effect of bias, an open coding strategy was used and where applicable, direct quotes from interviews were employed in preference to stating comments in the researcher's own words. 'Member checking' – or the verification of the accuracy of participant's statements was used if there was ambiguity over meaning.

To communicate results, an executive summary will be compiled and distributed to all participants who expressed interest in receiving a copy. It will also be shared with local blogs to be posted on the internet to provide open access to this research.

## 3.4 Positionality

Rose (1997) notes that "all knowledge is produced in specific circumstances and those circumstances shape it in some way" (p. 305). Identifying one's positionality and situating one's perspective acknowledges that the type of knowledge produced depends on the individual who is producing it. It further acknowledges that knowledge is partial, specific and limited (Haraway in Rose, 1997). It is critical to recognize how our own position impacts interactions with research participants, influences research goals and data evaluation.

In terms of positionality, the researcher is a cyclist and an avid believer that cycling should and could form a larger share of personal transportation. Her perception is that cities and municipal policies have largely been designed to favour the automobile and this has negative social, environmental and health implications. Although the researcher cycles for many reasons-recreation, low-cost, health and convenience, an integral aspect of her choice to cycle is that she see it as what Furness (2007) calls a "performative critique" (p. 299) or an act of political opposition to the dominance of car culture. Her feelings about cycling are what prompted her to undertake this research – cycling is an integral aspect of her identity and she currently participates in activities to promote cycling and intends to do so outside, and following, this research endeavour.

For some aspects of this project the researcher felt that her positionality was an asset. She shared common perspectives with some of the research participants related to promoting cycling. This

brought greater depth and nuance to their interactions given their shared experience and interests. At times, engagement with those who were not strictly pro-cycling required a more delicate approach. Potential participants were informed via initial email contact, and prior to each interview, of the researcher's positionality and that her interest was in understanding all aspects and perspectives related to the topic for an open and complete analysis. During these interviews the researcher felt that her pre-stated positions limited strength and directness of questions to the participants, through fear of creating offense and the desire to maintain an atmosphere comfortable enough to be candid. Nevertheless, it is not believed that the research was limited to the extent that it would be invalidated given that it was undertaken with vigour and in conformity with accepted techniques for producing validity.

## Chapter 4 – Results

#### 4.1 Introduction

This section provides the results of the study, which are drawn primarily from interviews conducted with research participants from June to September 2009. Quotes are used to illustrate key points and themes in participants' own words. Findings are substantiated and flushed out with information from policy documents, media clippings, notes from meeting minutes and the researcher's attendance at the 2009 Bike Summit and several City Council meetings.

The results are presented in sub-sections divided according to the research questions. The first subsection discusses the ways in which automobility affects the perspectives of those engaged in aiding or obstructing cycling activist activities. Participants were not directly asked about the influence of automobility on their actions as it was felt people would either supply crafted answers or would likely not be able to articulate exactly how their beliefs influence their actions. Therefore, participant's perspectives in regards to this topic were gleaned from various instances throughout their interviews and have been organized according to the themes presented in the automobility literature review: the cultural politics and political economy of automobility. The section will conclude with a presentation on participants' perspectives of the possibility of change and to what extent they see bicycles as being able to address existing problems with Toronto's transportation system. This section will also be responding to the literature on new social movements as it is seeking to identify how structural influences within the economic and social realms influence actions related to initiatives that promote cycling. And further, to identify that cycling activist perspectives challenge some aspects of the status quo and seek to present a reorientation of the normative basis of transportation systems that currently favour the automobile.

The second sub-section discusses the ways in which inputting cycling infrastructure is politicized in Toronto and why this politicization had taken place. Cycling activists were asked directly why they felt initiatives to promote cycling are politicized but it was felt that asking this of those who have contested cycling initiatives might be construed as confrontational. The results in this section, therefore, are derived from direct questions as well as through analysis of instances in the interviews where the topic was discussed by participants. This section will discuss governance and institutional structures, tensions between top-down and bottom-up methods of

governance, the use of cycling as a means to politicize other issues and a discussion of where the opposition to cycling issues exists (within the state or among the population). This sub-section will draw on diverse areas of the automobility and social movement literature, particularly the political process approach.

The third sub-section examines what strategies cycling activists are using to support increased cycling levels, analyzes their efficacy and suggests new methods, as necessary. The intention will not be to provide an exhaustive list of strategies but rather will identify general trends and methods. Building off of findings from the previous two sections, this section will allow for a robust examination of existing strategies to assess whether they are adequately responding to the cultural, economic and political context in which they are being used. An examination will be made of existing pro-bike policies, the current strategy of focusing on bike lanes, the business case for bikes and the role of networks and strategies being used to address cultural perceptions of bikes and cars. This section will refer back to the literature on the political process approach in social movement theory (while incorporating its critiques), cycling activism strategies and the more general context of automobility.

While there has been an effort to separate out results for each of the questions, there is overlap given their interrelationship. For example, to respond to the first question, it is necessary to identify some bicycle promotion strategies that have been used as this is a key way to identify perspectives related to automobility (i.e. making reference to the strategy of 'culture jamming' is a way to identify that cyclists contest how language or culture normalizes cars within the transportation system). Likewise, and as already noted, strategies are necessarily embedded within larger structural conditions, which makes it difficult to talk about them outside of those contexts.

## 4.2 The Influence of Automobility on Those Engaged in Supporting or Contesting Cycling Initiatives

#### 4.2.1 Introduction

Through an analysis of the broader social and economic climate in Toronto as it relates to automobility and cycling, this section will seek to explain why individuals become engaged in supporting or contesting cycling initiatives. It will be argued that individuals engaged in bicycle

and automobile politics are working both consciously and unconsciously to maintain and contest the status quo in various ways. In this case, the status quo refers to a system of automobility that is maintained through a particular subjective understanding of mobility (automobiles) that is complimentary to capitalist organization. It was found that those working to promote cycling tend to see cycling as a preferred form of mobility. Differences occurred in the extent to which activists see cycling as an opportunity to contest capitalism itself, or rather work to promote cycling through identifying its compatibility with economic growth strategies.

The research found, unsurprisingly, that those who tend to be supportive of cycling initiatives also tend to be critical of automobiles and the system in place to support them. For those who have contested cycling initiatives the influence of automobility was not as straightforward. <sup>26</sup> Specifically, it was found that those who have opposed cycling initiatives tend to acknowledge the challenges associated with automobility and also generally indicate they are supportive of cycling, within certain parameters. This apparent incongruity between action and attitude will be addressed throughout the results section. Ultimately, it will be argued that while there does appear to be a recognition that our current transportation system is untenable into the future, the scope for imagining an alternate reality continues to be limited by cultural, economic and political influences that favour automobility. This sub-section will primarily focus on the cultural and economic influences at play and political issues will be addressed in section 4.3. As will be presented in the discussion at the end of this section, it is the interrelation of these influences that has led to both: i) activist efforts to improve conditions for cycling; and ii) the politicization and challenge to implementing pro-bike strategies.

## 4.2.2 The Cultural Politics of Automobility and Cycling

The introduction and literature review suggested that people behave according to cultural belief systems and that, as a result, our routine daily actions are a function of socially-encoded norms

There is a hesitation to state that those who have contested cycling initiatives are 'anti-bike'. This is partly because these individuals stated in their interviews they are not against cycling per se, and this should be acknowledged. There is also a concern that categorizing people as 'anti' or 'pro' further entrenches the debate rather than seeing the possibility and flexibility within people's positions. It is also felt that perspectives are quite nuanced and this complexity needs to be incorporated into the analysis for it to be useful. Therefore, people that have voted against cycling initiatives, have been vocal in the media and neglected to incorporate cycling lanes in redevelopment proposals will be described as contesting cycling initiatives as opposed to being 'anti-bike'.

and values. The findings from this research suggest that those engaged in supporting or contesting cycling initiatives are strongly affected by contemporary cultural belief systems. Cultural belief systems found to be present in the debate surrounding automobile and bicycle use include: automobility, bikeability and conceptions of liveable cities and environmental sustainability.

There were inherent challenges in determining the extent to which people affix positive value to automobiles. Many individuals are not inclined to profess their 'love' for cars given the widespread awareness and acknowledgement of the detrimental effect motorized vehicles have on the environment, health and safety. Awareness of these ill effects is wide-spread and Canadian cultural norms surrounding environmentalism and sustainability may inhibit all but the most ardent supporters of the automobile in being overt with their perspective. Working in concert with this challenge is the fact that subjectivities that favour the automobile are likely held at a sub-conscious level given the normalization of car culture within society. Thus, individuals may not be aware of the extent to which the routine nature and ubiquitousness of automobile use influences their perspective and actions. This same challenge was not found with individuals who support cycling initiatives. In terms of cycling activists, while not all are vocally opposed to automobiles - whether for strategic or subconscious reasons – many become cycling advocates specifically because they are opposed to cars and car culture. Therefore, their engagement in cycling politics is a direct result of ascribing to a value system that contests the centrality of automobiles, and their resulting negative externalities. Even with the least political of perspectives, advocates are aiming to affix positive value to cycling with the intention of improving conditions for its use.

#### 4.2.2.1 Identifying 'the problem' and its 'solution'

Of central importance in discussing perspectives related to initiatives to promote cycling is the way in which individuals frame transportation problems in Toronto and the extent to which cycling is identified as a potential contribution to the solution.

Congestion from automobile traffic was identified as a major transportation problem by participants on all sides of the debate. There were, however, different reasons given as to why congestion is problematic. These ranged from environmental concerns (Koehl, 2009b), general

frustration for car drivers (Stintz, 2009), health concerns (Giambrone, 2009) and lost revenue as a result of inhibited mobility and 'lost' time (Heaps, 2009b). <sup>27</sup>

There was general agreement that congestion problems are largely a function of how the city has been developed. In regards to the *Official Plan* (Toronto, 2001b), Councillor Karen Stintz (2009) noted that "our entire plan has been focused on residential density and gives very little thought to how we create new employment nodes" resulting in "residential intensification but... employment sprawl." Cycling activist Luke Siragusa (2009) described how this poses specific challenges for proponents of cycling as "we just place so much space between all our amenities and our necessities. And that, to a large degree, defines how far we can get with integrating the bicycle in our mass transit plan." He did further note that "in dense city cores like Toronto it really is the ideal vehicle." As will be discussed in more detail below, habit, resistance to change and 'car culture' were also identified as contributors to the use of automobiles and resulting congestion.

In terms of solutions to the automobile problem, improved transit was seen by the majority of proponents on all sides as necessary to get people out of their cars, with free parking in the suburbs cited as a significant disincentive for people to switch modalities (Amster, 2009; Krossey, 2009; Siragusa, 2009; Stintz, 2009). Where the most significant difference emerged was in perceptions of what role cycling could play to address congestion. Those who advocate for increased cycling lanes tend to see cycling as a way to ease congestion – people will cycle more if there are cycling lanes which will, in turn, lead to reduced levels of cars on the road (Bambrick, 2009). Conversely, those who have contested bike lanes believe that their installation will increase congestion due to reduced space on the road for automobiles. In reference to the vote by City Council to approve removing a centre car traffic lane on Jarvis Street to input two cycling lanes, Councillor Karen Stintz (2009) - who did not support the installation of a bike lane on Jarvis street - stated: "There's only 130 bikes that they've counted on Jarvis in the morning and 27,000 vehicles during the same time frame and the notion that if you build it they will come I don't think has been tested sufficiently to do what we did in that

Heaps (2009b) noted "there's about a \$2 billion dollar a year loss in business in the city alone due to traffic congestion."

case and we certainly don't take that approach to transit." When asked whether cars and bicycles should be given the same priority in transportation planning Stintz (*ibid.*) further stated:

I think that it's important to have alternative modes. From a quality of life perspective there's a benefit to having an integrated bike network. But when I think about our transportation challenges it is about moving people and I think our policies should be designed for promoting the movement of people...and given our climate and given varialities (*sic*) of daily living I just don't see that having bicycle only policies will get us where we need to go if our transportation goal is moving people.

Yvonne Bambrick (2009), Executive Director of the Toronto Cyclist's Union, feels that the perception that inputting cycling infrastructure will increase congestion is directly related to the normalization of car culture within North America, noting that people challenge:

...anything that is a threat to what is seen as an already overburdened system. The rush hour, the congestion, the traffic... Bikes are, you know, the threat. Instead of looking at Jarvis Street going from five lanes to six they're seeing it going from five to four with bikes. It's this attitude. So we're actually increasing the capacity of the road by putting bike lanes in. Many more users can now fit cause bikes take up less room. It's all in the framing. It's the lens we all bring to our day to day lives... Some people are drivers and they can only think about their cars and it's all they've ever known. Our North American citizens have been programmed around the car for a long time. A long time. It's everywhere.

The extent to which cycling was perceived as a potential solution to transportation problems was also visible in whether cycling was seen as an effective mode of transportation and a viable mode for many. Polar opposite perspectives between those who have supported and contested cycling initiatives were given in terms of how effective cycling is as a mode. Bambrick (2009), an avid cyclist, noted that "bikes are just the most convenient and simple and inexpensive and healthy...of all vehicles. It's the best way to get around town. I couldn't do half of what I do without a bike." In comparison, Councillor Karen Stintz (2009) noted that cycling is able to accommodate approximately five percent of her needs, and stated: "I mean you can't pick your kids up on your bike and take my son to tai-kwon do or go pick up a couple bags of groceries on your bike. I mean, for where my life is right now it's just not a reasonable mode for me."

Potentially one of the central influences in whether cycling initiatives are supported or contested is the extent to which it is felt cycling could become a significant share of transportation trips and, therefore, is worth investing in as a mode. All those who have supported cycling initiatives, if asked, felt that cycling in Toronto could reach the same levels as Copenhagen or Amsterdam,

noting: "Yeah, I think it's a reality" (Koehl, 2009b) and "Absolutely... It's more challenging in the suburbs but there's no reason that we couldn't have the same levels for trips under five kilometers" (Lea Smith, 2009). <sup>28</sup> An opposite perspective was given by those who have not always supported cycling initiatives. Councillor Stintz (2009) suggested that we "be reasonable about expectations about what we really want to achieve out of this bike network because getting people on their bikes for their daily commute is probably not a reasonable goal... Making sure there's a safe place for them to ride is important...but to suggest that people are en masse going to leave their cars and get on their bikes is not a reasonable goal."

