

**Modernist Urbanism in the Age of Automobility:
Producing Space in the Suburbs of Toronto and Prague**

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ABSTRACT

Theorizing the effects of the expanding system of automobility has been an important area of inquiry in urban studies. What remains largely absent, though, are concrete investigations into the relationships between automobility and the transformations and production of urban space. Automobility is defined by its contradictions. This dissertation explores how urban planners, architects and theorists have historically responded to and attempted to resolve the contradictions of automobility. I locate these responses within the broader theoretical framework of the production of space, considering how the mode of conceiving space from the 1920s on was directly related to the car and the expanding system of automobility. Automobility as an assemblage of objects, ideologies, and institutions was central to the way architects and planners conceived of urban space: as a work of art. I argue that this conception of space circulated globally, which I show through the work of the Czechoslovak architectural avant-garde theorist Karel Teige in the 1920s and the urban theorist Humphrey Carver in post-war Canada.

In this dissertation I explore automobility and the production of space by way of two post-war suburbs: Jižní město (South City) in Prague and Willowdale in Toronto. Both places were considered as solutions to problems associated with automobility and both were key nodes in the circulation of ideas on modernist urbanism. I argue that the building of South City and the rebuilding of Willowdale are the culmination of the circulation of a modernist urbanism across space and over time that attempted to respond to the forces of urbanization and automobility through planning and designing the suburb.

Overcoming the contradictions of automobility will involve more than just new technologies of mobility—urban planners, architects and theorists will have to consider the

production of a wholly different space for urban life. To move beyond automobility means accounting for the ways the system of automobility unevenly affects city and suburban dwellers. In an attempt to offer a critique of the city-suburb dichotomy, this dissertation argues that to go “beyond automobility” means collapsing the separations that mark both modernism and automobility.

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It is said that the Inuit carver who sits before a piece of ivory does not have an image in his mind of what he wants to carve. He may carve aimlessly without a desired end in mind, responding to the material itself—that is, until the ivory reveals its end to him. The Aivilik word *Ahmi* means that which cannot be known in advance. This is how the dissertation largely came into being. Many people along the way contributed to its contours and helped shape it into its final form.

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1. Introduction

A generation that had gone to school in horse-drawn streetcars now stood in the open air, amid a landscape in which nothing was the same except the clouds, and, at its centre, in a force field of destructive torrents and explosions, the tiny, fragile human body.

– Walter Benjamin

Let us go then, you and I,
When the evening is spread out against the sky
Like a patient etherized upon a table

– T.S. Eliot

Le Corbusier begins his book *Urbanisme* (1925) by recalling a moment that has now become legendary in the history of modernism and urbanism in the 20th century. It happened on October 1, 1924, at 6 am on the Champs-Élysées, the first rush hour after the three-month summer holiday. Overwhelmed and transformed by the thrill, and the “destructive fury,” of traffic (*la circulation*), Le Corbusier proclaimed: we are part of it, and we believe in it. Le Corbusier had this feeling standing *amidst* the traffic, but his realization of both the power of the traffic and the vulnerability of his own body prompted the plea for a *separation* of cars from pedestrians. The force of the traffic was like the “swollen torrent of a storm” which at any moment threatened to engulf those who attempted to cross it (1925, III). Larger than life in the history of modernism, architecture and urban planning, Le Corbusier was also just another fragile, human body. The book was an important document of the time and the story continues to be seminal to accounts of 20th century modernity and the importance of the automobile.¹

Three years earlier in 1921, in the pages of the French journal *L'esprit Nouveau*, Le Corbusier proclaimed that a house should be a machine for living in made to human measure and

¹ Marshall Berman discusses Corbusier's account at length in *All that is Solid Melts into Air*. I do not quote directly from Berman's text as following my comprehensive exams, I grated and pickled my copy in a short performance at the now-defunct bookshop *Of Swallows*. The performance was called “All that is Solid Pickles in the Brine.” It was a tribute to my “comprehensive” struggle with Berman's text, a struggle that lives on in the two jars of “pickles” that resulted, the current location of which I am no longer sure.

designed accorded to the engineering spirit that gave the 20th century its steamships, airplanes, and automobiles. He introduced the term as a way to bring together the dwelling, the automobile and the city. The machine for living was central to *Vers une architecture* (1923) in the same way that circulation became a core urbanistic concept in *Urbanisme*. The dwelling and the city are like tools to be discarded when circulation is clogged, when air, energy, and light cannot circulate through the dwelling, and when vehicles cannot freely and safely circulate through the city. Prizing circulation above all else, Le Corbusier made a defiant break with the past—if the automobile was to be accommodated, then the old cities would have to be destroyed and re-built, the clogged arteries freed up by the doctors of urbanism and new cities constructed from scratch.

I am interested in Le Corbusier's epiphany because it marks a historical point, signaling a change in the way that both modernity and the urban were being talked about, largely in relation to and because of new technologies of communication and transportation. His work clearly made an impression on Walter Benjamin, who captured something of the spirit of Corbusier's modernism in the quote above and in his reflections on the “Destructive Character” ([1931] 1999) and “Experience and Poverty” ([1933] 1999). The need to clear space and make room for a new kind of society and a new kind of space called to mind the destructive characters of the age—Benjamin mentions Alfred Einstein, Adolf Loos, Paul Klee, and Corbusier. He writes that they turn to “the naked man of the contemporary world who lies screaming like a newborn babe in the dirty diapers of the present” (Benjamin [1933] 1999, 733). One could make the case that the naked man of the contemporary world was not only the city dweller overwhelmed by the new transportation and communication technologies emerging at the beginning of the 20th century, but also Le Corbusier himself, and those dirty diapers are the car-clogged streets that he wanted so desperately to be rid of. In order to parry the shocks that came with the rush of automobile traffic

in the pre-automobile city, the street and the dwelling needed to be radically changed. Le Corbusier, the surgeon, declared Paris sick, surgery was necessary (1925, 241; 249).

The striking contrast between the human body and the automobiles in Corbusier's description signifies a larger shift in the 1920s around rebuilding the city in the new age of automobility. His claims inspired numerous architects, urban planners and theorists—in particular the two theorists examined in this dissertation, Karel Teige and Humphrey Carver—who believed that the automobile could be rationally mastered and controlled, and its benefits harnessed. The urban body, like the human body, was vulnerable and had to be protected, its clogged arteries freed for the healthy circulation of vehicles and people.

Modernity, automobility and dwelling are practically inseparable, and to discuss one without the others is necessarily to do injustice to all of these terms. The automobile and standardized housing are the two dominant commodities of 20th century modernization (Ross 1995, 6). Taylorization and the standardization of labour, tools, dwellings, and the city are inseparable from the advent of the mass production of automobiles (19).

1.1 Contradictions in/of the Spaces of Automobility

There is little doubt that Le Corbusier's ideas, although now more often vilified than praised, have had an important influence on the urbanism that has shaped contemporary urban spaces, particularly, as I will show, those spaces on the periphery of the city. My aim, though, is not to revisit Le Corbusier's ideas even if they have proved influential on many of the architects and planners discussed in this dissertation, but to examine modernist urbanism more generally in the age of automobility. In the sense in which I am using the concept, automobility does not just refer to the car, but a whole range of objects, people, natures and cultures that come to define automobility and be defined by it. In the next chapter, I explore automobility as environment,

assemblage, and system.

The recent turn in the humanities and social sciences to the concept of automobility—ignited by Mimi Sheller and John Urry's self-declared “manifesto” “The City and the Car” (2000)—is for the most part critical of the sheer dominance of the automobile in the 20th century, even though there is no shortage of critiques of the automobile going back to its inception. In his discussion of “automobility and its discontents,” Matthew Paterson emphasizes two periods when “car culture” came under considerable scrutiny: the first years of the car's existence in the 1910s and 1920s and the early 1960s to the late 1970s (2007, 33-34). In the former case, Paterson points to critiques as early as 1908 and as late as 1931. It is in this first wave of critiques that I situate Karel Teige's work, which I explore in Chapter Three. For the second period, the 1960s/1970s, the critique had become much more developed largely because automobility itself had expanded and become increasingly complicated. Two of the most stringent critiques came from Ivan Illich (1974) and Andre Gorz (1973); their work became important for the anti-car movements of the 1990s and 2000s (and my first introduction to the critique of car culture when I began working as co-editor of *Carbusters* magazine). Paterson mentions largely US and British critiques, but along with Andre Gorz's essay a significant critique was also developed in France in the 1960s, including by Henri Lefebvre and the Situationists, which I examine in Chapter Three (see also Inglis 2004).

The resurgence of critical work on the automobile has been primarily through the idea of automobility as a system, which refers not only to the car, but the whole system built around it, from traffic rules to highway construction to urban design and planning. If automobility is less about the individual act of driving a car, and more about the environment and the system constructed for and around it, then it necessarily means accounting for the complex dynamics of

urban space as part of that assemblage.

Automobility as it has come to be understood and theorized is inherently ambivalent, if not contradictory. Automobility enables car drivers, while disabling non-car users, it unifies and fragments the city, and it is at once liberating and coercive for car drivers. Contradictions fuel the expansion of automobility (Beckmann 2004, 83). One of the most pronounced contradictions is automobility's impossibility (Böhm *et al.* 2006)—drivers can never practice truly autonomous mobility when they need a whole infrastructure to get them from one point to the next. Many of the critics argue that once the contradictions became too pronounced to be ignored, the car will cease to be the bearer of automobility (a possible future I take up in the conclusion).

Overcoming the contradictions of automobility is not simply about replacing the existing technology of the fossil-fueled, human-driven car with an electric car or a self-driving car, but producing a *different* space. The contradictions of space are at the core of Henri Lefebvre's theory of the production of space, and as such it is well-suited to understand the dynamic force of automobility, specifically as it relates to urbanization and industrialization. Lefebvre's tri-partite understanding of the production of space as representations of space, spatial practice, and spaces of representation also offers a parallel to the work on automobility as a system, as does his understanding of the contradictions of abstract space. I argue that Lefebvre's work draws attention to the necessary spatial transformations that come about with any change in the way people move through and dwell in the city. Paraphrasing Lefebvre, I argue that automobility secretes society's space.

In *The Production of Space* ([1974] 1991), Lefebvre puts Le Corbusier's own epiphany on the Champs-Élysées into historical perspective, arguing that the 1920s signaled a key moment in the confluence of industrialization, architecture and urbanism (126). For Lefebvre, this historical

moment is marked by the demise of the body as the measure of space and the dominance of a production of space that is “expressly industrial in nature” (120). The target of Lefebvre's criticisms was more often than not Le Corbusier and the modernist urbanism of the Bauhaus and the Congress Internationale d'Architecture Moderne (CIAM), particularly *The Athens Charter*, first formulated at CIAM's third congress, “The Functional City.” I will have occasion to refer to the charter throughout this dissertation as it codified a language for talking about the city through ideas of circulation and dwelling, and it became the dominant model in post-war urban planning. The congress took place on a cruise ship that traveled from Marseilles to Athens. Although conference proceedings were published in 1933 in a journal in Greece, it was not until 1943 that the document called *The Athens Charter* was first published (Mumford 2000, 73). Essentially, the charter outlined and defined three functions of the city—dwelling, work and recreation—to be strictly separated from one another, but united through the all-important fourth function: circulation. With *The Athens Charter* likely in mind, Lefebvre claimed that architects and urban planners—he singles out Corbusier and Bauhaus head Walter Gropius—thought of themselves as “rational and revolutionary,” but their ideas were in the end “tailor-made for the state—whether of the state-capitalist or state-socialist variety” ([1974] 1991, 124). Lefebvre was not entirely wrong in this regard, but I want to suggest that the history of modernist urbanism, both from within CIAM and without, is more complicated than this statement might suggest. As Lefebvre theorist Łukasz Stanek argues, Lefebvre's critique did not take into account many of the post-war discussions on urban space, both from within CIAM and without, which were themselves critical of the charter's focus on the separation of functions (2011, 83).

In order to redress this oversight, I want to look at how planners and architects in Western countries and in countries of the Eastern Bloc imagined and envisioned the city in the age of

automobility. While automobility has been studied generally, there has been almost no work looking at the way automobility circulated in both capitalist and socialist spaces. The recent volume on *The Socialist Car: Automobility and the Eastern Bloc* (2011) offers an important change in this regard. However, there is only one chapter on Czechoslovakia, and it looks more at automobile production (Fava), so my work on Prague, in particular, is an important contribution to better understanding automobility within the context of socialist city building and how it differed from the capitalist context. I also want to connect these discussions back to the two periods of critique of automobility, and in particular the later period in the late 1960s and early 1970s, which will provide a context for the discussion of the two case studies: South City and Willowdale. I argue that modernist architects and planners had a fundamental contradictory relationship to the expansion of automobility: they simultaneously embraced and rejected it. I further argue that the best place in which to study this contradictory relationship is in the suburbs of cities—in my case Toronto and Prague—where large-scale planning efforts in the 20th century reflected this contradictory relationship.

1.2 Ideas that Travel

This dissertation uses the term modernist urbanism to refer to a diverse body of ideas about urban planning, design and automobility that was itself mobile. I examine not only automobility and urban space, but also the *mobility of ideas* about automobility and urban space. Taking inspiration from work in mobility studies, I argue that modernist urbanism is only comprehensible through “multiple, overlapping and massively complex mobilities” (Urry 2007, 58). In order to account for this complexity, theorists of mobility must track the movement of objects, ideas and people (41). In *Circulation and the City* (2010), Boutros & Straw argue that within this complex of mobilities cities become “nodes, or clusters, within the circulation of

modernizing forces” (2010, 5). Modernist planning that attempts to control the expansion of automobility materializes in the form of buildings, roads, pedestrian walkways, and town centers, and generates anxiety and shapes ideas about mobility and immobility, change and fixity within urban society (ibid.). I consider Karel Teige and Humphrey Carver as central figures in this mobility of ideas, so I turn here to a more general discussion of the history of modernist urbanism that I trace from 1920s Europe to 1960s Canada. This is not simply a one-way influence that begins in North America; rather, it involves a situation of “entangled modernities” that, as the dissertation develops, connects Moscow with Toronto, Prague with Stockholm (Siegelbaum 2011, 6). Several figures are important to this entanglement and I want to introduce them here because they will appear again in other parts of the dissertation.

The naming of the final chapter of the dissertation “Visions in Motion” references Ladislav Moholy-Nagy's influential book *Vision in Motion* ([1947] 1965), and it reflects this circulation of ideas and visions about the automobile and urban space. Moholy-Nagy uses the term vision in motion as a catch-all phrase to describe changes in experiences of space-time that united art, the applied arts, architecture, painting and film and that marked the avant-garde of the 1920s. Vision in motion is a “synonym for simultaneity and space-time” ([1947] 1965, 12), about seeing objects, like buildings, not as isolated phenomena, but relationally as part of a coherent whole. Lefebvre accords historical importance to this idea of seeing things in relationships, which was largely developed at the Bauhaus. To fully grasp the meaning of “thinking in relationships,” Moholy-Nagy uses the example of logistics in war, pointing to the manifold different actions that need to happen in order to wage warfare, including coordinating production in factories, maintenance, transportation, human labour both physical and clerical, etc. Although Moholy-Nagy's example is wartime, he sees its most promising application in peacetime: to

imagine all of these processes at once, to think in relationships, will help “realize social planning and a better living” (268). Vision in motion helps render this “time-spatial existence” leading toward “an awareness of the forces plus their relationships which define all life” (268).

The concept of vision in motion brings together and unites disparate disciplines. In a 1944 unpublished work on “The Study of Anonymous History,” Giedion calls for more cross-disciplinary studies, rather than specialist approaches to isolated subjects (quoted in Darroch 2008, 151). In *Vision in Motion*, Moholy-Nagy critiques the specialists of industrial society working at their individual tasks, but “missing both human and social direction” ([1947] 1965, 16). In order to undertake such analyses, Moholy-Nagy suggests “new professorships for the interrelation of faculties” to bring together all disciplines to address the problems of industrial society (23). He went as far as calling for an “international cultural working assembly” of “scientists, sociologists, artists, writers, musicians, technicians and craftsmen” working under one roof devoted to problems as diverse as urban planning, nutrition, production and dwelling, media, folklore, crime, etc. In the final sentence of *Vision in Motion*, Moholy-Nagy writes that this assembly could “translate Utopia into action” ([1947] 1965, 361).

Although thinking relationally is a more general idea that resonates with both the conceptions of automobility and the production of space that I will discuss in Chapter Two, for both Moholy-Nagy and Giedion driving a car, preferably at highway speeds, was the best way to experience this new space-time environment. To illustrate this, Moholy-Nagy cites an experiment by a French poster designer, Jean Carlu, in which he places two paintings on conveyor belts: a Toulouse-Lautrec poster moving at 11 km/h (“the speed of a horse and buggy”) and a newly-designed poster moving at 80 km/h ([1947] 1965, 245). At their respective speeds both were easily read, but when the Toulouse-Lautrec poster was sped up to 80 km/h, it became just a

“blur.” For Moholy-Nagy, this means not only a change in perception with the introduction of the speed of the automobile, but that the artist, architect, and advertiser has to work with the new speeds of the automobile which require “a new orientation toward spatial organization and communication” on city streets (246).

Moholy-Nagy specifically evokes the car driver as an example for his vision in motion. The driver at the wheel of the car could see the surrounding objects simultaneously, much like the way a cubist painter shows all perspectives in one painting. The car driver “bring[s] distant and unrelated landmarks into spatial relationships unknown to the pedestrian” and sees both persons and things “in permanent motion,” and in relationship to one another ([1947] 1965, 245). Moholy-Nagy refers to the city specifically when he writes that seen in terms of airplanes and cars, architecture is no longer static, but “linked with movement” (244-45).

Moholy-Nagy's work is mirrored in Giedion's attempt in *Space, Time and Architecture* ([1941] 1967) to see parallels between art, construction and architecture coalescing around a new space-time conception “dictated by the advent of the automobile, based on technical considerations, and belonging to the artistic vision born out of our period—space-time” (822). For Giedion, Robert Moses's New York parkways grew out of this space-time conception and represented the “new scale in city planning” (823). Although the highway's graceful appearance could be admired from above—works of modernist architecture and urbanism often look best from an airplane—it was only while driving where its meaning could be fully grasped: “the liberation from unexpected light signals and cross traffic, and the freedom of uninterrupted forward motion” (825). It is as if the charm of the American automobile landscape swept the European emigré off of his feet: “The space-time feeling of our period can seldom be felt so keenly as when driving, the wheel under one's hand, up and down hills, beneath over-passes, up

ramps, and over giant bridges” (830-31). Rayner Banham writes that “the uniquely mobile metropolis” of Los Angeles can only be understood by those who “move fluently through its diffuse urban texture.” To “read Los Angeles in the original” Banham, a Londoner, has to learn to drive (1973, 23). As theorist and car driver, Banham can appreciate the highway interchange as “a work of art...as a kinetic experience as one sweeps through it” (90). It was this “kinetic experience” that Moholy-Nagy was most interested in exploiting. This experience culminated in the post-war utopian city visions of the 1960s, which I explore in Chapter Three, and specifically in the section “Modernism Thinks Big.”

Vision in motion, of course, demanded free-flowing traffic, not the bottlenecks that commuters now experience on a daily basis. In this sense, architecture and city planning were in part an attempt to assure that vehicles would be constantly in motion, unhindered by pedestrians, cyclists, and the unpredictable elements on the city street. Moholy-Nagy, drawing on contemporary theories of urban decentralization, envisioned “the elimination of congestion” through the “planning of smaller townships on a human scale, embedded in green and connected by excellent traffic lanes with each other and with the places of work and the center of the re-planned city” ([1947] 1965, 109). Vision in motion, to be in motion at 80 km/h, needs “excellent traffic lanes” and congestion eliminated. In many ways, vision in motion is inseparable from the separation of functions codified in *The Athens Charter*, published only a few years before *Vision in Motion*.

Both Giedion and Moholy-Nagy's ideas resonated with Canadian urban planner Jaqueline Tyrwhitt, a fellow student of Humphrey Carver's at the Architectural Association (AA) in London, and a key figure in the post-war CIAM congresses; she also translated *The Athens Charter* from French into English in 1943. In his autobiography, *The Compassionate Landscape*

(1975), Carver describes her as a “prophetess of a new age” and writes that her teachings helped give rise to “much of the idealism for the cities of the postwar world” (1975, 24). I want to turn to Tyrwhitt's work because as Darroch (2008) and Wigley (2001) note she is a key translator of ideas, particularly between Europe and Canada. She brings together Moholy-Nagy's concept of vision in motion together with her interest in city and suburban “cores,” the focus of the 1951 CIAM congress entitled *The Heart of the City: Towards the Humanisation of Urban Life* (she participated in the congress and co-edited its publication).

By the core of city life, Tyrwhitt and others meant more than just an actual planned space in the city, like the pedestrian plazas of a civic centre, but rather any space in the city that might serve as a gathering place (1952, 103). Urban planning should create spaces that will encourage what CIAM saw as the main aspect of the core: a “rendezvous” (1952, 165). The core would be the planned or spontaneous manifestation of an urban space that gathers people, objects, signs and symbols, although many of the examples presented in *The Heart of the City* show that CIAM attempted to control and plan this spontaneity, suggesting that the rendezvous could only happen in specific places, most often in places where there were no cars.

Tyrwhitt's essay for McLuhan's journal *Explorations* entitled “The Moving Eye” brings together her interest in developing an idea of the core with the idea of vision in motion. Darroch notes the connections between Tyrwhitt's essay and Moholy-Nagy's book, but I also want to connect the essay to the 1951 CIAM congress. The title of Tyrwhitt's essay comes directly from *Vision in Motion*: “A new viewpoint in the visual arts is a natural consequence of this age of speed which has to consider the moving eye” (Moholy-Nagy [1947] 1965, 246). The key problem for urban planners is to figure out how to organize buildings and movement in space without relying on the “obsolete and static single viewpoint” of linear perspective (Tyrwhitt

[1955] 1960, 95).

In Tyrwhitt's article, though, she does not discuss the moving eye of the automobile, but rather turns to a place that predates the automobile: Mahal-i-Khas, the core of the 16th century “dream city” of Fatehpur Sikri in India, close to the Taj Mahal in Agra. Tyrwhitt describes the particular way that the visitor to Mahal-i-Khas always feels at the centre of things: “from the moment he steps within this urban core he becomes an intimate part of the scene, which does not impose itself upon him, but discloses itself gradually to him, at his own pace and according to his own pleasure” ([1955] 1960, 90). She argues that planners need to “rediscover the importance of vision in motion” (94). Although Moholy-Nagy's vision in motion implied a rejection of the past ([1947] 1965, 260), Tyrwhitt turns to a pre-automobile and pre-industrial city for inspiration. Given that CIAM's focus on the core was also about the rights of the pedestrian, this seems logical. Still, there is a clear tension between Tyrwhitt's focus on a gathering place for pedestrians not cars as the setting for the “moving eye” and the importance of the automobile to vision in motion.

