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Abstract

This article explores how bicycle travel is changing Ottawa. I argue cycling is transforming Ottawa's unique production of urban mobility, as a capital and a city of people. Challenging behavioural research on cycling and neoliberal approaches to its expansion, which emphasize individual responsibilities and intentions to bike, this article analyzes the changing moral worth of cycling and its embodied performance. I draw on research by Laurent Thévenot and Luc Boltanski to show how the morality and performance of cycling are interconnected. My analysis draws on a larger mixed methods study on urban mobility in Ottawa undertaken between 2007 and 2012, and recent follow-up analysis on changes in cycling policy and cycling infrastructure between 2012 and 2015.

Keywords: Ottawa, cycling, urban space, pragmatic sociology, morality, performance, common good

Résumé

Cet article explore comment le cyclisme est en train de transformer la mobilité urbaine dans la ville d'Ottawa. Cet article analyse l'évolution de la valeur morale du cyclisme et ses énoncés de performances. Il s'agit dès lors de questionner la recherche comportementale sur le cyclisme et des approches néolibérale en regards à son expansion, qui mettent l'accent sur les responsabilités individuelles et les intentions de faire du vélo. Ainsi, l'article analyse l'évolution de la valeur morale du cyclisme et de ses performances incarnées. L'analyse est basée sur les recherches de Laurent Thévenot et Luc Boltanski qui démontre comment la moralité et la performance du cyclisme sont interconnectés. L'analyse s'appuie sur une plus grande étude de méthodes mixtes sur la mobilité urbaine à Ottawa entrepris entre 2007 et 2012 et incorpore les changements en matière de politique cycliste et infrastructures cyclistes entre 2012 et 2015.

Mots-clés: Ottawa, cyclisme, espace urbain, sociologie pragmatique, moralité, performance

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Figure 1: A couple of people bike along the Rideau Canal (photo, author)

INTRODUCTION

Imagine, for a moment, cycling through Ottawa, Canada's capital city. What sort of place do you picture? What does it feel like to be cycling there? Do you imagine gliding along the Rideau Canal, the wind blowing gently through your hair, with rollerbladers and dogwalkers parting as you wend your way along a beautiful tree lined pathway, watching the boats sail by? If you imagine cycling like this in Ottawa, you are not alone. This idyllic cycling experience is marketed to tourists around the world by the National Capital Commission (NCC), the crown corporation that manages an urban system of such multi-use capital pathways, as a distinctive and pleasurable part of Canada's "greener capital" city (http://www.ncc-ccn.gc.ca/places-to-visit/parks-paths/things-to-do/park-cycle-canadas-capital).

Now imagine, for a moment, getting off the pleasurable capital pathway, and entering the urban fray on Bank Street, Laurier Avenue, Somerset Street or, unlucky for you, Bronson Avenue (a notorious arterial highway running to the airport). What happens next? Suddenly thrust into another, messier Ottawa, you breathe heavier, start sucking in tailpipe exhaust, and compete with cars, trucks and buses for scarce road space. You worry about winning the next 'door prize.'This dichotomy encapsulates Ottawa's competing identities as a city and a nation's capital. On one hand, for many people, Ottawa is understood through the prism of Parliament, museums, parks and memorials as a predictable and orderly display for the Canadian nation. On the other hand, especially for people who live, and spend time, in Ottawa, the city is always already a practical, unfolding urban environment, full of tension, contradiction and ambiguity.

In this article, I explore how cycling, as a burgeoning system of urban mobility, cuts across these two Ottawas, with a focus on what happens when cyclists leave the protected capital pathways and bike into the lesser known Ottawa as a dynamic unfolding urban environment. The *Canadian Journal of Urban Research* has rarely explored bicycle travel (see Agarwal and North 2012). While there are important exceptions, such as the *Toronto Cycling Think and Do Tank* and UBC's *Cycling in Cities* group, cycling generally garners little attention overall in Canadian urban research. Where cycling is of focus, the primary concern is with explaining cycling behaviour in parsimonious models that show, for example: cycling is surprisingly safe; more men than women cycle; gender disparities are less where cycling rates are highest; and cyclists prefer short trips through dense, mixed use terrain (Ledsham et al. 2014; Pucher and Buehler 2012). These findings are insightful, and extend knowledge on the social determinants of cycling. But this behavioural research fails to advance theoretical and critical understandings of cycling as a *moral* and embodied *performance* that challenges conventional ways of

using the street.

I address this lack of critical cycling research in Canada through a theoretically-driven case study analysis of cycling in its capital city. Ottawa is a stage, unique in Canada, where national ideas about urban cycling, from the NCC, wrangle locally with those of a city. My empirical analysis draws on a larger study on the production of mobility and space in Ottawa, undertaken between 2007 and 2012, which includes twenty in-depth interviews with city planners and community activists, an analysis of various official planning documents and extensive fieldwork. Additionally, my analysis here draws on a follow-up interview in 2015 with a key informant in my initial study, Robin Bennett. I rely on Robin for his historical insight. He was Ottawa's first, and for much of the 2000s, only, full time cycling planner, a kind of 'one man cycling department.' Finally, I also examine the most recent *Ottawa Cycling Plan* (2013), and draw upon my own experiences of everyday cycling in Ottawa (2005-2013).

On the basis of my qualitative analysis, and a few important descriptive statistics, I will advance the following thesis: cycling has become increasingly worthy from a moral perspective as a viable form of everyday travel, and as such, entwined with Ottawa's production of urban space (Lefebvre 1991). What this means is cycling policies, practices and infrastructures are becoming significant avenues for Ottawa's articulation of urban space, both a capital and a city of people. I organize these different elements of cycling in my analysis as cycling *morality* and *performance*.