Albert Koehl (2009b), an environmental lawyer and cycling advocate, suggested that one of the challenges in promoting cycling as a reasonable and viable mode is the extent to which people accept - or don't contest - the status quo and the negative externalities of automobility. When discussing long-term efforts to install a bike lane on the Bloor-Danforth corridor, he noted:

A lot of people said well I love cycling, cycling is good and stuff. But it's unrealistic to have a bike lane on Bloor. And it was at that point that I said what do you mean by realistic? Because if the reality that you're talking about is air pollution, global warming, traffic congestion, death and injury on our roads. Is that the reality you're promoting? Because if that's the reality I don't support it. And I think there's an alternative reality and I think it's up to us to build that alternative reality and I think that alternative reality is safe streets for cycling and pedestrians and more mass transit. It means clean air. It means a secure climate future. And it means a city that's more livable and I think that's the reality that we want.

The climate in Toronto was identified by some as a hindrance to cycling becoming a significant modal share. Steven Krossey (2009), a senior transportation engineer with a private transportation firm, noted that: "I think Toronto is such a weird place in that it's only nice to bike maybe two months of the year. It's either too hot or too cold" (Krossey, 2009). The majority of cycling activists felt that the winter need not be a deterrent as "Toronto has a pretty mild winter and it's not a big problem" (Koehl, 2009b) and that "it's about dressing for the weather which you should do whether you're walking or whatever" (Bambrick, 2009). Although these individuals are experiencing the same weather phenomena, it is clear that their subjective perspective influences whether they find it a deterrent to cycling or not. This issue is important

<sup>&</sup>lt;sup>28</sup> 20% of trips are made by bicycle in Copenhagen and 32% in Amsterdam (Pucher and Dijkstra in Pucher and Buehler, 2005).

as the decision to invest in cycling initiatives is likely significantly influenced by whether stakeholders feel that cycling is a viable mode for two or twelve months of the year. These decisions could also influence the conditions for cyclists themselves. For example, New York City designed its cycling infrastructure specifically to ensure that snow removal equipment could be accommodated in the lane widths, thereby working to improve the conditions for winter cycling (Benson, 2009). By comparison, the City of Toronto currently moves snow from car lanes into bike paths during the winter months. The City has calculated the cost of snow removal (as opposed to simply moving it to the side) at approximately \$30,000 a year (Welsh, 2009). For those that do not believe winter cycling is viable in Toronto, this appears as an unreasonable investment when municipal financial resources are limited.

#### 4.2.2.2 Cultural Associations of Cyclists and Automobile Drivers

A topic that had resonance for many participants were the cultural associations made with being either a bicycle user or automobile driver. These associations were not linked to the specific technologies themselves, and their efficiency or viability as a transportation mode, but rather were focused on how people perceive lifestyle choices to link to broader social issues and value systems. Perspectives tended to be divisive and pointed to a high level of alienation between different factions.

Luke Siragusa (2009), a cycling advocate, felt that "...so much of this is cultural too. [Cars] are so much a part of our materialistic culture that anything that is a threat to that is a direct threat to some cultural mores that people hold dear. And what you see with so many cyclists, kind of incidentally, is a rejection of that. They don't give a shit if you have twenty cars or a Porsche. You're in the bike lane. Get out of that thing." While holding a strong opinion about the value system that car drivers ascribe to, he concurrently felt that cyclists were misunderstood: "How many times have you heard this phrase? The leftist treehugger granola-munching cyclist. Well, how about this – a right wing market fundamentalist cyclist. Yeah – in some respects it is me. But people don't see because there's all sorts of cultural associations with automobiles and cyclists. That are the subtext of the whole discussion. Or really argument" (*ibid.*).

In terms of how cycling and automobile use is linked to larger social issues, the relationship between automobiles, resource intensive lifestyles and the environment was brought up by participants on all sides. Yvonne Bambrick (2009) commented that transportation systems

focused on cars are "old ideas that just haven't got the shift yet. But you know, cars are comfortable. They're so cozy. I can have my stereo playing and don't have to worry about the rain. We're all very comfortable here in North America. That's why we produce so much garbage. That's why we don't care about conserving water. We overuse everything. We have a massive footprint... It's that mentality that factors into being anti-bike lane." Allyson Amster (2009), coordinator of BikeChain – a bike advocacy and repair shop at the University of Toronto – also identified cycling as being linked to an environmental ethic, noting that her "experience over the last five years is that there's this global phenomenon that biking is cool. But it's not just about biking. Being environmental. Being green is cool...". Steven Krossey (2009), a senior transportation engineer for a private transportation consulting firm, related this back to opposition to cycling initiatives, noting that "if you're anti-bike it means you're anti-green. What do you do?"

Councillor Karen Stintz (2009) provided the most nuanced account of her perception of how automobile drivers are affected by the social awareness of the negative impact of automobiles on the environment:

You know I think that where people react emotionally to it is that there is this sense that if you're in your car living your life that somehow you're engaging in this activity that is detrimental to the health of cities, to the health of communities, to the health of the environment and there's this notion that it's a repudiation of our lifestyle... I think it's just this notion that people feel victimized or demonized because they have a car and they don't appreciate that feeling because they are good people living their life in the city that they love and they want to do the right thing. But creating more bicycle lanes and making their lives more difficult is not helping them achieve our shared goal of creating sustainable cities.

When asked what she and her constituents felt *would* contribute to sustainable cities, her response was "it's just smart investment in transit... Linking commuting patterns. You know. Notionally how we build cities that are sustainable and it's not just through bike paths." The idea that cycling advocates are trying to build sustainable cities through bike paths was also addressed by cyclists, but from a different angle. Luke Siragusa (2009) argued that "we're talking about transportation and bicycles. But what we're really talking about is building a better community, a more civil society. And incidentally, that is the goal of most cyclists I see. It's not bike lane on x street." This perspective was reinforced by Albert Koehl (2009b) who sees that the long term vision of cycling advocacy "is that people are safer on the streets. Number two is

our air is cleaner. Number three is children are safer in our communities. So the vision is creating that new reality... We want to build a new reality and bicycles are part of that reality."

These statements indicate a disconnect between the stated intentions of cycling activists, in regards to sustainability and livable cities, and how these are being perceived by automobile drivers. This will be discussed in greater detail in Section 4.4, which identifies and analyzes specific cycling strategies.

#### 4.2.2.3 Desire For – And Resistance To – Change

Those who support cycling initiatives demonstrated an interest in creating change within the transportation system – and sometimes within society as large as evidenced by the previous section. Within this research there were no clear examples of those who have opposed cycling initiatives specifically saying they were against bikes or resistant to change. However, there were instances where people were resistant to a specific initiative (Costigan, 2009) or felt more data was needed to justify public expenditure on bike lanes that "nobody uses" (Holyday, 2009).

While general resistance to change was identified by numerous proponents of cycling as a challenge to overcome, it was also felt that small cultural changes were beginning to take place and that resistance has a tendency to fade once the change is made and the result is not catastrophic. In reference to the removal of a car lane on Lansdowne Avenue to input two cycling lanes in his constituency, Councillor Adam Giambrone (2009) observed that:

Change is always difficult. I mean I narrowed Lansdowne and that created, you know, you still see signs 'don't narrow Lansdowne' ... It's very difficult to take something away from people. Whatever that is if they like it. And have grown accustomed to it... I mean it's built. It's clear it's not going anywhere. They tried to sue. Nothing happened. Another year or two no one will remember except the, you know, three or four die-hards.

Lukasz Pawlowski (2009), Senior Engineer for Pedestrian and Cycling Infrastructure for the City of Toronto, also felt that people aren't necessarily philosophically opposed to cycling but "often bike lanes can only be introduced if you take something out. And that's where you run into challenges. So, in principle, if you look at the majority of people and do they support cycling and do they object to bike lanes being introduced if nothing changed. You know if you didn't remove parking, traffic lanes. The majority of people would be in support."

As already noted, most cycling initiatives that involve the built environment require that changes are made in terms of removing parking and lanes. Therefore, although it may be felt that the majority of people are not philosophically opposed to cycling, it becomes difficult to make this differentiation when initiatives are frequently contested. However, the general sense among activists is that a cultural shift is occurring, although not fast enough. In reference to the use of the phrase the 'war on cars' - which has been used frequently by the media and a small group of councillors to describe what they see as an anti-car bias within City Hall - Albert Koehl (2009b) feels this is positive because:

The fact that they've started using it means they feel threatened. Which is good because they should feel threatened given the nature of the problems they've caused. Motor vehicles have caused, the car industry has caused, traffic planners have caused. We need a change and we need it fast... The culture is changing. I think. But it needs to change more quickly. But it's all about building that critical mass. And I think we're getting close. I mean you know the old expression, the idea of three phases. First it's ridiculed. Second it's attacked... Thirdly it's accepted as self-evident. So when people rip my bike flag off my bike I always think that's good. We're being attacked, which is good. It means we're making progress.

Adrian Heaps (2009b), a Toronto City Councillor and chair of the Cycling Advisory Committee, agreed with the notion that progress is being made and recognizes that "attitudes change with generations. And if they're passed from generation to generation you're going to have a problem. Maybe you can break the trend and you'll be fine. I think there's a growing behavioural shift that's already happening in the city right now."

## 4.2.3 The Political Economy of Automobility and Cycling

Economic influences were also found to play a large role in the ways in which cycling initiatives have been supported, contested and designed. The two most frequently mentioned influences by research participants were parking and regulation. Parties on all sides linked the built environment and its design as central in facilitating the continued flow of people and goods. Also visible were socially-encoded conceptions of what types of transport are most likely to contribute to economic priorities. Specifically, those who have contested cycling initiatives tend to see cycling as not contributing to, or inhibiting, capital flows while some cyclists and cycling organizations have responded by making a business case for cycling.

This latter point was of interest as it demonstrates a divergence of opinion within the cycling community related to the role of cycling activism in contesting dominant economic and social paradigms. As was presented in the literature review and will be discussed below, for many, cycling is seen as an opportunity to promote an agenda that extends beyond cycling itself and encompasses broader critiques of capitalism and its negative externalities. However, this is clearly not an agenda that all advocates ascribe to and some strategies have focused, instead, on working within the logics of capitalism to present cycling as a contributor to growth-oriented economic priorities.

#### 4.2.3.1 Parking

A main issue identified by all participants in regards to the built form and efforts to input cycling lanes is parking. Inputting cycling lanes often requires the removal of on-street parking for automobiles given the finite space on roadways. Business owners and business improvement associations (BIAs) have been vocal in the media and with their city councillors over concern of potential lost revenue if automobile parking spaces are removed (Coorsch, 2008; Marlow, 2008). Those voicing concern tend to be clear they are not opposed to bike lanes, only to losing parking spots for customers. While this distinction is important to note, in practical terms, their position manifests itself in opposition to cycling. As a local cycling activist noted in describing a meeting with a BIA in his ward where they are working on inputting a cycling lane: "We had a... conversation with the BIA where one guy said 'We are for bike lanes. We are for bike lanes as long as it doesn't affect parking and it doesn't affect automotive throughput.' And my response to this was, well you're for change as long as nothing changes. You might as well be for debate as long as no one speaks" (Siragusa, 2009).

Activists have been responsive to the concern of lost revenues for businesses. The Clean Air Partnership undertook a study of the Annex neighbourhood on Bloor Street to analyze the public acceptability and economic impact of reallocating road space from auto parking to cycling lanes (CAP, 2009). They found that: i) only 10% of patrons drive to the neighbourhood; ii) even

during peak periods no more than 80% of paid parking spots are in use; and iii) patrons arriving by foot and bicycle visit the most often and spend the most money per month.<sup>29</sup>

The interest in promoting the economic impact of bicycling was also noted by Councillor Adrian Heaps. In his opening remarks at the 2009 Bike Summit, he stated that cycling activists needed to make a "business case" for cycling that most importantly included "the economic benefits" (Heaps, 2009a). Activists tend to identify the economic benefits of cycling as extending beyond cyclists using their bicycle to go shopping to: the minimal cost of inputting and maintaining infrastructure as compared to cars (Heaps, 2009b); decreased health costs due to a healthier population (Koehl, 2009b); and decreased costs associated with negative environmental impacts (Amster, 2009). However, the majority of efforts in this area have been focused on the extent to which inputting cycling infrastructure does not inhibit, or contributes to, local business interests.

The success in making this case is likely dependent on the neighbourhood for which it is being made. The Bloor-Yorkville area - a high-end shopping district - is currently undergoing a multimillion dollar street redesign that will improve the streetscape for pedestrianism and includes widening the sidewalk to accommodate root growth for trees. Cycling activists unsuccessfully lobbied to include a bike lane in the new street configuration. Interestingly, in order to widen the sidewalks, 54 on-street parking spaces had to be removed (de Lange, 2009). Staff of the Bloor-Yorkville BIA indicated that their interest in widening the sidewalks was purely a numbers game – transportation studies indicated that of consumers traveling to the area, 24% come by car, 2% cycle and the balance walk or come by transit. Therefore, from an economic perspective, the BIA was interested in altering the built environment to accommodate its largest group of customers. There was a sense that the BIA staff did not feel that cyclists were generally the type of people that would shop at their stores – perhaps injecting a cultural preconception of what type of people cyclists are. Briar de Lange (2009), the General Director of the BIA noted that "if you're going to go to William Ashley and buy a boat load of china you aren't going to take it

The intention by CAP was to have a follow up study to analyze what the impact was once a bike-lane was installed on Bloor Street. This lane has, to date, not been installed and so CAP is currently undertaking a similar study of Bloor West Village to see if results are comparable. There were some criticisms of the original study given the structure of the Annex neighboourhood and its obvious high level of walkability and student population.

home on your bicycle." It was unclear how the 74% of people who arrive on foot or by transit manage to take home a boat load of china through their respective modalities.

Another perspective was given in regards to the relationship between the built form and capital flows. Suggesting there should be attention paid to alternative functions for urban space other than facilitating the flow of capital, Sean Wheldrake (2009), the Bicycle Promotion Coordinator for the City of Toronto, commented: "there's always been a long tradition of capitalism in Toronto, Canada. Unbridled for sure. That's really why Canada exists. It's a free market…we talk so much about private industry and that we've got to have free flow and blah blah blah. And I think that… Toronto has reached a size that we've got to have more government involvement in planning issues."