One of the impetuses of the theme of “The Heart of the City,” was the need to rebuild bombed out city centres, but many of the designs presented at the congress looked at new cities in places not affected by the war. In its focus on the “recentralization” of urban space, the meeting attempted more generally to curb “suburbanism” and “unplanned decentralisation” (Sert 4). For Jose Luis Sert, then president of CIAM, “urbanism had become suburbanism” (quoted in Mumford 2000, 203). The post-war focus on the core of cities in this congress was an attempt to renew the symbolic functions that the centres of older cities provided (Welter 2003, 36) and to take back space from the automobile. In apparent contrast to his praise of the urban highway, here Giedion argues that the rights of the pedestrian to be at “the centres of community life” have

now been “overridden by the petrol engine and so the gathering places of the people...have been destroyed” (1952a, 18). The focus on the separation of cars and pedestrians, enshrined in *The Athens Charter*, continued in the focus on the core. Giedion insisted that vehicle traffic be kept out of the core: the “reconquering of the right of the pedestrian...is the first requisite of the contemporary city plan” (Giedion 1952b, 161). In this sense, Giedion's praise for highways and pedestrians is not contradictory because each form of movement would have its own space. I come back to this 1951 congress throughout the dissertation because it made a clear connection between cars, suburbs and modernist urbanism; it figures most prominently in the chapters on Humphrey Carver and Willowdale.

Tyrwhitt's work on both the core and vision in motion, along with the other theorists and planners I have mentioned in this section, is important because it highlights a turn in the post-war period to addressing the need for rethinking urban and suburban space in the face of the spread of automobility, while also attempting to assure the mobility of all: pedestrians, cars, public transportation users, etc. It was a task that the planners and architects of Willowdale in Toronto and South City in Prague took on. Tyrwhitt is also an important translator of words and ideas and perhaps it is her work that is most representative of the mobility of ideas about mobility.

1.3 The Case Studies: Willowdale and South City

For the purposes of this dissertation, this circulation of ideas about modernist urbanism culminates in, appropriately enough, a conference at York University. In 1967, the newly-built York University hosted a massive, 10-day conference on “metropolitan problems” that drew architects, politicians and planners from major cities around the world, including Prague and Moscow. Much was made in the Canadian Press of the visitors from Moscow, who claimed at the conference that they had no problems because they had restricted growth in their city. Jiří

Hrůza attended, Prague's deputy city planner and one of Prague's most influential planners in both the post-war period and in post-1989. His writings on post-war urbanism in Prague feature significantly in the chapter on South City. Hrůza was probably sitting in the audience while North York mayor James Service, a champion of the modernist plan to redevelop Willowdale as North York's new downtown, welcomed the delegates. Hrůza also likely traveled to Montreal for Expo '67, which was going on at the same time, to see the Czechoslovak pavilion and the display model of the experimental suburb called Etarea, which was the model for South City. This confluence of events marks my analysis of South City and Willowdale not as isolated, but parallel developments in the circulation of a modernist urbanism that attempted to respond to urbanization and automobility through urban planning and design.

York University was itself imagined as a “University City,” which along with the adjacent Edgely Village high-rise development (known now as the Jane-Finch community), formed two of the most important examples of modernist urbanism in the fast-growing suburb of North York in the 1960s. It is in the suburbs of Toronto and Prague that I locate my research into automobility and modernist urbanism. I consider Willowdale and South City as important nodes in the circulation of a modernist urbanism that was responding to the problems of automobility and to the scattered nature of suburbs whether it was the mass-produced single-family houses in suburban Toronto or the proliferation of the pre-fabricated concrete apartment block in suburban Prague.

I selected these two places in part because Willowdale's redevelopment plan and South City's planning occurred at the same time in the late 1960s, but also because in the end the grand visions proposed for each of these places largely went unrealized. Willowdale is situated in what used to be the borough of North York on the city's main north-south artery, Yonge Street. In

1968, Service unveiled a plan to transform this bedroom suburb of Toronto into a showcase modernist development that would become North York's new downtown. South City, also planned in the late 1960s, was an entirely new development whose apartments were constructed in astonishing speed over a five-year period and was also marked by the grandeur of its plan, particularly for its city centre.

Although these similarities prompted my comparison of these two places, there are other important points of similarity. Both places are situated on the borders of their respective cities and both occupy the last three stops on the metro (subway) lines, as well as being adjacent to their city's major highways, the 401 in Toronto and the D1 in Prague. Both are gateways to the newer suburbs and countryside beyond. And, both are important landscapes of mobility built at a time of growing automobile ownership. Willowdale and South City are also both part of the major cities of their region, if not the country, but are also exceptional in their own right. Willowdale's redevelopment was an important beginning in the Toronto region in implementing what was called the “sub-centre” approach, which I discuss in detail in the chapter on Willowdale. South City, along with two other developments, North City and Southwest City, signaled a new change in urban planning in Prague in the 1960s away from small, isolated housing developments and towards “city building” (Borovička and Hruža 1983, 89).

Willowdale and South City also defy easy classification. Are they cities? Suburbs? Something in-between? German planner and architect Thomas Sieverts defines the *Zwischenstadt*, or in-between city, as having the characteristics of city, countryside and village all at once, and thus escaping concrete definition. The in-between city is an “urban landscape” where “traditional city-composing forces” are absent and so a certain chaos of competing and disorganized urban environments reigns (Sieverts 2003, 3). In the Toronto context, urban

theorists understand Sieverts's term as referring to suburban places “between the 'glamour zones' of the 'creative' inner (global) city economies...and the sprawling new regional economies” (Keil and Young 2011, 3). The in-between city can include both the post-World War Two suburban single-family homes and the huge apartment developments of the 1960s (4). Sieverts argues that the in-between city must be understood on its own terms, and should not be measured against the historical city centres to which they are often on the periphery of, or against a pre-automobile age that in the end does not speak to the majority of the people who inhabit the in-between cities. Officially, Willowdale and South City are both part of their respective cities, Toronto and Prague, and although they have distinct identities as places, they belong to that post-war history of trying to find a name for a place that was constructed so fast and without precedent that neither planner nor historian was able to adequately categorize it (Fishman 1995, 400).

One of the primary themes in this comparison is the tension between the unique and the generic, between South City and Willowdale's connectedness via the ideas and influential places of modernist urbanism and the particular way in which those ideas were either taken up or rejected. In both cases, Willowdale and South City are expressions of modernist urbanism's focus on controlling automobility by separating pedestrians from cars, and with their links to public transportation they are both important mobility nodes in their respective cities. McCann and Ward's recent work on “mobile urbanism” (2011) suggests that the ways in which urban policy circulates globally necessitates and presupposes comparison as cities are constantly placing themselves in relation to “elsewheres” (177) sometimes at the expense of the local nuances of cities (Sloan 2007, 10). However, this dissertation suggests that this is not a new phenomenon, particularly if we consider the modernist urbanism of the 1960s, which circulated globally, the product of not only ideas on the move, but also people attending conferences, congresses, and

study trips. In the 1960s, certain cities and models of cities were held up as exemplary, to be emulated and copied worldwide. It is not that South City and Willowdale look similar—on the surface they are radically different, with Willowdale dominated by condominiums and single-family homes and South City by the pre-fabricated, concrete panel apartments ubiquitous in the Eastern Bloc and Soviet Union—but as the research for this dissertation progressed, their resemblances emerged through the particular ways that both places attempted to respond to automobility and through the places that inspired the planners, theorists and architects; in the 1960s, Willowdale and South City were part of a global web of modernism. In this way, the urban research that I have undertaken is very much in the vein of what Alan Blum calls the art of “seeing resemblances” (2007, 21), while at the same time recognizing the peculiarities of places that distinguish them or set them apart from the generic, the taxonomy of places with which they are classified: city, suburb, village, etc. Both places are a “peculiar expression” of the movement of people, ideas and technologies over time. Each place is “a site for the passage of [the] spirits” of modernist urbanism (49).

1.4 Situating the Toronto and Prague Suburbs within Modernist Urbanism

My focus on automobility and modernist urbanism within the parallel contexts of North American and Europe draws inspiration from David Gartman's *From Autos to Architecture* (2009), whose history begins with the aesthetic of Fordism in Europe and in North America beginning in the 1920s. In Europe, there were far fewer automobiles and many of them were not mass produced and so the interest in mass production in the writings of someone like Le Corbusier was often more about an aesthetic than actual mass production (Gartman 2009, 15). As Beatriz Colomina (1994) reminds us, Le Corbusier and other European architects came across the North American grain silos that would inspire their writings on modern architecture in

images rather than in physical reality. The machine aesthetic was to become an ideal not just for building cars and dwellings, but for entire cities as well, culminating in the utopian projects of building large-scale housing estates in the 1920s and early 1930s. Buck-Morss also notes that in the Soviet Union of the 1920s, the “cult of the machine” came before mass production, while in the US mass production was “pragmatically motivated” without the utopian rhetoric of the fusing of technology and art (2000, 105; 107).

The distinction, though, is somewhat simplistic and does not hold entirely for the situation of Czechoslovakia in the 1920s, which it could be argued embraced *both* the pragmatics and aesthetics of mass production (Gartman does not mention Prague, nor Czechoslovakia). Although it obviously never reached the production levels of Ford's factories in Detroit, cars were produced in Czechoslovakia in factories that explicitly drew on the methods of Frederick Taylor and Frank Gilbreth, culminating in the 1928 opening of an automobile body shop called “America,” which was an important “encounter with American models of mass production” (Fava 2013, 21). In 1920, 400 cars per year were manufactured in the country, but by 1929 that number reached 10,200 (41). Debates on Taylorism had already begun in Prague in 1911 (23). This was not the country's first encounter with American-influenced mass production. Although not based in Prague, but in Zlín, Tomáš Baťa, the founder of the Baťa shoe company, traveled to the US on three occasions in the early 20th century, visiting the Ford Motor Company and shoe manufacturers in Massachusetts, and in 1924 he introduced the assembly line into his plants (Šlapeta 2009, 56); in the 1920s, Baťa also spearheaded Zlín's transformation into a garden city for the workers in his factory in the 1920s.

After the establishment of the Czechoslovak State in 1918, the “Greater Prague Act” of 1921 annexed the surrounding inner suburbs and villages and towns, raising Prague's population

to 700,000 (Švácha 1995, 147-8). The architectural theorist Rostislav Švácha argues that the garden city ideas of Ebenezer Howard and Raymond Unwin were especially important in 1920s Prague urbanism, particularly on the periphery of the city at the end of tram lines (Sýkora & Mulíček 2014, 134). Howard's Garden City was a utopian vision of radical social change, that called for decentralizing the big cities and creating a network of self-sustaining garden cities, but within the Prague context they become less about social change and more about a planning model that offered family homes with a garden away from the industrial zones of the city.² These neighbourhoods, built in the 1920s and 1930s, form one of the zones in Prague's concentric growth in the 20th century and were the first attempts at building suburbs (135). However, this form was by no means dominant, as by the late 1920s “functionalist urbanism” and functionalist architecture had become increasingly important, with its focus on transportation and the division of the city into zones for working, industry, shopping and dwelling (Švácha 1995, 164-5). Although there was not the number of cars as in the Canada or the US, functionalist urbanism “paid unprecedented attention” to transport problems because automobile use was on the rise and because the separation of functions had exacerbated commuting problems for many inhabitants (166). Although Karel Teige was not an architect, nor a planner, he was at the forefront in promoting the functionalist urbanism inspired by the new machine technologies and critiquing the English garden city planning approach that he associated with Ebenezer Howard and Raymond Unwin, and in particular the idea that a house and a garden should be open to all classes. I return to Teige's critique in Chapter Three.

Central to post-war urbanization in Czechoslovakia, and for the entire Eastern Bloc and Soviet Union, was Nikita Khrushchev's speech in 1954 on the importance of concrete and the

² For an in-depth discussion of the differences between the Garden City as a social, utopian ideal and the way it was actually taken up in planning see Fishman 1977, 23–88.

industrialization of construction, which I discuss in more detail in the introduction to the chapter on South City. In his cultural history of concrete, Adrian Forty (2012) notes that the speech was made remarkable by the simple fact that a head of state spent two hours discussing in detail the single subject of building with reinforced concrete (150). This speech proved extremely influential in the construction of places like South City. During communism, Prague's urbanization was defined by decentralization, and it was also on the open spaces of the periphery where the advantages of the new methods of large-scale industrialization of building could be best taken advantage of. The city centre was under-invested with all focus on industrial districts and the large-scale residential developments on the periphery, generally referred to, in Czech, as the *sídlišť*. In his conclusion to the English-language translation of *Od moderny k funkcionalismu* (1985), Švácha writes that following Khrushchev's critique of the decorative elements of socialist realism and his embracing of standardization and mass production of apartments, Prague endured decades of planning and building focused on housing the bulk of the city's population in pre-fabricated apartment blocks where people were “deprived of their dignity and identity living in this monotonous, uncivilized wasteland” (1995, 433). This conclusion was added to the English translation, as the Czech-language version came out in 1985 when the ruling party responsible for building these cities was still in power and still building them. Švácha would later develop a much more nuanced account of life in these new towns (see Švácha 2000) and other theorists have begun to discuss the rich post-war history of the sídlišť, sparked in part by a 2006 exhibition called *Husákovo 3+1*, a reference to Gustav Husák, the leader of the Communist Party from 1969-1987, and the apartments of the period. South City itself was featured in the recent NFB online documentary *Highrise*. This work, aside from *Highrise*, is almost exclusively for a Czech-speaking audience.

If Prague is one of those sites where the spirit of modernism can be grasped, one would not know so from the literature on modernism. Prague as well as many other cities in Czechoslovakia, like Zlín, Brno, and Hradec Králové, were very much at the height of both modernist urban planning and modernist architecture in Europe in the 1920s, but they are largely absent from standard accounts of European modernity's "complex historical geography," which bypasses Prague in favour of Paris, Berlin, Vienna and Moscow (Harvey 1989, 24).

While garden city planning and modern architecture was significant in Prague's inter-war landscape, aside from a few isolated cases modern urban planning and modern architecture did not come to Toronto's suburbs until 1942 when The City of Toronto Planning Board was established. It released Toronto's first master plan in 1943 (Sewell 1996, 55), which included parts of the suburban townships of North York, Scarborough and Etobicoke. Urban activist and theorist John Sewell notes that it was not until the end of the Second World War that modernism's "tradition of the new" established itself in Toronto's city centre and on its peripheries. The 1943 plan included a number of expressways and subway lines, only some of which were actually built, as well as an inner green belt that would snake throughout the city; it also made the case for the first "urban surgeries" in the city in the area that would become Regent Park. It emphasized decentralization and lower densities, and Sewell notes that it reflected the thinking of "two of the most active and influential planners at the time: Eugene Faludi [the plan's author] and Humphrey Carver" (2009, 33).

Two suburban forms are important to modernist urbanism in Toronto generally and to Humphrey Carver and Willowdale more specifically: the streetcar suburb of the inter-war years and the post-war "corporate, packaged" suburb (Harris 2004, 132). The electrification of streetcar lines in the 1890s coupled with urban growth in the 1910s allowed for families to settle

outside the city in the suburbs and use the streetcar to get to work. The farming villages that developed along Yonge Street, including Willowdale, were turned into subdivisions in the 1910s to take advantage of the streetcar's link to downtown; around this time, the majority of commuters walked or took the streetcar (Harris 2004, 129). Most of the houses were built within walking distance of the streetcar stops, contributing to the compact form of these suburbs. Although automobile historian Dimitry Anastakis (2008) describes the 1920s as “the first phase of Canada's automotive revolution” (26), suburban historian Richard Harris writes that the car did not have a significant impact on the Canadian suburb until after the Second World War (2004, 69). If the compact suburb with its self-built and self-financed homes defined the streetcar era, the corporate suburb was “designed, financed, and built in an increasingly standard way” (132). And by the 1960s, people were increasingly using their cars for all their everyday tasks. The standardized and uniform post-war suburb is inseparable from the critiques of car culture and automobility that developed in the 1960s and early 1970s. At the same time that architects and planners in Prague were critiquing the uniformity of the sídliště, urban theorists like Humphrey Carver were critiquing the suburban uniformity and standardization of the post-war suburbs in Toronto and Canada.

The post-war development of Toronto's suburbs also included examples of modernist urbanism and modernist architecture, particularly in the township of North York, where Willowdale was located. North York, established in 1922, was still largely rural until the boom of the post-war suburban growth, at which point it became an important place for works of modernist urbanism. One of the most prominent projects in North York was Don Mills, held as exemplary of the packaged, corporate suburb, and which also included many buildings designed by the modern architect John C. Parkin, the co-author of Willowdale's redevelopment plan.

Humphrey Carver praised Don Mills because of the attention given to the layout of the suburb as a whole and to the architecture of the individual houses. There is also a “North York Modernist Tradition” that draws on many of the ideas developed in the early CIAM period around functionality and rationality in planning, and the circulation of not only cars, but air and light (DeSorcy & Iaradas 2009, 13; 14). Leo DeSorcy and Helene Iaradas, urban designers in North York, also write that the separation of pedestrians from car traffic characterized North York's modernism (ibid.). In the 1960s, Toronto also turned to the periphery as a place for large-scale modernist projects, of which the Jane-Finch neighbourhood in North York, Rexdale in Etobicoke, are significant examples (for an analysis of Jane-Finch, see Young 2006).

1.5 Methodology or, “You can't be a flaneur of the estate though you are welcome to try”

The tower neighbourhoods of suburban Toronto, the rows of mass-produced housing on the car-dominated suburban streets of North York, together with the sídliště in Prague, can all be considered variations on the in-between city. Sieverts claims that the biggest challenge to understanding these urban landscapes is the “lack of an aesthetic relationship” with them (2011, 23). Willowdale and South City are part of the “urban and suburban imaginaries” (Fiedler and Addie 2008, 21) even though as in-between cities, they do not look like traditional cities, nor like traditional suburbs of single-family homes. To revisit the existing suburban spaces means seeing them not as isolated spaces, nor as simply a collection of buildings, but as an “amalgamation” of form, infrastructure, of visions and ideals, as important “nodes,” in terms of the flow of ideas and people, and as places in their own right (25). To give these spaces the recognition they deserve will require that we—the general public, planners, architects, policy makers—treat them not as instrumental, “anaesthetic” spaces, but spaces with depth, complexity, and histories that are not readily visible from the seat of a moving car or from the vantage of point of the downtown city

dweller who measures the suburbs through the qualities of the city centre. This was my guiding approach to exploring South City and Willowdale.

I made numerous visits to South City over the four-month period in which I did research in Prague on South City specifically. I combined my visits to South City with a series of interviews to better understand the urban history of a place with which I was, on the whole, unfamiliar. The quote that opens this section is taken from Lynsey Hanley's description of the British council estates, built at the same time as South City. Her point is that you cannot really drift on the council estate—she evokes the Situationists—because they “are too channeled, too labyrinthine, to make wandering an enjoyable experience” (125). In a way, she is right. I had intended to use direct site observation in the form of unstructured walks through the areas, following the Situationist practice of *dérive*. Different from simply strolling through a neighbourhood, Guy Debord writes that the drifter is attuned to the terrain and both its physical and emotional contours, and is open to chance encounters ([1958] 2006).

The choice of the *dérive* as a different form of circulation is deliberate. To wander aimlessly through a functional environment designed for segregated, purposeful circulation calls attention to my own ethical stake in this project and to the problems that inform this dissertation: the unchecked spread of automobility. As I discuss in the next chapter, the problems of automobility are not so much finding the perfect vehicle in which one can express one's autonomous mobility, but revisiting the concept as such. Wandering through a landscape designed for channeling people as quickly as possible from one point to another calls attention to the degree to which urban spaces are given over above all to the purposeful circulation of traffic. And perhaps it was the time of day or year in which I explored South City, or more my own inhibitions as a non-native speaker of Czech, but I never did have the encounters with the

inhabitants I expected. And yet, I was drawn to the architecture and the curious terrain: streets that rarely could be followed on maps or whose street signs could rarely be found on streets that did not follow the logic of the streets of Prague's city centre. On one particular day, I was sure I was at the place where I was to have a meeting only to discover, after talking to a passer-by, that the place I wanted to get to was on the other side of the development, but, she added, my confusion was understandable because the two areas are virtually identical in their design. In a later conversation with Vítězslava Rothbauerová, the architect who helped design those very spaces I was passing through, she confirmed for me that they did indeed design them exactly alike. As architects, they had very little opportunity to actually practice architecture because of the strict focus on the mass production of dwellings, particularly in the 1970s and 80s, and so they embraced any chance to influence the design. Thus, the direct site observation became about a reciprocal relationship between the textual research and the interviews on the one hand and my experience of the built environment on the other; the space where a walkway suddenly ends, an empty field surrounded by buildings, seemingly insignificant concrete elements, like benches, clothes lines, etc. actually speak to one of the key themes in the chapters on Karel Teige and South City: an architecture *without* architecture. The rest of the research for the chapter was compiled from Czech daily newspapers, the main Czech architectural journal—*Architektura ČSSR* (later renamed *Československý architekt*)—urban planning documents, and photo documentation of South City in its building and in its early phases. I had little knowledge of the area, so I complemented my archival research and site observations with a number of interviews with important actors, including Jiří Lasovský and Vítězslava Rothbauerová, two key architects in South City's planning, Jiří Musil, a sociologist who from 1959 to 1982 worked as a researcher in the Výzkumný ústav výstavby a architektury (Institute for research on construction and

architecture), was an “expert” consultant on the designing of South City, and author of one of the most extensive studies of life on the post-war sídliště during Communism (1985). I also interviewed local personalities, including the Prague 11 “chronicler,” Jiří Bartoň, Dalibor Mlejnský, the mayor for the district from 2006 to 2014, and one of the district's urban planners, Miroslava Fišerova.

My research methodology in Willowdale was very different, although the idea of the *dérive* that I brought to South City had already been practiced on walks in Willowdale as part of my work on the Leona Drive Project (2009), a site-specific art installation in six vacant post-war houses awaiting redevelopment. On our walks in the area, we came across many of the houses characteristic of post-war suburbs, built in the immediate post-war years according to the designs of the Canadian (then Central) Mortgage and Housing Corporation (CMHC).³ They were usually boarded up, often in groups of three or four, with a city sign posted out front announcing a proposal to redevelop. The area clearly had an in-between feel, but it was only when I embarked on archival research for the project that I discovered that these vacant houses were part of a transition period that began in the late 1960s with the plan to turn the area into North York's downtown. As part of that research, I also conducted interviews with residents and so developed a more nuanced understanding of people's everyday lived experience (although this research does not figure into the dissertation). I also grew up in the area and so my knowledge of Willowdale comes from seeing the area change over time. Thus, coming into my specific dissertation-related

³ Here I am referring to co-curator Janine Marchessault and members of the research group LOT: Experiments in Urban Research of which I was a part. One walk, which as a result of miscommunication left only two of us to explore the area ended (or began) when my colleague and I saw flames through the window of one of these vacant houses. The street was otherwise empty. We called 9-1-1. The fire trucks *did* bring people out on the street and a vibrant discussion ensued around the changing neighbourhood. The Leona Drive Project functioned, in part, like a fire in the neighbourhood: it brought people from the area together to talk about the past, present and future of urbanization.

research I already had an idea of Willowdale's place within the history of urbanization in Toronto and North York specifically. As part of my research for the dissertation, I reviewed urban planning documents, newspapers articles, and archival documents collected by the North York Historical Society.