This article has four sections. In the first section, I briefly review the mobilities literature and theoretical work by Thévenot and Boltanski (1991/2006) on the different levels at which we could imagine the production of urban cycling. In the second section, I apply this theory (the mobilities paradigm in conjunction with Boltanski and Thévenot) to help explain recent cycling controversies in Ottawa, and understand how cycling is publicly justified and attributed worth (morality). In the third section, I dip below the level of public conflicts, and apply additional work by Thévenot to analyze how cycling is changing Ottawa's local urbanity by reconfiguring regular actions and customized practices (performance). In the fourth section, my conclusion, I offer some observations derived from my analysis about cycling futures in Ottawa.

LITERATURE REVIEW: MOBILITIES AND THE COMMON GOOD

The "mobilities paradigm" (Sheller and Urry 2006) offers a sociological response to individualizing and deterministic models in conventional transport science that define travel primarily as an economic and technical issue (Freudendal-Pedersen 2009). The main assumption underlying the mobilities paradigm is that movement—whether of people, ideas or things—carries a social and political significance that extends beyond the utilitarian function of getting from point A to point B (Jensen 2009; Cresswell 2006). Transport comprises a central area of mobilities research where car travel, for example, or automobility, is viewed as a complex network interwoven with dominant forms of industry, consumption and culture that, among other effects, erodes the dense interlinkages in cities that make walking, cycling, and transit feasible and desirable (Conley and McLaren 2009; Parusel and McLaren 2010; Paterson 2007). Ottawa, like other Canadian cities, exemplifies a system of hegemonic automobility. In Ottawa, building a dedicated bike lane can cause more controversy than expanding a superhighway, and planners and politicians privilege sprawling car-oriented urban development (Scott 2012, 2013).

Cycling is a peculiar, self-propelled form of urban mobility that often unfolds in the shadows of automobility. Like the car, cycling affords relatively autonomous movement; unlike car driving, especially in wealthy Anglophone countries, cycling is viewed as a risky and "unusual, if not actually deviant, activity" (Jones 2005: 815). This stereotype may help depress cycling rates. In Canada, according to the National Household Survey, four out of five commuters used private motor vehicles in 2011, while only 1.3% of cycled (Statistics Canada 2013). Why do so few Canadians bike to work or school? How can car dependent societies expand cycling? Behavioural research emphasizes changing attitudes and values that determine or 'drive' behaviour, leading individuals to make better choices. This choice-driven approach legitimates dominant policy interventions that use dis/incentives and pricing to persuade individuals to give up dirty habits—such as placing graphic, cigarette-inspired stickers depicting climate change at the gas pump (Baluja 2015). While choice-making plays an important role in the process of cycling, to only focus on individual choices is to ignore how social and technical elements in a mobility system interact and coevolve.

An alternative view of changing mobilities focuses on performance, practice and the embodied dynamics of

movement. The performance of cycling demands physical coordination and "sensuous intensities" felt through bodily exertion and exposure to weather, terrain and traffic (Spinney 2006; Jones 2005). Over time, these exertions and exposures hone "affective capacities" for cycling (Larsen 2014) and variable cycling competencies (Aldred 2013) that differ considerably by social and spatial context (Horton et al. 2007). By this view, cycling expansion in car-dominated cities first presumes that cycling constitutes a practice continually developing in conjunction with infrastructures, policies and wider mobility norms (Watson 2014; Furness 2010; Mapes 2010). For example, to create "conditions in which much less resource intensive ways of life might take hold" (Shove and Spurling 2013: 1), Shove (2010: 1279) emphasizes "how practices evolve, how they capture and lose us, their carriers, and how systems and complexes of practice form and fragment." This practice-based approach improves significantly on individualistic choice-driven models of change by showing how evolving cycling practices contest, and become constrained by, car-dominated cultures of city planning and hegemonic systems of automobility (Stoffers 2011; Bonham 201). At the same time, the concept of practice is not without its own limitations. In particular, practice-based approaches offer few tools to understand issues of morality, values and worth.

The expansion of cycling entails the reconfiguration of its moral worth (Jensen and Freudendal-Pedersen 2012; Freudendal-Pedersen 2014). For instance, cycling shapes, and is shaped by, shared notions of the good life and the "good city" (Amin 2006), especially where 'good' carries ecological value (Cupples and Ridley 2008; Green et al. 2012), but also other values, such as citizenship, where cycling enhances local roots and embeds cyclists in wider communities (Aldred 2010). To account for the complexity of producing more cycling, researchers must confront the embodied dynamics of cycling alongside the tenuous, emergent and value-laden connections that tether cycling to the common good. This article therefore builds on practice-based understandings of change—and challenges narrow choice-driven approaches—by investigating cycling through two distinctive yet interconnected lenses: *morality* and *performance*. In spite of the fact that cycling's moral cache is rising as cities enroll cycling to fight climate change, habitat destruction, obesity and road violence, very little research analyzes the moral nuances of cycling. This gap becomes especially visible with respect to the diversity of ways in which cycling might advance the common good.