#### 4.2.3.2 Regulation and Licensing

As noted in the literature review, some of the most effective means for reducing automobile use and increasing cycling is to actively regulate against cars through taxation, congestion charges, increased gas prices and costly parking. Unsurprisingly, when asked if active regulation against automobile use by the City of Toronto would be a positive development, perspectives tended to align with whether individuals were avid supporters of cycling or not.

Councillor Karen Stintz (2009) felt that regulation doesn't make sense practically from the City's perspective and wouldn't serve the needs of citizens given the high level of commuters traveling large distances due to city planning that has located residential and employment areas far from each other. In what appeared to be a reiteration of concerns from her constituents, she stated:

I think it's got to be done with a view that people do have viable options. It's not just another car tax, gas tax, parking tax. It can't be viewed in that way or people will just become resentful and will leave. Just leave Toronto or leave the area. And say you know what? I've had enough... I've just had enough of my life getting more and more difficult when I'm not getting ahead materially. My life is not improving and everyone's telling me how I live my life is wrong. And I've had enough.

Councillor Adam Giambrone (2009), former head of the Cycling Advisory Committee and current Chair of the Toronto Transit Commission, also felt that regulation wouldn't initially be well received, but would be positive in the long term:

...what congestion charges [do] is give you a revenue stream to address alternative transport... And no one, very few people will be happy about it. My guess is that there will be five to ten percent who will think this is great because it's good for the environment. It's good for transit. Maybe even fifteen or twenty. There will be a large group of people who are violently against it. And it will be these people who will forget about it. Or accept it. And also they may come around to supporting it because they see the investment that it buys in public transit and cycling and that it reduces congestion.

The suggestion of regulation and taxation has also been directed towards cyclists with proponents arguing that cyclists are 'getting a free ride' given they do not have to contribute to licensing or insurance systems and the perception that car drivers contribute to building roads through gas taxes while cyclists use them for free (Corcoran, 2009). The proposal of regulation for cyclists has been contested by cycling advocates who argue that licensing and insurance systems are a hindrance to the uptake of cycling, which would be unproductive given the interest in promoting active and non-polluting modes of transportation (van den Dool, 2009). They additionally argue that funding for municipal roads is sourced largely from property taxes and cyclists are homeowners and thus are already paying disproportionately for roadways for automobiles (Bambrick, 2009). Finally, a normative argument is made by contesting the notion that public space should only be accessible to taxpayers – and queries what the implication of such policies would be for children or the homeless (van den Dool, 2009). This last argument, in particular, links back to Lefebvre's notion of the right to the city in the sense that it contests the idea that inhabitants should be able to exist in the city only as economic units – and rather that urban spaces are places for living and the expression of lived experience.

#### 4.2.4 Discussion

Contemporary cultural and economic influences were clearly visible in the positions of those engaged in supporting and contesting cycling initiatives in Toronto. Those who are supportive of cycling initiatives tend to contest the cultural value systems associated with automobiles. The status of automobiles is dismissed and they are viewed, instead, as problematic and part of a resource-intensive and over-consumptive lifestyle that has negative environmental, health and safety implications. In this way, cycling activism can be seen as a new social movement insofar as the motivations for advocacy are typically not related to issues of production or class, but are instead a critique of personal and social values and lifestyles. In addition, automobiles are not seen as an effective or efficient mode of travel for shorter distances and there is the belief that cycling could become a significant transportation mode and is viable year-round. Not only do

activists feel that our current transportation system *could* change, they feel it has to. There is the general sense that cultural shifts are taking place but there is resistance to change due to the continued centrality of automobiles in people's imaginations.

Those who have contested cycling initiatives did not explicitly point to their 'love' of the automobile as an explanation for their position. Interestingly, there was an acknowledgment of the challenges posed by automobility and the recognition that change is needed in Toronto's transportation system. The concerns tended not to relate to the health, safety and environmental impacts of automobiles, but were more focused on ease of mobility and potential lost revenue for business with the removal of parking and cycling lanes. Where their opinion also diverged from the activists' was in the extent to which they felt bicycles could contribute to addressing transportation challenges in Toronto. Bicycles were seen as impractical for most tasks, not a viable mode for the majority of people and only rideable for a small portion of the year. In other words, the cultural association with bicycles is that they are a reasonable mode of transportation for a very marginal portion of the population. Because of these associations, it was felt that inputting cycling infrastructure would serve to increase congestion, thereby exacerbating the problem.

These participants were explicit that they were not anti-bike, nor did they say they were resistant to change. Rather, they were resistant to the removal of parking or the removal of car lanes in specific cases. As previously noted, however, although this could be seen as positive, this differentiation is somewhat unimportant when perspectives manifest themselves in opposition to cycling lanes. Additionally, it also reinforces the notion that automobiles are central in people's imaginations as they are challenged to conceive altering the current urban form to accommodate another mode. Many research participants, on all sides, pointed to the necessity of investment in transit if serious in-roads are to be made in moving away from an automobile-focused system. However, efforts to upgrade transit in areas where car traffic flow and parking may be affected have also been met with extreme resistance. <sup>30</sup> While those who oppose these initiatives may say

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<sup>&</sup>lt;sup>30</sup> For example, efforts to include a dedicated right-of-way for a streetcar track on St. Clair street has been met with resistance by local businesses, residents and councillors due to concerns over lost parking, increased traffic congestion and lack of space for cars to pass other stopped automobiles.

that they do not oppose bikes (or transit) in principle, if efforts to alter car-based infrastructure are always met with resistance, it is difficult to take their position at face value.

An interesting finding related to the political economy of cycling and automobility was how different factions framed the two modalities in terms of their contribution to a capitalist economic system through the mobility of goods and people and capital flows. Those who oppose cycling initiatives tended to have consistent concerns that inputting cycling lanes would inhibit the flow of traffic and remove parking, thereby negatively impacting business and increasing 'lost time' in congestion. There was a broader range of opinion among those who have supported cycling infrastructure. Many activists pointed to the importance of making the business-case for cycling in order to frame investment in cycling as economically sound and productive. This was in contrast to those who see cycling as a technology through which to challenge capitalist economic organization itself. As will be discussed in Section 4.4 when cycling strategies are presented, it is not necessarily counter-productive to have such divergent strategies at work. As the literature on social movements notes, activists with extreme positions can be perceived as utopian and unrealistic by a large majority of the population, but can also have the positive effect of normalizing more moderate positions within the activist group. They can also serve to expand the conceptual boundaries of different types of societal organization and facilitate dialogue on whether these are desirable or possible.

Essentially, it was found that automobility, and the interrelation between dominant cultural and economic systems, influenced perspectives on all sides of the debate. Those who have contested initiatives to promote cycling state that they are not opposed to cycling per se and acknowledge that changes need to made in the transportation system, yet their actions serve to maintain the status quo. They justify their actions through reference to a particular set of values, which are in line with capitalist ideals and socially-encoded conceptions of the automobile as a reasonable or effective means to achieve those ends. As will be discussed in more detail in the next section, these beliefs manifest themselves in the political realm, where decision-making about cycling initiatives takes place. Those who support cycling initiatives find common ground in contesting the notion that automobiles are an effective and reasonable mode of transportation. However, there is a divergence of perspectives on whether cycling should be promoted and framed as an effective mode to realize capitalist ends, or is a means to challenge capitalism itself. It is not

being suggested that cycling activists are always consciously making this delineation – however, economic factors clearly influence activists, and activist strategies, in divergent ways.

# 4.3 In What Ways Is the Installation of Cycling Infrastructure Politicized in Toronto? Why?

#### 4.3.1 Introduction

The previous section provided a lens into the ways in which automobility influences the perspectives of those engaged in cycling and automobile politics in Toronto, making reference primarily to the political economy and cultural politics of automobiles and bicycles. This section will discuss how these influences manifest themselves in the political realm by identifying the relationship between the political environment and cycling as a social movement. Findings suggest that the installation of cycling infrastructure becomes constrained and politicized due to the interrelationship between: i) a lack of coherent transportation policy; ii) the continued - albeit improving - institutionalization of automobiles in transportation planning; and iii) a ward based decision-making system which tends to entrench suburban and urban biases. Tensions between implementing top-down policy and engaging citizens in decisions that affect their immediate community are also present. As compared to results discussed in the previous section, a significant difference in perspectives was not found between those who have supported cycling initiatives and those who have contested them, insofar as common weaknesses within the political process were identified by both parties.

In addition to extrapolating on these ideas, this section will also discuss whether resistance to cycling initiatives is emanating from the state or within the social body. It is felt that identifying the source of resistance is necessary for determining if strategies to promote cycling are appropriately focused. The section will conclude with a discussion of how endemic or entrenched the resistance to cycling is.

## 4.3.2 Transportation Policy

As discussed in the introduction and literature review, the City of Toronto has in place what appears to be a progressive vision for transportation that seeks to reduce automobile use and increase transit and active modes of transportation. This vision is described in the *Official Plan* and the *Bike Plan* and was reinforced in the *Climate Change, Clean Air and Sustainable Energy* 

Action Plan – a blueprint for describing how Toronto will achieve and exceed the Kyoto greenhouse gas reduction target (Toronto, 2007a). This last plan calls for the preparation of a Sustainable Transportation Implementation Strategy that includes a long-term sustainable transportation vision, short-term transportation projects to accelerate the City's agenda and the creation of a Strategic Transportation Planning Group to establish priorities and oversee implementation of the plan. In a search of the City of Toronto's websites, no reference could be found to the development of a long-term transportation strategy nor was there evidence of the creation of a Strategic Transportation Planning Group. The search did find a Staff Report entitled Sustainable Transportation Initiatives: Short-Term Proposals that was presented to the Public Works Committee in 2007 (Toronto, 2007e). The document includes suggestions such as the feasibility of creating a bikestation at Union Square and a bike share program and calls for feasibility studies for an east-west bicycle route through downtown, on the Bloor-Danforth Corridor and rail and hydro corridors. To date, the first two of these objectives have been implemented and the latter have not.

In spite of having various policy documents in place that include a vision for sustainable transportation, an overwhelming majority of research participants, if asked, felt that there was not a coherent transportation strategy in place for the City. Nancy Lea Smith (2009) of TCAT felt "there doesn't really seem to be. It doesn't seem to be very integrated. I mean what is it? There's a bike plan. There's an official plan. But not a transportation plan that incorporates things like transit. So I think that's kind of missing." Tim Costigan (2009), President of the Moore Park Resident's Association, and a vocal opponent of inputting bike lanes on Jarvis Street, was explicit in linking the lack of holistic transportation planning to the so-called feud between cyclists and auto drivers. He stated:

This is not a war between bikes and cars. This is about responsible government. It's about the decision-making process in the city. And so that's how for me the process is derailed into this war. This fictional war. And when you look at it from a macro view you stop and you say we're not all going to agree on everything but why isn't there at least some comprehensive plan or thinking about how you take cars, transit, bikes and pedestrians and have them co-exist.

The idea that the apparent 'war' between cyclists and drivers is fueled by a lack of coherent policy was re-affirmed by Luke Siragusa (2009), a cycling advocate actively working to increase cycling lanes in his ward:

I'd like to see the whole question framed in a more efficient livable city. What we have now is a vacuum of indecision and the policy to carry out at City Hall. So we have all these factions moving at the back here. Of which I'm one. Trying to fight for their territory. So what we get, looking from a macro level, is a lot of chaos...it's really adhoc.

Councillor Karen Stintz (2009) believes that while high-level goals have been set, there has been little communication about how compromises between the various modalities will be realized. The lack of coherent policy leads to "conflicting views and philosophies on how we're making decisions and the public...is left to piece together what the real motives are because they (the City) don't offer a consistent clear message about what they're trying to achieve."

The two City of Toronto staff members who were interviewed had different opinions as to whether there was a coherent plan in place. Sean Wheldrake (2009), the Bicycle Promotions Coordinator, initially said that "Toronto really needs a transportation plan. Like a complete transportation plan." He did, however, go on to mention the *Climate Change, Clean Air and Sustainable Energy Action Plan* and noted that it included very aggressive targets such as a 20% reduction in vehicles in the City and that "some really hard decisions will need to be made by council to reach those numbers" (2009). Lukasz Pawlowski (2009), a Senior Engineer for Pedestrian and Cycling Infrastructure with the City, was the only person queried who felt that there is a holistic plan in place:

There is. There is. But because the different districts have different land uses it's a different type of environment. I guess in the past the experience has been that in the downtown areas because cycling is more prevalent and councillors are more in support there tends to be more acceptance downtown...it's becoming more of a holistic plan but there are challenges in the suburbs more because of the politics of it.

It is possible that Pawlowski misunderstood the question and was responding to whether there is a holistic *bike* plan in place. However, he could also have been suggesting that there is a clear vision within the City to reduce automobile use and increase other modes but that this plan is hindered due to resistance from suburban councillors and constituents.

## 4.3.3 Institutionalization of Automobility and Cycling

As identified in the literature review, Toronto has a history of planning for the automobile, and this institutional legacy continues today. This is evidenced, in part, by the necessity of developing policy as described above to shift the focus from the automobile onto other

modalities. In addition to there being a lack of clarity on what the overall transportation vision is for the City, participants also pointed to the challenge of there being little direction on how to operationalise the goals the policies set. Steven Krossey (2009), a private-firm senior transportation engineer who deals regularly with the City to obtain development approvals for clients noted: "there's certainly a lot of advocacy for less focus on cars...[but] it hasn't permeated through the whole system yet." This point was further articulated by Nancy Lea Smith (2009) of TCAT who noted that:

The Official Plan in 2001... was a really kind of important document that set the stage for reducing automobile use and encouraging public transit, cycling, walking. And I don't think anything's really changed too much since then. It's basically been trying to operationalise it. And that's when it becomes quite difficult. I think people generally, um, agree with the principle of these kinds of things but when it comes to putting dollars behind it we run into trouble.

Also highlighting the institutionalization of planning for the automobile within the bureaucracy, Councillor Adrian Heaps stated that "a challenge within the City is we have a transportation department that's all about road maintenance...[cycling] has been the poor brother on the transportation ladder" (Heaps, 2009b). And that while "most cities understand it psychologically, ideologically they're having trouble making the shift" (*ibid*.). The lack of priority given to institutionalizing planning for cycling can be evidenced, in part, by the lack of staffing and funding allocated to implement the *Bike Plan* once it was approved.