1.6 Chapter descriptions

I begin Chapter Two with a literature review of critical work on automobility. I trace automobility's etymology and look at its two dominant meanings: as autonomous mobility and as system, environment and assemblage. The purpose here is to show that although the concept of automobility has come to be dominated by cars, it cannot be reduced to the car alone, but rather includes ideologies of car culture, urban planning and design, the system of roads and other infrastructure that allows for people to buy, drive, park, fix and dispose of cars. Arguing that automobility is about much more than just individuals driving cars, I make links in the second part of the chapter between automobility and Henri Lefebvre's *Production of Space* ([1974] 1991). The three areas in Lefebvre's work that I look at are representations of space, his conceptualization of the city as *oeuvre*, work of art and product, and abstract space. I argue that automobility theorists would do well to return to Lefebvre's formulations as a way of better understanding the relationship between automobility and transformations of urban space. In the conclusion, I look at Lefebvre's essay "Notes on the New Town," his description of the New Town of Mourenx, by way of bridging to the second chapter, which addresses the characteristics of modernist urbanism.

In Chapter Three, I turn more specifically to modernist urbanism and address what I argue are its dominant characteristics. I first examine modernist urbanism as a body of ideas about circulation and automobility that itself circulated. This provides the basis for the parallel

case studies of automobility in its capitalist and socialist contexts. Then, drawing on Lefebvre's description of abstract space as simultaneously homogenizing and fragmenting and Bruno Latour's description of modernity, I look at the dominant tendency in modernist urbanism to unite urban space through the separation of pedestrians and cars. I then explore what I see as one of the fundamental contradictions of modernist urbanism going back to Le Corbusier's insistence on separating pedestrians and cars: the relation between the aesthetics and anaesthetics of modernist urbanism. I develop this theoretically with respect to Susan Buck-Morss's work on Walter Benjamin and Thomas Sieverts's *in-between city*. There is often a vast gulf between modernist utopian ideas—in both the 1920s and early 1930s and the 1960s and early 1970s—and the post-war places to which they gave birth. I want to address these two sets of separations together. The contradiction of modernist urbanism lies with the often heroic attempts to produce the city as a work of art, an aesthetic object, which turned into its opposite: the anaesthetic spaces of post-war modernist urbanism; I take this up at length in Chapter Three with reference to the medical metaphors around circulation that modernist urbanists like Carver and Teige both used.

In Chapter Four, I look specifically at modernist urbanism in the 1920s through the figure of Karel Teige, who was an important figure in the circulation of ideas about modernist urbanism and architecture in Europe. As both poet and functionalist, I look at the way Teige approached the city as simultaneously a work of art and a product inspired by assembly lines, industrial efficiency and mass production. In his 1929 polemic with Le Corbusier, Teige proclaimed that architecture should create instruments, not monuments. Teige's utopian visions of dwelling and mobility in his “magic-city” and his socialist, green city, are premised on the rejection of the car and the single-family house, and offer an alternative to the dominant capitalist narratives of

modernist urbanism.

Although Teige's visions for the “magic-city” remained just that, visions, his support for the mass-production of dwelling become central in the post-war construction of South City, the subject of Chapter Five, “Only Visions without Cranes.” Here I consider South City in light of recent work on *The Socialist Car* (2011) which places the car in an assemblage that also includes utopian urban plans, mass produced housing, construction cranes, pedestrian spaces. Building on the work of the previous chapter, I develop the tension between the utopian plans for South City as a kind of magic-city of movement—pedestrians, cars and public transportation— with its actual construction, a realization less of the magic-city and more of the strict industrial production of housing, referred to by architects and planners as crane urbanism.

Chapter Six shifts the discussion from Czechoslovakia to Canada, and discusses the life and work of Humphrey Carver, one of Canada's most influential post-war urban theorists. This chapter is structured around the many parallels between Carver and Teige, even though they were living and writing in two different places. If Teige argued against monumentality, timeless aesthetics, and art as the product of the singular genius in his debate with Le Corbusier, Carver believed that it is exactly those characteristics that are needed to contain and give form to the explosion of urbanization on the peripheries of cities. Carver attempted to balance his dedication to social reform through providing affordable and diverse forms of accommodation to all classes with his devotion to the privileged objects of middle-class desire: the car and the single-family house. This tension is drawn out by examining Carver's lifework, and particularly his important book *Cities in the Suburbs* (1962a).

In the final chapter of the dissertation, entitled “Visions in Motion,” I draw a direct connection between Carver's work in *Cities in the Suburbs* and the transformation of Willowdale

from a suburb into a key sub-centre within the Toronto metropolitan region. The authors of the first Willowdale redevelopment plan, Murray Jones and John C. Parkin, situated their plan within the discourse of modernist urbanism attempting to rebuild the suburb in the age of automobility. In their plan, and the subsequent redevelopment of Willowdale a tension emerges between the suburban parts of Willowdale and the area designated for high-rise office and residential development. I take the building of a ring road in Willowdale that physically separates the city from suburb as a key aspect for the redevelopment of Willowdale and the themes of this dissertation as a whole.

In the conclusion, I consider what it means to go beyond automobility, a gesture often made in the critical literature on automobility. I make the case that this beyond is less about a change in technology—even though this is inevitable—and more radically about the production of an altogether different space. That is, imagining a beyond to automobility, also allows us to imagine a beyond to modernist urbanism: an ecological urbanism that does not see the individual as separate from his or her environment, but inextricably a part of it from the scale of the street, to the infrastructure, and to the planet as a whole.

2. From Automobility to the Production of Space

In this chapter I argue that automobility is central to Henri Lefebvre's understanding of the production of space ([1974] 1991), and that his work is itself foundational for many of the theorists of automobility examined in this dissertation. In a recent volume on automobility, Walks (2015, 4) notes that automobility's relationship to the post-war urban changes Lefebvre describes in *The Urban Revolution* ([1970] 2003) has not been adequately theorized, and this dissertation is in part a response to that lacunae. Lefebvre's critique of the car “sub-system,” and of the dominance of cars generally has been noted (Urry & Sheller 2000), specifically within the context of post-war France (Inglis 2004). I want to suggest that Lefebvre's writings on space can enrich and inform not just the contemporary debates on automobility, but also the discussions on post-automobility, which I take up in the conclusion.

In this chapter, I explore automobility specifically as a system, environment and assemblage, and then I situate that work in relation to Lefebvre's writings on modernist urbanism and the production of space more generally by focusing on the following: 1) the importance of representations of space to Lefebvre's overall theory of the production of space; 2) Lefebvre's discussion of the work (*oeuvre*), work of art, and product, and; 3) the contradictions of abstract space that Lefebvre saw as being central to both the urbanism of post-war capitalism and state socialism.

In searching for a “unitary theory” of space, Lefebvre seeks theoretical continuity between what are normally perceived as disparate fields: physical, mental, and social processes, which include the space of the imagination, at work in “projects and projections, symbols and utopia” (Lefebvre [1974] 1991, 12). Or in their spatial register, according to Lefebvre's conceptual triad: spatial practices, representations of space, and representational spaces. Two

influential texts on automobility offer a variation on these three aspects. In *Ecology of the Automobile* (1993), Freund and Martin's understanding of the specific dominance of automobility maps onto Lefebvre's theory of the production of space. They see automobility in three related ways as ideology, phenomenology—more specifically, the “subjective experience” of driving—and the “auto space” given over to driving, parking and servicing cars. (In the description of auto space they make a brief reference to Lefebvre's work.) In their introduction to the anthology *Against Automobility* (2006), Böhm et al. describe automobility as at once an ideological formation, a phenomenology (“a set of ways of experiencing the world”), and a set of institutions and practices that are “irreducible to *the* automobile” (3). Tim Cresswell's definition of mobility more generally as “the entanglement of movement, representation and practice” (2010, 19) also maps onto Lefebvre's conceptual triad. Lefebvre's earlier work in *Everyday Life in the Modern World* (1971) examines the car specifically as one of many formalized and specialized interlocking “sub-systems” within the “bureaucratic society of controlled consumption” (99). Lefebvre defines a sub-system as “a specific semantic field invading and influencing everyday life” (100). He writes that a sub-system consists of a defined social activity along with an inter-related set of organizations and institutions and texts that support the spread of that activity (99).⁴

In bringing together Lefebvre's work on space with the literature on automobility, I want to stress that the production of urban space and automobility happen together, rather than separately or independently. Space is not simply the neutral ground on which the practices of automobility unfold; Lefebvre argues that space itself is an active producer of space. In *Henri*

⁴ Like mass tourism to a particular historical core of a European city, which, in paradoxical fashion, “ruins the site in so far as it achieves its aim,” the automobile sub-system can only lead to “autodestruction,” as “the object destroys everything and then itself” (Lefebvre [1962] 1995, 103).

Lefebvre on Space (2011), Łukasz Stanek draws a connection between dwelling and the production of space, characterizing Lefebvre as a “thinker of dwelling” that goes back to his rural research beginning in the 1940s (2011, 5), but given the above, I offer a parallel argument by seeing Lefebvre as a thinker of automobility, which necessarily includes and is inseparable from new forms of dwelling.

2.1 Understanding Automobility

Experiencing the world through driving a car was important to the space-time experiences that Moholy-Nagy, Giedion and Banham associated with driving. But the individual experience of driving a car is not the only feature of automobility, nor is it a determining one. Automobility, as a concept, actually has a long history that predates its association with cars. The *Oxford English Dictionary* (OED) dates automobility's earliest use to 1863 in French (*automobilité*) and to 1877 in German (*Automobilität*). This early definition of automobility had nothing to do with the automobile, referring to “the quality or fact of being automobile; the capacity *of* a person or thing for self-propulsion.” The word automobile appears here as an adjective rather than as a noun; even the word automobile originally referred to Paris's steam-powered omnibuses, the first public transportation system (Jackson 1985, 33; 158). Ivan Illich calls the pedestrian an “auto-mobile person on his or her feet” ([1983] 2009, 18). This understanding of the term, as a quality or state of being rather than a thing, is important because it sets up a distinction between the capacity for automobility and the other now-common definition of automobility, also from the *OED*: “the use of automobiles or motor vehicles as a mode of transport; motor travel.” This definition reiterates the common sense idea that automobility is above all about individuals using cars.

That the term automobility would become dominated by the automobile was by no means

historically inevitable. In his work on cycling and automobility, Zack Furness traces the term back to a 1922 *New York Times* article entitled “Automobility.” The Times article states that automobility implies a “higher individual power” and a “higher social state.” It also claims for automobility a “struggle [of life] to escape a static slavery to roots into a freedom of feet, and then from a freedom of feet to a mobility of wheels.” Furness writes that even in the very first usages of automobility it had ideological and symbolic content beyond that of simply a mode of transportation (2010, 6). He traces these symbolic origins of automobility not to the car, but rather to the bicycle, which expressed the autonomy and freedom that we now associate primarily with cars (16). In the context of the US in the 1890s, Furness stresses that like the car the bike gave people the opportunity to escape the crowded and noisy trolley and to go on countryside jaunts unburdened by the schedules and routes of the train (39). The mediated relationship to nature that is often thought to be a product of automobility and the view from the highway (see Wilson 1998) began with cycling; only later on, when cars became the dominant form of automobility, did this relationship to nature become fixed to driving. And the *OED* definition of automobility referring to a “person” or “thing” discounts the role of the horse, which made a significant contribution to both private and public mobility in the 19th century city and paved the way for both the electric streetcar and the car. By the 1850s, horse railways, or horsecars, were carrying millions of passengers in American cities (Jackson 1985, 41), however the over 100,000 horses on the nation's streets were over-worked, often died in the streets, and dropped literally hundreds of tons of manure per day on city streets; in this context, the appearance of the automobile was not only seen as the “salvation of the city” (107), but the elevation of the comfort, convenience and freedom of automobility. In this way, automobility does emerge with the car, but the car necessarily follows from the pursuit of automobility more

generally (and also profiting from that pursuit).

This understanding of automobility has informed some of the dominant understandings of automobility as individuals exercising their autonomous mobility. According to Böhm et al., this approach is best summed up by the complex, if not contradictory idea that autonomy only comes when one is mobile and that “true mobility” is autonomous mobility (2006, 4), neither of which are the sole domain of automobiles; cycling and walking could also be seen as autonomous mobility. Loren Lomasky's essay “Autonomy and Automobility” (1995) was arguably the first work to articulate the connection between autonomy and automobility later made mainstream by a 2004 *New York Times* essay by John Tierney called “The Autonomist Manifesto (Or, How I Learned to Stop Worrying and Love the Road).”⁵ Lomasky's explicitly pro-automobile article defending suburban house building, road expansion and car driving as the epitome of freedom has become a point of reference for a number of critiques of automobility (e.g., Böhm et. al 2006; Conley & McClaren 2009; Patterson 2007; Stoekl 2007; Walks 2015). Lomasky's key argument is that automobility is best understood as the free choice of individuals to express their autonomous mobility, which includes the freedom to choose where to work and where to live (usually, in a detached house in the suburbs). Invoking Aristotle, Kant, and John Stuart Mill, Lomasky builds an argument that emphasizes a person's ability to make choices which then leads to movement, be it physical movement in a car or intellectual movement in coming to know something of which one had been previously ignorant (10). For Lomasky, the car is the best object for realizing this individual autonomy—although he does argue that the printing press and (in the future) the “microchip” rival the automobile as “autonomy-enhancing” technologies (14).⁶

⁵ Paterson (2007) provides an extensive critique of Lomasky and other “car defenders.” See also Walks 2015. It also occasioned my 2004 editorial in *Carbusters* magazine. The car-defending autonomists should not to be confused with the Italian Marxist autonomists of the 1970s.

⁶ Lomasky would clearly be impressed by Google's self-driving, “autonomous” car, which combines the microchip

Paterson (2007) provides an extensive critique of the philosophical foundations of Lomasky's argument, while also criticizing his restricted understanding of automobility as referring to individuals expressing their autonomy through movement (81). Lomasky's argument is premised on the separation of the individual from his or her environment and on the assumption that the choice to drive or live in the suburb is a free choice. Lomasky's argument implies a coherent self that realizes its potential—autonomy—while moving. It then follows that an urban landscape wholly given over to the automobile is not the result of government or corporate intervention, but simply the expression of millions of individuals who vote with their wheels. If the highways are clogged with traffic it is not because people have no choice but to drive cars, but that the countless drivers believe that driving a car makes their lives better (Lomasky 1995, 26). This individualist version of neo-liberalism, which Walks (2015) dubs “automentality” (12), separates individuals from one another and from the wider cultural, technological and political environment that makes car commuting the only option (Paterson 2007, 18). I will return to this point of separation in the following chapter when I discuss modernist urbanism.

In his extensive critique of Lomasky, Paterson does not take up Lomasky's focus on privacy as autonomy's necessary complement. Lomasky argues that privacy's most prominent feature is not simply separating oneself from other people, but “(re)gaining control over one's immediate environment” (21). Shutting oneself in one's car allows a person to recapture “the self,” but ironically, this is a self that can only be achieved while mobile and in the confines of an automobile. In this sense, autonomous mobility is inextricably linked to the technologies which enable it. Although by no means a libertarian autonomist like Lomasky, Peter Sloterdijk also

and the automobile's “autonomy-enhancing” potential. The US-based Competitive Enterprise Institute (CEI), the policy think-tank that published Lomasky's essay, lavishes praise on Google's self-driving car in an article entitled “The Future of Automobility Is (Almost) Here” (Scribner 2012).

locates the philosophical underpinnings of automobility, arguing that any break with the automobile will require that “motorized humanity is converted beforehand to a completely different means of transporting one's soul” (Sloterdijk [1992] 2011, 19). The car is not simply a transportation tool for getting people from one point to another, but the materialization of “deeply held fantasies” of automobility that precedes cars (18). Although the automobile may be an important object in its own right, the ideologies of automobility precede it and both Sloterdijk and Lomasky trace them back to the beginnings of Western philosophy. Sloterdijk plays with the origins of automobility discussed at the outset, tracing it back to the *Phaedrus* and Plato's use of *autokinoun* as “that which moves itself” and which is “identifiable with the soul” (19). Automobility is modernity's technical projection of the philosophical idea of the self-mover, or auto-mobility. Sloterdijk does not make the case for automobility as autonomous mobility, precisely the opposite: he argues that it is the “automotive potential” of humans that irreducibly links them to the technologies that help realize that potential (19). Thus, drawing on another Greek myth, humans are better thought of as centaurs, half-human and half-automotive hybrids. Like Lomasky then he does not equate automobility simply with automobiles, but his turn to the philosophical roots of automobility as the idea that the self is only realized in motion is not to justify driving as inherently good, but to better understand modern subjects as “agents of an increasingly motorized narcissism of a hugely addictive character” (18). How to explain the over one million traffic deaths per year? These are acceptable sacrifices in the pursuit of automobility, deemed simply side effects rather than an intrinsic part of that very pursuit.

But Sloterdijk's argument still lies primarily with the auto-mobile individual. In his critique of Lomasky's argument, Allan Stoekl (2007) questions the pursuit of autonomy in a moving (or idling) car because it is inextricably tied to and dependent on a non-renewable

resource: fossil fuels. Ivan Illich (1974) brings the question of energy to the forefront of discussions of autonomy in stark and unequivocal terms: “no society can have a population that is at once autonomously active and hooked on progressively larger numbers of energy slaves” (18).

Stoekl's critique goes beyond simply acknowledging the material underpinnings of the pursuit of autonomous mobility—he questions that very pursuit of an authentic and autonomous self whether one embraces or rejects the car (2007, 125). In these understandings of automobility, agency rests primarily with the individual who chooses to consume without care or conversely, carefully conserves resources. Stoekl shifts the discussion away from the modern self always in search of a vehicle to realize his or her autonomy—be it a bike or a car—and toward the forms of energy expenditure that underlie these practices (which I take up again in more detail in the conclusion to the dissertation).

2.2 Putting the System Behind the Wheel

By shifting the discussion of automobility away from the individual and the pursuit of autonomy, I turn my focus to automobility as a system, environment and assemblage. Sloterdijk writes that a car has brakes and an accelerator, which allows the driver to start and stop at will. But take the system of automobility as a whole and it is as if the brake pedal is broken and the system's foot is glued to the accelerator—this is how the recent literature characterizes automobility as an ever-changing and constantly expanding system. The title of a recent edited collection entitled *Car Troubles: Critical Studies of Automobility and Auto-Mobility* (2009) makes the competing meanings of automobility explicit. The curious repetition of a word marked and delineated by a hyphen reveals much about the current, and dominant, understandings of automobility. Although the editors largely draw upon earlier work on automobility (e.g., Böhm et

al. 2006; Sheller and Urry 2000; Urry 2004, 2007), they uniquely call attention to these two different iterations of the term. Auto-mobility refers primarily to the *experience* of driving a car, the feeling of autonomy, flexibility, and speed, but also to “self-propelled forms” such as walking and cycling (Conley and McLaren 2009, 1). The expansion of the system of *automobility* serves to enhance the car driver's experience of *auto-mobility* in a car.

Instead of focusing upon the automobile alone or the human desire to be auto-mobile, the literature places both within the context of a system of automobility that has become dominated by cars (Urry & Sheller 2000; Urry 2004; 2007). Urry and Sheller argues that automobility refers to much more than the car itself, and they list a number of related aspects that “generate and reproduce the 'specific character of domination' of the automobility system” (2000, 738): the “quintessential manufactured object” of 20th century capitalism produced by that century's most well-known firms; the “major item of individual consumption” alongside the single-family house; a complex of interconnected and powerful social and technological institutions, including urban planning and design; the dominant form of auto-mobility; the “dominant *culture*” sustaining the ideologies proffered not only by Lomasky, but also in countless books, films, and advertisements, and; the “single most important cause of *environmental resource-use*” (Sheller & Urry 2000, 738-739). Like Lefebvre's conceptualization of space, automobility is at once about the ideological and the discursive, the material networks of infrastructure, fossil fuels, asphalt, pollution, and the daily practices of urban inhabitants.

When Moholy-Nagy and Giedion describe driving a car, they are equally enamoured with the highways upon which the cars would travel. In one way, they understood the need of “thinking in relationships” beyond the object-car itself and to how the whole environment would change around the car. But they and other modernists did not confront the situation in which

everyone wants, or has no other choice but, to express their auto-mobility by driving a car—that is when the opportunity for expressing autonomous movement has been monopolized by the car. Freund and Martin argue that the mass use of automobiles generates a “major structural contradiction that haunts capitalist society,” one that directly counters Lomasky's focus on the individual. They write:

individual drivers pursuing their rational self-interest in using autos for journeys to work, to shop, and to play create problems of exaggerated energy consumption, traffic congestion, and environmental degradation on the collective level—the level of society and the economy. (6)

Freund and Martin are in essence reworking Andre Gorz's very simple, but powerful claim in his article “The Social Ideology of the Motorcar” that the automobile is “the paradoxical example of a luxury object that has been devalued by its own spread” (1973, n.p.). Their point is to deflect attention away from individual responsibility and toward the system as a whole and the “auto-space” it produces and generates—the choice to drive a car or not is as much if not more an after-effect of the system than it is a free choice on the part of individuals. The car may, on an individual level, give unprecedented autonomy, but on the systemic level its wide-spread use creates a host of ecological and spatial problems. *Carbusters* magazine co-founder Randy Ghent writes that the car becomes a symbol of convenience and autonomy only after a long historical process in which car advertising and government spending on both transportation and dwelling favoured the automobile over other forms of mobility. The supposed autonomy of the car rather worked to impede “access by proximity” (2004, n.p.). In order to prop up the idea of the autonomous individual of the likes that Lomasky propagates, the individual has to be seen as somehow separate from society, rather than part of a larger ecology, which necessarily includes a capitalist mode of production and consumption that not only sells autonomy and individuality in

the form of cars, but that coerces people into negotiating the time-spaces of automobility, what Wolf calls “enforced mobility” (1996, 160). As the system of automobility expands, what was once a luxury object for the few, becomes a necessity for all (Paterson 2007, 43).

The “auto” in automobility resonates on two inter-linking levels: seemingly autonomous humans and autonomous machines (Urry and Sheller 2000, 739). Urry and Sheller conceptualize the car driver, rather, as a part of an assemblage that not only includes people and their cars, but also road infrastructure, buildings, and ideologies of mobility (739). In this sense, it makes no sense to speak of individuals separate from the technology they use—whether that is a car or a bike—the spaces they pass through, and the dwellings they inhabit.