To investigate how cycling intersects with a plurality of common goods, I draw on pragmatic sociology.¹ In *On Justification* (1991/2006), Boltanski and Thévenot identify a set of common goods, or "cités," to which people appeal during public disputes. When people express injustice, or try to legitimate and "enlarge the validity of their respective claims" (Thévenot 2014: 8), they appeal to these common cités by arguing on behalf of everyone. However, each cité, grounded in a canonical political philosophy, defines a particular way of distributing worth for everyone, and they contradict one another. The *market cité* exalts competition, relying on an open market in which people pursue their own interests and acquire worth through wealth. Market worth clashes with the domestic cité, in which people acquire worth through traditional roots and their status in local, hierarchical chains of dependencies. Both of these oppose a Rousseauian *civic cité*, where people and things become virtuous to the extent they create active forms of citizenship and advance equality and solidarity between bloodlines. The *industrial* cité, in another sharp contrast, celebrates engineers, planners and technocrats who efficiently organize complex systems far into the future. I apply these four cités or "justificatory grammars" (Blokker 2011: 253) in the next section of this article to understand public trials in which the worth of urban cycling is 'put to the test.²

To integrate the analysis of the moral and performative production of cycling, I apply further research by Thévenot (2014; 2002) on three "regimes of engagement." Thévenot's work offers an extension of the "practice-orientation" (Watson 2014: 119) applied in mobilities research. This extension allows us to not only distinguish between two modes of practice 'below' the level of public controversies, but also integrate the analysis of performance and moral dynamics. The first regime of engagement, that of moral justification, is joined by two others that operate through "socially acknowledged ways of coordinating with oneself" (Thévenot 2014: 11): regular planned action and familiar engagement. The regime of *regular planned action* views practice as the "functional agency of allowing normal action from nonpersonalized individuals" (Thévenot 2002: 73). Under this regime, imagine cycling as the product of intentional choices, in line with behavioural research, but also as the achievement of regular actions: maintaining tire pressure, checking the weather, choosing safe routes on Google, clearly signaling to others when you turn. This regime is important for the successful accomplishment of cycling,

yet becomes problematic in neoliberal discourses that equate prudent personal choices and planned actions as responsible cycling.

In contrast to the regime of regular planned action, the regime of *familiar engagement* defines practice not as a product of intentions or actions, but as "numerous idiosyncratic linkages with a customized environment" (Thévenot 2002: 73). Here, imagine cycling as a series of embodied and perceptual clues you developed over time through local, habitual frequenting: wandering on two wheels through old haunts, taking unconventional pathways, engaging in play. This mode of cycling brings us closer to Shovian theories of practice (Shove and Spurling 2013; Shove 2010), in which embodied performances cannot be explained by individualized moments of choice. Unpacking cycling performance as both intentional plan making and familiar engagement is necessary for understanding the politically privileged role played by intentional performance, and for highlighting the democratic possibilities of expanding familiar ways of cycling.

Moral evaluation, planned action and familiar engagement describe three unique worlds of urban cycling; equally significant is where these worlds come together and intersect via particular policies, practices and infrastructures. Of particular contemporary significance is the manner in which economic worth has dominated public debates on cycling and contributed to a neoliberal emphasis, in policy discourse and popular representations of bicycle travel, on the need to expand cycling as a series of regular actions, often on standardized (read: on-street) bike lanes where cyclists assume individual responsibility for the risks of riding in traffic. This dynamic—a kind of "structural tyranny of one regime of engagement upon another" (Blokker 2011: 256)—can only be understood by applying all three regimes in tandem. In what follows, I apply each regime of engagement to the case of Ottawa. I first examine how Canada's capital is reconfiguring cycling's public worth, drawing on a diversifying moral terrain in which industrial worth is increasingly contested by market and civic worth. I then analyze cycling performance in Ottawa through the dual performative lens of intentional action and familiar engagement. I show how an overemphasis on biking as regular planned action in Ottawa not only undermines cycling's collective worth but also excludes familiar, embodied performances and ignores how these performances generate a shared 'cycling habitat.' I argue, by protecting urban cycling habitats that cultivate various familiar ways of biking, Ottawa can steer the expansion of cycling in a more democratic direction. To begin my analysis, I return to where I began, cycling off the capital pathway into Ottawa's grittier streets, like Sussex Drive.

THE WORTH OF CYCLING IN OTTAWA

After leaving NCC pathways—either by choice, in search of less meandering routes to workplaces and grocery stores, or more often by necessity, where pathways abruptly end—people riding bikes enter streets designed primarily for, and in practice dominated by, people driving cars. A recent addition to Ottawa's streets, and reminder of the risks cyclists face around motorists, comes in the haunting form of the ghost bike. First cropping up in St. Louis, Missouri around 2003, ghost bikes, painted in white and adorned with mementos, resemble roadside shrines. They sit closely to where cyclists were killed in traffic, usually by motorists or people opening car doors. The first ghost bike I encountered memorializes Melanie Harris (see Figure 2).

In 2009, Melanie was struck by a bus on Sussex Drive in front of the Department of Foreign Affairs and died of her injuries. The protected pathway where Melanie had been riding suddenly stopped at an arterial highway. At first glance, Melanie's ghost bike, like many others, seems like a religious observance, a memorial appealing to the Gods rather than common human principles for salvation. However, family and community members who build and maintain ghost bikes also appeal to a domestic common good by finding a public way to remember particular lives without forgetting the violence that ended them, almost like a cenotaph. Shades of civic worth further colour ghost bike memorials, insofar as these memorials become wider symbols of political protest against the inequalities and daily violence associated with the car (World Health Organization 2004).