Until this year when \$70 million was included in the 2009-2013 capital budget for the City to complete the bike network, the installation of cycling infrastructure had been inhibited by annual funding shortfalls (*ibid*.). An additional identified challenge to implementing the network was the lack of staff in place to handle the design, consultation and project management of inputting cycling lanes (Toronto, 2005). However, in 2007, Council approved four new positions in the Pedestrian and Cycling Infrastructure Unit with a dedicated focus on cycling infrastructure (Heaps, 2009b). These improvements indicate that changes are slowly being made within the bureaucracy to institutionalize planning for cycling within the transportation division. It remains too soon to evaluate the extent to which this will address the existing institutionalization of automobiles in city planning.

While these are important steps, it has been noted by some that the challenge in installing cycling may have more to do with governance structures and political issues than with shortages in

staffing and funding. The former chair of the Toronto Cycling Committee noted that "the *Bike Plan* has been stalled more due to political malaise than funding" (Smith, 2007). The ward-based governance structure of City Council, and how it serves to increase the politicization of cycling infrastructure will be discussed in the following section.

#### 4.3.4 Ward Based Decision-Making

One of the actions taken by Councillor Adrian Heaps, the current chair of the Toronto Cycling Committee, was to streamline the approvals systems for installing bike lanes. The previous approvals process required that proposals for cycling lanes first went to local Community Councils for review, and if passed, went to City Council for final approval. This dual process was extremely lengthy and also resulted in a suburban/urban bias whereby suburban Community Councils were blocking the installation of lanes (*ibid.*). Under the revamped approvals process, Community Councils are no longer involved, and all proposals are considered by the Public Works and Infrastructure Committee before they go to City Council for final approval (Neumann, 2008). The rationale for proposals to be vetted by the Works Committee is that they are responsible for city-wide transportation issues and it was felt that cycling issues needed to be "considered as part of a connected, city-wide system" (Toronto, 2007d). As Councillor Heaps (2009b) noted: "transit is city-wide, driving is city-wide, cycling should be city-wide as well."

The hope was that by removing the influence of the local Community Councils, the installation of cycling lanes would be dealt with it a higher level and thus would be met with less local resistance (*ibid*.). While the new process has resulted in some increase in the speed and rate with which cycling lanes have been approved there is still a high level of contention and politicization surrounding the installation of cycling infrastructure.

Councillors continue to support or obstruct lanes on a ward-by-ward basis demonstrating the different levels of importance ascribed to road networks for automobiles as compared to

planning and development matters, as well as neighbourhood matters including traffic plans, parking regulations and exemptions to certain City bylaws" (Toronto, 2008b).

The City's governance structure is comprised of a City Council and four district-based Community Councils (North York, Scarborough, Toronto-East York and Etobicoke-York). City Council has 44 councillors – each represents one of the City's wards. Community Councils are "committees of City Council that consider the City's business of a local nature at the community level, and provide a forum for local input into Council's decision-making process. Their responsibilities generally include making recommendations to City Council on local

bicycles. As cycling activist Luke Siragusa (2009) observed: "Every bloody segment that we get is literally fought on a block-by-block basis. Can you imagine building a highway where literally every ward you have to fight for two kilometers of road? I mean, when they built the 401 they expropriated land. I'm not saying there should be carte blanche everywhere. But when you build a network it needs to be coherent." Senior transportation engineer Steve Krossey (2009) echoed aspects of this statement and noted that "it kind of feels like it's whatever the local councillor wants for his or her stretch of street... Streets are controlled on a political level, um, without that kind of strong bureaucracy behind it... No one looks at the big picture. And no one says here's what's actually best for the city. It seems to be whoever is yelling at the moment."

Lucasz Pawlowski (2009), a Senior Infrastructure Engineer with the City, pointed specifically to the suburban and urban biases that councillors bring into the ward-based structure that leads, in turn, to the politicization of cycling issues. He felt that:

The challenge is that because the City Council is a ward-based structure the councillors are very tied to the interests of their wards and their constituents. In the defense of councillors like Doug Holyday... I don't imagine there's a big lobby group in his ward for cycling. So, in part, his position is what he's hearing from his constituents. And that's the same as you have in the reverse. The councillors downtown are hearing from their constituents. They're seeing it visually themselves that it's out there as a mode. And they're hearing from the actual community that this is something they want.

As noted in Hess's work in the literature review – when efforts become politicized because they are working against the status quo, they often require a champion or the investment of political capital to make change. Some activists interviewed felt that the high level of politicization surrounding the approval of bike lanes on Jarvis Street actually impeded progress in long-term efforts to install a bike lane on the Bloor-Danforth corridor (Koehl, 2009b; Siragusa, 2009). The Bloor-Danforth corridor was the next lane approval to be presented to the Public Works and Infrastructure Committee following the highly publicized and contested Jarvis Street case. A lane on the corridor has long been advocated for as a necessary component of a comprehensive bike network. It is also seen as politically challenging to implement due to the fact that it would run through numerous wards and would require the removal of on-street parking in a number of commercial areas (Siragusa, 2009). When presenting to the Public Works and Infrastructure Committee on the corridor, rather than advocating to move forward with an approvals process as

expected by many, the City instead recommended that another study be commissioned to analyze the viability of the lanes. <sup>32</sup> Albert Koehl (2009b), a cycling activist, felt this was because the City "noticed all that pushback (on Jarvis) and weren't willing the pay the political price for what it would take to put a bike lane on Bloor."

Numerous participants on all sides of the debate also felt that politicians use cycling as a wedge issue to highlight the apparent philosophical divisions between different political camps. Sean Wheldrake (2009), the Bicycle Promotions Coordinator for the City, felt that the issue is not cycling itself but rather that "the politicians are actually playing up the cycling... That's part of the problem. Making it more political. Especially now in Toronto you have two camps... The mayor is perceived as being bike friendly so everyone is against it. But if the mayor was anti-bike his opponents would be pro-bike. So I don't see any logical reason for it." This position was supported by Tim Costigan (2009), who opposed the installation of lanes on Jarvis Street. He argued that "when it gets to City Council the politics ratchets it up... The mayor speaks about it only in terms of bikes versus cars. And I think wrongly the opposition talks about this as the war on cars. For a sound bite refer to it as a war on bikes...This has turned into a polarized discussion."

One outcome of the high level of politicization is that a path of least resistance is followed and a conscious decision has been made to begin by inputting cycling lanes in areas where there is little or no opposition. Councillor Heaps (2009b), in his role as the chair of the Toronto Cycling Committee, made an agreement with councillors who did not want lanes in their wards that if they did not oppose lanes in those that did there would be no push to install one for at least two years in their home wards. Yvonne Bambrick (2009) noted that the hope is that "because there would be these little sorts of puzzle pieces around, chunks of bike lanes that lead to nowhere, that people would then start to demand of their councillor's…where's there connectivity?"

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There have already been studies analyzing the best east-west route in the City and the viability of the Bloor-Jarvis corridor for bike lanes. The first of these studies took place in 1992 by the old city of Toronto and found that the Bloor-Danforth corridor makes the most sense as an east-west route in the city.

#### 4.3.5 Top-Down Versus Bottom-up Approaches

The politicization of cycling lanes also reflects the challenge in balancing top-down governance approaches – or strong directives from the bureaucracy – with local interests that may not support those directives. The ward-based system is intended to provide checks and balances for the bureaucracy and to ensure that local interests are represented in the decision-making process. However, there were mixed opinions among the research participants as to the extent that public opinion, through councillors, should influence when and where cycling lanes are installed.

For some, the feeling was that if there is an intention to reduce automobile use and increase levels of cycling, that the City should be more pro-active in pushing through cycling lanes, regardless of specific local concerns (Amster, 2009; van den Dool, 2009). Often this was couched with observations that government policy decisions contributed to the rise of the automobile and therefore should do the same for cycling. Herb van den Dool (2009), President of the Community Bike Network, indicated that he wasn't a fan of ward-based politics and open houses for everything and noted that "...when highways came in it was built on a dream and so money went with it. Now it's a battle to get every inch back."

Other perspectives provided a more moderate approach and felt there should be a balance between top-down and bottom-up perspectives. Both of the participants who spoke to this - one who has supported and one who has contested cycling infrastructure - pointed to the fact that as the *Bike Plan* and network was approved in City Council, it should be implemented, but with a continued eye to local concerns. Nancy Lea Smith (2009) from TCAT noted that this "is tough territory. On one hand I think that we have this priority for putting in bike lanes across the city and City Council approved it...so let's just do it. On the other hand...these things can make a big difference and it's important to get people's, um, input into what's happening on their street...I think it has to be a mix." Tim Costigan (2009) of the Moore Park Resident's Association agreed that as the *Bike Plan* and network was approved in City Council that it should be implemented. However, he felt that if there was deviance from the plan, as was the case with inputting cycling lanes on Jarvis Street, that wide-spread public consultation should be compulsory. In the case of Jarvis he felt that political opportunism pushed the lane through as opposed to it making good sense from a cycling network viewpoint: "I fault the mayor and those that are looking to win individual political points around – I got another bike lane! If it doesn't match. If it doesn't

match what you thought were the priorities. And by the way if it does. If you do all that and at the end of the day people think yeah we think it will work for all these reasons...well that's life."

Costigan also argued that it was specifically *because* there was not adequate public consultation that inputting cycling lanes on Jarvis Street became so politicized. As the President of a resident's association north of Jarvis Street - whose members take Jarvis for their daily commute to work - he had asked the local councillor, Kyle Rae, to keep them abreast of the situation. According to Costigan, Rae did not communicate back to the association, and members found out late in the process - and through other means - that the plan to be voted on in City Council was to remove the centre traffic lane and input two cycling lanes. When asked whether it was the actual installation of the cycling lanes or the way in which they were approved he noted: "Certainly my biggest beef is with the process and the fact that through the process and the way it's created you create this polarization which is unnecessary in my view. Would it have meant that if the process had gone on longer that we'd have a different answer? No. ...So the procedural aspect I think was a disaster and created more conflict than it needed to."

A final perspective was given by those who have observed that in regards to inputting cycling lanes, while there may be apparent tensions between top-down approaches and local resistance, those who contest initiatives tend to represent a vocal minority. As Councillor Giambrone (2009) observed in regards to the installation of cycling lanes on Gladstone and Lansdowne:

These were not citizen-led initiatives. They were government-led initiatives. Top down engagement is difficult. You know – whereas if the community had said we want to narrow Lansdowne that would have been different... A lot of these programs are top-down so you don't get a huge 'let's do it.' You get some people who say hey I agree with that... You get a small group who hate it... But there remains this massive in between section that says sure whatever."

Sean Wheldrake (2009) framed his perspective in terms of larger understandings of democracy and noted that "maybe a broader question for you is what is the nature of democracy and when is, you know, when is one angry person representative of the change that should happen for the greater good of the majority."

## 4.3.6 Where is the Opposition? State politics? Or Social Politics?

As noted within the social movement literature, one limitation of the participatory process approach is its focus on the state as the source of opposition to social change. In Toronto, while

planning for cycling is somewhat hindered by an institutional culture that favours the automobile, the City of Toronto has progressive sustainable transportation policies in place. These policies are bolstered by an engaged leader, the mayor, who frequently and publicly supports efforts to increase cycling. Therefore, although continued effort needs to be made within the bureaucracy if planning for cycling is to become integrated and institutionalized in transportation decision-making in a meaningful way, the City of Toronto is generally supportive of increasing cycling as a transportation mode.

Opposition to cycling initiatives have come primarily through the bike lane approvals process, with city councillors voicing concern in City Council meetings and through voting against cycling initiatives. There is a tendency to identify these councillors as 'anti-bike' rather than to recognize the challenge to cycling as coming from their constituents, or within the social body. As Lucasz Pawlowski (2009), Senior Engineer of Pedestrian and Cycling Infrastructure for the City, observed:

I think the challenge is that because, um, because the City Council is a ward-based structure the councillors are very tied to the interests of the wards and their constituents. In the defense of councillors that oppose the lanes like Doug Holyday... I don't imagine there's a big lobby group in his ward especially for cycling. So, in part, his position is what he's hearing from his constituents. And that's the same as you have in the reverse. The councillors downtown are hearing from their constituents. They're seeing it visually themselves that it's out there as a mode. And they're hearing from the actual community that this is something they want.

Cycling activist Luke Siragusa comparably noted:

Doug Holyday. Case Ootes. Those are people that to some degree I can respect cause they're true to their colours. As much as I disagree with them. And they have been voted in. So, I mean rather than focus your enmity at the politician, he is reflecting, I'd like to think, the sensibilities of his constituents... You have to engage, you know, the arguing has to percolate beyond the politicians.

The cultural associations ascribed to cyclists and car drivers are also prevalent in the media. Research participants on both sides of the debate identified the media as complicit in politicizing cyclists and drivers and further entrenching positions. Lucasz Pawlowski (2009) felt that "the 'war on cars' has come out of the media... I don't think it's an accurate representation of things. I mean we have 6,000 kilometers of roads and very few of those are devoted to cycling. And even when we do issue bike lanes I mean no one is taking away access for vehicles...maybe we

can share the pavement a little more. I really wouldn't frame it in that context. But it gets airtime I guess." Tim Costigan (2009) argued that "the problem solving is doable and it's hard work. And it requires that you sit and listen to views that you don't necessarily agree to. And to be open to them... Frankly I blame the press and each one of us individually because we like to get our news in five second sound bites."

An observation, therefore, is that in the case of cycling in Toronto, the most significant challenge to the cycling lobby is currently emanating not from the state but rather from the population itself. This is manifested in the media and by everyday Torontonians who express their preference for the automobile through their elected officials. Although their power is, to a certain extent, centralized and embodied within a particular councillor, efforts to destabilize their position are not effective if directed at those individuals. Rather, tactics need to address the cultural practices, ideas and beliefs which influence how people think about their daily transportation.

#### 4.3.7 Discussion

Research findings indicate that the installation of cycling infrastructure in Toronto is politicized due to a combination of factors. There lacks a clear and holistic transportation policy that not only identifies high-level goals, but also provides clear guidance on how those goals are to be operationalised. It appears that despite the City articulating an interest in reducing automobile use, there is a hesitancy to implement aggressive strategies that regulate against the car due to the potential political backlash of a car-focused citizenry. Specifically, there is no policy in place that identifies how all road users will be incorporated within the transportation system. As a result of this skeletal policy framework, user groups have tended to become pitted against each other as they attempt to carve out space for their particular modality within the urban landscape.