This has been one of the key arguments of media studies that focus not on the individual sending and receiving messages, but on the infrastructure and technology that allows for communication to take place at all. Understanding automobility as a system is similar to the way McLuhan understands technological media as environments that alter the “scale or pace or pattern” of everyday life (1964, 24). When McLuhan claims that the “medium is the message” (1964), he is specifically directing attention away from how people use technologies—for good or for ill—and towards the new environment that is created with the addition of the technology; it is not simply a question of the car and the city, but that the entire urban ecology changes with the introduction of the car. In thinking about automobility as an environment, humans are not simply considered users or consumers of a technology, but component parts of that very environment. When thought of as automobility, the car no longer simply connects two points, but also creates what media theorist Régis Debray calls a “middle ground, setting or environment” for the transporting of people (1996, 26). A technology is also “a field of relations” that encompasses its broader function economically, culturally, and politically (Gabrys

2010, 53). Debray argues that “mediological man” does not simply co-exist along with his technologies, but rather “he is inhabited by his habitat; constructed by the niche he has constructed” (111). This is why McLuhan can write in the “Narcissism as Narcosis” section of *Understanding Media* (1964) that to use any technology is necessarily to become its “servomechanism” (55). Although Sloterdijk writes that automobility might best be studied by narcotics theory, rather than mobility studies, he could have also meant media theory.

McLuhan's point suggests that humans do not simply use technologies, but that they are used by them and are in no way autonomous or separate from those technologies—addiction is not necessarily an individual problem, but a collective one. As Sheller & Urry write, automobility generates “complex, harried patterns of social life” and “coerces people into an intense flexibility” (2000, 744). Their understanding of automobility as at once “immensely flexible” and “wholly coercive” (2000, 743) speaks to the double meaning of automobility that Conley and McClaren explore. Although the system of automobility may provide unprecedented freedom and autonomy to go where one wants and when one wants, automobility's spaces have become coercive, giving people little choice, but to negotiate its “temporal and spatial constraints” (Sheller & Urry 2000, 743; 744). Because it is assumed people have cars, then home, jobs, shops, culture, and recreation can be further from one another. Automobility itself did not separate work from home as Sheller and Urry argue—this process began before the car with intra-city railroads or the suburban streetcars in countless North American cities in the late 19th and early 20th century—but it did perpetuate this development and made the distances between destinations ever-greater. Although there are conflicting accounts of how General Motors bought up streetcar companies to bankrupt them and thus establish the dominance of the automobile in the post-war US cities, the spread of automobility has no direct corporate culprit

behind it as the system itself, as it grows, re-organizes and reconstitutes the transport needs of society (Freund & Martin 1993, 113).

The system also re-formats other transportation modes, such that individuals who do not drive are now pedestrians forced to negotiate and often be protected from automobility's time-spaces (Urry 2007, 134; Sheller & Urry 2000, 745). When the street becomes primarily designed for vehicular circulation, rather than a place for people to gather, for children to play, certain activities are prohibited. In order to facilitate traffic, streets and roads need to be predictable so the driver is not subject to surprises and can travel at the maximum allowable speed. The idea that the automobile is a force for equality and democracy discounts the number of people who do not drive: the young, the elderly, the disabled, and the poor who cannot afford cars.

Ivan Illich argues that automobility achieves a “radical monopoly” when the “industrial products” of transportation become the “dominant means of satisfying needs that formerly occasioned a personal response” (1974, 57). Illich defines traffic as made up of “two profoundly distinct modes of production”: self-powered transit and motorized transport (55). It is the difference between the use value of feet and the exchange value of industrially produced commodities like cars. These two modes of production can exist together so long as the industrial commodity of transport does not encroach upon self-powered transit. Beyond a certain threshold, the “capital-intensive mode of traffic” smothers the “labor-intensive” mode of traffic, or the human-powered transit of people on foot, bike, or in a wheelchair; in other words, automobility, as car-based system, deprives people of their own auto-mobility. Illich of course would have known that before the car and the subway, walking and cycling were not the only means of satisfying needs, as the discussion of the horse trolleys, or horsecars, above makes clear. However, in the disappearance of *real* horse-power and other animal-based forms of

mobility from the cities, the car and its attendant infrastructure and spaces thoroughly monopolized automobility and became *the* marker of autonomous mobility.

But rather than an individual making a choice to drive, Illich downplays this agency calling drivers “habitual passengers” of the proliferating networks of traffic by transport who have “lost control of the physical, social and psychic powers” residing in their feet (37). (It should be noted that Illich does not apply the term transport to mobility devices that aid people who do not have or have lost the ability to walk.) This flexibility, which automobility authorizes, allows and encourages, cannot be accessed by people moving on foot; the flexibility that the system promises depends on the speed the car offers and the time it saves individuals. If a person cannot afford a car or simply chooses not to drive, then automatically she cannot juggle time the way the car driver does, particularly if she lives in an area poorly-served by public transportation. People without cars are deprived of the use-value of their own auto-mobility as the system “create[s] distances for all and shrink[s] them for only a few” (Illich 1974, 42-43).

In the context of the 1973 oil crisis, Illich confronted the automobility system by declaring that there is an inverse relationship between energy and equity. The more complex automobility becomes, the more it is dependent on ever-increasing speeds, and the more inequitable the system becomes, particularly for non-car users. The car, which can reach speeds of 200 km/h, incorporates a prejudice against those who do not have access to it. When automobility passes from being associated with all forms of mobility to being exclusively associated with the speed of motor vehicles it passes its first watershed; it passes its second watershed when the system tends to create more distances than it is supposed to overcome, that contradiction between flexibility and coercion that Urry and Sheller discuss. Urry references Illich's radical monopoly, writing that the only solutions to the problems of everyone driving cars

can come from within the system itself (2007, 124). If the pursuit of automobility is to be understood as infinite expansion—and thus by definition unattainable—then the system will continue to expand.

2.3 We Have Never Been Automobile

This seemingly infinite expansion of automobility goes to the core of automobility as a distinctly modern project that focuses on the separation of humans from technologies, from the resources that fuel them, and from the spaces, which they served and which in turn increasingly serve them. To see car drivers as separate from the consequences of automobility, and separate from the space through which they pass, is part of the contradictions of automobility as autonomous mobility.

It is through the contradiction between auto-mobility and automobility that Böhm et al. make a conceptual link to Latour's characterization of modernity as the twin processes of translation and purification (or separation), which are seen as two separate processes in the modern world (Latour 1993, 10). The work of purification separates out human beings from the non-human world of technological objects, animals and other living things (10-11), while the work of translation mixes things up.

Böhm et al. write that the vast system that makes auto-mobility both possible and desirable, ironically, if taken as an intrinsic part of auto-mobility would “threaten the apparent autonomy of the subject in motion” (2006, 13). Drawing specifically on Latour, Böhm et al. write that the process of purification or separation allows the car to be perceived as simply a neutral object “mastered and controlled” by seemingly autonomous humans (ibid.). Their point is that it is not necessarily the individual in the car that expresses autonomous mobility, but that it is rather the infrastructure, the vast network of highways, that fosters the illusion that movement is

autonomous (13). Autonomous mobility is only possible because of the complex networks, yet at the same time, these complex networks emerge out of the societal desire for autonomous mobility, which in turn are inseparable from the social, cultural and economic dynamics that make automobility seem both desirable and necessary.

Although in a somewhat extreme formulation, Böhm et. al. argue that all forms of automobility, as autonomous mobility, are in the strict definition of the term unattainable—even pedestrians need sidewalks to walk on (2006, 12). Their point in this sense is not at all limited to cars—for the realization of the human desire for auto-mobility an assemblage or system of some sorts will always be necessary; aside from walking, that assemblage has either involved animals, electricity, or fossil fuels. The same argument could be made for the horse and carriage, which also required an attendant infrastructure for dealing with manure, feeding horses, housing them at night, etc. Why then did autonomy become so strongly linked with the car exclusively? In an air-conditioned car with the windows closed traveling along smooth asphalt it is much easier for the means to recede into the background and for the driver to have a feeling of autonomous mobility than in a horse and carriage bumping along an unpaved road (see Schivelbusch 1986, 8-9). A pile of horse manure is a much more tangible and visible actant in the horsecar assemblage than the more diffuse tons of carbon dioxide released into the atmosphere. Latour's point is that although the experience of mobility changes, humans have never been autonomous travelers, they have always been dependent on networks of transportation and communication.

The dominant approach to automobility and auto-mobility, however, is to make what are largely technical improvements to the former so that the latter becomes, at least temporarily, possible, rather than questioning the system's viability (Böhm et al. 2006, 4). Improvements like the congestion charging scheme in London help to reform automobility, but do not move toward

a “radically different regime of automobility” (13). The emphasis placed on the system suggests that the antagonisms of automobility cannot be solved by individuals choosing simply to drive less, or by improving the fuel efficiency of cars or the frequency of public transport (Urry 2004, 33). According to Lomasky, automobility's antagonisms are not “intrinsic” to automobility, but are merely “undesirable side-effects” (23) and not part of the system's normal (dis)functioning (Böhm et al. 2006, 11).

If automobility *is* impossible on conceptual grounds, attempts to resolve such antagonisms will always fail and Böhm et al. argue that interventions that attempt to make automobility possible, albeit temporarily, generate their own “iatrogenic diseases” which require remedies that come from within the system itself (2006, 11). In the futile pursuit of the unattainable autonomous self, which can only be achieved in motion, disaster is left in its wake: millions dead, polluted cities, and a “world of resources pumped and dumped” (Stoekl 2007, 128). As we will see in the next chapter, the description of automobility as a system in need of treatment is reflected in the claims of architects and urban planners that the 20th century city was ailing and sick, in part and largely because of the congestion and traffic caused by the influx of cars into cities that developed before the automobile. It was an argument that generated any number of remedies from the widening of streets to the complete destruction of whole city blocks, and an approach which itself generated its own “iatrogenic diseases”: the anaesthetic spaces of the urban periphery I explore in the next chapter.

The point in reference to automobility is not to stress autonomy and detachment, but their radical opposite: interconnection and attachment. Both McLuhan and Latour in different contexts shift the focus of their theories—communication theory and assemblage theory—from *transportation*, understood as the maintenance of the integrity of the message in the movement

from sender to receiver, to *transformation*. Every claim to autonomous mobility must have as its necessary corollary a vast project of system building that involves the labour of numerous actors, including architects, planners, engineers, but also pedestrians and cyclists. As Latour writes, the “smooth displacement in time and space” for which all car drivers wish, “is paid for, somewhere else, by other people” (1997, 189). The focus on automobility as an assemblage shifts attention away from individuals driving cars, away from individual journeys and towards the system and the transformation of the environment that makes that journey possible.

In *We Have Never Been Modern* (1993) Latour makes a distinction between intermediaries and mediators. An intermediary “although recognized as necessary—simply transports or transfers,” “it is a void in itself” a neutral means through which a plan is more or less faithfully realized. In this sense, intermediaries ensure that movement from one point to another happens as smoothly and efficiently as possible, so that the passenger can indeed have the experience of autonomous mobility. Mediators, however, are “actors endowed with the capacity to translate what they transport, to redefine it, redeploy it, and also to betray it” (81). It is not that mediators “determine the action,” but that they “authorize, allow, afford, encourage, permit, suggest, influence, block, render possible, forbid, and so on” (72). When looked at this way, the seemingly “smooth displacement” in time and through space is bought at the cost and the work of a host of mediators. The example of accepting traffic deaths can now be framed not simply in philosophical terms, but rather in terms of mediation. In Lomasky's version of automobility, the speed and freedom of driving a car is more important than the deaths on the road. In terms of the assemblage of automobility, “an explicit collective decision” has been made that reduces traffic deaths as mediator to simply an intermediary, a side-effect (Latour 2004, 124). They are consigned to the “dumping ground” by the system of automobility.

At some point, though, the contradictions will become too pronounced for the system to continue to expand—it is these cracks in the system of automobility that expose the contradictions of automobility and open up the possibility not for a more authentic and ecologically-benign automobility, which would still perpetuate the modern separation of the subject from her environment and the illusion of autonomy, but for a wholly different approach to automobility as such. Böhm et al. (2006, 15) suggest we must “delink autonomy from mobility” and create a space for different kinds of automobilities. But why not simply aim to make automobility available to everyone? Melvin Webber argues that “the joys of automobility” should be extended to even those who do not have access to a car (1992, 284). Any alternative forms of transportation must equal the freedom and autonomy that the car supposedly provides, an argument also made by Sheller & Urry who claim that any technology that comes after the automobile must “harness its [the car’s] peculiar auto-freedom” (2000, 754).

There are a couple of problems with this approach. In *Automobile Politics* (2007), Matthew Paterson, offers two critiques of the literature on automobility that are relevant here. First, he suggests that approaches to automobility as a system or assemblage continue to privilege the phenomenological aspects of automobility—that is, the role of the automobile in the everyday lives of individuals. This speaks to a larger problem with reducing automobility to one of the individual choice of whether to drive or not. Second, Paterson argues that in focusing on the system as a whole, automobility theorists can miss the political struggles over “concrete decisions” that happen in specific cases when the car dominates over other modes (2007, 27). Paterson also shows that the same arguments made for the car have been and are also made for the bicycle (see also Furness 2010). At the same time, he suggests cycling is a more authentic form of auto-mobility than driving even though he criticizes autonomists like Lomasky (2007,

230). For all his critiques of transport's radical monopoly, Illich does not abandon the idea of autonomous mobility. Illich associates “liberation from dependence” on cars with convivial tools that complement a person's autonomy rather than hinder it. Traffic by transport, be it cars or public transport, should only develop to the extent that it supports “autonomous transit”—that is, walking, cycling and any mobility-supporting devices such as wheelchairs. The problem that neither Illich nor Paterson recognize is that in the contemporary urban-economic context, the radical monopoly of transportation has turned this situation on its head: walking and cycling as modes of traffic, not recreation, have been reserved only for those who have the luxury to live close to work and recreational amenities and in places where there are safe streets on which to ride bicycles (and on which there are actual sidewalks). Sajay Samuel and Jean Robert, long-time collaborators with Illich, write that walking to work has now become a “designed and expensive commodity” that only the most well-off urbanites can afford (2004, 9). The problem was not simply the inverse relationship of energy and equity, but the uneven ways in which that imbalance is corrected. Equity transforms into exclusivity. The point is not to get into a debate about which forms of auto-mobility are more authentic and autonomous, but to insert a third category into the human-technology relation: space.

In a 1983 talk, Ivan Illich addressed the need for this third category—space—to redress an omission he made in focusing solely on the relationship of energy and equity. In comparing transit and transportation in terms of the quantitative amounts of energy expended, Illich believed he missed what was the main difference between the two: “people and motors do not move through the same kind of space” ([1983] 2009, 18). If we are to consider automobility as not simply the individual act of driving a car, but as a system, environment, assemblage, then it necessarily means accounting for the complex dynamics of urban space as part of that

assemblage.

Automobility not only necessitated historically the production of completely new spaces, be they new towns, suburbs, or new city centres, but that like space, automobility is at once “result and cause, product and producer” (Lefebvre [1974] 1991, 142). Like media theory's conceptualization of technologies as fields of relations, Lefebvre sees space as more than simply the sum total of the individual buildings in the landscape. He writes that space is not a neutral container unaffected by the contents poured into it. The problem in perceiving space in such a way is the inability to see the contents of spaces “in terms of their interrelationships within the containing forms” ([1974] 1991, 94). Lefebvre draws on the metaphor of the spider's web to help theorize space as inseparable from the objects that make it up. The web implies the texture of space, with its intricate design, nodes, and in-between spaces. The spider secretes its web, but at the same time is inseparable from it; the spider is defenseless and homeless without its web, and without the spider the web is no longer useful. I turn now to the aspects of Lefebvre's work on space that resonate with the conceptualization of automobility as system, environment, and assemblage.

2.4 Representations of Space

In *The Production of Space* ([1974] 1991), Lefebvre defines representations of space as the conceptualized space of “scientists, planners, urbanists, technocratic subdividers and social engineers” and of a “certain type of artist with a scientific bent” (38). Although, the ideology of automobility is most often associated with advertisements, films and other discourse supporting the idea of the freedom of the road, the ideology of automobility is also expressed through representations of space, such as planning models, maps, architectural journals and manifestos, which are all part of the “extraordinarily powerful *complex*” of the system of automobility (Urry

2004, 26). Although autonomists may abhor planners because of the emphasis on master planning (see Tierney 2004), I want to suggest that it was the 20th century planners and architects who wanted to fulfill the goals of autonomous mobility by supporting the free circulation of vehicles.

Although representations of space are most often thought of as the space conceived in plans, models and diagrams, Lefebvre also emphasizes their practical impact as they “intervene in and modify spatial *textures*” by way of architecture and construction (42). Things in space are not to be read as isolated objects, but as having a productive meaning only in relation to their surroundings and their context (118), or more precisely, and in keeping with the metaphor, their *contexture* understood as the process of linking together, uniting. Architecture and construction together are conceived as a “project embedded in a spatial context and a texture” and thus are not necessarily about individual buildings themselves, but the “associated networks” to which they belong as part of the production of space (ibid.). As such, representations of space play a significant role in everyday spatial practices. It is important to the work of this dissertation that representations of space are not seen simply as plans or ideas, but also as the process of materializing these plans (which rarely, if ever, *materialize* as planned as we will see with both the case studies of Willowdale and South City). In Richard Milgrom's essay on architects and Lefebvre's conception of the production of space, he argues that conceptualized space is where “the architect is most comfortable” (2008, 270) but as we shall see in the chapter on South City in particular, different tensions are at work between the planners and the “technocratic subdividers” that create significant tensions within conceived space which by no means can be reduced to the architect's plans and drawings.

Representations of space are not simply the work of architects and urban planners alone,

they derive them from ideology, which take on material form when they intervene and influence the production of space (Lefebvre [1974] 1991, 44). Ideology to be effective assumes a form, a body. For example, Lefebvre asks: what is the Christian ideology without churches, relics, and panel paintings, which secures its dominance over time (44)? Like automobility, the Christian ideology has “created the space which guarantees that it endures” (ibid.). Although, as the previous section illustrated, it is not simply the ideology creating the space, but a dialectical relationship wherein the actual spaces of automobility—a highway, for example—promote the ideologies of automobility—autonomy, mobility and the pleasure of driving; these are meaningless without the infrastructure and the planning that support them. The physical separation of cars and pedestrians that became the marker of modernist urbanism was an attempt to ensure the unimpeded movement of cars, while also providing a safe haven for pedestrians. From this perspective, the visions and representations of urban space are as much a part of the environment of automobility as the cul-de-sacs, the parking lots, the highways, and the gas stations.

This more nuanced understanding of representations of space suggests that it is more than simply a concept or discourse on space. I characterize the relationship between vision and construction in terms of what Lefebvre describes as the city as oeuvre and the city as product.

2.5 Oeuvre, Product and the Work of Art

My main argument is that the architects and urban planners believed that urban space had to be entirely re-thought in light of the spread of automobility, a point I develop and return to throughout the dissertation. In the *Production of Space*, Lefebvre begins his discussion of social space by pointing to the distinction between the *oeuvre* (work), the *oeuvre d'art* (work of art) and the product.

In the city as *oeuvre*, or the city-*oeuvre* as Rob Shields (1999) calls it, the everyday life of the city coincides with and is inseparable from the city's “involuntary *mise-en-scene*” (Lefebvre [1974] 1991, 74). The city-*oeuvre* is the collective work of the inhabitants of a place, who shape it slowly over time. Time is key to the city-*oeuvre*, as the buildings bear the time of their growth like the rings of a tree trunk or the spiral on a snail's shell. In his book on Lefebvre, Shields notes that the *oeuvre* is important as a “totality” or an “indivisible whole” irreducible to its parts (1996, 101). Shields also suggests the *oeuvre* represents a “human right” to enjoyment of the urban landscape that does not revolve around ownership, be it a car, a single-family house, property, etc. I would argue that the city-*oeuvre* is itself a critique of the separations that defined Athens Charter urbanism, and particularly the idea that leisure has its own separate (usually commodified) space that one usually has to travel to by car. In the next chapter, I will show how the Situationist idea of unitary urbanism offers another take on the city-*oeuvre*.

Lefebvre distinguishes the *oeuvre* from the work of art, writing that “no work [*oeuvre*] has ever been created as a work of art [*oeuvre d'art*]” ([1974] 1991, 74). Lefebvre was discussing both traditional works of art—a painting by Picasso—as well as the city intentionally “composed” by the urban planner like a work of art (74). The city as a work of art is planned in advance by a singular individual or group of individuals, while the city-*oeuvre* is the product of inhabitants who build the city over time, sometimes without any concept of how the city will look as a whole. For Lefebvre, the city built in advance like a work of art implies the disappearance and increasing irrelevance of those cities or villages secreted slowly over time by their inhabitants. The difference between works and products formed the basis of Lefebvre's observations of Mourenx, a new town built close to the medieval town where he grew up.

Referring to the building of entirely new towns in the post-war period, Lefebvre writes

that spatial practice “consists in a projection 'on the ground' [*sur le terrain*]” of all the aspects, elements and moments of social practice” ([1974] 1991, 8, translation modified).⁷ At the same time, these aspects of social practice are systematically separated from one another in the functionalization of space: For Lefebvre, the contradictions of post-war abstract space is this simultaneous homogeneity and fragmenting as the architects, planners and subdividers treat the landscape as an empty canvas. Stanek (2011) writes that this projection on the ground stands in direct contrast to the slow development or secretion over time of a unique urban space by the inhabitants themselves, the city-oeuvre. Lefebvre's point is not to lament the disappearance of cities as great works, like Venice and other medieval cities. He acknowledges that Venice's splendor, the result of vast expenditure of resources still required the repetitive gestures of workers, etc. Yet at the same time, Venice is also about festive celebrations, revelry, and ritual (77). The use of the streets and squares of the city in this latter sense is *la Fête*, “a celebration which consumes unproductively” ([1967] 1996, 66). These city-oeuvres may be unproductive, but they are also at risk of being either marginalized or commodified. Venice and Florence have become museums, and the city-oeuvres, like Kensington Market in Toronto, can easily become nodes in the capitalist system, increasingly marketed as tourist destinations and incubators of cultural capital in the creative city.

The art of building cities in their entirety has “destroyed works” replacing them with “products, destined to be exchanged, traded and reproduced” (ibid.). For Lefebvre, a product in its strict economic sense is something produced on an assembly line, a result of a rational production process that has as its goal the mass production of any number of identical objects formed out of the “repetitive acts and gestures” of labour and machines ([1974] 1991, 70). This

⁷ The reference for the original French is Lefebvre 1974, 15.

production process mobilizes materials, be it concrete or steel or *matériel* (tools, instructions, know-how, etc.). The product is not a totality, but a result of conceiving space as separated and fragmented, a critique Lefebvre would level at modernist architects and urbanists like Le Corbusier. As all cities start to look and feel similar, any uniqueness they once had (if they had it to begin with) is lost, and as each space is designed according to specific functions, it becomes harder to find the spontaneous interactions characteristic of a city-oeuvre (75).

In the confluence of industrialization and urbanization, the modern city produced according to its four functions—dwelling, circulation, work, and recreation—becomes “a product *strictu sensu*: it is reproducible and it is the result of repetitive actions” ([1974] 1991, 75). This applies as much to cities and dwellings, as it does to highway or airports; they are the outcome of “repetitive gestures” of both workers and the machines they use (75). The increasing reproducibility and exchangeability of space reduces all urban activities to function and to each function a defined space. In urban society, the car as a product, and its corollary, the urban spaces of post-war urbanism, not only create a strict divide between works and products, but in functional spaces, the production of *oeuvres* is becoming more and more rare or reified as in the case of great works of signature architecture by the “starchitect.”