The industrial worth of city cycling

Cycling deaths have recently created opportunities for public trials over the worth of city cycling. People riding bicycles killed by people driving cars has recently erupted as a political controversy in Ottawa, much as it did "back in the 1980s, when people started to come onto the streets more, and ride to work on their bikes" (Robin Bennett, interview with author). While a rush of fatalities in the 1980s met a wide civic response, leading to the birth of Ottawa's main cycling advocacy group (Citizens for Safe Cycling), today the major public response



Figure 2: A Ghost Bike Memorial on Sussex Drive (photo, author)

tilts decidedly towards industrial qualifications. On October 24, 2011, for example, the Ontario government, acknowledging a recent string of cycling fatalities (including Melanie's), announced a systematic public review. Led by the Office of the Chief Coroner for Ontario (OCC), the *Cycling Death Review* (OCC 2012) covers all "accidental cycling deaths" that occurred in the province from January 2006 to December 2010 (n=129). In the contradictory moral terrain of the different cités, the *Cycling Death Review* exemplifies the functional spaces of the industrial cité, relying on long term, scientific and technical interventions to increase efficiency.

The industrial cité reduces a cyclist killed in traffic, in spite of her complex biography, to a unit of data analysis, one anonymous case in a population. This reduction contradicts people in the domestic cité, including the families of victims and caretakers of ghost bike memorials, for whom the meaning of cycling, and the fatal loss of a cyclist, derives from the personal life history and relationships sundered by a seemingly 'senseless' act of violence. Like domestic worth, with its strong focus on the past, industrial worth takes an expansive view of time, but oppositely, into the future. The purpose of the Cycling Death Review is "to learn from tragic deaths in order to generate recommendations aimed at preventing deaths in the future" (OCC 2012: 6). The Cycling Death Review takes for granted the very "hypothesis" it wants to "test": "the vast majority of cycling deaths are preventable" (OCC 2012: 7). If cycling deaths were not preventable, then there is no basis for scientific planning that could lead to their prevention. To avoid this problem, the Cycling Death Review at its outset specifies that "deaths resulting from cycling collisions ... are not 'accidents,' in the sense that all of these deaths were predictable, and therefore preventable" (OCC 2012: 3). In a strange way, then, given the aura of senselessness that often surrounds tragedy, cycling deaths are made to make almost perfect sense. As something to be explained, cycling deaths become predictable and, through their extension into the future, a prolific site of engineering and urban intervention. Interventions, in this case, include public education, a provincial cycling plan, and improved infrastructure (OCC 2012).

Ottawa's first major cycling plan as an amalgamated city, like Ontario's *Cycling Death Review*, situates cycling primarily in the industrial cité. Long time City of Ottawa cycling planner Robin Bennett, for example, frames the *Ottawa Cycling Plan* (OCP 2008) in terms of deploying a long term plan for the future:

We have a plan that we can show to people. People would not, people being city staff, accept it if it isn't in a plan that we have to move towards.... The plan was being used long before it was approved. Because we would say this is going to come in, so you might as well think about it now. There are people who still are very skeptical about the potential and as a result they may not strongly support it, which is understandable. But it, the plan, I think, *itself*, has moved forward people's thinking about it. (Interview with author, my emphasis)

The 2008 OCP shaped the worth and meaning of cycling as a technical system capable of rationally organizing bicycle travel across the National Capital Region. This cycling plan imagines the city as a standardized geometric space, waiting to be filled by cyclists along a network made up almost entirely of shared and painted cycling lanes on streets (with the critical exception of Laurier Avenue, more on this below) (OCP 2008). This blanket approach, however, became a critical weakness. As Robin reflects,

we tried to make the entire city cycling friendly, and that created a new set of challenges. A lot of resources have spilled out to suburban and rural areas, and that has hurt cycling, where the biggest problems are. The greatest potential is in the central part. It has been a little bit left out, because of this need to include all of the city. (Interview with author)

The 2008 OCP thus fails to recognize how dense and mixed use urban neighbourhoods nurture city cycling. It could also be viewed as manifesting what Cupples and Ridley (2008) describe as a "cycling fundamentalism," that denies embodied and gendered aspects of cycling through an emphasis on building standard bike lanes mixed with traffic that, in reality, mainly appeal to certain demographics, such as a subset of middle class white males who prefer to ride in traffic.

Diversification of cycling worth in Ottawa: 2008-2013

Public cycling policy in Ottawa between 2008 and 2013 underwent a moral shift that saw the diversification of cycling worth beyond industrial value. This shift was supported by unusual forays by the National Capital Commission (NCC) into city cycling politics, demonstrating the ongoing significance of cycling in representations of 'capital space.' As a crown corporation accountable to Parliament, the NCC is "responsible for planning, as well as taking part in the development, conservation and improvement of Canada's Capital Region" (http://www.ncc-ccn.gc.ca/about-ncc). In 1958, the NCC was reconsolidated as a national organ to implement the ambitious 1950 Gréber Plan (Gordon 2001). The single mention of cycling by the Gréber Plan encapsulates the NCC's approach in the twentieth century to promoting bicycle travel.

The valley of the Gatineau River, the innumerable lakes surrounded by rocky and wooded escarpments, the picturesque Masham Valley, the pastoral river banks of the Mississippi, Ottawa and Rideau Rivers, the Rideau Lakes and the numerous tributaries of these waterways provide a system of green spaces for rest, hiking, cycling, motoring, boating, fishing, camping, picnicking, horseback riding, skiing and, the most salutary of all recreations, living close to nature. (Gréber Plan, 1950: 110)

In the 1970s, The NCC applied this notion of cycling as a recreational activity best suited for natural corridors around the city. On its mission to construct Canada's Capital Region as "a source of national pride and significance" (NCC 2015), the NCC built extensive multi-use recreational pathways for walking and cycling that meander along Ottawa's many waterways.