This challenge is exacerbated by the existing institutionalization of automobiles within the bureaucracy. In this case, it does appear that movement leaders have had some success in upsetting the institutionalization of automobiles within the City bureaucracy through increased funding and staff for cycling initiatives and improvements to the approvals structure for cycling lanes. While advancements have been made, the lack of specific direction on how to operationalise auto-reduction policies while augmenting other modes, results in external pressure by cyclist lobby groups working to challenge the status quo. The political process approach to

social movements suggests that movements tend to emerge when political opportunity is present and activists gain sufficient power and access to resources to affect change within the political process. Cycling activists have been gaining momentum in this area and through contesting institutionalized norms, the debate has moved into the political arena. Once in the political arena, the expenditure of political capital and individual champions has been needed to actively facilitate change.

In the case of Toronto, the ward-based governance structure has served to further entrench and politicize the debate due to different priorities emanating from suburban and urban constituents. In an attempt to contain the challenge - and speed up the installation - of cycling infrastructure, proponents of cycling have opted to implement the 'low-hanging fruit' as opposed to focusing on network connectivity. In some ways, this has contributed to the notion that planning is taking place on an ad-hoc basis. In other ways, this provides incentive for the installation of more lanes to complete the network. Although it is too soon to speak with authority on the matter, this incremental approach may also serve to improve public opinion as changes to the built form are taking place at a gradual pace. As will be argued in the following section, however, concurrent changes are needed in the cultural acceptability of cycling in order to augment ridership and decrease frustration in instances where the removal of lanes or parking for cars does result in increased congestion.

As noted, the politicization of cycling lanes is emanating not directly from the state, but rather is more diffuse in nature and is manifested in citizens through their councillors and in the media. However, while the installation of cycling infrastructure has been politicized for all the reasons above, many of those engaged suggest that those most vocal represent a minority and the majority of Torontonians are supportive or disinterested in the debate.

# 4.4 What strategies are cycling activists using to support increased cycling levels? Are these effective? Why or why not?

#### 4.4.1 Introduction

This section analyzes what strategies - or how - cycling proponents have been working to promote cycling in Toronto. The intention is not to provide an exhaustive list of strategies, but rather to identify broader methods or actions used by cycling activists and to analyze them

against the findings from the previous two research questions and existing literature on automobility and cycling activism.

The general strategies to be discussed include: i) the development of pro-bike policies; ii) the focus on the installation of cycling lanes; iii) cultural framing and the cultural politics of cycling; and iv) the business case for cycling. Ultimately, it will be argued that while cycling activist strategies in Toronto have made good progress in some areas, their influence could be greater by expanding the scope from an almost sole focus on cycling lanes to include tackling the cultural politics surrounding automobiles and bicycles. Additionally, a shift away from bicycle-infrastructure policies towards a 'complete street' approach could serve to decrease resistance to infrastructural changes. Taking these recommendations on-board will necessitate a recognition that current efforts to promote cycling take place within an automobile focused transportation system and the specific challenges posed by the normalization of automobiles as a viable form of transportation need to be addressed if cycling levels are to reach meaningful levels.

The structure of this section will differ from the preceding two insofar as the results for each subsection will be presented in conjunction with analysis. This will be followed by a specific recommendation as to what type of strategy it is felt could be more effective.

### 4.4.2 Policy Framework – Pro-bike? Anti-car? Complete streets?

As has been discussed, the City of Toronto's policy framework related to bicycles is composed of general statements promoting the reduction of automobile use and increased active transportation in high-level policy documents and the more detailed *Bike Plan*. It has been previously argued that while there are progressive policies in place to reduce automobile use, one challenge has been the lack of direction or guidance on how to operationalise those policies. The *Bike Plan* does provide a more detailed account of what types of activities should be undertaken to achieve its two over-arching goals of doubling the number of trips made by bicycle and reducing the number of bicycle injuries and collisions (Toronto, 2001a: p. ES-1). Specifically, the plan is structured along six key "spokes" of action that include: promotion, safety and education, cycling and transit, bicycle friendly streets and a bicycle network (*ibid*, p. ES-2).

The *Bike Plan* was analyzed to determine the extent to which the proposed plan of action implicitly situates bicycling as a mode of transportation within an automobile-focused

transportation system or, rather, seeks to increase bicycle use through a direct challenge to automobility. It was found that while the *Bike Plan* is a significant and valuable document that may meet its target of doubling trips made by bicycle and reducing collisions and injury, it is unlikely that its proposed policies will result in radical change in terms of decentering the dominance of the automobile in Toronto. While the plan does provide opportunities to improve conditions for cycling, it does not aggressively challenge automobile use through direct regulation such as car-free areas or congestion taxes. Additionally, and as already noted, the development of the bike lane network aspect of the plan was done so with an eye to inputting lanes in areas that would meet minimum resistance from automobile drivers.

These observations are not meant to critique the efforts invested in the preparation and approval of the *Bike Plan*. Rather, the intention is to make transparent the notion that even in this plan, where more specific guidance was given on how to augment alternative forms of transportation, it was limited in scope because it was not tied to concurrent operational plans to limit or restrict automobile use or into broader planning on how to incorporate all types of transport in a 'complete streets' approach. <sup>33</sup>

A potential challenge with developing a plan specifically on increasing bicycle use is that it is has the potential to further entrench anti-cycling positions as external observers do not understand how the plan links into a holistic transportation vision (Wheldrake, 2009). An additional limitation is that having a separate plan, as opposed to broader institutionalized norms and processes that incorporate bicycling as a regular matter of course in transportation planning, is that actions can be limited to those identified in the plan. For example, one of the main arguments made in opposition to installing bike lanes on Jarvis Street was the fact that they were not identified in the *Bike Plan* and therefore could not be that important in terms of the overall network (Costigan, 2009; Stintz, 2009). However, from the perspective of promoting cycling initiatives, if we start from the premise that the network was designed based on a path of least resistance, as opposed to optimal bicycle planning, then the selection of lanes was not ideal in the first place. There are also some cyclists who feel that *most* streets should be bikeable, because

A complete streets approach is described as planning streets that "work for motorists, for bus riders, for bicyclists, and for pedestrians, including people with disabilities" (McCann, 2005, p. 1). In other words complete street policies are aimed at producing roads that are safe and convenient for all users.

streets that are bikeable are also likely more walkable, safer and more livable from a social standpoint (Siragusa, 2009). By identifying certain (and very few) streets in a plan as those to be used for cycling, this removes the onus of responsibility on making the city, at large, accessible to those who do not have a car.

There were many advocates, however, who felt that the *Bike Plan* was a sorely needed first step in bringing cycling onto the agenda in a co-ordinated and visible way (Bambrick, 2009; Lea Smith, 2009; van den Dool, 2009). It also required buy-in from City Council in regards to the general idea of supporting cycling in Toronto and therefore could not be too aggressive in terms of taking an anti-automobile stance or it likely would not have been approved (Sorenson, 2009). At the time, the relationship between the political environment and the cycling movement was of key importance in terms of the development and tabling of the proposal. It was not felt there was a favourable environment for putting forward an aggressive strategy and a more progressive vision was constrained.

Currently, there appears to be a multitude of perspectives held by cycling advocates in terms of whether they feel cycling activism is, or should be, pro-bike, anti-car or focused on a complete streets approach. In reference to the inclusion of cycling lanes on Jarvis Street, Yvonne Bambrick (2009) noted that "it was never about anti-anything. It was about 'Hey wait a minute. You're redesigning a major downtown street that has always been a scary spot for cyclists. But you're not going to include bike lanes?' It's not about anti-pedestrian or anti-car. It's about probike." A different perspective was given by Allyson Amster (2009) from Bikechain. While she works for a cycling organization, Amster does not feel that activists' focus should be specifically on bikes, and her engagement in active transportation is more a function of being anti-car: "I don't need to get people on bikes. I just need to get people out of cars. I'm pretty anti-car."

Dave Meslin, a founding member of the Toronto Cyclist's Union, has been extensively involved in organizing cycling advocates into ward-based groups as a strategy for engaging with the ward-based structure of City Hall. As the keynote speaker of the Bike Summit in Toronto in 2009, he urged the audience to not be afraid of embracing the oft-used phrase 'the war on cars' when thinking about how to promote bicycling in the city, given that it *is* a war on old ways of thinking (Meslin, 2009). However, he stated the importance of putting ideas forward in such a way that they are not perceived as anti-car, but rather suggest new ways to organize that give space to

everyone. If the debate becomes framed in a new way, he argued, then there is the possibility of the debate being less dichotomized over specific modalities and more about complete streets that accommodate all users in a safe and sustainable way. The ultimate end result would be, of course, planning that places higher priority on bicycles, walking and transit. And in this way the war against cars would be won.

The City is currently debating whether they will put forward a new plan when the existing one expires in 2012. Sean Wheldrake (2009), with the City of Toronto, observed that it may not make sense to develop another bike plan, given the challenges identified above, and also because the context has changed since its adoption.

#### 4.4.2.1 Recommendation

Focusing on a complete streets approach could serve to decrease the contention currently surrounding the installation of cycling lanes in Toronto. It would move the focus from a debate about whether finite urban space should be used for cars *or* bicycles, and would present a new holistic vision seeking to incorporate all users in a sustainable transportation plan. The findings from this research suggest that all parties, even those who have contested the installation of cycling lanes, are cognizant of the negative impacts of automobiles and recognize that the current level of their use is not tenable into the future. While cultural, economic and political influences continue to favour automobility, it is felt that the development of a coherent plan that outlines plans for reducing automobile use through a presentation of alternative options for mobility could serve to decrease resistance to change. A new Bike Plan should be developed only if integrally imbricated and under the umbrella of a coherent sustainable transportation plan.

It is recognized that this recommendation is significantly more challenging to operationalize for cycling activists than focusing on cycling alone. Rather than lobbying for a specific lane or a specific modality, the focus would need to extend to transportation planning at large. It may also not be perceived as being within the interests of many activists if they are more interested in cycling than sustainable transportation itself. As already argued, however, it is felt that this strategy would benefit cyclists in the long term by incorporating cycling as a meaningful component of a holistic solution to Toronto's transportation challenges.

As opposed to findings that identified the challenge to cycling as emanating from the public as opposed to from within the state - in regards to this recommendation - activists would need to engage with the state to affect change as the development and implementation of this vision would need to be centrally driven. This should be complimented by efforts to engage and inform the public about the benefits of a complete streets approach to facilitate a change in attitudes, beliefs and habits towards those that value sustainable transportation approaches.

### 4.4.3 Activist Focus on Cycling Lanes

Since the approval of the *Bike Plan* in 2001, the cycling activist community has been primarily focused on implementing the bike network aspect of the plan. They have additionally focused on lobbying for cycling lanes not in the original plan when opportunities arise, such as through the re-development of existing roads (e.g. Jarvis Street). The focus on cycling lanes as the primary strategy of cycling advocates in Toronto is of note given the lack of conclusiveness within research as to whether the installation of lanes necessarily results in increased ridership. This is of additional interest given that research has identified the large role that identity, preferences and attitudes - or the cultural politics - play in the decision to cycle.

There was a significant difference in activists' perspectives in regards to whether they felt cycling lanes should be the primary focus of their lobbying efforts. Some felt that infrastructure was a necessary first step as there was no perceived benefit to advocating for cycling if there was no safe place for people to do so. Councillor Adrian Heaps (2009b) felt that "you have to have the infrastructure before you can start the advocacy." Nancy Lea Smith (2009) from TCAT sees "infrastructure as critical" and that:

As far as changing people's behaviour and changing attitudes, there's very little time for that. I think people make choices that are practical to them. They make them based on what makes sense. What's out their door. If there's an eight lane highway or a nice place to walk... The softer measures are important. It's just that I don't think they're as important. There are a lot of people who want to walk and they want to ride their bikes. And they're afraid to do it.

On the other hand are those who are concerned about the focus on bike lanes alone. For example, Sean Wheldrake (2009) with the City commented that "the problem with the *Bike Plan* and the perception of the public and the media and the councillors is that the *Bike Plan* is about bike lanes – and it's not... There's seven chapters, ten chapters actually... Only one chapter

deals with infrastructure and there's only one recommendation that deals with bike lanes. Everything else is about everything else about cycling. So that's the problem I think with the bike plan is that it just becomes focused on bike lanes." As noted, the seven "spokes" of the *Bike Plan* are promotion, safety and education, cycling and transit, bicycle friendly streets and a bicycle network. Wheldrake's perspective is that more investment is needed in working to create a cultural shift, which will – in turn – allow the appropriate infrastructure to be built and ensure that it is well used once in place. Allyson Amster (2009) also pointed to the importance of planning for other cycling related issues – particularly those that may encourage suburban riders. She noted that "...if I lived at Sheppard and Yonge. I'm not biking. I would want the subway... So maybe my issue would be being able to take bikes during rush hour."

Another challenge related to focusing on cycling lanes alone is the way in which the general public – or those opposed to cycling – experience the impact of their installation. It was previously noted that through the installation of cycling infrastructure, many activists are interested in creating one component of a livable, sustainable and safe city. When asked whether he felt that the general public sees this larger vision, Luke Siragusa (2009), a cycling activist, felt they only saw a focus on bike lanes because:

That's what impacts them directly. Let's say you're driving down a road that you've driven down for years and all of a sudden it goes from two lanes in one direction to one lane. And all of a sudden it's backed up. You're like 'What the fuck?' That is the most obvious visceral impact of let's say the cyclists agenda... (drivers) react reflexively and that's what they see. They see an intrusion where there wasn't. They see an imposition where there wasn't previously a bike lane. They see these budget costs and they don't understand why so much money is being allocated to what they consider something retrograde.

To a certain extent, this perspective is corroborated by previously given quotes from Councillor Karen Stintz when she noted that one of her reasons for not being wholly supportive of cycling initiatives is that the provision of cycling lanes is not *the* way to create a sustainable city or to address Toronto's transportation challenges. Although the activists interviewed for this research felt that cycling lanes are *one* component of a sustainable city, this small - but important - difference does not appear to be making its way into the public realm and may have significant ramifications. The vision of cyclists may be perceived as unrealistic in terms of what benefits can be realized through the provision of a two meter strip of pavement on urban roadways. Or, because of cultural perspectives that do not see cycling as a viable or effective mode of travel for

many, cyclists may appear as a small interest group selfishly vying for their own "two meters of paradise" (Siragusa, 2009).