Lefebvre attempts to use production beyond its strict economic sense, to encompass the production of space as a whole. Stanek delineates the two meanings of production in Lefebvre's architectural and urban research. Production in its wide sense refers to “social practice defined as the material and 'spiritual production' simultaneously” (2011, 40). Production in the “narrow sense” refers to its strict economic association with industrialization, repeatability and reproducibility (Ibid). Lefebvre writes that the concept of production in its more general sense has been annexed by the narrow view of an “ideology of productivism” and a “crude and brutal

economism” ([1974] 1991, 72). This “vulgar and vulgarising” economism, Lefebvre says, works as “an ideology of expansion, as productivism, as organizing rationality or as the prospect of imminent affluence” (1971, 96). The “rationalism of the 'principle of economy'” and its “minimum expenditure” contrasts with the “non-productive” spaces that do not contribute to economic and industrial growth ([1974] 1991, 177).

With this wider understanding of production in mind, Lefebvre writes that we need to be careful not to fetishize the notion of work, and thereby deny the dialectical possibilities of the intertwining of works and products ([1974] 1991, 75). Rather, the point is to see works and products in a dialectical relationship, where the two can mutually reinforce and critique one another (77). Lefebvre makes the overcoming of the opposition between works and products part of the “orientation” of the process of producing qualitatively different spaces (422), attempting to better understand these two different ways of occupying and producing space.

The tension I have been exploring here between the city-oeuvre, the city-product, and the city-work of art are central to Lefebvre's understanding of abstract space. These are important historical markers in the history of the production of space, which Lefebvre connects to painting and the architecture of Le Corbusier and the Bauhaus. The historical passage from the city-oeuvre to the city-product is also inseparable from the rationalization of space due to changes in transportation, such as canals, railroads and then highways, which Mattellart (1996) traces back to 18th century France or in the transition from horse-drawn carriages and trolleys to electric street cars and then to cars and subways. With the onset of automobility and the full impact of industrialization in the 1920s rationalization of space becomes more pronounced and widespread.

The tension between works and products illustrates one of the fundamental tensions of abstract space—that is, the tendency to emphasize the quantitative over the qualitative. It was

with the dominance of abstract space under both state capitalism and state socialism (Lefebvre [1974] 1991, 304) that space became produced not simply like a product on an assembly line, but as a work of art of architects and urban planners.

2.6 Towards a Theory of Abstract Space and Assemblages

In his work on hegemony and urbanization in Lefebvre, Stefan Kipfer argues that “as a product of industrialization, commodification, real estate capital, and everyday symbols ... urbanization is abstract space (2008, 201).” Kipfer also argues that abstract space is not simply the projection of the architect's or urban planner's view of society, but that it necessarily contains the dreams of a “privatized urban life” with which inhabitants identify (ibid.). In this, urbanization, like automobility, is both coercive and persuasive. Through Lefebvre's understanding of abstract space, I want to forge the links between Lefebvre's approach to studying space and the approach to automobility as a system and assemblage (Latour) that I have laid out in the first part of the chapter.

Lefebvre draws on Marx's understanding of abstract labour to develop his theory of abstract space. Like labour, simultaneously fragmented and unified in the mass production process, so too space becomes fragmented and unified; as labour becomes abstract it became separate from the processes of social reproduction ([1974] 1991, 49). Like abstract labour, space becomes exchangeable, repeatable and based on machines that emphasize standardization and repetition. Abstract space is a “medium of *exchange*,” and like money, becomes what Georges Simmel in “The Metropolis and Mental Life” ([1903] 2002) calls “the frightful leveler” (106) erasing the distinctions between things in the interest of exchange value, quantitative growth, and calculation. The Bauhaus and Le Corbusier are part of the city's mental life as their work embodies the “analytic spirit” of “dispersion, division and segregation” (Lefebvre [1974] 1991,

308). In many ways, Illich's own discussion of the dominance of transportation as commodity (exchange value) over self-powered transit (use value) is part of this process.

The “principal contradiction” of abstract space is its simultaneous homogenizing and fragmented character (Lefebvre [1974] 1991, 355). This has been emphasized by Lefebvre scholars, who argue that the homogenizing and fragmenting tendencies of capitalist space is “the most important characteristic of abstract space” (Stanek 2011, 152), its “distinctive feature” (Shields 1999, 177) and that “the production of abstract space homogenizes through separation” (Kipfer 2008, 201). Abstract space's homogeneous character comes from this tendency to reduce everything to the quantitative (Lefebvre [1974] 1991, 49). Abstraction's “*modus operandi* is devastation, destruction” even if that devastation “may sometimes herald creation” (289). This is related to Lefebvre's understanding of the transition from works to products, from space secreted slowly over time, to the projection of space as a product—a highway—or a work of art—a new housing development. Lefebvre argues that the strangeness of space has to do with this simultaneous homogenizing and fragmenting quality. The boundaries between city and suburb, centre and periphery have disappeared, as have those “between the domain of automobiles and the domain of people” ([1974] 1991, 97). Yet because of or in spite of automobility's radical monopoly the disappearance of boundaries is contrasted with the strict separation of work from dwelling, recreation from living spaces, etc.

The contradictions of abstract space are also expressed in the “implosion-explosion” of “neo-capitalist urbanization” (Kipfer 2008, 201). Lefebvre sees implosion in the “tremendous concentration of urban reality” and explosion in the “projection” of “fragments...into space,” which he identifies with suburbs, new towns, etc. ([1970] 2003, 14). These places although part of the urban reality have lost the “organic totality” and “monumental splendour” associated with

the first cities and are “populated with signs of the...dissolution of urbanity” (14). In the face of capitalism and neocapitalism which have produced abstract space, the privileged and defined space of the town is disappearing ([1974] 1991, 53).

Although Lefebvre writes that “implosion-explosion” is a metaphor that comes from nuclear physics ([1970] 2003, 15), he was more likely drawing on *The City in History* (1961) in which Lewis Mumford refers to the rise of the first cities as an “Urban Revolution” and as “the first urban implosion,” marked by the concentration of activities and functions within a defined place: the historic walled city. Like Lefebvre, Mumford privileges the medieval city in his historical account as a particularly defining moment in the history of the city. The medieval city with its concentrated functions was a means of expressing “sacred and secular power,” but also a means to bring “heaven down to earth...a symbol of the possible” (Mumford 1961, 31). This stands in marked contrast to the urban transformations of the present—Mumford is writing in 1961—marked by an “exploding universe of mechanical and electronic invention,” which is producing a “similar explosion” of the city: “the city has burst open and scattered its complex organs and organizations over the entire landscape” (34). The tension between the compact, clearly-defined and demarcated walled city, also a pre-automobile city, and new technologies of communication and transportation, have contributed to the erosion of any clear border between city and countryside. Mumford also made the connection between new technologies and the changing character of urban space. With the urban “explosion” boundaries between city and countryside erode, at the same time, fragmented spaces proliferate connected only by automobile.

Like automobility, one of the defining aspects of abstract space is not only that it harbours contradictions, but that these contradictions will lead to the decline of abstract space, out of

which will emerge a “differential space” (Lefebvre [1974] 1991, 52). In this way, we have returned to the contradictions and impossibilities of automobility. Overcoming the current domination of automobility, without simply exchanging one technology for another (a gas-powered car for an electric car) will only occur within the wider context of the simultaneous overcoming of the contradictions of abstract space. This differential space will “restore unity to what abstract space breaks up” (ibid.) and open up the possibility for different as yet unseen automobilities that do not depend on the separations that have defined both abstract space and the modern approaches to automobility.

Modern space fragments, setting up clear divisions between humans and technology, between nature and culture, and so the task of assemblage theory is to reconnect the separated elements. Lefebvre's theory of the production of space while stressing the important role of politics—that is, state and corporate power—also does just this: in a Marxist approach, the production of space uncovers sets of relations that are not always evident when urban theorists focus on single buildings in the landscape. “Things” or “products” are measured quantitatively and as such conceal the truth of their production and the “social relationships of...domination” they presuppose (Lefebvre [1974] 1991, 80-81). Lefebvre does for urban space what Marx did for commodities: unmasking their social relationships. Although Latour generally eschews such Marxist language of “unmasking” or revealing the truth behind objects, both thinkers in different ways seek to show modernity's processes of separation and purification (Latour) or fragmentation (Lefebvre). Whereas Lefebvre focuses on how abstract space homogenizes through separation, Latour presents a different, but parallel process showing that the unflinching commitment to separation has created complex networks, be they traffic deaths or in-between cities. For Latour, the distinctly modern approach of someone like Lomasky seeks to separate

out automobility from its supposed side-effects, but in doing so, the more the problems are exacerbated and the more spaces proliferate. In one way, Latour's work can complexify Lefebvre's approach, which at times gives nature and society predetermined roles, such as when he writes that social space includes "everything that is produced either by nature or by society" ([1974] 1991, 101). Addressing the contradictions of abstract space and automobility does not just mean contesting the dominance of automobiles, but contesting the logic of separation that produced the homogeneous spaces of automobility *and* examining those very spaces as not simply the detritus of modernist urbanism, but complex spaces in their own right. Freund and Martin point to the "globalization of auto hegemony" in North America, Western Europe, the so-called third world, and Eastern Europe (1993, 61-77). Along with the globalizing tendencies of automobility, comes the simultaneous fragmentation and homogenization of urban space worldwide, through the separation of cars and pedestrians, a hallmark of 20th century modernist urbanism.

Andre Gorz (1973) sums up the intersections of abstract space and automobility, and in particular the way that the city-product spaces mirror the fragmented and specialized operations of labour (Lefebvre [1974] 1991, 98) while also anticipating the work in the following chapter on modernist urbanism more specifically. In the "Social Ideology of the Motorcar" (1973), Gorz points specifically to the fragmenting character of abstract space under the homogenizing character of automobility and the need to consider transportation within its wider context:

Above all, never make transportation an issue by itself. Always connect it to the problem of the city, of the social division of labour, and to the way this compartmentalises the many dimensions of life. One place for work, another for "living," a third for shopping, a fourth for learning, a fifth for entertainment. The way our space is arranged carries on the disintegration of people that begins with the division of labour in the factory.

2.7 Intermezzo, Mourenx

If the key moment in Le Corbusier's life and career as both an architect and an urbanist was his meeting with the speeding traffic on the Champs-Élysées, for Henri Lefebvre one of the key moments in his career was not had on a Parisian street, but in a much less glamorous environment: on a hill overlooking the new town of Mourenx, built four kilometres from his hometown of Navarrenx, and where he spent the latter parts of his life. He describes Mourenx in the sixth prelude of *Introduction to Modernity* ([1962] 1995). A number of scholars (e.g., Elden 2004; Stanek 2011; Wilson 2011) point to Mourenx as a key site for the development of Lefebvre's theories. Lefebvre visited there on a number of occasions on his way to Navarrenx, taking his friends Guy Debord and Michelle Bernstein with him (Stanek 2011, 106). Lefebvre himself noted the important influence Mourenx had on his shift from rural to urban issues, as he witnessed a new city emerge out of the rural landscape; he envisioned writing a book about Mourenx called “Birth of a City” (Lefebvre 1997, 76). The uniqueness of a place like Mourenx lay with the rapidity with which the city was projected on the landscape rather than secreted slowly over time by the inhabitants, thanks in large part to new building technologies and the visions of building cities from scratch. With its focus on separation, rather than integration, Mourenx was also unique in the way that it was a total system, a landscape of signals and a space given over to the circulation of vehicles, which was part of Lefebvre's critique of the homogenizing and fragmenting abstract spaces of post-war capitalism and socialism. Lefebvre, the sociological mid-wife, was eager to attend at the birth of Mourenx, to witness what new kind of city would replace the city of old. It was a messy birth.

Lefebvre begins his discussion of Mourenx with a description of his birthplace, Navarrenx. From the outset Lefebvre tries to show the delicate balance between unity and

separation that pervaded in Navarrenx as a city-oeuvre, and he does so by describing the street and its relation to the environment, stressing the totality rather than the individual parts: “There is no clear-cut difference, yet no confusion between the countryside, the streets and the houses; you walk from the fields into the heart of the town and the buildings, through an uninterrupted chain of trees, gardens, gateways, courtyards and animals” ([1962] 1995, 117). Each neighbourhood has its own personality, but the dwellings are mixed with the places of work, and the places where people relax. Lefebvre describes the street as a “place to stroll...to be alive in” (117). It is not an “over privileged means of communication” to move people from one point to the next, nor is it a spectacle for the display of commodities (117). Above all, the street is integrated, part of the life of the town.

However, in the shadow of Mourenx, and countless other places like it, Navarrenx has become “an expiring seashell” lying “shattered and open to the skies” ([1962] 1995, 117); life was moving to the large-scale housing complexes. Referring to the work of Gaston Bachelard from whom he borrows the metaphor of the sea shell, Lefebvre writes that “the shell, a secreted and lived space...epitomizes the qualities of human 'space’” ([1974] 1991, 121, translation modified).⁸ Lefebvre understands the city-oeuvre through the relationship between the intricate shell and the formless mass inside; its buildings, structures and layout are secreted over time by the inhabitants. Le Corbusier—a frequent target for Lefebvre in his writings on urbanism—also refers to the dwelling as a snail shell, but in a very different vein from that of Lefebvre and it is possible Lefebvre was bringing together Bachelard and Le Corbusier to illustrate the very tensions and contradictions in post-war urbanism's abstract space. For a thousand years, writes Le Corbusier, “[man] lived like a snail in its shell, in a home made to his exact measure; nothing

⁸ Lefebvre writes: “La Coquille, espace secrété et vécu...” (1974, 143). Nicholson-Smith's translation reads “the shell, a secret and directly experienced place,” which I have modified.

prompted him to change this state of things” ([1923] 2007, 294). Until, that is, Le Corbusier met the speeding cars in Paris and became intoxicated by images of grain silos and great engineering projects. Accompanied by images of cranes, automobiles, and steamships, *Toward an Architecture* ([1923] 2007) claims that the objects of modern life have created a new way of thinking and now “the old rotten things that are our snail shells, our dwellings...hold us in their putrid and useless grip every day and offer nothing in return” (297).

The urbanism of Mourenx elevates abstract space to the structuring principal of modernist planning—Lefebvre describes Mourenx as modernity's “propaganda leaflet” ([1962] 1995, 119). For Lefebvre, it was the projection onto urban space of “analytical reasoning” and the “evil genius of abstraction and separation” (120). Rather than a place of encounter, the city had become a place of connections. Every object is reduced to its specific function: shop in the shopping centre, recreate in the nature park, work in the industrial zone, etc. For Lefebvre, this abstract approach to space focuses solely on functionality and visibility ([1974] 1991, 313). It is the city-product rather than the city-oeuvre.

Within the “total semantic field,” Lefebvre sees Mourenx as a city of signals, where every object has been stripped of any symbolic meaning beyond its functional imperative. Even though Mourenx did not have many traffic lights at the time, it was in one sense “nothing but traffic lights: do this don't do that” (119): this is a place for walking, this is a place for driving, consume here in the shopping centre, leisure time in the park, recreation area or community centre, playtime in the fenced-off, age-appropriate playground, etc. The idea of the functional city is that every object, every space has a preordained function. This is the city of a “closed and materialized system” where “everything is clear and intelligible” (119).

Conclusions

Although Lefebvre gives no indication that Mourenx was overrun by cars, Mourenx is significant because it speaks of a system, an environment that is wholly given over to functional and rational circulation. The significance of automobility, as a system and as an environment, to the production of space cannot be downplayed. I have tried to illustrate in this chapter both the parallels and intersections of automobility and the characteristics of the production of space. It can be seen in the transformation from the city-oeuvre to the city-product, in the contradiction between homogenization and fragmentation, explosion and implosion, and the task given to architects and planners to build entirely new cities suited to automobility, which I explore in more detail in the next chapter.

In their manifesto on automobility, which played a part in mobilizing the field of mobility studies and studies of automobility, Urry and Sheller (2000) are critical of an urban studies—they mention both Lefebvre and Mumford—that they argue privileges dwelling over mobility as the defining feature of urbanism and urban space. They criticize Lefebvre for focusing on how the car contributes to the destruction of urban public spaces and neglecting how mobility and movement also constitute those urban spaces. For Urry and Sheller, implosion as “the concentration of places in space” and the “intensification of human habits” contrasts with the explosive characteristics of “automobilization,” and “extension,” “dispersal,” and “fragmentation” (2000, 742). These processes together constitute modernity (*ibid.*). In their view, the “explosion” does not contribute to urbanity's dissolution, but is rather constitutive of that very urbanity. Their point is that mobility generally should not be seen as the “enemy” of urban space, and that the “auto-freedom of movement” is essential to urban life. Automobility in these processes stands for both the freedom of movement, the escape from a “static slavery to roots”

and at the same time for the many “unintended consequences of modernity” (743), Lefebvre, however, is a thinker of automobility not because he laments the effects of the car on the city—more a result of the specific context of post-war France (Ross 1995)—but because he specifically sees space as dynamic and formed on multiple levels in much the same way that Urry and Sheller describe the system of automobility, Latour understands an assemblage, and McLuhan environments of technology.

In the next chapter, I argue that the tension is not only between implosion and explosion, but between modernist urbanism—which sought in any number of ways to reassert the need for place and public spaces—and the forces of automobility and urbanization. Modernist urbanism did not reject mobility and movement, rather it reproduced the contradictions of abstract space by associating all of urban space with the problem of automobility, by strictly separating cars from pedestrians. Not only did this reproduce the homogenizing/fragmenting characteristic of abstract space, but by associating all of urban space with the problem of circulation and movement it reinforced the idea of automobility as autonomous mobility—that is, the goal of modernist urbanism was to assure the auto-mobility of all through separation.

Abstract space corresponds to the spread of automobility and “the ever vaster and denser networks” spreading over the planet (Lefebvre [1974] 1991, 307). Both the emergence of abstract space and the expansion of the system of automobility meant that space was put into the service of that expanding system, becoming produced, distributed and consumed like a product (Stanek 2011, 70). In the spread of automobility, urban spaces lose their qualitative distinctions and increasingly look and feel the same. For Lefebvre, it was post-war capitalist urban space where the contradictions of abstract space were most visible with the simultaneous separation of functions and homogenization of the urban landscape (Stanek 2011, 142). This space as we will

see in the following chapters was not limited to the capitalist countries.

Lefebvre writes that abstract space harbours “spatial contradictions” which are “liable to precipitate the downfall of abstract space” (52). I have elucidated these contradictions here. In many ways, the theorists of automobility are not only drawing attention to automobility's contradictions, but its inherent impossibility. They argue that these contradictions will precipitate the downfall of an automobility dominated by cars, and in the conclusion I specifically look beyond automobility.

3. The (An)aesthetics of Circulating Modernist Urbanisms



Fig. 3.1. Modernist Urbanism: South City, Prague. (Photo by Jaromír Čejka.)

In his wonderfully-titled *A New Kind of Bleak: Journeys through Urban Britain*, Owen Hatherley visits places in Britain not unlike Mourenx, places that Lefebvre would have likely associated with the global dominance of abstract space. Walking around present-day Cumbernauld, a new town built in the 1950s just outside of Edinburgh, a place whose town centre megastructure is both loved and loathed, Hatherley comes to the realization that he could just as easily be in a suburb of Stockholm, the places look that much alike. One modern place evokes another. While I was presenting my research on South City to the students in my seminar course on mobility and the city, I showed many of the images I had gathered while doing research. One image, depicting a lone figure in South City's prefabricated landscape (see fig. 3.1)

prompted the following response: that looks a lot like the spaces around York University's Ross Building. Why did the elevated pedestrian space in South City prompt a comparison to York University's monumental megastructure? Why do so many landscapes of the post-war period resemble one another?

As I discussed in the previous chapter, Lefebvre writes that Le Corbusier and Walter Gropius may have believed their work was “rational and revolutionary,” but in reality it was “tailor-made for the state—whether of the state-capitalist or state-socialist variety” ([1974] 1991, 124). Implicit in much of the previous chapter's discussion of abstract space was Lefebvre's critique and understanding of post-war urbanism. Lefebvre argues that the main contradiction of abstract space is the simultaneous abstract and homogenizing character. Lefebvre writes that the reproducible spaces of post-war urbanism are “homogeneous” and “utterly dislocating” ([1974] 1991, 97). Roads and routes have a paradoxical role: they create “fracture lines” between places that they supposedly are bringing together (38). In post-war urbanism everything is “separated and isolated, projected on tracts of land and disjointed 'islands': amenities, blocks of flats, and housing” (98).⁹ I would add pedestrians to this list, as one of the defining features of modernist urbanism, as I will show, was the isolation of pedestrians on “islands” separate from cars. This can be read as a clear critique of Athens Charter urbanism. As Stanek notes, Lefebvre's reference point was more often than not, CIAM and *The Athens Charter*, which divided the city into four functions: dwelling, recreation, work, and circulation.

⁹ A note here on translation which is not entirely clear from the English: Lefebvre's distinction between *l'habitat* (housing, abstract space) and *l'habiter* (residence, dwelling). In abstract space, residence [*l'habiter*] is replaced by housing [*l'habitat*] (Lefebvre [1974] 1991, 314). Lefebvre associated *l'habitat* with new towns and suburban houses [*pavillons*], as well as with the small apartments he described as the “minimum living-space, as quantified in terms of modular units and speed of access” (316). The reference is most likely to the “minimum dwelling” or the *existenzminimum*, which was the focus of the 1929 CIAM conference, and which I discuss in further detail in Chapter Three.

Although I turn to *The Athens Charter* later in the chapter, I want to suggest that the modernist urbanism of the 20th century was more complex and contradictory than Lefebvre portrays it in *The Production of Space*. Although *The Athens Charter* dominated representations of post-war urban space (Young 2006), the insistence on the separation of functions was critiqued from within CIAM itself, as early as the 1951 Congress on the urban and suburban core. In his essay on this congress, the theme of which was the “Heart of the City,” Welter (2003) argues that it signaled a movement away from the more strict functionalism and rationality that CIAM had propagated in the 20s and early 30s. The CIAM meeting on the core explicitly critiqued *The Athens Charter* emphasis on “bands of separation” in favour of “centres of integration” (Tyrwhitt 1952, 104).