Therefore, in 2010, it marked a significant shift in cycling philosophy when NCC CEO Marie Lemay chose to lead a delegation of city leaders on a fact-finding mission of world-class and decidedly *urban* cycling corridors in Northern Europe, culminating in the Velo-City 2010 conference in Copenhagen. The delegation returned with an ambitious vision to "Copenhagenize" Ottawa by building "segregated bike lanes" across Ottawa of the sort that crisscross the Danish capital. This idealistic vision quickly collapsed under the weight of complacent Ottawa bureaucracies, "where the most important thing is to ensure that motorists do not have to wait too long in traffic lights... and get into congested situations" (Bennett, interview with author)—but not before a critical piece of cycling infrastructure took hold in 2011 of Ottawa's urban core, in the clever guise of a "pilot project."

Ottawa's Laurier Avenue Segregated Bike Lane (see Figure 3) (http://ottawa.ca/en/city-hall/publicconsultations/segregated-bike-lane-pilot-project) has transformed the materiality of biking, by dedicating street space to it, while simultaneously shifting the moral grounds of cycling. Unlike Ontario's Cycling Death Review (OCC 2012) and Ottawa's first far-reaching official cycling plan (OCP 2008), Laurier connects cycling to a democratic common good and civic worth. First of all, "the word segregated came about from the naming of the pilot project. And not long after that, [Ottawa cycling planners] thought it was a bad word for a number of reasons. But it stuck" (Bennett, interview with author). Rather than racist notions of segregation, with which it may have been popularly associated, 'segregation' of cyclists refers to their separation from motorists via concrete dividers, berms, parked cars, planters, etc. While Ottawa's cycling planners now wish they would have called Laurier a 'dedicated' lane, Laurier still became a wildly successful pilot. It tripled cycling volumes, enhanced the safety of cyclists (City of Ottawa 2013), and now forms one of the "top ten biking facilities in North America" (Miranda-Moreno et al. 2013). Laurier provides an important counterargument to Cupples and Ridley's thesis (2008) that emphasizing cycling infrastructure reinforces disembodied ideas about biking that exclude people who tend to associate cycling with high levels of risk. The safety of separated bike lanes appeals significantly to underrepresented cyclists in Canada, in particular women, older people and children. As such, dedicated lanes act as democratic beachheads for inviting more kinds of cyclists into cities such as Ottawa, where cycling trips are dominated 2:1 by men (OCP 2013: 21).





Dedicated bike lanes also inspire passionate denunciations that further diversify the worth of cycling into the market cité. Opposition to the Laurier lane by local residents and businesses quickly spread, fanned by Business Improvement Associations that reframed the dispute around market principles. Businesses expressed anger because the project would result in the loss of commercially valuable on-street parking and space for delivery trucks, despite the city's moves to make alternative arrangements. One quote in particular, from the owner of a local café along the route, became a running media mantra (Clarke 2012: n.p.): "It's hurting everyone's business. If you have a delivery or if someone wants to quickly buy something they can't because there is no parking." The shift in the prevailing justificatory narrative was pronounced. The City of Ottawa responded by emphasizing

market research demonstrating bike lanes are good for business, arguing cyclists of all kinds stop more easily and frequently than motorists at local businesses and tend to spend more money there per month (Sztabinski 2009). After this response, the City tempered plans for segregated infrastructure, quietly removing proposed extensions of the Laurier lane to other areas of the city from some planning documents (Reevely 2013). The sudden chill speaks to an unusual power of market justifications in the North American context (Lamont and Thévenot 2000).

The public controversies over cycling discussed in this section illuminate a dynamic moral landscape, in which cycling plays an increasingly prominent role in producing Ottawa, in different ways, as a 'good city.' In spite of popular critiques by businesses of Laurier's dedicated bike lane, Laurier's industrial, civic and market justifications prevailed in 2013, when Ottawa City Council moved to make Laurier's lanes permanent. In the same year, the City approved a revised Ottawa Cycling Plan (OCP 2013). The new plan strategically uses Laurier as a jumping off point for reproducing urban mobility more broadly in Ottawa through cycling transport. It completes a shift away from antiquated notions of cycling embedded in NCC pathways, when cycling was worthy of 'national pride and significance' insofar as cycling enabled physically active encounters with nature. Equally significant, the 2013 OCP moves Ottawa away from previous plans and a provincial Coroner's Review which imagine the city as a Cartesian industrial space in which cycling can be uniformly engineered. Instead, the 2013 OCP envisions strategic corridors centered on dedicated infrastructure that target dense urban neighbourhoods (instead of a blanket approach) as high growth areas for cycling. As Robin explains, "the biggest change in direction [between the two plans] is the movement away from a network ... towards an emphasis on "bikeways" which are specific corridors that stretch throughout the city" (interview with author). The first "east-west bikeway" is twelve kilometres long and encompasses Laurier downtown. In sum, Laurier is ground zero for Ontario's first city bicycle highway, carrying, in addition to thousands of people every day (see http://ottawa-laurier.visio-tools.com/), the moral capacity to make cycling more inclusive.

PRACTICE AND FAMILIARITY: PERFORMING CYCLING IN OTTAWA

Morally charged debates over the worth of bike travel are not the only way in which cycling planning and politics have altered the production of Ottawa's urban mobility. These debates only pertain to situations when cycling is 'put to the test,' where cycling is open to public critique, which say nothing on how biking actually unfolds below the public through prosaic, everyday life. In this section, I turn to prosaic biking, only tracing links back up to the 'moral cycling infrastructure' examined above where necessary, to show their interconnection through a 'neoliberal cycling subject.' In what follows, I first analyze how the regular accomplishment of cycling is expanding and evolving. I then examine how cycling is proliferating through "numerous idiosyncratic linkages with a customized environment" (Thévenot 2002:73). In both of these analyses, I offer relevant examples from my fieldwork and my own everyday cycling experience in Ottawa undertaken most days of the year between 2005 and 2013.