As there is not a current holistic sustainable transportation policy in place that incorporates all modalities and provides clear guidance on how to plan and operationalise the plan, efforts by cyclists can appear to be ad-hoc, selfishly motivated and not linked to a broader transportation vision.<sup>34</sup> Additionally, the current North American cultural preference for the automobile has a clear influence on the extent to which the public will support cycling lanes given that it typically requires the removal of lane or parking space.

Finally, a focus on the installation of cycling lanes alone may serve to limit the vision of cycling activists themselves. Although research participants articulated that their success was not defined simply by the inclusion of a new stretch of bike lane on a particular street, these tend to be the victories that are celebrated, because those are the 'battles' that are being fought. For example, some proponents of cycling felt that the amount of energy invested in advocating for cycling lanes on Jarvis Street was somewhat misdirected given that it is not an integral road in terms of cycling lane connectivity (Siragusa, 2009). Others felt that the approval did not represent a significant win for the cycling community because a cycling lane on two kilometers of road was not adequate for addressing the significance of the transportation challenges facing Toronto (Meslin, 2009). In other words, cycling activists need to take care in terms of how *they* define transportation problems and solutions in Toronto or there is the potential for developing anemic strategies of change.

#### 4.4.3.1 Recommendation

Cycling activists could extend their actions and lobbying efforts beyond the installation of cycling lanes alone to incorporate broader solutions to addressing Toronto's transportation challenges. If a continued focus on cycling lanes alone is desirable, activists could take care to present their interests in terms of how cycling is *one* component of developing a sustainable and livable city. Those who have opposed cycling initiatives tend to not see this broader vision or do not believe that investments in cycling alone are able to address the significant transportation

<sup>&</sup>lt;sup>34</sup> This is not to suggest that all cyclists or cycling activists have broader goals in mind when advocating for cycling infrastructure.

challenges facing Toronto. Cycling initiatives are, in turn, contested as they are not seen as an effective use of resources.

As will be discussed in more detail below, focusing on cycling lanes alone does not adequately address cultural and behavioural norms that favour automobility. A multi-pronged approach could be used that incorporates activating for improved infrastructure for cycling as a component of a complete streets approach in conjunction with efforts to address cultural preferences for the automobile. This multi-pronged approach could additionally serve to expand the vision among cycling activists themselves to ensure that their efforts are contributing to a holistic goal and are not limited to the inclusion of various cycling lanes on various streets.

## 4.4.4 Cultural Framing and Addressing the Cultural Politics of Automobility and Cycling

As identified in the literature review, socially-encoded norms regarding both automobility and cycling are central for understanding how automobiles have become dominant and whether individuals will make the decision to cycle. Positive cultural associations of the automobile, promulgated through media, advertising and the social body, have resulted in the normalization of automobile travel despite its negative impacts. Although the focus within the activist community has been on cycling lanes, many cycling proponents pointed to the importance of addressing the cultural aspects of car culture and instilling a positive perception of bikes. Given that resistance to cycling initiatives emanates largely from citizens who have a preference for the automobile, and do not see cycling as a viable form of transport for many, addressing cultural preferences is paramount if there is an interest in depoliticizing cycling initiative efforts.

Councillor Adrian Heaps (2009b) noted the importance of "changing the mindset. I mean everyone grew up on a bicycle and so they think that's the only thing they can use a bicycle for... So the attitudinal shift taking it from a form of recreation to a form of transportation is actually one of the behavioural things we have to do." Allyson Amster (2009) from Bikechain observed that:

The desire to have the car throughout our culture (comes from) romanticizing the suburb. We've glorified these. It's the American dream. And you can see people saying, you know, let's make biking hip and make cities livable. You can do it. You can make a culture of living in the city just like you can make a culture of living in the suburbs. You can make that the desire of the future.

However, in spite of the recognition of the importance of addressing the cultural politics of automobility and cycling, few resources and energy are devoted to it. The City of Toronto's current cycling budget has a 90% allocation for infrastructure and 10% percent allocation for the other six "spokes" (Wheldrake, 2009). Yvonne Bambrick (2009) noted that "in this year's budget for the cycling department there's no funds allocated to communications. None."

This has significant implications in terms of the potential for altering perceptions about cycling and ensuring that infrastructure is well used once it is put in place. It misses out on the opportunity to provide positive messaging and images of cycling, in order to affect general discourse or sub-conscious beliefs about cycling and driving. Some activists pointed to the importance of the language used to describe automobiles and cars and its requisite infrastructure and how this plays at the sub-conscious level (Amster, 2009; Bambrick, 2009; Lea Smith, 2009). For example, rather than referring to Jarvis Street as losing a (car) lane, it should be described as gaining two lanes (Bambrick, 2009). Dave Meslin (2009) exhorted attendees at the 2009 Bike Summit to be conscious of not inadvertently ascribing to the cultural paradigm of the automobile through our use of language. Culture jamming, or the use of positive messaging about cycling in the public realm, can serve to normalize cycling as a mode.

There have been some efforts by cycling proponents to engage in the cultural politics of cycling in Toronto. Comparable in nature to Critical Mass, the most visual of cycling protests described in the literature review, Bells on Bloor is an annual event in which one lane of Bloor Street is closed to car traffic in order to accommodate thousands of cyclists. Albert Koehl (2009b), one of the organizers, noted that the main purpose of the event:

Was to have fun. But number two, it was sort of more or less to let people get out of the closet. Like I think there were a lot of people saying – yeah I'd love to have bikes but it's not realistic. That same sort of attitude. Because they've heard that. It's been engrained in people. So here's a way to say, especially when you see 2000 people cycling, you say it's not unusual. And I think more and more we have that feeling now.

Another means through which cycling activists are engaging in the cultural politics of cycling is through the media. Yvonne Bambrick (2009) has a background in media and when she took on her role as the Executive Director of the Cyclist's Union she felt this was an important avenue for improving the public image of cycling. She noted that "it's a lot about communications and

about dealing with media because that's where the broadest messages are spread. So that's been huge... And where we've really been able in the last year to give positive messaging is via all the mainstream media" (*ibid.*). Allyson Amster (2009) pointed more to pop-culture as a means through which cultural perspectives may change and noted that:

What we did before was through policy right? We built highways and we built suburbs. And we sold it... And you use multiple tools. Some of it's going to be heavy-handed policy. Some of it's going to be the media. It's going to be what you're used to seeing in the movies. Do you see lots of cars or do you see young kids living in a co-op in the middle of the city. I think we're seeing more of it now.

In regards to the effectiveness of networks in promoting activist agenda, an initiative a variety of activists pointed to in terms of improving the public image of cycling, was the creation of the Toronto Cyclist's Union itself. Luke Siragusa (2009) feels that "the Toronto Cyclist's Union is a real favourable development from an advocacy standpoint because it kind of professionalizes and systemizes the whole, uh, proposition. Before you'd have all sorts of, I don't know, arguing factions among themselves and they'd want this and that. At least the Cyclist's Union presents kind of a unified front and constant presence. At council and also for the media." It was also felt to be beneficial insofar as the media and politicians tend to listen to a spokesperson that is representative of a larger group (van den Dool, 2009).

#### 4.4.4.1 Recommendation

While there have been some efforts by activists in Toronto to address cultural norms surrounding automobiles and bicycles, these efforts could be significantly expanded to compliment the existing focus on the installation of cycling infrastructure. Giving greater focus to this area could decrease opposition to the installation of cycling lanes as positive associations with cycling would be more prevalent in the public realm. Additionally, if more people have positive associations with cycling, and are cognizant of the negative impact of automobiles, there is the potential they would be more likely to cycle themselves.

## 4.4.5 The Business Case for Cycling

As already described, another way in which cycling activists have attempted to respond to resistance to the installation of cycling infrastructure is to make the business case for cycling by showing that cyclists contribute to local economies – as much, or more than – automobile drivers. This strategy may not resonate for all cycling advocates given the interest by some in

linking bicycle use to broader critiques of capitalism. However, given the current centrality of economic models focused on growth-oriented goals, the business case strategy could have significant resonance with business owners who are concerned about decreasing revenues due to lost car parking and lanes.

One of the limits of this approach, however, is that it is not applicable to all neighbourhoods given current land-use orientation and design that is favourable to the automobile. Thus, while this is likely an effective strategy to focus on for neighbourhoods like the Annex or the Danforth, given their mix of residential and commercial properties, it has less applicability for suburban or single-zoned neighbourhoods.

#### 4.4.5.1 Recommendation

Making the business case for cycling could have further applicability by expanding its scope to include other economic benefits accrued from having a transportation system with less focus on the automobile. This could include: analyses of the cost of infrastructure to support automobiles; the immediate health related costs of obesity and air pollution; and the long-term economic benefit of decreased costs associated with climate change.

These arguments could additionally enable cycling proponents to advocate on larger-scale issues such a land-use planning and general city design. This could potentially lead to the depoliticization of the installation of cycling infrastructure as it could be presented as one aspect of a sustainable and livable city as opposed to a singular issue seen to positively benefit a small group of people. In other words, the debate could move away from a discussion about whether finite urban space should be provided to bicycles or cars, and instead focus on how the city should be designed to facilitate sound economic, environmental and social outcomes.

This is not to suggest that there is no space for those that are more interested in linking cycling to direct critiques of capitalism. In what is known as the "radical flank effect", social movement research has shown that extreme perspectives have a tendency to normalize what may have previously been seen as radical (Furness, 2007). Thus, while strategies that promote cycling as a modality to counter capitalism may not have broad political or social appeal, they could be working to normalize more moderate cycling promotion efforts.

## Chapter Five - Conclusion

#### 5.1 Introduction

Through an analysis of bicycle and car politics in Toronto, the overarching objective of this thesis was to contribute to understandings of how phenomena become normalized and dominant and how this, in turn, influences the ways in which phenomena are sustained and contested. As noted in Unger's concept of formative contexts, described at the beginning of this thesis, in order to understand routine practical or discursive activities it is necessary to identify the basic institutional and imaginative preconceptions that allow for the normalization of those activities. Rather than seeing everyday and habitual actions - such as how we mobilize ourselves – as 'natural' or common-sense, the intention was to interrogate how valuations of phenomena, are enabled and influenced by socially encoded, normative and institutionalized ideas and actions. This laid the groundwork for an analysis of the means through which the status quo, or a transportation system focused on the automobile, is contested or sustained.

In the case of bicycle and car politics in Toronto, this research found that institutional arrangements, historical circumstances and a particular set of socially-encoded values and beliefs facilitated the rise of automobility to the extent that it has become a normalized and ubiquitous mode of travel despite its many negative externalities. Stemming from a path dependence pattern cut in the nineteenth century, which locked in place a system of economic and social conditions that favour automobility, societies in North America re-organized their cultural, institutional and physical space to accommodate automobile technologies. The interrelation between these automobile-oriented spaces sustains automobility, making it stable and difficult to reverse.

This research found that for those that have engaged in obstructing efforts to promote cycling in Toronto, positive values associated with automobility are resilient. Despite awareness of the challenges posed by automobiles, their use has become integrally tied to the belief that they are a necessary underpinning for economic circulation and other modes, such as the bicycle, are not seen as an effective or practical alternative for the majority of the population. Attempts to reorganize space to accommodate other modes are, in turn, contested in political and social realms. The perpetuation of automobility is due not just to individuals or organizations who

vocally support it, but also to its institutionalization in planning processes and decision-making structures, despite progressive visions of change. Reversing institutionalized processes is challenging once they are locked-in, given the systemic and far-reaching nature of the influence of automobility.

Although the system of automobility is well-entrenched, historical research on social movements and social change shows that few things, if any, are fixed. While positive values associated with automobility are resilient, they are not now - nor have ever been - totalizing. There is the possibility for a chain of actions to occur to upset the spaces that support automobility, or any phenomenon's centrality.

This research found that those who support cycling initiatives were found to contest dominant norms surrounding mobility and believe that change can, and must, take place. They see cycling as a form of mobility available and effective for many and feel it could, and should, form a significant part of the transportation system. Through efforts directed primarily at the institutionalization and political processes that support automobility, some headway has been made in terms of planning for cycling and in making changes to the built form. However, while it is argued there is a dialectical relationship between the urban form and conceptions of preferred modes of mobility, it is not felt that efforts directed solely to the installation of cycling lanes will produce desired results. Given the entrenchment of automobility, and the extent to which automobiles are perceived to be a normal and sensible way to be mobile, greater attention needs to be paid to upsetting cultural conceptions and positive value associations of the automobile. The findings from this research suggest that activist efforts could benefit from moving away from advocating for cycling alone as current efforts may actually be re-enforcing preference for the automobile. It is believed that shifting the focus may result in favourable conditions for implementing further reaching sustainable transportation policies, under which cycling is bound to benefit.

## 5.2 Study Limitations

It has been argued that this study has relevance for other North American cities given their common governance, institutional and cultural paradigms. A possible limitation in using a case study approach to examine social phenomena is the potential for lack of generalizeability given the detailed and specific information of a place or occurrence (Snow & Trom, 2002). It is

argued, however, that given this study's intention of situating cycling activism within larger cultural, political and economic understandings, that while not all findings are transferable, some of the broader conclusions will have resonance beyond Toronto's borders.

An additional limitation is that as there is minimal existing research on cycling activism or the influence of automobility on initiatives to promote cycling, it is near impossible to corroborate or compare the findings of this study. Its conclusions, therefore, are exploratory in nature and could be compared retroactively to future studies to test whether they are similar or divergent to other cases. As the research was undertaken using care to incorporate rigour and sound research techniques, it is felt that the findings are methodologically valid.

The size of this study also provides a limitation insofar as there were a limited number of participants that could be interviewed given the time-frame and scope of the study. This could potentially produce results that are not fully representative of every perspective that exists in regards to bicycle and automobile politics in Toronto. However, it is felt that by undertaking interviews with participants who have a broad array of backgrounds, and who represent vantage points on all sides of the debate, that saturation and representation has been achieved. Undertaking additional interviews would not add significant richness to the data and research results.