The Athens Charter did not *cause* the separation of functions, which had a much longer history in the practice of maximizing land values by grouping certain uses together (Sieverts 2003, 37). The separation of functions was also a feature of Prague city planning in the 1920s before *The Athens Charter* codified this separation and turned it into CIAM's guiding ideology (ibid.). Most importantly, this separation of functions was justified by the spread of the automobile. Although the charter was critiqued, what was not questioned was the need to separate out cars from pedestrians, reject the traditional street of the pre-automobile city, and create new kinds of spaces, be it pedestrian-only districts, elevated urban highways, or elegant parkways of the kind Giedion praised. Modernist urbanism was united in its rejection of the street where different modes of movement intermingled, where shops spilled out onto sidewalks, and where people lived above it all, looking down at the seeming chaos below. The principle reason for that rejection differed whether it came from the architects and urban planners of CIAM, the Situationists, such as the architect Constant Nieuwenhuis, or from the utopian

modernist architects and urbanists who turned to the megastructure idea as an architectural and urbanistic response to the separation of functions and to the problems of increased automobile traffic. The rejection of what Le Corbusier called more specifically the “corridor street” was not necessarily out of a love affair with the automobile; on the contrary, his rejection of the street represented a commitment to and interest in different forms of circulation and mobility not simply that of cars. As I argued in the previous chapter, the system of automobility is not only about individuals driving cars, but how the environment for other modes of traffic—pedestrians, trams, subways, bicycles, etc.—also changes. I want to show that this commitment to separation did not produce as its intended result vibrant public spaces free of cars and highways free of traffic; rather it produced as one of its after-effects the anaesthetic landscapes of the in-between city. Interventions that seek to make automobility possible always generate their own “iatrogenic diseases” and often come within the system itself (Böhm et al. 2006, 11). This plays out in two different ways in this chapter. First, modernist urbanism's devotion to the healthy city as the city where light, air, and vehicles circulate led to calls for urban surgery—that is, highway building and road widening—to relieve the clogged arteries of the existing city. This is not to say that planners and architects are wholly responsible (or to blame) for the non-spaces of automobility, the same way that we cannot blame the car for causing them. Second, I situate the anaesthetic spaces of the post-war urban landscape within the network of pronouncements, plans, models and utopian visions formed around the problems posed by mass automobile use, and the new construction materials, tools, machines, and architectural forms around and through which post-war urban spaces were built.

3.1 Modernism Thinks Big

I see modernist urbanism as part of automobility's “extraordinarily powerful machinic

complex” that includes road-building, house and apartment buildings, shopping and community/cultural centres, as well as urban design and planning (Sheller and Urry 2000, 738-9). This complex includes the actual places that were built and the ideas and visions that gave rise to them. In *Dreamworld and Catastrophe* (2000), Susan Buck-Morss draws out the critical component in the utopia of modernity in both East and West. She argues that in both East and West, the utopian aspect of industrial modernity was the promise of material happiness for all, but this promise has repeatedly turned into its opposite: ecological catastrophe (xi). For the expanding system of automobility, this has meant ecological devastation associated with fossil fuel extraction, production and consumption, the countless urban spaces clogged with automobiles and the over one million deaths annually on the world's roads. To continue in this vein would be “suicidal” (even if globally we are continuing to buy more cars) but this does not mean abandoning the “democratic, utopian hope to which the dream gave expression” (xiv). Buck-Morss's aim in returning to the past to, for example, the Russian avant-garde of the 1920s, is to open up new avenues for appropriating the legacies of the 20th century (97). This is the approach that Hatherley (2008) and Douglas Young (2006) draw on in their own analyses of modernity in the East and West.

Young is interested in the legacies of modernism and how modernist ideas can become part of the re-building of those very places: Marzahn, a housing estate in East Berlin, and the Jane-Finch community in Toronto. In *Militant Modernism* (2008), Hatherley argues that returning to modernism does not mean treating modernism as heritage, the architecture of which should be preserved, but looking to the visions and ideas that were behind their building, so much more than an architectural style of an individual building to which modernism is so often reduced. Hatherley finds in the “concrete walkways and windswept precincts” of the British

1960s megastructures of Cumbernauld or the Barbican in London, as Benjamin did in the arcades of the 19th century, a nostalgia for a modern future that did not quite happen. Given that these structures were produced at the height of British post-war social democracy, Hatherley argues that they offer a critique of present-day inequalities, particularly as regards to architecture. The modernism of the 1920s and the 1960s was “immersed in the quotidian” while today's architecture that still calls itself modernist is based on the spectacular and a “distance between itself and everyday life” (Hatherley 2008, 8; 12). In the next chapter, when I turn to the 1920s, in Prague specifically, this tension between the everyday and the spectacular was already at play and I explore it through the writings of Karel Teige.

The modernist urbanism of the 1960s, which was central to the designs for Willowdale and South City, may be more clearly formulated as the *quotidian made spectacular*. The utopian visions of 1960s modernist architecture literally and symbolically elevated the everyday practices of walking, shopping, and hanging around. If Modernism thinks big in the 1960s—and the plans of both Willowdale and South City did just that—it was the idea of the megastructure that embodied this utopianism. The megastructure was the answer to CIAM's call in the 1951 congress on the core: to create a monumental architecture and an architecture of “urban 'spontaneity'” that would also emphasize fun, flexibility and transience. For the purposes of this dissertation, I am less concerned with the strict architectural requirements for a building to qualify as a megastructure, and more concerned with the ideas it embodied and sought to materialize, which Banham develops at length in his book *Megastructure: Urban Futures of the Recent Past* (1976). These ideas that circulated through different architectural projects—it was central to the case studies in this thesis as the planners and architects of both South City and Willowdale's redevelopment cited the Cumbernauld Town Centre as inspiration. In his

discussion of the Cumbernauld Town Centre—“the most complete megastructure ever built” (168)—Banham points to four key elements of the megastructure that speak to many of the themes I am developing in the dissertation: concentration, monumentality, symbolism and a “comprehensive traffic solution” (170). The main motivation behind megastructures was to contain the exploding metropolis and the increase in automobile ownership by concentrating as many activities as possible under one roof (199), including shopping, residential, and civic functions. Banham calls this approach “a defiant gesture in favour of an older type of urbanism” (170) and also a critique of Athens Charter urbanism, which by the 1960s had become “graven on the consciousness” of the architectural profession (201). In its sheer size, Cumbernauld Town Centre is a “monument to monumentality” particularly given that it was to be surrounded by open, green spaces. Megastructures were not simply to express permanence, but they were to also be flexible, allowing for additions, extensions, modifications by the very people using the structure. Banham writes that this became largely symbolic and rarely carried out in practice. The final element of most megastructural schemes, including Cumbernauld, was the “burial” of the automobile problem. The cars were to be hidden away in multiple levels of above-ground parking, separate from the main pedestrian levels of the structure. The point was to “dispose of the automobile” (43) not by banning it from the centre, but by hiding it in elegantly designed parking structures, rather than leaving it open and visible in surface parking lots (170; 40). At the same time, Cumbernauld's town centre was supposed to straddle the motorway and thus give car drivers the “Futurist experience of plunging through a vast urban structure” (170). It would be tribute to and a realization of Moholy-Nagy's vision in motion. As the megastructure movement shows, auto-space—shopping malls, freeways, and single-family houses—is not simply in thrall to the automobile. What makes modernist urbanism more complex and more contradictory is that

its architects and urban planners were in part reacting against automobility while their responses simultaneously and paradoxically assured the spread of automobility. Modern urban planners envisioned the enhanced auto-mobility of both car drivers *and* pedestrians through the expansion of the system of automobility, part of which would include extensive pedestrian infrastructure.¹⁰ The specific utopian aspirations of the modern city planners was a city that would theoretically bring the joys of automobility to even the non-car users: the auto-mobility of pedestrians and cars would be assured through the complete separation of these modes of transport and the elaborate design of spaces for both pedestrians and cars. It is these characteristics that make the megastructure important as an idea to the modernist urbanism that would be proposed in Willowdale and South City. Importantly for the comparative aspect of this dissertation, megastructures were part of the architecture of socialism and capitalism (Banham 1976, 11). Although Banham only mentions this in passing—his detailed examples are all from the West—Elke Beyer (2011) notes that the town centres of the GDR and the Soviet Union were particularly influenced by the megastructure idea.

3.2 Circulating Urbanisms: East and West

In the introduction I called attention to ideas that travel, ideas about automobility and urban planning and as the previous discussion shows monumental ideas like the megastructure were not at all static; they traveled well. These dominant ideas are part of what urban theorist Colin McFarlane calls “Corbusier's circulating modernist urbanisms,” a model that urban planners the world-over sought to apply (2010, 727).¹¹ McFarlane's term is important for a

¹⁰ Cycling is rarely, if ever, discussed in the literature on the modern city. It is as if the bicycle, as a mode of transportation, and cycling simply vanished with mass automobile use, at least in the modern visions of the city, even though, as I argued it is central to some of the tenets of automobility (Furness 2010).

¹¹ The classic examples include Chandigarh, India, and Brasilia, but there are a host of other important examples that include Casablanca, Algeria (Avermaete & Casciato 2014), and the many European cities that I refer to throughout this dissertation, including Edinburgh, Stockholm, the New Towns around London, and even York

number of reasons. First, urbanism in the plural points to the multiple forms that it can take, even though the tendency to reduce all modernist urbanism to Le Corbusier is problematic. As McFarlane himself admits, there is an inclination in urban studies to “compare with and learn from the 'usual suspects'” (728). Banham (1976) notes that the sheer power that *The Athens Charter* held over architects was due in part to the belief that it came solely from Le Corbusier (201), when in fact it was the results of the entire congress of CIAM. Modernist ideas are far from monolithic and the tendency to equate modern urban planning with Le Corbusier obscures the range of approaches to modernism that have been taken (Deckker 2000, 4). A good example in this regard is Sigfried Giedion's influential *Space, Time and Architecture*, which had five editions from 1941 until 1967. It makes no mention of Soviet architecture and urbanism, nor of any of the architecture of the Eastern Bloc countries, including Czechoslovakia. Giedion knew this work existed as he worked closely, through CIAM, with the architects and theorists from Czechoslovakia, including Karel Teige, and it is possible he chose not to include it because of the climate of anti-communism in the USA, where he gave the lectures that make up the content of the book. That this book became “the canon of the modern movement in architecture, planning and design” (Berman 1983, 302), makes it especially important to understand that although modernist urbanism was a mobile set of ideas, not all ideas circulated equally, and different aspects became part of the production of space and the environment of automobility depending on the context.

This was particularly the case with the socialist and capitalist forms of automobility. In a recent edited collection *The Socialist Car: Automobility in the Eastern Bloc* (2011), Lewis Siegelbaum defines the “Socialist Car” in a similar way to automobility. The socialist car is more

University, itself designed as a “University City.” McFarlane writes that the modernist urbanism is just one historical iteration in this tendency to apply models in very different places.

than just the ubiquitous Trabants, Ladas, and Skodas in the parking lots of Eastern Bloc housing developments. It brought together the state and private sphere, it was evidence of both the technological gap and the attempts to close that gap between the socialist and capitalist world, it sought to bring “personal mobility” and flexibility, and for our purposes importantly, it speaks to the links and cross-over in planning for automobility and mobility in general (2011, 2-3). Like automobility the socialist car refers to personal mobility (auto-mobility) and a wider system (automobility). Examining automobility in East and West, following the discussion in the previous chapter, means moving beyond the individual and the car itself to the system as a whole, both real and imagined. This is less about comparing an East German Trabant to an American Ford, and more about understanding the whole environment of automobility of which the actual car is only one part. Eli Rubin specifically connects the Trabant and the Marzahn housing development in Berlin to modernist urbanism's practice of reducing the street solely to its traffic function, a practice which itself was a major element in producing the space of the post-war housing developments (2011, 125). To understand the Trabant beyond its now post-socialist and largely nostalgic understanding as a “fetishized object” (124) means placing it in the context of the “utopian modern urban planning visions” and seeing it alongside the “trams, S-Bahns, pedestrian pathways and meticulously planned high-rise urban settlements” (2011, 140).

The urban spaces of post-war North America and the Eastern Bloc are part of the “entangled modernities” of automobility (Siegelbaum 2011, 11). The birth of a new kind of city as a response to automobility, particularly if we maintain the focus on the 1960s, is by no means limited to the countries of the West. In her case study of mobility and urban space in 1960s GDR and USSR, Elke Beyer offers a good example of how as an assemblage, socialist automobility included many different actors. She notes above all that socialist automobility was inseparable

from modernist urbanism as there was a mutual sharing of information among urban planners in both East and West through, for example, the International Union of Architects and other meetings of the United Nations on cities (2011, 72). CIAM played a key role. Giedion, CIAM's general secretary, argued that the pursuit of “order” in urban planning and architecture was a technical question that was “outside of politics” (quoted in Mumford 2000, 88). CIAM's task was to create a “suprapolitical urbanistic 'order'” (91).

More so than in the West, the city building projects of the Eastern Bloc gave planners and architects a clean slate, usually in the form of the open spaces of the periphery, to implement the complete separation of traffic modes. A number of contributors to *The Socialist Car*—particularly in the section “Mobility and Socialist Cities”—point to the overriding logic of mobility that governed these models, be it pedestrian, automobile, or public transport. In the socialist city, urban space was conceived as a “system of mobility” with planning focused on making all forms of movement efficient through the separation of cars, pedestrians, and public transportation (Beyer 2011, 73). Beyer looks at how this manifests itself in plans for entirely new city centres that would offer a rich pedestrian infrastructure along with plenty of parking, although with all of the attention paid to the circulation of vehicles, pedestrians were less the focus of the plan and more seen as “endangered species needing to be isolated on reservations” (Beyer 2011, 75).

Authors (Freund & Martin 1993; Wolf 1996) have pointed specifically to how automobility spread through the West and the East, and specifically, East Germany and other countries of the Eastern Bloc. Although there were vast differences in car ownership levels between East and West Germany, in the 1960s, East Germany was “on the road to becoming a car-owning society,” along with Czechoslovakia, Poland, Hungary and Yugoslavia (Wolf 1996,

108). Car ownership in Czechoslovakia increased significantly in the 1960s and 1970s, marked by the production of the first “Czechoslovak people's car” by Skoda, which began in 1964 (Fava 2011, 24). Of course, automobiles were nowhere near as accessible as in the Western countries; in 1960, there were only 14 cars per thousand inhabitants in Czechoslovakia, while in Canada that number was 224 (Pucher 1990, 281). There was always a marked difference between the West and the East: in the 1980s, eighty-seven percent of all trips in Czechoslovakia were either by public transport, cycling or walking, while in Canada seventy-four percent of all trips were made by car (Pucher 1990, 282).

Even when the attention to circulation meant in some contexts, particularly in the Eastern Bloc, an attention to public transport, it often meant subways, which were necessary to serve the new cities built beyond the reach of the existing tram lines. Jiří Hrůza believed that one of the consequences of building the post-war new towns in Prague far from the city centre is that infrastructure was costly, particularly transport. For South City, in particular, Prague had to extend the metro five kilometres, which entailed an exceptional cost at the time. Hrůza cites this example as indicative of an economy based on “extensive growth” (2006, 38). Subways, although a public form of transportation, radiate out from the city to the suburb, promoting the segregated city and putting people and life underground rather than on the street in trams (Wolf 1996, 154). Subway stations, particularly those at the end of the lines with massive parking lots promote this kind of extensive sprawling development, as it is usually most convenient for people to drive from their homes to the subway station. Even though people are using public transport, they still need a car to reach the subway station (154). In his critical history of transport, Winnifred Wolf argues that in the end putting traffic underground in a subway benefits car drivers because when trams are removed (if they were there in first place), extra lanes for car

traffic open up.

Wolf calls the city of modern urbanism, in both the East and the West, the segregated city. In this kind of city, people must deal with ever-increasing distances between work, shopping, pubs or cafes, and public spaces (Wolf 1996, 154) and an urban space that is increasingly “fragmented and dispersed” (Beckmann 2001, 598). Whereas in the pre-automobile city all the activities of social life made up an “interwoven texture,” in the functional city they have been “hurled one by one into time and space” (Lefebvre [1962] 1995, 120).

At the same time, the specific socialist freedom of automobility meant the freedom *not* to have to use a car. All one's needs were within walking distance (on the pedestrian paths) or accessible on the ubiquitous streetcar, particularly in Prague, unlike the North American system of automobility, which put those without a car at a severe disadvantage (Meier 2011, 117). Meier argues that socialist cities were “designed to accommodate an increase in private traffic without sacrificing the dominant position of public transportation” (2011, 122), while housing developments like Marzahn, were “designed to maximize the efficiency of living without a car,” which was a necessity in part because it was so difficult to purchase a car at all during socialism (Rubin 2011, 138). Here the freedom of mobility was not just about the freedom to drive anywhere, but the freedom to have everything one needed close at hand, within walking distance, including work. To create a conflict-free environment, each form of transportation—and that includes walking—would have its separate place in the new city.

Automobility in the segregated, socialist city also meant, *in theory*, the freedom to have a rich urban environment right outside the dwelling. Even this idea has its antecedents in *The Athens Charter*, which stipulated that collective institutions should be easily accessible from the dwellings. The architects and planners of socialist cities, like their Western counterparts, sought

to manage the contradictions of automobility by rejecting the traditional mixed-use street of the pre-automobile city in favour of pedestrian centres, networks of pedestrian pathways and above-ground walkways under which would circulate cars. In this way, socialist automobility was very much a part of the circulating modernist urbanisms of the time; however, the focus was not so much on promoting the ideology of automobility as autonomous mobility—the freedom to drive where one wants and when one wants—but on envisioning a future system of socialist automobility that would be compatible with rather than replace walking, public transportation, and carfree public spaces and that would not have the congestion, pollution, and sprawl of cities in North America.

In many cases—South City as we shall see is exemplary in this regard—the rich, pedestrian-oriented urban environment did not emerge, in particular because so much of the financial resources were spent on the transport infrastructure, be it public transport or automobiles. The lack of public spaces in the socialist city contributed to the increased privatization of everyday life in the Eastern Bloc countries, mirroring the commodification of everyday life in the West, exemplified by the automobile and the television. Siegelbaum situates the Socialist car in the overlapping of the state and private spheres. Pauline Bren notes that the Czechoslovakia of the 1970s and 1980s situated “communist citizenship within a publicly shared private world” (2002, 127). Recreation, rather than being something one could walk to, became something one goes to by car in both East and West. In the capitalist cities, the disappearance of large public recreational spaces, accessible on foot or bicycle, was made up for by bigger houses, bigger backyards, private recreational centres (Wolf 1996, 161) or the highways that lead to the hinterland beyond; the lack of pedestrian-oriented, public spaces is made up for by privately-run shopping malls. In the Eastern Bloc the culture of escaping the city to the family *chata* or

chalupa [country house or cottage], most often by car, was a widespread phenomenon; during Communism, close to one-third of Prague's inhabitants owned a second home (Sýkora and Mulíček 2014, 136). On the weekend, the streets were largely empty (when there actually *were* streets in the new towns) as people fled to their country houses (Bren 2002, 126). The Communist regime tolerated the private ownership of the *chata* as it kept people out of the cities, the site of political protest during the 1968 Prague Spring, and helped to maintain the state's focus on preserving what post-1968 Communist leader Gustav Husák called “the quiet life” (quoted in Bren 2002, 123). It also left the cities and the new housing developments empty on weekends, which also benefited the regime because there was not much to do. Although Bren points to activities of *chata* culture, recent research on the culture of dwelling in Czechoslovakia in the 1970s and 1980s (Hubatová-Vacková & Říha 2007) points to the rich private worlds made up of a panoply of mass produced goods that dominated the interiors of the mass-produced dwellings.

3.3 Designing and Separating Out or, Eliminate the Street!

Although the streets of the socialist city were not dominated by cars to the degree they were in West European cities or in Canada and the US, the post-war urbanisms of the East and the West were still united by a universal rejection of the traditional, pre-automobile street. It was this element that makes modernist urbanism specifically modern. If modern ideas traveled across boundaries uniting disparate places and times, the rejection of the mixed-use street is very much a product of the modern practices of separation and purification (Latour 1993), erecting strict borders between the pedestrian and the car, while at the same time mixing functions in the town centre megastructure.

The street is a significant actor in the system of automobility, and in particular within the

contradictory tension between auto-mobility and automobility. The street is not simply a space to be traversed by pedestrians or cars, but a mediator, that encompasses not simply the people who have traversed it, but the people who envisioned it, the materials and techniques that helped them transform that street, allowing it to become a generator of ideologies of freedom and autonomy in different ways. The street is also the principle site of contestation in numerous visions of modernist urbanism.

The confusion and chaos of multiple activities occurring simultaneously in the same space together with the rushing cars lead modern planners to reject the traditional street. Largely seen as the triumph of the car by modernism's critics, it was more: the triumph of mobility and circulation *as such*; the car, of course, was a privileged object. The new cities of both post-war capitalism and socialism were united through the near unanimous call for a new kind of street, whether it was the *cul-de-sac* of the suburb, the ring road of a residential development, or the interior spaces of a town centre. Modernist urbanists and architects attempted to radically redefine not only how people moved in the city, but the spaces in which and through which that movement happened.

Much of the discourse on the rejection of the street can be traced back to Le Corbusier's writings of the 1920s, in an antipathy that only he could express: the “well-trodden path of the eternal pedestrian, a relic of the centuries, [is] a dislocated organ that can no longer function. The street wears us out. And when all is said and done we have to admit it disgusts us. Then why does it exist” (quoted in Mumford 2002, 56)? CIAM historian Eric Mumford notes that it is not clear what could have prompted such unequivocal disgust. One such possibility can be located in the Futurists, who influenced Corbusier's visions of the city of the future, particularly in the 1920s (see Banham 1967). F.T. Marinetti's founding manifesto of Futurism culminates in the

conflict between Marinetti's speeding vehicle traveling on the wrong side of the road and two cyclists “dithering about” and blocking Marinetti's way ([1909] 2006, 12). Le Corbusier and Marinetti's antipathy was not for pedestrians and cyclists as such, but for the particular way that they blocked automobile traffic.¹² Marinetti may have wished that it was the cyclists who ended up in the ditch rather than him and his car when he swerved to avoid them, but Le Corbusier offered a more rational response: in the near maniacal rejection of the old in favour of the new, he gave primacy to efficient circulation to be achieved through the separation of modes. He was not only a champion of unfettered car motion, but of all forms of circulation. This is how Le Corbusier envisioned his *Radiant City*: “I have proposed that the pedestrian should quite simply be given sole possession of the entire ground surface of the city, the e-n-t-i-r-e ground surface, as though he were living in the heart of the countryside” ([1933] 1967, 123). The roads would be elevated and so “no pedestrian will ever again meet a high-speed vehicle.” In this sense, it was the desire to *exclude* the car that marked modernist urbanism as much as its devotion to elevated highways and wide boulevards.

As I argued earlier, *The Athens Charter* codified this separation, so it bears returning briefly to this document. The charter calls for parallel networks of foot-paths for “slow-moving pedestrians” and a “network of fast roads” for cars. The sidewalks are “absurdly ineffectual” because the new speeds have “introduced a real menace of death into the streets” (64) and so thesis 62 requires that: “the pedestrian must be able to follow other paths than the automobile network”—no other change would bring about such a “fresher or more fertile era of urbanism” (84). *The Athens Charter* demands the purification of the street through the separation of

¹² One is reminded here of the monthly Critical Mass bicycle ride, which attempts to undo a century of thinking that cyclists are in the way of cars and buses and that the street is for cars and where possible will accommodate other forms of movement. Critical Mass's main slogan is appropriate here: “we are not blocking traffic, we *are* traffic.”

pedestrians from vehicles, and streets themselves defined by the purpose they served (85).