Planned action cycling in Ottawa

Evidence that bicycles are becoming a regular part of Ottawans' transport routines is unequivocal. Every year, over 16 million trips in Ottawa are now made on bicycles (OCP 2013: 2). Between 2005 and 2011, cycling's share of commuters ('mode share') jumped from 1.7% to 2.4%, still a low proportion, but climbing (OCP 2013: 2). The new *Ottawa Cycling Plan* (OCP 2013) jettisons the overly modest 3% mode share target of the old plan (OCP 2008), raising it inside Ottawa's greenbelt to an ambitious 8%. For perspective, the bike mode share in Portland, Oregon is currently about 6% (Pucher et al. 2011). Short cycling trips (<5 kilometres), especially in dense urban areas with mixed land uses, are exploding as a way to get from point A to point B, deliberately, on a bike. The new OCP (2013) aims to double down on this growth by building and mapping forward-thinking infrastructure, like Laurier, more closely onto the corridors along which people in Ottawa's biggest bundle of desire lines, not coincidentally, essentially encompasses Ottawa's new east-west bikeway through downtown and surrounding urban neighbourhoods (see OCP 2013: 20).

Following Thévenot's concept of regular planned action, there exist at least 16 million voyages every year where Ottawans exert an 'individual intentional agency' required to successfully perform biking. Intentional planning is required to coordinate people who bike, and render them responsible for their actions. An interesting

example of intentionally planned cycling in Ottawa is the way in which sections of meandering capital pathways are co-opted by utilitarian cyclists trying to travel across the city in a functional manner. For example, Colin, another a leading figure in Ottawa's small group of cycling planners (e.g. lead on the Laurier project), uses a good chunk of the Rideau Canal pathway to get to work at City Hall.

Well today again I biked. I'm part of the 2% of people who cycle to work. I do that for eight months a year, from March to October, and then I'm part of 23% of the population here who takes the bus in the winter. Biking is great, it's one the most pleasurable parts of my day, getting fresh air and cycling along the canal, taking in the beauty of the flowers and the trees, and traveling at a speed that's comfortable to stop and to say hello to people. (Interview with author)

Yet, the Rideau Canal Pathway is not simply beautiful. It, along with other national capital pathways, offers what Robin calls "hidden capacity" for utilitarian cycling. In fact, he argues cycling transport

is stronger in Ottawa than in most other cities because of the NCC's pathway network that allowed people to travel some distances here with having to worry about traffic and so on. And it just caused more people to just try out a bike, although it is still a small number of people. (Interview with author)

Another network where individual cyclists can extend their intentional agency is an expanding, and already extensive, public transit system in Ottawa. The City aims to cultivate intermodal voyages throughout the capital region by using this system and, to quote the vision statement for the OCP (2013: 18), "maximizing the synergy of transit," by increasing "bike-ride-walk" trips and other hybrid commutes (OCP 2013: 36).

While emphasizing individual intentional agency may help grow the number of people who successfully accomplish cycling, it also, problematically, reinforces a neoliberal cycling subject. Cycling scholars drawing on governmentality have shown in different English speaking democracies that people face significant pressure to cycle as responsible, self-managing citizens (Cupples and Ridley 2008; Aldred 2012). After innumerable hours of biking around urban Ottawa (and receiving verbal feedback from motorists, not all of it constructive), I found 'responsible' cycling in the capital has come to mean, especially for motorists, but also for many cyclists: biking in single file; donning a helmet and other body armour; leaving earbuds in your pocket; staying extremely visible (urban planning speak: 'conspicuous') to motorists by wearing lights and safety vests; and finally, using segregated infrastructure, like Laurier, if it is available, even if you prefer to bike on the road with the speed of traffic, which is your legal right.

The neoliberal cycling subject is especially reflected in the strong emphasis on 'safe cycling.' This emphasis appears in Ottawa's official cycling plans (2008, 2013), and the work of major advocacy organizations like Citizens for Safe Cycling, as if the default mode in Ottawa is unsafe and irresponsible cycling. Cyclists already take a significant amount of responsibility for their own safety. Continually heaping individual responsibility onto cyclists for their own conduct ignores how governments and urban development industries in Canada systematically undermine safe cycling by expanding arterial highways, superhighways (see Figure 4), and sprawling suburbs that legally or effectively exclude people riding bicycles, while training people driving cars to use and think about public rights of way as belonging to motorists. As Robin laments, "we continue to build the city to accommodate the car. And this city, no matter where you go, whatever time you go at, it is easy to get around by car. We did an excellent job" (interview with author).

A new approach to biking is needed in Ottawa that contextualizes regular cycling actions in relation to the regular driving actions of motorists within the civic cité. Ottawa and Ontario cycling policies and plans do not frame the violence inflicted on cyclists by people driving cars as an issue of urban equality, in terms of *rights* of cyclists to the city; it would probably be viewed as radical to do so. This could be interpreted as political pragmatism in a capital city that emphasizes technical solutions and prides itself on its low traffic congestion. It could also be viewed as what Thévenot calls a "structural tyranny" (Blokker 2011), where an emphasis on *individual* actions impedes *collective* valuation of cycling in general, and impedes much needed civic justifications of cycling in particular. Yet, not all individual cycling actions reinforce neoliberal subjectivities. In the next section, I analyze 'familiar cycling engagements' that operate below the public, yet exist outside of intentionally planned cycling.