Some of the challenges involved when undertaking research on a subject that involves politicians and political processes is evaluating the veracity of politician's statements and determining what takes place 'behind the scenes' away from the public eye. Where possible, attempts were made to validate participant's responses with public documents such as meeting minutes, voting records and statements made in the media. There were some statements made by participants, however, which could not be corroborated and were therefore not included in the findings. For example, many people stated that it is well known that councillors trade off votes to gain support on an issue and agree to vote in favour of another councillor's motion when asked. None of the councillors – if asked – would concede that this takes place. This has the limitation of making the political process somewhat opaque to an outsider. However, it does support the conclusion that transportation decisions for all modalities need to be under the umbrella of a holistic and transparent sustainable transportation plan.

Finally, as already stated in the methodology section, the researcher's positionality has the potential to influence findings. While all efforts were made to ensure rigour in the research design, data collection and analysis and presentation, there is the potential for bias in the research findings.

## 5.3 Future Research Opportunities

Given the paucity of information on the specific topics addressed in this research, as well as on the politics of cycling in general, there is significant opportunity for future research.

To validate and compare the findings from this research, it would be of value to undertake a comparative study of various locations where there are high levels of cycling such as Copenhagen or Madison, Wisconsin to determine whether cycling was as politicized in these areas and what strategies were used to gain support. Of equal interest would be to examine efforts in an area such as Manhattan, where progressive cycling policies have been undertaken in an area that is known for having extreme traffic conditions.

While there have been studies examining what factors influence people's decision to cycle, these tend not to focus on the influence of automobility itself. These research findings identified that opposition to cycling is emanating from the public at large, as opposed to from the state or from city councillors. A better understanding of how automobility influences the public's actions and opinions could facilitate the development of effective cycling promotion strategies. Of additional interest would be an analysis of media coverage over the last thirty years to see how cycling and driving have been represented to the public.

In terms of the recommendations provided for effective cycling promotion strategies in this thesis, future research efforts could be focused in the following areas: i) the development and testing of efforts to address cultural preferences for the automobile; ii) the development of business cases for cycling in terms of the economic benefits of reduced infrastructure and health costs and reductions in greenhouse gas emissions.

#### 5.4 Conclusion

An objective of this thesis is to shed light on the notion that lending a critical eye to dominant and problematic systems of organization provides an opportunity to contest their apparent

inevitability and naturalness. Ubiquitous phenomena, like automobility, challenge our ability to recognize that they are but one way to organize given their colonization of physical and cultural space. While entrenched, habitual and locked-in systems may present strong resistance to destabilization, their influence is not totalizing. Change does occur. However, strategies designed to contest their centrality must be developed from thorough and comprehensive understandings of the phenomena at hand if strategies are to be effective.

Specifically related to the empirical aspects of this research, the bicycle remains the most efficient mechanical means of personal transportation devised for travelling short distances and is an ideal vehicle for travel in the urban core. Transportation systems focused on the automobile are not tenable into the future given their wide-spread negative environmental and social impacts. The development of strategies and procedures to achieve and install new paradigms in the transportation realm are imperative. While some progress has been made in curtailing the excesses of automobility, additional efforts are needed to shift attitudes and behaviours to support and institutionalise alternative modes of mobility. The present times dictate a need for change and initiatives to promote cycling provide an opportunity to contribute to that change.

## Appendix 1 – Research Participants and Affiliations

Research Participant	Affiliation
Allyson Amster	Coordinator, Bikechain - University of Toronto
Yvonne Bambrick	Executive Director, Toronto Cyclists Union
Tim Costigan	President, Moore Park Resident's Association
Briar de Lange	General Manager, Bloor-Yorkville Business Improvement Association
Adam Giambrone	Toronto City Councillor – Ward 18 Davenport. Former Chair of Cycling Advisory Committee
Adrian Heaps	Toronto City Councillor – Ward 35 Scarborough Southwest. Current Chair of Cycling Advisory Committee
Doug Holyday	Toronto City Councillor – Ward 3 Etobicoke Centre
Marija Jevric	Urban Design Coordinator, Bloor-Yorkville Improvement Association
Albert Koehl	Lawyer, Eco-Justice. Bells on Bloor Organize

Steve Krossey	Senior Transportation Engineer, BA Group
Lukasz Pawlowski	Senior Engineer, Pedestrian and Cycling Infrastructure, City of Toronto
Nancy Smith Lea	Program Director, <i>Toronto Coalition for Active Transportation</i> Director of Active Transportation, <i>Clean Air Partnership</i>
Luke Siragusa	Cycling Activist, Blogger on ibiketo
Karen Stintz	Toronto City Councillor – Ward 16 Eglington-Lawrence
Herb van den Dool	President, Community Bike Network
Sean Wheldrake	Bicycle Promotions Coordinator, City of Toronto

#### References

Alvord, K. (2000). *Divorce your Car: Ending the Love Affair with the Automobile*. Gabriola Island, British Columbia: New Society Publishers.

Amster, A. (2009). Personal Interview June 30, 2009.

Arksey, H. & Knight, P. (1999). *Interviewing for Social Sciences: An Introductory Resource With Examples*. London: Sage.

Bambrick, Y. (2009). Personal Interview July 2, 2009.

Barry, J., Berg, E. & Chandler, J. (2006). Movement and Change in the Public Sector: Bringing Social Movements into the Analysis. *Public Management Review*, 8(3), 433-448.

Batterbury, S. (2003). Environmental Activism and Social Networks: Campaigning for Bicycles and Alternative Transport in West London. *Annals of the American Academy*, 590, 150-169.

Baxter, J. & Eyles, J. (1997). Evaluating quantitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, 22, 505-525.

Benson, J. (2009, May). *Innovative Bicycle Facility Design in New York City*. Presentation given by the New York City Department of Transportation at the Toronto Bike Summit as part of the panel on New Approaches to Street Design. Toronto, Ontario.

Berg, B. L. (1998). *Qualitative Research Methods for the Social Sciences*. (3<sup>rd</sup> ed.). Needham Heights, Massachussetts: Allyn & Bacon.

Blee, K. M. & Taylor, V. (2002). Semi-structured Interviewing in Social Movement Research. In B. Klandermans and S. Staggenborg (Eds.). *Methods of Social Research* (pp. 219-223). Minneapolis: University of Minneapolis Press.

Blickstein, S. & Hanson, S. (2001). Critical Mass: forging a politics of sustainable mobility in the information age. *Transportation*, 28, 347-362.

Bohm, S., Jones, C., Land, C. & Paterson, M. (2006). *Against Automobility*. Malden, MA: Blackwell Publishing.

Buechler, S.M. (2000). Social Movements in Advanced Capitalism: the Political Economy and Cultural Construction of Social Activism. Oxford: Oxford University Press.

Buehler, R. (2009, May). *Policy Changes for Sustainable Urban transportation: Lessons from Europe and North America*. Presentation given at the Toronto Bike Summit as part of the panel on Bicycle Friendly Policies that Result in Economic and Public Health Improvements. Toronto, Ontario.

Carlsson, C. (1995). *Bicycling Over the Rainbow: Redesigning Cities - and Beyond*. Personal commentary retrieved February 2009 from: http://www.processedworld.com/tfrs\_web/history/rainbow2.html.

Castree, N. (2004). Economy and Culture are dead! Long live economy and culture! *Progress in Human Geography*, 28(2), 204-226.

Cervero, B. & Duncan, M. (2003). Walking, Bicycling and Urban Landscapes: Evidence from the San Francisco Bay Area. *American Journal of Public Health*, 93(9), 1478-1483.

Clean Air Partnership. (2009). *Bike Lanes, On-Street Parking and Business: A Study of Bloor Street in Toronto's Annex Neighbourhood*. Toronto: Clean Air Partnership. Retrieved July 2009 from: www.cleanairpartnership.org/pdf/bike-lanes-parking.pdf

Coorsh, K. (2008). Battle Over Bike Lanes Rages On. *Town Crier*. October 1<sup>st</sup>, 2008. Retrieved July 2009 from: <a href="http://www.bikingtoronto.com/2008\_10\_01\_archive.html">http://www.bikingtoronto.com/2008\_10\_01\_archive.html</a>

Corcoran, T. (2009). Comment: Time to Stop Giving Bicyclists a Free Ride. *National Post*. Retrieved September 2009 from:

http://network.nationalpost.com/np/blogs/toronto/archive/2009/09/29/time-to-stop-giving-bicylists-a-free-ride.aspx#

Costigan, T. (2009). Personal Interview. July 30, 2009.

Cox, P. (2005). Conflicting Agendas in Selling Cycling. Paper presented to Velo-City 2005: Delivering the Vision Conference. Department of Transport Dublin.

Crang, M. (2002). Qualitative methods: the new orthodoxy? *Progress in Human Geography*, 26(5), 647-655.

Crossley, N. (2002). Making Sense of Social Movements. Open University Press: Philadelphia.

Davies, S. (1989). Reckless Walking Must be Discouraged: The Automobile Revolution and the Shaping of Modern Urban Canada to 1930. *Urban History Review*, 18(2), 123-138.

Davison, G. (2004). Car Wars: How the Car Won Our Hearts and Conquered our Cities. Crows Nest, Australia: Allen and Unwin.

De Lange, B. (2009). Personal Interview. September 4, 2009.

Della Porta, S. & Diani, M. (2006). *Social Movements: An Introduction* (2<sup>nd</sup> ed.). Oxford: Blackwell Publishers.

Dill, J. & Carr, T. (2003). Bicycle Commuting and Facilities in Major U.S. Cities: If You Build Them, Communities Will Use Them. *Transportation Research Record*, 1828, 116-123.

Dill, J. & Voros, K. (2007). Factors Affecting Bicycling Demand: Initial Survey Findings from the Portland, Oregon Region. *Transportation Research Record: Journal of the Transportation Research Record*, 2031, 9-17.

Dunn, J.A. (1998). *Driving Forces: the automobile, its enemies and the politics of mobility*. Washington, D.C.: The Brookings Institute.

Flacks, R. (2004). Knowledge for What? In J. Goodwin & J.M. Jasper (Eds.), *Rethinking Social Movements*. New York: Rowman and Littlefield.

Freund, P., & Martin, G. (1993). The Ecology of the Automobile. Montreal: Black Rose Books.

Furness, Z. M. (2005). Put the Fun Between Your Legs! The Politics and Counterculture of the Bicycle. (Doctoral Dissertation, University of Pittsburg, 2008). Retrieved June 2009 from: http://etd.library.pitt.edu/ETD/available/etd-12052005-210916/unrestricted/Z.Furness2005.pdf

Furness, Z. (2007). Critical Mass, Urban Space and Velomobility. *Mobilities*, 2(2), 299-319.

Gatersleben, B., Appleton, K.M. (2006). Contemplating Cycling to Work: Attitudes and Perceptions in Different Stages of Change. *Transportation Research Part A: Policy and Practice*. 41(4), 302-312.

Giambrone, A, (2009). Personal Interview. July 20, 2009.

Goodwin, J. & Jasper, J.M. (2004). Introduction. In J. Goodwin & J.M. Jasper (Eds.), *Rethinking Social Movements: Structure, Meaning and Emotion*. New York: Rowman and Littlefield.

Hamel, J., Dufour, S. & Fortin, D. (1993). *Case Study Methods*, Qualitative Research Methods Series 32, A Sage University Paper. Newbury Park, CA: Sage.

Harvey, D. (2006). The geographies of critical geography. *Transactions of the Institute of British Geographers*, NS 31, 409-12.

Harvey, D. (1993). The condition of postmodernity: an enquiry into the origins of cultural change. Cambridge, MA: Blackwell.

Harvey, D. (1985). On Planning and the Ideology of Planning. In D. Harvey *The Urbanization of Capital* (pp. 165-184). Baltimore, Johns Hopkins University Press.

Healey, P. (2003). The new institutionalism and the transformative goals of planning. In N. Verma (Ed.), *Institutions and Planning*. Oxford: Elsevier.

Heaps, A. (2009a, May). *Opening Remarks*. Presentation given at the 2009 Bike Summit, Toronto, Ontario.

Heaps, A. (2009b). Personal Interview. July 14, 2009.

Henderson, J. (2009). The Spaces of Parking: Mapping the Politics of Mobility in San Francisco. *Antipode*, 41(1), 70-91.

Hess, P. M. (2009). Avenues or Arterials: The struggle to Change Street Building Practices in Toronto, Canada. *Journal of Urban Design*, 14(1), 1-28.

Hess, P. M. & Milroy, B.M. (2006) *Making Toronto's Streets*. (Toronto: Centre for Urban Health Initiatives, University of Toronto). Retrieved September 2009 from: <a href="http://www.cuhi.utoronto.ca/research/Toronto%20Streets%20Report%20Sept%202006.pdf">http://www.cuhi.utoronto.ca/research/Toronto%20Streets%20Report%20Sept%202006.pdf</a>

Hodder, I. (2002). The Interpretation of Documents and Material Culture. In D. Weinberg (Ed.), *Qualitative Research Methods* (pp. 266-279). Malden, MA: Blackwell.

Holyday, D. (2009). Personal Interview. July 2, 2009.

Horton, D., Cox, P. & Rosen, D. (2007). Introduction. In D. Horton., P. Cox, P. & D. Rosen (Eds.), *Cycling and Society* (pp. 1-18). Surrey: Ashgate.

Horton, D. (2007). Fear of Cycling. In D. Horton., P. Cox, P. & D. Rosen (Eds.), *Cycling and Society* (pp. 133-152). Surrey: Ashgate.

Horton, D. (2006). Environmentalism and the Bicycle. *Environmental Politics*, 15(1), 41-58.

Jacobs, J. (1961). The Life and Death of Great American Cities. New York: The Modern Library.

Johnson, D. L. (2002). Origin of the neighbourhood unit. *Planning Perspectives*, 17, 227-245.

Johnston, H. (2002). Verification and Proof in Frame and Discourse Analysis, in B. Klandermans & S. Staggenborg (Eds.). *Methods of Social Research* (pp. 62-91). Minneapolis: University of Minneapolis Press.

Jones, M. (2008). Recovering a sense of political economy. *Political Geography*, 27, 377-399.

Jordan, T., Lent, A., McKay, G., Mische, A. (2002). Social Movement Studies: opening statement. *Social Movement Studies*, 1(1), 5-6.

Kalinowski, T. (May 24, 2009). Road Wars: Can cyclists and Motorists get along? *Toronto Star*. Retrieved May 2009 from: http://www.thestar.com/news/gta/article/639462

Kebede, A. (2005). Grassroots environmental organizations in the United States: A Gramscian Analysis? *Sociological Inquiry*, 75(1), 81-108.