Influential urban planner and theorist Hans Blumenfeld believed that the “extra-human scale” of skyscrapers and highways—vertical and horizontal transport—had together “obliterated the street as a defined space of inter-related proportions” (1967, 309). The idea of constant motion, between the vertical and the horizontal, ties back to Moholy-Nagy's ideas of vision in motion, and CIAM historian Eric Mumford notes that this city with its separation of functions would be the “universal 'counter-image'” to the city of the past (2000, 61). The modernist urbanism of the 1960s, however, did not entirely reject the past; the concentration of functions in a single location was meant to evoke a past urban life, to recreate street life in a completely new context.

Non-car users were ironically accorded an exaggerated importance at the moment that their spaces were increasingly being taken over by cars and other infrastructure related to automobility. In his “New Urbanism” (1966), Constant Nieuwenhuis, an important influence on Lefebvre's writings and an important progenitor of the megastructure movement, writes that the “traffic code has degraded the individual...to the rank of 'pedestrian.’” Within the expanding system of automobility, non-car users became “an endangered species” that planners and architects isolate on “reservations,” usually pedestrian-oriented civic centres (Beyer 2011, 75). Pedestrians are forced onto sidewalks, and walking generally becomes a “recreational activity” and no longer a mode of transportation, except for a select few (Beckmann 2001, 598).

In the opening chapter to *The Urban Revolution* ([1970] 2003), Lefebvre holds a discussion “for” and “against” the street. Lefebvre offers a debate that is not in thrall to circulation and mobility, but which situates them within the spatial and temporal registers of capitalism. Both the street and the car are part of a wider field of relations. In his argument for

the street, Lefebvre writes that the street has always been an *oeuvre*, a place of encounter, a meeting place, where cafes and theatres enliven the street (18), providing a necessary disorder to the normal ordering of everyday life. Citing Jane Jacobs's work, he writes that the disorder is “alive,” it “informs,” and it “surprises” (19). Most importantly, in the spaces of the street, “a group (the city itself) took shape, appeared, appropriated places, realized an appropriated space-time...[demonstrating] that use and use value can dominate exchange and exchange value” (19). Continuing his argument for the street, Lefebvre argues that the elimination of the street as a gathering place, leaves only separation and segregation, a passageway where cyclists and pedestrians compete for space in an environment where the car is the privileged way of moving around. The street, particularly one where the streetcar has been removed, becomes a multi-lane highway where one can only cross at designated spots, facilitating connections between cars, but acting as a barrier to encounters between pedestrians (Wolf 1996, 154). Automobility alters the pace and scale of the street virtually assuring that it would no longer be the “primary open space” for recreation, but would be transformed into “arteries for motor vehicles” (Jackson 1985, 164).

Still, when Lefebvre turns to arguments “against” the street, it is clear he is not simply advocating an unqualified return to the street of old. If the urban street had not become a corridor for traffic, then it was becoming a spectacle for the display of merchandise, a corridor for the circulation of capital (20).¹³ The time of the street is either the time of profit and consumption, in terms of shopping, or travel time, in terms of efficiency of circulation. In the street, then exchange value dominates, and the possibilities to appropriate that space outside the dictates of

¹³ One of the arguments often made for pedestrianizing streets in the city centre is that it brings more business to the local shops and restaurants and raises the value of the property. However, the same advocates for pedestrianisation, such as Jan Gehl, dismiss the pedestrian environments of modernism usually on the periphery of cities. Conley and McLaren (2009, 13) suggest that the “walking city” usually translates into higher real estate values, allowing the affluent to choose between walking or driving, while the poor, marginalized, and the disabled cannot afford such a choice.

capitalism become increasingly rare.

Lefebvre poses a critical question in dealing with the question of the street: how to reproduce the conditions for spontaneous interaction when the street, for good or for ill, was no longer the place where this might happen (Lefebvre [1962] 1995, 125)? Lefebvre shared many of the same concerns as Constant, who claimed that with the growth of automobility and the prevalence of both parked and moving cars the city had ceased to be a gathering place (Niewenhuis 1966). Constant and the other Situationists, closely aligned with Lefebvre in the late 50s and early 60s, offered scathing critiques of urbanism, but also attempted to offer their own versions of urbanism dubbed “unitary urbanism,” a detournement of Athens Charter urbanism and the separation of functions, particularly the idea that leisure had a defined and separate space in the city (Kotanyi & Vaneigem [1961] 2006). Traffic circulation was antithetical to the encounter on the street. In his work on megastructures, of which he includes Constant's plans for a covered city, Banham calls unitary urbanism “the indispensable basis for a liberated society where life would be a work of art” (1976, 81). The city of unitary urbanism is inhabited by “*Homo ludens*, the archetypal 'man at play'” (ibid.), rather than the commuter or the consumer. Although with a much different goal in mind, the Situationists made equally extravagant claims for the disappearance of the street and the creation of new kinds of spaces of encounter which clearly influenced Lefebvre's writings on the automobile and the street in *The Urban Revolution*. Constant proposed a complex spatial construction on multiple levels in which “streets can be done away with;” traffic “in the functional sense” could pass underneath or “on overhead terraces” ([1959] 1997, 110). Constant's covered city, which he would later develop as New Babylon, should be seen from within modernist urbanism rather than simply a critique of it.

Constant writes that the functional city is only concerned with keeping cars moving and

providing maximum domestic comfort in the home ([1959] 1997, 109). The Situationists, particularly in the late 1950s and early 1960s, critiqued the new cities of post-war urbanism, which had forgotten about play and desires that could not be satisfied by commodities (ibid.). Constant writes that functionalism is not an end in and of itself, but a means to an end: “once their functions are established, they are followed by play” (110). The functionalist city was an opportunity to remake the non-functional parts of the city to turn them into a playground for the senses. Although Constant advocated the separation of cars and pedestrians and the elimination of the street, his approach was very different from the functionalist urbanism of *The Athens Charter*. In the following chapter, I return to and develop this idea when I consider the activities of Karel Teige and the artist group Devětsil as important precursors to the Situationists, both of whom envisioned a liberated society in which art and play were paramount.

3.4 Aesthetics/Anaesthetics of the Urban Periphery

Lynsey Hanley, combining history with memoir, writes that you cannot *drift* in the Situationist sense on the English council estate of the 1960s and 70s because the pathways and underground passages that pedestrians use to get around are mere conduits, like a “funnel direct[ing] liquid into a bottle” (2007, 125). Far from being a feast for the senses, the landscape had become utterly boring. The aesthetic of modernist urbanism, which was to offer a completely new kind of urban space in the age of automobility, had become the anaesthetic, dystopian landscapes of the countless apartment blocks of the urban periphery worldwide. Although unitary urbanism as *oeuvre* has been commodified in the creative city centres of capitalism emphasizing walking and cycling, living, working and play, here in the blustery, concrete landscapes of the peripheral council estate, where people's everyday lives unfold, is the result of modernist urbanism's desire to separate and purify.

The Danish architect and theorist Jan Gehl describes how the basis for the modernist urbanism of the 1920s and 1930s was medical knowledge of the 19th and early 20th century. This knowledge combined with the real effects of automobility—pollution, congestion, etc.—made the idea of a “healthy and physiologically suitable architecture” a priority: pedestrian pathways, wide roads, and huge swaths of green spaces (Gehl [1971] 2011, 45). The reference points for CIAM in particular were the crowded streets of the medieval or pre-automobile city.

The logic of CIAM's urbanism in particular was that the old city was sick and needed a cure to be administered by the urban planner as surgeon. The focus on the city as a circulatory system certainly helped in this regard, and in the appendix to Le Corbusier's *Urbanisme* (1924) there is a series of anatomical drawings of the body's circulatory systems. In the chapter on “Physic or Surgery,” he argues that Paris does not need physicians, but surgeons. The medical references were not only metaphoric, at least in how the urban theorists imagined it. Le Corbusier makes explicit reference to Georges-Eugene Haussmann, the Prefect of the Seine under Napoleon III, who had planned for Paris's transformation in the mid-19th century. In his memoirs, Haussmann writes that one of his key principles was the “systematic destruction of infected alleyways and centres of epidemic” (quoted in Giedion [1941] 1967, 745).

In her essay “Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered,” Susan Buck-Morss (1992) discusses the first medical uses of anaesthetics, which occurred in 1846, the same time that Napoleon III and Haussmann were themselves prepping Paris for surgery. Anaesthesia literally developed together with and in response to life in a sped-up modern and increasingly urbanized world. The “threatened bodies, shattered limbs, physical catastrophe” (1992, 27) to which Buck-Morss refers are not just those injured on the battlefield or in the factory but the bodies of pedestrians in the city; what is more, the city itself is a body

that needs to undergo surgery. Although Buck-Morss draws parallels between the operating theatre and cinema—building on Benjamin's comparison of the cameraman and the surgeon ([1936] 2002)—I want to bring the modern city into this constellation, particularly because of the way so many modern architects and theorists claimed that urban surgery was necessary. The architects and planners of modernist urbanism believed they could control the effects of automobility by creating a protection against the shocks of automobility. Although Benjamin's work was mostly directed at the changing nature of technologies of reproduction such as film and photography, the automobile along with the city of modernist urbanism produced like a work of art, is also central here. Like the medical surgeon, modern architects and urban planners charged themselves with piecing together the “casualties of industrialism” by creating “total environments of bodily comfort” (Buck-Morss 1992, 27). Modernist urbanism would strengthen the defenses of the human body against the shocks of urban life by further isolating it in automobiles or in the comfort of the perfectly rationalized urban plan.

In *Space, Time and Architecture*, Giedion describes the city as a living being profoundly threatened by “the omnipresence and anarchy” of the automobile ([1941] 1967, 819). If the city does not change, “it will perish” (ibid.). His text is riddled with bodily and organic metaphors that point not just to the body's fragility, but to the city's fragility in the face of the automobile, culminating in his claim that urban highways will reduce the “artificially swollen city” to its normal size (832).

Circulation was a key metaphor through which modernist urbanism was understood because it referenced both the movement of traffic in the city (in French, *circulation*) and the flow of blood in the body. The idea of circulation was central to the modernization of the city (Swyngedouw 2006, 21). The history of urban planning can be traced back to the idea that the

city is a body, sometimes healthy, at other times sick and in need of a cure. The modernist mantra of sun, fresh air and light dictated the architecture of modern urbanism and was a key component of functionalism. The idea of cities oriented towards circulation generally was not new to the early 20th century, it has been the dominant way of understanding cities, going back to the Baroque period (Mumford 1961, 348). The recent volume on *Circulation and the City* (Boutros & Straw 2010) points to the diverse ways that this term is now understood—information, language, used goods, people, as well as vehicles—but to the modern urbanists of CIAM it was above all about maintaining the constant flow of people and vehicles.

I want to build on the modernist use of the medical metaphor of circulation by suggesting that it is through the spread and expansion of automobility that the aesthetics of modernist urbanism, largely defined by the circulation of vehicles, became the anaesthetics of contemporary urban landscapes. In using this term I am not only drawing on Susan Buck-Morss's essay on Benjamin, but also Thomas Sieverts's discussion of the anaesthetic qualities of the in-between city (2003; 2007; 2011; 2015). Read together, these works paint a picture of automobility as both a powerful extension and enabler of human auto-mobility and a protective armour against the shocks of modern life and the increasingly anaesthetic landscapes that automobility itself was generating. The modern city that was to be a work of art in the age of automobility, which Giedion expressed in his lyrical odes to the regional parkways in New York, turned into its opposite: a product of the “alienating, blinding experience of the age of large-scale industrialism” (Benjamin [1940] 2003, 314).

In modernist urbanism, automobility has both aesthetic and anaesthetic qualities. Buck-Morss argues that aesthetics is not the sole prerogative of art and in fact in its original meaning refers to “corporeal, material nature” (1992, 6). Drawing on the work of Terry Eagleton, she

writes that aesthetics is “a form of cognition, achieved through taste, touch, hearing, seeing, smell—the whole corporeal sensorium” (ibid.). Aesthetics here refers to all the human senses, and as such the human subject is not separate from her environment, but intimately bound to it. Buck-Morss contrasts this original understanding of aesthetics with its modern reversal wherein it referred to art and cultural forms first and foremost, instead of “sensible experience” (7). Sieverts offers a similar understanding of aesthetics as a mode of perception that is “sensual-emotion in character,” that uses all the senses to experience a place (2015, 242; 2003, 97). The modern understanding of aesthetics refers less to corporeality and materiality, and more to a subject *detached* from his or her surroundings. Le Corbusier's epiphany on the Champs-Élysées can be read as a turning point for his understanding of the city and for this modern understanding of aesthetics, from a mode of being in touch with the world around him, to then separating himself from the city, treating it as an aesthetic object in its modern sense to be mastered. Le Corbusier's fear and excitement standing amidst the roaring traffic, associated with the fragility of the human body, called for a separation, the creation of an autonomous subject, a “manly *creator*” (because the heroic modernists were almost always men) who can control these forces at a distance (Buck-Morss 1992, 10).

In many ways, life in the metropolis of the 1920s necessitated a certain separation, as shock became a fundamental feature of modern experience (Buck-Morss 1992, 16). Simmel ([1903] 2002) and Benjamin ([1940] 2003) both write of the need to shield oneself from the chaos of modern urban life, whether that was the traffic or the rush of pedestrians.¹⁴ Benjamin understood them as shocks whereas Simmel understood them as the excessive stimuli of the metropolis, which produces the need for a necessary distance, a “dissociation” and a “blase

¹⁴ Simmel's influence on Benjamin, particularly in his essay “On Some Motifs in Baudelaire” is explored by Tafuri (1976, 78-89) and McQuire (2008, 63-69).

attitude” in order for the individual to assert his/her autonomy and to survive and thrive in the modern city (Simmel ([1903] 2002). The shocks of modern life required a kind of defense mechanism because an openness to everything around the body would simply be excessive. On that October day in 1924, the car traffic was destructive for Le Corbusier's fragile, fleshy body, but out of that experience, the individual figure of Le Corbusier is born. The shock of the traffic prompted the need for a new kind of city—and a new kind of architect, an urban planner—to create a protective mechanism for the urban dweller.

Buck-Morss's point, and here she draws upon specifically Benjamin's essay “On Some Motifs in Baudelaire” ([1940] 2003), is that the protective mechanism—Benjamin calls it a “stimulus shield,” quoting Freud—leads to the attenuation of experience in the city. The goal of this protective mechanism is to “*numb* the organism, to deaden the senses, to repress memory” (Buck-Morss 1992, 18). Under conditions of modern technology, aesthetics as a mode of being in touch with reality turns into anaesthetics, a mode of being out of touch with the street on a sensual level. There is a corresponding loss of experience for the urban dweller, as both Benjamin and Simmel suggest, as the protective mechanism protects the body from the onslaught of stimuli and in the process numbs the organism. When aesthetics is no longer a “cognitive mode of being 'in touch' with reality” and becomes instead “a way of blocking out reality,” we are no longer able to respond politically (Buck-Morss 1992, 18). Sieverts puts this in more concrete terms: a mode of being in touch with our surroundings, not blocking them out, is the condition for assuming responsibility towards and for the anaesthetic landscapes of automobility.

Automobility as autonomous mobility depends on the protection, comfort and privacy of the car to get its occupant through space as easily and efficiently as possible. Following Simmel's argument, cars provide their drivers with the necessary detachment and dissociation from the

space around them to express their autonomy. Technology in this sense extends human power and autonomy, but it also makes the human body ever more vulnerable—particularly the body of the pedestrian, the wanderer—and so produces a “counter-need” where technology protects its user against the “colder order” that it itself has created (Buck-Morss 1992, 33). Sieverts characterizes anaesthetics as perception detached from emotional involvement, which is “instrumental” and “oriented exclusively towards practical goals” (2015, 242). The automobile is the means by which drivers can freely explore the urban region in search of the very fresh air and greenery that could not be found in the city because of all the pollution and roads. The same dialectical reversal between aesthetics and anaesthetics is always possible. Technology opens up the realm of experience to the external world—the particular form of “auto-freedom” that Sheller and Urry point out and Lomasky extols—but, in the interests of protection it also acts as a numbing mechanism. The automobile is both armour and anaesthetic against the fragmentation of the modern city, even though it is automobility's expansion that is causing that very fragmentation creating distances that only people in cars can traverse. In his analysis of SUVs and the construction of the urban in advertisements, Shane Gunster notes that urban space is presented as something from which “to protect oneself against” (in an SUV) instead of “something to participate within and actively construct” (2004, 26).

The anaesthetic is not simply a quality of perception, but a quality of the landscape itself. When a landscape is used only functionally and instrumentally as a space to pass through as quickly as possible then it becomes an anaesthetic landscape, defined by urban theorists as “incomplete,” “an organ suffering from loss of memory,” and generally seen as the sick or ailing part of the city (Sieverts 90, 2003). The street so often seen as a place where all the senses are engaged, is desensualized and turned into a corridor for traffic. At the speed of the automobile,

the “sights, sounds, tastes, temperatures and smells of the city are reduced to the two-dimensional view through the car windscreen [windshield]” (Urry and Sheller 200, 747).

An aesthetic relationship with the anaesthetic in-between spaces of modernity calls for a unique understanding of circulation, of speed and slowness, and history in the modern city. Working out alternative understandings of the concept of circulation, Boutros and Straw (2010) suggest that the speed of automobiles and information is matched by a corresponding slowness, an “accumulation and sedimentation” in which the city both real and imagined “becomes a receptacle for the tangible remains of its own history” (17). Slowness is precisely what is needed to develop an aesthetic relationship with the neglected, anaesthetic environments. The point, though, is not only slowing down and taking notice of what can be seen, but attending to the numerous actors and agents, times and spaces that make up the urban assemblage, that which cannot be seen at first glance or that which is no longer there, the absent architects and urbanists who first conceived of a highway, a boulevard or a shopping mall.

The problem for Sieverts is when the aesthetic of the traditional, compact historical city or the traditional street is used as a yardstick to measure the qualities of the periphery, something Lefebvre implicitly acknowledges in his discussion of the street. Sieverts suggests that planners, architects and the general public alike should handle the in-between city on its own terms by engaging aesthetically with the “non-aesthetic reverse side of our rational-technological world” (2003, 94-95). One of the examples Sieverts draws upon is the conversion of a factory into a cultural centre. Although it would call upon the architect to perceive the factory in a more aesthetic way, it does not accord with Buck-Morss's understanding of aesthetics, which is aimed more at the interaction with the everyday banal spaces. The point is not simply about appreciating the aesthetic design of a highway interchange or a concrete walkway, it is not about

seeing them as isolated objects at all. Aesthetics in Buck-Morss's sense is not about standing before a building and contemplating it like a work of art, but rather understanding urban space in its multiple registers, not simply visually, but in its relationship to the body and all of its senses, to nature, and to the passing of time, all aspects that Lefebvre argued had been evacuated by the abstraction of space.

Although Sieverts focuses on the everyday landscape of the in-between city, his examples of the factory turned cultural centre seems to belie this analysis. His example also raises an important question: how do we avoid the dangers of aestheticizing the post-industrial landscape, which has often become the playground of an urban elite? For the most part, the post-war urban landscape was not structured around play, although the suburbs offered a form of domesticated fantasy that operated largely through the privatization of play in the detached house: playroom, television, the home theatre, etc. In the current context, the architecture of play has become synonymous with the creative city enclaves in a neo-liberal city that collapse the separations between living, working and playing. In the suburbs, the rejection of the street brought only the ubiquitous shopping mall surrounded by parking lots or, in the case of the post-socialist city, a periphery dominated by hypermarkets and shopping malls that further drain life and pedestrian traffic from the socialist housing developments. Aesthetics and anaesthetics are experienced unevenly, particularly by the 1960s when the majority of modernist interventions were occurring on the periphery of cities. Automobility may be a global phenomenon, but its effects are felt unequally, depending on whether one lives in the downtown or on the more car-dominated periphery. I turn specifically to these effects in the Willowdale and South City case studies.

Conclusions

Modernist urbanism is marked by two processes which must be kept separate: in theory,

the devotion to the complete separation of pedestrians and cars as the defining element of urban space and, in practice, by the actual results on-the-ground, what I call the anaesthetic environments of modernist urbanism. Modernity separates out what the past mixed together, and modernist urbanism's vision of the future is just this: a very clear separation between cars and pedestrians. It is here that modernist urbanism embraced the car in the lavish attention heaped on circulation, but at the same time rejected it by envisioning spaces purged of the car. In this way, this chapter brings together the work of purification above with the messy results below, seeing them as not two separate processes as if the anaesthetic landscapes of the in-between city were simply a side-effect of modernist urbanism and post-war abstract space, but rather central features of the complex assemblage of automobility.

This dissertation, and its methodology of inquiry into the environments of automobility, is rooted in a reaching out towards the in-between spaces of modernist urbanism, as a way of redeeming them from the stigma of monolithic urbanism with which they are then easily dismissed as a pox on the urban landscape. In the conclusion to his dissertation on Marzahn in East Berlin and the Jane-Finch neighbourhood in Toronto, Young summarizes his key argument that modernism's "democratic egalitarianism" is often overlooked by anti-modernist critics who dismiss modernism because of its tendency to "gigantism, monotony, and uniformity" (2006, 294). Although modernist urbanism may have been uniform in terms of its rejection of the traditional street and its calls to separate cars and pedestrians, this chapter has also showed that its simultaneous and contradictory pro and anti car position lead to a diversity of architectural and urbanistic responses.

Aesthetics and anaesthetics are particular germane to this chapter's discussion of the street. This rejection of the traditional street was not at all universally in favour of the

automobile. Constant and the early Situationists advocated an aesthetics that was not rooted in the traditional street, but in the possible future spaces of a unitary urbanism that rejected the separations of Athens Charter urbanism. Many of the existing parts of the urban landscape—a concrete walkway, a busy arterial road, an old building—are inseparable from the ideas, projects, and utopian aspirations that were behind their building.

The actual places that got built in the 1960s and early 1970s emerged out of modernist urbanism's long history. These places are not the ruins of modernity—like an abandoned factory or a disused industrial site awaiting adaptive re-use—but places where people still live and negotiate their everyday lives; the legacy of the visions and utopias of the modern city can be found throughout the world in various forms; the anaesthetic spaces of post-war suburbs, in-between cities and socialist city housing developments are part of the environments of automobility. Although the literature on both automobility and modernist urbanism has offered critiques of the segregated modern city in a rather general way, the actual places themselves and the people who generated their visions remain under-explored.

Reclaiming the aesthetic as mode of being in touch with the urban landscape applies to planners, architects and theorists as much as it does to the general public. With Sievert's call we actually come back to the 1960s megastructure idea, which specifically sought an architecture of play, of the senses, in a space that did not at all try to emulate the traditional city, but that sought to remake urban space in an entirely new way. To return again to Cumbernauld, in *A New Kind of Bleak*, Owen Hatherley takes Sievert's advice directly to spend time in modernity's anaesthetic landscapes. He writes that in the Cumbernauld Town Centre megastructure we can find “glimpses of potential new worlds” (2012, L). It also brings us even further into the past and to the avant-garde theorists of the 1920s who turned their attention not to art itself, but to collapsing

the distinction between art and everyday life. It is to the potential new worlds envisioned by the architectural and avant-garde theorist Karel Teige that I offer a detailed account of modernist urbanism in the vibrant atmosphere of 1920s Prague.