Figure 4: Cyclists on a capital pathway under an expanding superhighway (photo, author)

Familiar ways of biking Ottawa

Another way in which people perform biking relates to creating "perceptual and kinaesthetic clues" on customized "tracks" in local environments (Thévenot 2002: 71). Unlike regular planned actions, which attribute intentional agency, cycling as familiar engagement entails modifying a person's surroundings and mobility habits to configure her agency across what I call a 'cycling habitat.' Cycling habitats sustain spatial conditions in which different ways of biking can take hold of the city (to paraphrase Shove and Spurling 2013: 1). In addition to this collective dynamic, cycling habitats are also unconventional in the sense that one person's cycling habitat might not make immediate sense to another. For example, my Ottawa cycling habitat, like Colin's, when he veers onto the Rideau Canal pathway for sake of a slower and pleasurable ride, includes peculiar places in the capital that were not planned for functional cycling use, yet afford affective cycling experiences, moments of play, and embodied "sensuous intensities" that often vary significantly between different urban neighbourhoods (Larsen 2014).

Sneaking off Elgin Street through Jack Purcell Park, coasting side-to-side down one of Ottawa's largest hills on Somerset Avenue West, dwelling in the city's unique web of Francophone-Anglophone traffic on Dalhousie Street, racing through Ottawa's Central Experimental Farm, straying onto unnameable yet customary side streets in old streetcar suburbs and across the Ottawa River in Hull, Quebec—these affective ways of biking on some of my familiar tracks compose an intuitive cycling habitat. This cycling habitat offers many perceptual clues about where, and with whom, I am biking, including sound signals (dogs barking, crows screeching, car doors clicking), somatic feelings (pleasures of speed, traffic vibrations swelling) smells (summer grass, gasoline) and tastes (winter slush, tailpipe exhaust). Through habitual use and the development of such cues, my cycling tracks, from their pavement cracks to the precise timing of their traffic lights, have become so familiar that I no longer plan or think about, but rather *feel* my way through, their affordances. In this multisensorial way, a person's cycling habitat creates an extension of their home, where they arrange their furniture and attach meanings to objects in embodied, idiosyncratic ways. While the particular cycling performances I just described may be difficult to place, imagine your own ever-evolving collection of habitual, embodied movements through familiar extensions of your home. Expanding cycling as familiar engagement as opposed to planned and intentional action carries two critical advantages for improving the production of urban mobility in Ottawa: enhancing spatial creativity, and contesting hegemonic automobility. Familiar ways of biking in Ottawa do not necessarily cause positive emotions, comfort or happiness. What growing cycling habitats generally inspire, however, is creative use of urban space. Relative to people driving cars, people riding bikes more easily switch up their urban routes (sometimes adventurously, into unfamiliar streets), stop and linger more frequently (and not simply to buy things in stores), and develop far more intimate acquaintances with the human and nonhuman beings in their immediate surroundings (Aldred 2010, 2013). Cultivating cycling habitats full of close acquaintances, people and objects, opens up larger city districts where people can relax the functional constraints of transport and play and experiment with, even subvert, regular aspects of Ottawa's car saturated urbanity. Tactical subversion (de Certeau 2011), of course, may irk the city planners, whose job is to create a regular cycling order.

For example, when I first interviewed Robin on Elgin Street, one of Ottawa's busier and more playful urban scenes, just as he was about to explain how the 2008 OCP integrates a patchwork of cycling rules from preamalgamation Ottawa, he suddenly looks out the window. We both watch as a cyclist stopped at a red light starts angling for a left turn. She smoothly and politely worms her way through a crosswalk full of pedestrians buried in blackberries on a well timed diagonal across the street (to avoid becoming stranded in the middle of Elgin between opposite columns of moving cars). I interpret this move as an elegant and useful, if unsanctioned, cycling tactic for turning left. Robin exclaims, "I am astonished at how poorly cyclists cycle up Elgin Street. They are just all over the place" (interview with author). We laugh, and agree to disagree. It is important to note, what makes Elgin Street so conducive to such non-conventional, legally vague cycling performances are the same factors that render Elgin a dynamic urban hub in the first place: slow car speeds (owing to having only one lane in each direction, small city blocks, frequent traffic signals and frequent jaywalkers), and a diverse and dense mixture of surrounding land uses (Jacobs 1961).

The cultivation of cycling habitats around urban hubs like Elgin Street, Bank Street, Somerset Street and other areas that support the kind of creative cycling tactics I just described poses a decisive, if nascent challenge to hegemonic automobility in Ottawa. The challenge is still in its early stages, largely because

the majority in Ottawa I would say, at the city and the general public, do not understand that you can actually travel by bicycle. You really can! They don't get that, and it's a very hard thing to do, when the perception is it's very dangerous, and why should I? I can just jump in the car. (Bennett, interview with author).

Yet, this limited understanding of possibilities surrounding city cycling has started to give way, as Ottawans, faster than many other urban populations in Canada, transition from recreational biking to commuting (Statistics Canada 2013: 4). As biking remoulds people's regular plans and actions, it also offers a tool for reimagining and recreating city streets in a way the majority of Ottawans have never experienced—as primarily for something other than cars. There remains a long hill to climb. As Farah (pseudonym), a rare female planner working on cycling at the City of Ottawa, describes,

We have lots of people who cycle for recreation, but very few who cycle for commuting. One of the main reasons is that the people who cycle for their commute and cycle in traffic are really committed, while the majority who cycle for recreation like being away from traffic. They like to be segregated, they don't feel or perceive being safe on the road. I am one of them! (Interview with author)

Farah's comments punctuate the significance of efforts by the National Capital Commission to improve its off road pathway system (OCP 2013: 94), Ottawa's unique 'hidden capacity,' as well as new plans by the City to build more dedicated cycling lanes.