Kidd, K. (September 5, 2009). Traffic Signs can make streets dangerous. *The Toronto Star*. Retrieved September 2009 from: http://www.thestar.com/news/gta/article/691342.

Klandermans, B. (1997). *The Social Psychology of Protest*. Cambridge, Massachusetts: Blackwell Publishing.

Koehl, A. (July 7, 2009a). Fast Lane to Safer Cycling. *Globe and Mail*. Retrieved July 2009 from: http://www.theglobeandmail.com/news/opinions/fast-lane-to-safer-cycling/article1209893/

Koehl, A. (2009b). Personal Interview. July 17, 2009.

Krossey, S. (2009). Personal Interview. July 2, 2009.

Levy, S. (May 17, 2009). Mean Streets: It's bike vs car. *Toronto Sun*. Retrieved May 2009 from: http://www.torontosun.com/news/columnists/sueann\_levy/2009/05/07/9378576-sun.html

Lomasky, L. (1997). Autonomy and Automobility. *The Independent Review*, 2(1), 5-28.

Lucas, W. J. (1998). *A report on cycling fatalities in Toronto 1986 – 1998*. Toronto: Regional Coroner. Retrieved September 2009 from: http://www.toronto.ca/cycling/reports/coroner/coroner index.htm

McCann, B. (2005). Complete the Streets. *American Planning Association*, May Edition. Retrieved September 2009 from: <a href="http://www.completestreets.org/complete-streets-fundamentals/resources/">http://www.completestreets.org/complete-streets-fundamentals/resources/</a>.

Mapes, J. (2009). *Pedaling Revolution: How Cyclists Are Changing American Cities*. Corvallis, Oregon: Oregon State University Press.

Marlow, I. (2008). The Latest Skirmish in the Bike Wars. *The Star Online*. Retrieved October 2009 from: <a href="http://www.thestar.com/printarticle/523510">http://www.thestar.com/printarticle/523510</a>

Melucci, A. (1985). The Symbolic Challenge of Contemporary Movements. *Social Research*, 52(4), 789-816.

Meslin, D. (2009, May). *Building a Movement: Getting involved on the Ground*. Presentation given at the Toronto Bike Summit as part of the panel on Cycling Advocacy and Community Engagement, Toronto, Ontario.

Moloney, P. & Vincent, D. (May 26, 2009). Bikes win in Jarvis overhaul: City council backs removal of centre lan as critics predict backlash by voters. *The Star Online*. Retrieved May, 2009 from: http://www.thestar.com/printArticle/640314.

Morris, A. (2004). Reflections on Social Movement Theory. In J. Goodwin & J.M. Jasper (Eds.), *Rethinking Social Movements: Structure, Meaning and Emotion*. New York: Rowman & Littlefield.

Moudon, A.V.C., Lee, C., Cheadle, A. D., Collier, C. W., Johnson, D., Schmid, T.L., Weather, R. (2005). Cycling and the Built Environment, a US perspective. *Transportation Research Part D*, 10(3), 145-261.

Mumford, L. (1963). The Highway and the City. New York: Harcourt, Brace and World.

Nader, R. (1965). *Unsafe at any Speed*. New York: Grossman.

Nelson, A.C. & Allen, D. (1997). If you Build Them Commuters Will Use Them: Association Between Bicycle Facilities and Bicycle Commuting. *Transportation Research Record*, 1578, 79-83.

Neumann, J. (2008). *Shifting Gears or Stalling? An Analysis of Bike Lane Planning and Building in Toronto*. Masters Thesis submitted to the University of Toronto.

Noble, T. (2000). Social Theory and Social Change. New York: St. Martin's Press.

Parkin, J., Ryley, T., Jones, T. (2007). Barriers to Cycling: An Exploration of Quantitative Analyses. In D. Horton., P. Cox, P. & D. Rosen (Eds.), *Cycling and Society* (pp. 67-82). Surrey: Ashgate.

Paterson, M. (2007). *Automobile Politics: Ecology and Cultural Political Economy*. Cambridge: Cambridge University Press.

Pawlowski, L. (2009). Personal Interview. September 10, 2009.

Pikora, T., Giles-Corti, B., Bull, F., Jamrozik., Donovan, R. (2003). Developing a framework for assessment of the environmental determinants of walking and cycling. *Social Science and Medicine*, 56, 1693-1703.

Pucher, J., Komanoff, C., Schimek, P. (1999). Bicycling Renaissance in North America? Recent Trends and Alternative Policies to Promote Bicycling. *Transportation Research Part A*, 33, 625-654.

Pucher, J. & Buehler, R. (2005). Cycling Trends and policies in Canadian Cities. *World Transport Policy and Practice*. 11(1), 43-61.

Pucher. J. & Buehler, R. (2006). Why Canadians Cycle more than Americans: A Comparative Analysis of Bicycling Trends and Policies. *Transport Policy*, Vol. 13, 265-279.

Rajan, S. C. (1996). The Enigma of Automobility. Pittsburgh: University of Pittsburgh Press.

Ribera-Fumaz, R. (2009). From Urban Political Economy to Cultural Political Economy: Rethinking Culture and Economy in and Beyond the Urban. *Progress in Human Geography*, 33(4), 447-466.

Rietveld, P., Daniel, V. (2004). Determinants of Bicycle Use: Do Municipal Policies Matter? *Transportation Research Record Part A*, 38, 531-50.

Rodriguez, D. A. & Joo, J. (2004). The relationship between non-motorized mode choice and the local physical environment. *Transportation Research Part D*, 9, 151-173.

Rose, G. (1997). Situating knowledges: positionality, reflexivities and other tactics. *Progress in Human Geography*, 21(3), 305-320.

Rosen, P. (2008). Framing Production: Technology, Culture and Change in the British Bicycle Industry. Cambridge, Massachusetts: MIT Press.

Rubin, H.J. & Rubin, I.S. (2005). *Qualitative Interviewing – The Art of Hearing Data*. Sage Publications: Thousand Oaks, CA.

Sachs, W. & Reneau, D. (1992). For the Love of the Automobile: Looking Back Into the History of Our Desires. Berkeley, CA: University of California Press.

Sayer, A. (2001). For a Critical Political Economy. *Antipode*, 33(4), 687-708.

Seiler, C. (2008). *Republic of Drivers – A Cultural History of America*. Chicago: University of Chicago Press.

Sener, I.N., Eluru, N., Bhat, C.R. (2008). An Analysis of Bicyclists and Bicycling Characteristics: Who, Why, and How Much are they Bicycling? Retrieved March 2009 from: <a href="http://www.ce.utexas.edu/prof/bhat/ABSTRACTS/sener\_eluru\_bhat\_bicycle2\_13Nov08.doc">http://www.ce.utexas.edu/prof/bhat/ABSTRACTS/sener\_eluru\_bhat\_bicycle2\_13Nov08.doc</a>

Siragusa, L. (2009). Personal Interview. July 8, 2009.

Sirkis, A. (2000). Bikeway Networking in Rio: the Challenges for non-motorized transport in an automobile-dependent government culture. *Local Environment*, 5(1), 83-95.

Skinner, D. & Rosen, P. (2007). Hell is Other Cyclists: Rethinking Transport and Identity. In D. Horton., P. Cox, P. & D. Rosen (Eds.), *Cycling and Society* (pp. 83-96). Surrey: Ashgate.

Smith, M. (April 26, 2007). Squeaky Wheel: no new bike lanes if cyclists don't up the volume. *NOW Magazine*, 26(34). Retrieved July 2009 from: http://www.nowtoronto.com/news/story.cfm?content=158080&archive=26,34,2007

Smith Lea, N. (2009). Personal Interview. July 21, 2009.

Snow, D. A. & Trom, D. (2002). The Case Study and the Study of Social Movements. In B. Klandermans & S. Staggenborg (Eds.), *Methods of Social Research* (pp. 146-172). Minneapolis: University of Minneapolis Press.

Sorenson, A. (2009). Personal Correspondence April, 2009.

Statistics Canada. (2001). Employed labour force by mode of transportation, both sexes, 2001 counts, for Canada. Retrieved April 2009 from:

 $\frac{http://www12.statcan.ca/english/census01/Products/standard/themes/DataProducts.cfm?S=1\&T=49\&ALEVEL=2\&FREE=0$ 

Statistics Canada. (2006). Employed labour force by mode of transportation, both sexes, 2006 counts, for Canada. Retrieved April 2009 from:

http://www12.statcan.gc.ca/english/census06/data/highlights/POW/Table603.cfm?Lang=E&T=603&GH=8&SC=1&SO=0&O=A

Statistics Canada. (2009). Number of vehicles on the registration lists by type of vehicle and jurisdiction. Retrieved September 2009 from: <a href="http://dsp-psd.pwgsc.gc.ca/collection\_2009/statcan/53F0004X/53f0004x2008004-eng.pdf">http://dsp-psd.pwgsc.gc.ca/collection\_2009/statcan/53F0004X/53f0004x2008004-eng.pdf</a>

Stintz, K. (2009). Personal Interview. July 3, 2009.

Strauss, A. L. & Corbin, J. M. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3<sup>rd</sup> Ed.). Thousand Oaks, C: Sage.

Streek, W. & Thelen, K. (2005). Introduction: institutional change in advanced poitical economies. In W. Streek & K. Thelen (Eds.), *Beyond Continuity: Institutional Change in Advanced Political Economies* (pp. 1-39). Oxford: Oxford University Press.

Thorne, T. (2009). Signed, sealed, delivered? *Dandyhorse – Toronto on Two Wheels*, 2, 14.

Toronto. (1999). *City of Toronto 1999 Cycling Study*. Toronto: Decima Research Inc. Retrieved January 2009 from <a href="http://www.toronto.ca/cycling/reports.htm">http://www.toronto.ca/cycling/reports.htm</a>

Toronto. (2001a). *Toronto Bike Plan – Shifting Gears*. Toronto: City of Toronto. Retrieved February 2009 from: <a href="http://www.toronto.ca/cycling/bikeplan/index.htm">http://www.toronto.ca/cycling/bikeplan/index.htm</a>.

Toronto. (2001b). *City of Toronto – Official Plan*. Toronto: City of Toronto. Retrieved April 2009 from: <a href="http://www.toronto.ca/planning/official\_plan/introduction.htm">http://www.toronto.ca/planning/official\_plan/introduction.htm</a>.

Toronto. (2005a). *Traffic Data Centre and Safety Bureau*. Brochure Retrieved September 2009 from: <a href="http://www.toronto.ca/transportation/publications/brochures/2005\_ped.pdf">http://www.toronto.ca/transportation/publications/brochures/2005\_ped.pdf</a>

Toronto. (2005b). *Toronto Bike Plan Year 3 – Progress Report: 2004*. Staff Report to Works Committee and the Toronto Cycling Committee. Retrieved September 2009 from: www.toronto.ca/legdocs/2005/agendas/committees/wks/wks050629/it023.pdf

Toronto. (2007a). *Climate Change, Clean Air and Sustainable Energy Action Plan*. Toronto: City of Toronto. Retrieved September 2009 from: <a href="http://www.toronto.ca/changeisintheair/index.htm">http://www.toronto.ca/changeisintheair/index.htm</a>

Toronto. (2007b). Change is in the Air: Toronto's Commitment to an Environmentally Sustainable Future: Framework for Public Review and Engagement. Toronto: City of Toronto. Retrieved September 2009 from:

http://www.toronto.ca/legdocs/mmis/2007/ex/bgrd/backgroundfile-2428.pdf

Toronto. (2007c). Air pollution burden of Illness from Traffic in Toronto: Problems and Solutions. City of Toronto: Public Health. Dr. David Mckeown Medical Officer of Health.

Retrieved September 2009 from:

http://www.toronto.ca/health/hphe/pdf/air\_pollution\_burden.pdf

Toronto. (2007d). *Streamlining the Approval Process for the Bike Network*. Report to the Executive Committee. September 17<sup>,</sup> 2007. Retrieved October 2009 from: www.toronto.ca/legdocs/mmis/2008/ex/bgrd/backgroundfile-9688.pdf

Toronto. (2007e). *Sustainable Transportation Initiatives – Short-term proposals*. Staff Report presented to the Public Works Committee September 19, 2007. Retrieved September 2009 from: http://www.toronto.ca/legdocs/mmis/2007/pw/bgrd/backgroundfile-7193.pdf

Toronto. (2008). 2009-2013 Recommended Capital Budget and Plan, and 2014-2018 Proposed Capital Forecast. City of Toronto. Retrieved September 2009 from: <a href="http://www.toronto.ca/budget2009/pdf/2009\_capital\_EC\_presentation\_public.pdf">http://www.toronto.ca/budget2009/pdf/2009\_capital\_EC\_presentation\_public.pdf</a>

Toronto. (2008b). Community Councils. Web Page. Retrieved October 2009 from: <a href="http://www.toronto.ca/committees/community\_councils.htm">http://www.toronto.ca/committees/community\_councils.htm</a>

Urry, J. The System of Automobility. (2004). *Theory, Culture and Society*, 21(4/5), 25-39.

Van den Dool, H. (2009). Personal Interview. July 14, 2009.

Vigar, G. (2001). *The Politics of Mobility: Transport, Environmental Politics & Public Policy*. New York: Routledge.

Weese, B. (May 26, 2009). Jarvis gets jammed: T.O. council votes to cut street back to 4 lanes. *Toronto Sun Online*. Retrieved May 2009 from: http://www.torontosun.com/news/torontoandgta/2009/05/26/9569321-sun.html.

Weinstein, J. (2005). *Social and Cultural Change: Social Science for a Dynamic World*. Oxford: Rowan and Littlefield Publishers.

Welsh, G. (2009, May). Deposition by General Manager of Transportation Services of the City of Toronto given at a City Council meeting regarding the installation of cycling lanes on Jarvis Street, Toronto, Ontario.

Wheldrake, S. (2009). Personal Interview. August 17, 2009.

Xing, Y., Handy, S. L., Buehler, T. (2009). Factors Associated with Bicycle Ownership and Use: A Study of 6 small U.S. Cities. Paper submitted for the Transportation Research Board 88<sup>th</sup> Annual General Meeting January 11-15. 2009. Retrieved March 2009 from: http://www.des.ucdavis.edu/faculty/handy/Bike\_Draft\_11.14.pdf

Yin, R.K. (2008). *Case study research: Design and methods* (2<sup>nd</sup> ed.). Beverly Hills: Sage Publications.