The boldest play yet by Ottawa to challenge hegemonic automobility and transform the city into a kind of 'mass cycling habitat' is easily lost in the technical jargon of the industrial cité (possibly on purpose, for pragmatic reasons). The play relates to assembling 'bikeway corridors' and customizing bike lanes according to changing neighbourhood conditions using a "Facility Selection Decision Support Tool" (OCP 2013: 43). More important

than its uninspiring name, is the way this tool incorporates the *quality* of cycling lanes, not just their quantity, based on stress levels experienced by cyclists on different kinds of streets (see Figure 5). Practically speaking, this portends the construction of more dedicated lanes on stressful streets (and political battles over their value), in dense areas where people need them the most before they start biking to work. New dedicated bike lanes³ invite a diversity of cyclists—and different ways of performing and embodying bicycle for prosaic travel—into the city. As such, they become spines of an emerging mass cycling habitat with the civic potential to not only democratize cycling transport, but also advance equality among different road users. Ideally, dedicated lanes will act as beachheads for future bicycle highways, like Ottawa's emerging east-west bikeway. This will probably depend on whether Ottawa can win over homeowners and businesses angry about losing commercially valuable street space where motorists have been traditionally allowed to park or 'take off' their cars at rock bottom prices. If Ottawa proves successful, we may look back at Laurier Avenue as a Trojan Horse for sustainability. Dressed up in the technical veneer of industrial science and market value of increased local consumption, Laurier conceals a democratic sword to make streets safer, and more inclusive, for self-propelled transport.

Figure 5: Riding in traffic at Rideau Street and King Edward Avenue (photo, author)



CONCLUSION: CYCLING FUTURES

In this article, I have examined how various cycling policies, practices and infrastructures have become major influences in Ottawa's eclectic production of urban mobility. By applying pragmatic sociology (Boltanski and Thévenot 1991/2006), I demonstrated how the moral value of cycling is hierarchical and dominated by the economic qualifications of the industrial cité. Additionally, I showed how this moral terrain is nevertheless evolving, but not in a straightforward manner that would suggest a linear decline of economic domination. Rather, changing public qualifications show a politically complicated shift towards both the market and civic cités, with ambiguous implications for future policy interventions. Furthermore, I integrated my analysis of cycling cités with that of cycling performance, through Thévenot's regimes of planned action and familiar engagements below public cycling conflicts. These concepts were necessary to illustrate how the moral dynamics of cycling intersect with the performance of cycling, and contribute to the range of tools mobilities researchers employ to understand sustainable practices and sociotechnical change (Shove and Spurling 2013). Specifically, I showed how an ongoing emphasis on cycling's economic worth reinforces an individualistic neoliberal cycling subject that valorizes intentional forms of responsible cycling. I conclude cities have the power to contest a

neoliberal cycling subject by recognizing embodied forms of cycling knowledge, and using this knowledge to expand cycling habitats through dedicated infrastructure that strengthens links between cycling performance and a democratic common good.

I complete this article on a hopeful observation derived from my analysis that Ottawa ultimately sits in a rather enviable position. Recent strides by forward thinking cycling planners are helping cyclists expand their familiar habitats into territory previously marked for motorists. These strides build on three reinforcing factors: 1) a unique historical network of capital pathways and training ground for future bike commuters; 2) a momentous urban experiment on Laurier Avenue inspired by a European cycling tour taken by the City of Ottawa and the National Capital Commission; and 3) a shift in focus towards quality over quantity in bike infrastructures that bodes well for women, older people and children. The City of Ottawa can build further momentum by taking urban cycling seriously, not merely as a product of rational and intentional choices, but as an embodied, affective and ephemeral performance that varies by neighbourhood, gender, age and ability. The City can start this process, for example, by hiring more women as planners who can speak to the embodied experiences and sociotechnical needs of female cyclists, and by framing cycling policy as a matter of equality and social inclusion.

Imagine, it's summer 2027. You're cycling again through Ottawa and the humidity, as usual, is terrible. You work at the Tunney's Pasture office park for Statistics Canada, but you live in an eastside suburb, a Francophone mother of two young children. You spent your early morning biking with the kids to camp. Until recently, it was difficult to bike all the way from the eastside through downtown to the westside, where Tunney's is located, without hopping on a cramped Confederation Line. But a recently finished East-West Crosstown Bikeway you heard about now features almost entirely dedicated lanes, making cycling a faster, and safe, option. It sounds ambitious, but they just expanded showers and change rooms for cyclists at Tunney's. So you think, what the hell?

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Notes

¹ Pragmatic sociology was constructed by the Groupe de sociologie politique et morale in France.

² States of worth can never permanently be ascribed to people or things, so they inevitably face reality tests in the form of public disputes. Each cité draws on certain qualified objects and institutions for support during these tests, such as rights and laws in the civic cité and scientific studies and standards in the industrial cité (Boltanski and Thévenot 1991/2006).

³ For example, cyclists are excited about a new dedicated lane that will transform O'Connor Street in the centre of Ottawa and link up with Laurier. O'Connor is a one-way, four lane 'traffic sewer' that drains motorists into the superhighway that cuts Ottawa in two. As such, motorists eager to be (and often already driving as if they were) fleeing the city on a superhighway mingle with the many cyclists and pedestrians who traverse Ottawa's urban core.

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