4. Architecture without Architecture in the Work of Karel Teige

In 1924, the same year that Le Corbusier had his epiphany on the Champs-Élysées, Karel Teige along with the modernist architect Jaromír Krejcar formed The Club For New Prague. They were responding to the Club for Old Prague, founded in 1900 to better deal with the planned “modernization” of Prague's Old Town (Švácha 1995, 102). Teige and Krejcar's New Prague involved a proposal to knock down most of the medieval core of Prague save for a few choice historical monuments, erecting an administrative center in its place whose streets, unlike the narrow, winding streets of the medieval core, would be able to accommodate modern forms of traffic (Cohen 2000, 38). In their manifesto, Teige and Krejcar argued for the acceleration and extension of affordable and cheap means of transport. In their view, the form of the modern city should reflect the “modern organization of work.” Above all, the building of cities they claimed was a “scientific, not an artistic problem” (1925, 13).

On a spring evening, again in 1924, Karel Teige and fellow poet Vítězslav Nezval, sitting in one of their favourite Prague bars, enacted another form of destruction, liquidating old ideas of art in favour of a new kind of art which they called poetism, the art of living well. Poetism would break down the barriers between art and everyday life, between art and its singular creator, and between art and technology.

These two moments firmly place Teige within the “Corbusian circulating modernist urbanisms” and the themes of this dissertation. Teige's approach to architecture and urbanism combines a rational, scientific view of the city as product to be produced like an object manufactured in a laboratory or on an assembly line—repeatable, efficient, and perfectible—with a poetic understanding of the city-oeuvre as the collective work of art of its inhabitants.¹⁵ It is

¹⁵ A number of English-language publications have addressed the dual nature of Teige's approach, focusing on the

through this tension that I situate Teige's work in the rejection of the street and in the tension between aesthetics as mode of being in touch and the anaesthetics of industrialization and urbanization. Teige offers a position that both reflects the dominance of *The Functional City* and calls into question a modernist urbanism reduced solely to the works of Le Corbusier and CIAM. Although Teige was committed to Corbusier's idea that a house should be a machine for living, he also offered a socialist poetics that collapsed the distinction between art and technology, nature and dwelling, calling into question the desire for home and private car ownership. In this way, Karel Teige encompasses the different perspectives on modernist urbanism I described in the previous chapter, from Le Corbusier to the Situationists. Equally influenced by ideas from the West and East, Karel Teige, like Prague and Czechoslovakia in the 1920s, is a key node in the circulation of modernist urbanisms.

Teige is a central figure in what Lefebvre calls the “moment of the emergence of space and the awareness of its production” in the 1920s ([1974] 1991, 120). Lefebvre limits his analysis to the familiar figures on the architectural landscape—Le Corbusier, Paul Klee, Walter Gropius—through which he then dismisses modern architecture as “tailor-made for the state” (124), but in the newly created state of Czechoslovakia, the 1920s and early 1930s was a vibrant time that brought together architecture, urbanism, literature, painting, poetry, photography, etc., with discussions of socialism and critiques of capitalism. Teige, a committed leftist, was at the forefront of these discussions.

As I stated in the introduction, I want to situate Teige's writings in the first wave of critiques of the automobile in the 1910s and 1920s. Teige rejected the two dominant objects of

question of style (Zusi, 2004), art and architecture (Dluhosch and Švácha 1999), architecture and urbanism (Cohen 2000), and dwelling (Dluhosch 2002). There has been almost no work on his approach towards transportation or his concept of the “magic-city” aside from a few passing references (Cohen 2000; Švácha 1998a, 147-8).

20th century automobility—the car and the single-family house. Although Teige praised the automobile as an object of mass production, within the wider context he rejected it as the dominant mode of transportation, associating it with the pollution and congestion of the capitalist city. Echoing Gorz's classic socialist critique of the automobile, he did not make transportation an issue on its own, but connected it to ways of dwelling and the city in general. Teige believed that the new socialist cities would be dominated by public transport and small apartments or “minimum dwellings,” a response to automobility and capitalism's “major structural contradiction” (Freund & Martin 1993, 6).

4.1 A Revolutionary Poetics of the City

Very much like Le Corbusier, Teige made the leap from the car and the dwelling, objects perfected through mass production, to the city as also a machine for living, but which was broken and in need repair. In 1922, Teige traveled to Paris where he met Le Corbusier for the first time. In 1923, Teige became the editor of *Stavba* (Construction), a monthly journal devoted to modern architecture, purism, and constructivism and that took up themes that Le Corbusier and Amédée Ozenfant addressed in their journal *L'esprit Nouveau*. Teige translated many of the articles from that journal for *Stavba* and also wrote on Le Corbusier's ideas, in particular the idea that a dwelling should be “mass produced and just as available and cheap as a Fiat model 509, a Ford, or a Citroen” (1925-26, 139). In this article, entitled “Machines for Living” Teige writes that industrialization makes possible the utopian promises of the past (136). The style of the “new architecture” found in cars, airplanes, cinema and photography is not the result of “aesthetic manifestos” but the “collective and largely anonymous, disciplined...work of laborers and technicians” (Teige [1923] 2000, 309). For Teige, the machine for living was an example of “architecture without architecture,” which he first used to describe the austere design of a train

stations (1933, 18); I will come back to this term further on in the chapter.

In “Modern Architecture and Czechoslovakia,” Teige includes images of Czech functionalist and constructivist architecture and makes claims for the end of the metropolis: “most contemporary cities are useless for modern life” ([1930] 2000, 264). Teige praised the “slum clearance” in Prague, particularly the Jewish ghetto whose winding streets were cleared to make way for a broad boulevard (named, significantly, Paris Street). With respect to this “necessary revitalization” Teige writes: “this single great urban scheme of century's end was so virulently attacked by members of the Club for Old Prague that the city's bold and often merciless urban development from a medieval town into a modern metropolis was considerably hampered” ([1930] 2000, 83). Although Teige's work has been noted primarily for his interest in architecture, he argued that modern architecture must solve the city's *two* major problems: “the first is traffic and the second is housing” (135). Using the language of surgery, Teige claimed that the city was “sick in all its parts” and “ingenious traffic regulations” are “local surgeries,” which at best “help slow down the disintegrative cancer afflicting our cities (152-3).

Teige, however, was by no means simply a disciple of Le Corbusier. Although he was strongly influenced by his idea of a machine for living, in 1929, Teige offered a harsh critique of Le Corbusier's plans for the Mundaneum project in Geneva—a “centre for world thought”—which he published in *Stavba* and to which Le Corbusier would respond later that year.¹⁶ The debate centres around what has become Teige's most infamous claim: architecture should create instruments and not monuments to supposed timeless ideas of aesthetics ([1929] 1974, 90). To call itself modern, argued Teige, architecture should be dictated by actual, social need, not by monumentality, which only leads to the “monstrosities” of palaces and castles (89). Teige

¹⁶ The text was first published in 1929 in *Stavba*, and then later reprinted in French with additional commentary by Le Corbusier in 1933 in *L'Architecture d'Aujourd'hui*. The text is translated from the French publication.

believed that an “affection for art” had hindered the architect's ability to build houses for workers, apartments, and schools (91). In this vein, Teige leveled one of his characteristically brazen statements: “Le Corbusier sins against harmony, having formulated such a clear and comprehensible notion as the 'machine for living,' he depreciates it by adding vague attributions of dignity, harmony and architectonic potential, through which he can then embrace all aestheticism and academicism” (89). In “Modern Architecture in Czechoslovakia,” Teige wrote that modern architects should give up their “artistic and individualistic caprice” and “adjust to the conditions of machine production” ([1930] 2000, 287).

Le Corbusier began his response to Teige's critique claiming that “it is the first time I have responded to criticism” (1933 [1974], 93). I turn to Le Corbusier's response and the debate generally not necessarily to engage with the substance of Corbusier's “defense of architecture” nor with the particulars of the plan that occasioned Teige's critique, but to place the debate first within the environment of a circulating modernist urbanism that stretched from Paris to Moscow and second within the milieu of Prague and its modernism of the 1920s. While composing the letter, Le Corbusier was on the train to Moscow where he was going to discuss his architectural plans for the Centrosoyus building, a work which signified the international character of modernism, particularly between East and West. Teige was also very much a part of that dialogue. In 1925, Teige traveled to Moscow and Leningrad to see first-hand the fruits of the Bolshevik revolution, meeting with Russian Constructivists like Vladimir Tatlin and Kazimir Malevich (Honzík 1963, 72). But as Corbusier reflected in 1933, Soviet Russia had by then turned away from international modernism and towards socialist realism, marked by the decision in 1931 to build the Palace of the Soviets—a building that in Le Corbusier's words would “manifest the spirit of modern times”— in “Italian Renaissance style” ([1933] 1974, 107). In

Dreamworld and Catastrophe, Susan Buck-Morss calls the original winning design the “quintessential example of Stalinist monumentality” (176).¹⁷ As I will show further on, it was in the wake of Stalin's turn away from modernism and toward socialist realism in Soviet architecture that Teige stopped writing about architecture and urbanism.

Le Corbusier's response to Teige's critique is quite personal. He addressed Teige directly: “you speak in a way that contradicts your thought and suggests the opposite of what you really are: a poet” ([1933] 1974, 93). Le Corbusier calls Teige a “passionate devotee of *objectivity*,” because of his focus in his criticisms on “utilitarian architecture” and an architecture dictated by social need rather than art. But, Le Corbusier remarks that Teige and his friends come to Paris to “breathe in the streets (the women, the shops, the cars)” and not to visit the “cruel places...of ruthless Taylorism” in the suburbs (106).

Le Corbusier also makes direct references to his visits to Prague. He remarks that the “Czechs have shone so brightly in the emerging sky of the new times” because of the poems, journals, manifestos and the people—“Teige, Nezval, Krejcar, etc.”—“who know so well how to make a stay in Prague captivating” (94). Corbusier's point was that this captivating stay was not because of their “erudite and profound discussions” on objectivity, but by the “vivacity” of their reactions to contemporary problems (*ibid.*), further proof that Teige was a poet garbing himself in the clothing of strict functionalism.

The people to whom Corbusier was referring were mostly members of Devětsil, an interdisciplinary group of artists, architects, intellectuals, many of whom were leftists and/or members of the Communist party. Teige would collect their works and publish them in any

¹⁷ *Dreamworld and Catastrophe* explores the links and commonalities between East and West generally, and the Palace of the Soviets is one of her crowning examples, comparing the designs to the Empire State building, and its statue of Lenin on the top to King Kong atop the Empire State Building

number of the journals he edited, such as *ReD* (revue Devětsil), a monthly journal which counted among its topics poetry, dance, music-hall and circus, architecture and urbanism, socialism and class struggle, and typo- and polygraphy ([1927] 1977, 1). The focus was often on the politics of playfulness, on sport and games, on theatre and film, especially the works of Charlie Chaplin and Buster Keaton. Devětsil's most productive period was 1923-1926, but the group existed until 1931.

Teige's theory of poetism, formulated with his friend, the poet Vítězslav Nezval, was central to Devětsil's activities. Poetism was first proclaimed in a 1924 manifesto and later elaborated on in 1928 and 1930.¹⁸ In the first manifesto, Teige takes inspiration from film and other technologies of reproducibility and their ability to collapse the distinction between art and everyday urban life. Poetism was an “art of living and enjoying life” (Teige [1924] 1966, 122). In this first manifesto, Teige declared that this new art is not found in cathedrals or galleries, but “outside on the streets, in the architecture of the cities...in the heat of industry that satisfies our primary needs” (121). Freed of its connection to literature and poetry, art manifests itself in “gleaming cafes, intoxicating alcohol, and lively boulevards,” and “silence, night, calm and peace” (128). It is not that art was to be simply found in the city, poetism was to become a “method for observing the world in a way that it becomes a poem” (Nezval quoted in Honzík 1963, 71). Art was not to be encountered in the galleries as isolated works of art, but the city itself became a work of art inseparable from the products of industrial modernity. It is in this context that literary theorist Peter Zusi suggests that Teige's seemingly contradictory approach—at once poetist and strict constructivist—was to lead to the collapse of distinctions between the city centre and the “fringes of the city...the factories and housing projects,” as the latter would be

¹⁸ Teige's two manifestos of poetism (1924 and 1928/1930) roughly correspond to the dates of Breton's first and second manifestos of surrealism in 1924 and 1930. Breton visited Prague in 1935.

redeemed “from the stigma of being extra-aesthetic” (Zusi 2004, 113). Poetism and the machine for living needed each other, and the periphery needed the centre, as much as the centre needed the periphery. Although Le Corbusier's critique of Teige and his fellow travelers suggests that poetism often stayed within the confines of the city centre.

Socialism is controlled by “reason and wisdom, economical, purposeful and useful,” but that is not sufficient as “reason would cease to be wise if in controlling the world, it suppressed the realm of the senses” (Teige [1924] 1966, 121). Already in this early manifesto Teige points toward a tension that Lefebvre and the Situationists would later struggle with: between the functional city with its economical organization of dwelling and circulation and what they saw as the need for play—that is, play not in the interests of profit—encounter, and a sensual engagement with the city.

In its rejection of the singular work of art, Devětsil was above all about a collective effort. Reflecting on a decade of Devětsil, Teige wrote that the group's collective emphasis was more important than the actual individual creative achievements (1932, 7). Although there was a voluminous output of individual works, Derek Sayer notes in *Prague, Capital of the 20th Century* (2013), the artists of Devětsil did not see themselves as producing artworks in the way that making art is currently understood; rather, their efforts were directed ultimately to creating a new society (202). Ironically, most of Devětsil's work today, the product of individual artists, can be seen almost exclusively in art galleries.

That collective experience was an irreducible urban experience. The ideas of Devětsil were formed in and through the experiences of the city, in the cafes, dance halls, bars, and streets of Prague. In the National Cafe and in Cafe Slavia—the main cafes of Devětsil between 1923 and 1928—“the fighting words of poetism” were first formed (Honzík 1963, 55). Karel Honzík,

founding member of Devětsil's architectural wing, recalls that “if you were to have knocked down the walls of the cafes on Wenceslas Square it would be possible to walk through the entire centre of Prague as if it were one cafe” (50). Fellow architect Josef Chochol remarked that the bars were the temples of the 20th century (65).

Honzík felt that the night-time walks through Prague “were the most rich for recognizing the goals of our work” (1963, 59). Nezval similarly proclaimed poetism a product of “long discussions and night-time walks through Prague, when the believers in modernity and progress” gathered (quoted in Teige [1930] 2004, 199). Honzík describes the mood on these walks: “We spoke about the future of the world, about the future of creativity. Global revolution was knocking at the door. How would one work, live? How would cities be built? How would one eat? Sit? Travel? Fly?” (1963, 68). They would walk “from the moment the street lamps were lit until the moment they were extinguished” traversing the old city out to the surrounding districts of Vinohrady and Smichov (ibid.) Poetism was created in the movement through the city.

The debate between Le Corbusier and Teige was a friendly one—Le Corbusier did not harbour any ill-will in its aftermath—and it can be assumed that Le Corbusier would not have responded had he not experienced Prague in the particular way that he did. The debate highlights Teige's commitment to the idea of a machine for living and an architecture that creates instruments, not monuments, but also an architecture that is inseparable from the poetist interest in building new kinds of urban spaces. Le Corbusier was right, Teige was a poet, but not *only* a poet. He wanted to build—in 1927, he published a collection of writings under the title *Stavba a básně* [Building and poem]. It was in the concept of the magic-city that he brought together his poetism with this desire to build a new society to “rebuild our days and our nights” ([1920] 1966, 25).

4.2 The Magic-City

The relationship between poetism and its actualization in the life of the city, culminated in the “magic-city” ([1928] 2004, English in the original). In Teige's second poetist manifesto, which he published in two parts in 1928 and 1930, he challenges poetism to organize in the “metropolis of work and production,” an “Epicurean garden of poetry, a magnificent and entertaining...magic-city” ([1928] 2004, 89). The “magic-city” would be a city of noise, sounds, color and light, a “giant, dynamic symphony,” in which movement would be “the fundamental element.” “Movement and laughter” are the marks of the poetist magic-city, and Charlie Chaplin, Buster Keaton, and Harold Lloyd its emissaries. This cinematic description of the magic-city also calls to mind Dziga Vertov's *Man with a Movie Camera*, where the movement of cars, machines, trams, people and the camera itself are the defining features of the film.

The magic-city is particularly meaningful in Teige's work in this period because through it he connected poetism, socialism and the city. He envisioned poetism as “poetry for the five senses” ([1930] 2004). In that second manifesto he called for “poetist parks of the new poetry” in the “constructivist city” ([1930] 2004, 235). The magic-city is a city of encounter, gratification, and a poetry that is “for all the senses” and “never *l'art-pour-l'art*” ([1930] 2004, 236). Teige also made the connection to Marx's work explicit quoting from the *Economic and Philosophical Manuscripts 1844* in which Marx writes that “the *forming* of the five senses is a labor of the entire history of the world” (quoted in Teige [1930] 2004, 233). Abolishing private property and the need to own things would mean the “complete liberation of human feelings and qualities” (Marx quoted in Teige, 234). In this sense, Teige's and Devětsil's magic-city can be understood as a city-oeuvre, one not premised on the ownership of things, but on a mode of aesthetics that meant a deep, sensual engagement with the city. The aesthetics of the magic-city

resonates with the discussion in the previous chapter on aesthetics as a mode of being in touch with one's surroundings. At the same time, Teige imagined the magic-city as a place set aside for leisure, and thus still supporting an idea of a separate space for leisure rather than a unitary city. However, other members of Devětsil, particularly those involved in architecture, did not think that the magic-city had to have its own district, they believed that the idea could also be a part of any new architectural project (Švácha 1998, 149).

The magic-city of poetism finds its parallels in writings of the time, particularly that of Walter Benjamin,¹⁹ and acts as a pre-cursor to many ideas that were later developed in the post-war critiques of the Functional City by the Situationists and the work of Michel de Certeau. What unites the work of these disparate thinkers—unlike Teige and the Situationists, de Certeau does not offer a critique of capitalism—is the attempt to construct a city within and against the functional city. Teige and his compatriots created poetism on the move and associated poetism with movements in the city, dislodging poetry from books such that poetry becomes the stuff of everyday life. But unlike de Certeau, Teige's poetism was incomplete without the actual building of the socialist city. However, if we consider the magic-city on its own for a moment, then Michel de Certeau's interpretation of urban space in his work on "Walking in the City" is relevant. For de Certeau, the city-oeuvre, to return to Lefebvre's term, is less a physical plan than a spatial practice that "slips into the clear text of the planned and readable city" (1988, 93). These practices refer to a space "foreign" to the strict visualization of the space of modernist urbanism, to a different spatiality and to an "opaque or blind mobility" (ibid.). The rational city

¹⁹ Although there is no evidence that Teige came in contact with Benjamin's works, there were many commonalities and mutual influences through the work of, for example Sigfried Giedion, Ladislav Moholy-Nagy, Andre Breton, as well as their mutual interest in Soviet Russia in the 1920s, Baudelaire, Chaplin, the political aspects of surrealism, and their reconsideration of art in the age of new technologies (on the latter point see Zusi 2013).

“makes room for a void...it opens up clearings...it 'allows' a certain play within a system of defined places” (106). De Certeau writes that the rational city “‘authorizes' the production of space for play (*Spielraum*)” (ibid.). This production of space for play contrasts with the strict productivism of the functional city. De Certeau describes those who walk in the city as “making use of the spaces [jouent des espaces] which they cannot see” (93).

The term *Spielraum* also has an important place in Walter Benjamin's essay “The Work of Art in the Age of Mechanical Reproducibility,” particularly in its second version ([1936] 2002). The notion of *Spielraum* has many different meanings and Benjamin's translators seem to translate it both in reference to *spiel*, play, but also in the sense as “room to move” or “wiggle room,” which offers a broader understanding of play and one that de Certeau was likely working with as well. Benjamin writes that because “technology aims at liberating human beings from drudgery, the individual suddenly sees his scope for play, his field of action [*Spielraum*] immeasurably expanded” ([1936] 2002, 124). Benjamin's reference here was film and the way it opened up the possibilities—through quick cuts, montage, close-ups and slow motion—for representing reality. This suggests that the magic-city, in its filmic sense, offers a similar expansion of the scope for play. There was also an explicit utopian element to the space for play which Benjamin likens to a child who, just learning to grab things “stretches out his hand for the moon, as it would for a ball” (ibid.).

Like Benjamin and other theorists of the time, Teige saw new technologies of construction and mass production allowing for the basic conditions of survival to be easily met, which would then open up the possibility for a poetic or playful engagement with everyday life. In a number of essays, Teige insists that “all poetry starts where the worries of existence end” (Krejcar & Teige 1925, 2). Teige believed that the goal of mass production and automation was

to liberate human beings from drudgery so that they could inhabit or enact the magic-city.

I do not want to read the magic-city as simply a playful intervention into the rational, planned city, only because Teige explicitly connected it to his calls for building a new society. In this sense, it is not just another leisure space in the Functional City because for Teige poetism and the magic-city only make sense under radically different social and political conditions. Teige believed that mass production and automation would lead to the free time necessary to build the magic-city for all, liberating human beings from drudgery, long commutes, and precarious living conditions. Poetism is inseparable from the socialist way of life Teige describes in his second poetist manifesto: “green cities” of “deurbanized settlements” in collective dwellings, in a society which has “done away with the institution of the family and freed erotic feelings from material relations” ([1930] 2004, 235).

4.3 The Utopia of the *Existenzminimum*

Poetism may have embraced the beauty of modern technologies like the automobile, yet at the same time, the automobile, along with the single-family house in the suburbs, was occupying people's free time (and space) and preventing the appropriation of space as a poetist, socialist, and collective space.

Devětsil disbanded in 1931, as Teige and Nezval's focus shifted towards surrealism, and Teige began to work more intensely on architecture and urbanism through the Left Front, a collective of leftist intellectuals, artists, and architects committed to socialist revolution, but not connected to any political party. In 1930, Teige founded the architectural section of the Left Front, and lead it until 1934, when it became the *Svaz socialistických architektů* (Association of Socialist Architects). The Association focused on the socialist reorganization of dwelling and the city, and in this way assumed an explicitly political stance towards architecture unlike CIAM

(Effenberger 1966, 689). Teige was most active politically in this period, and although he supported the Communist Party, he did not (and never did) become a member. *The Minimum Dwelling* ([1932] 2002) along with “Toward a Sociology of Architecture” ([1930] 1977) were his two most significant critiques directed at urban planning in Prague and in other capitalist countries (Cohen 2000, 38). *The Minimum Dwelling* addresses themes that were taken up in CIAM's second meeting in Frankfurt in 1929 entitled *Habitation minimum*, or *Wohnung für das Existenzminimum*, where different plans for small, standardized, affordable apartments were presented. At the request of director Hans Meyer, Teige gave a series of lectures at the Bauhaus in January 1930 on typography and contemporary literature and was to also lecture on the “Sociology of the City and Housing” in March of the same year (Spechtenhauser and Weiss 1999, 235; 251).²⁰ As the proposed title of his work at the Bauhaus indicates, Teige was not only interested in housing, but the city as a whole. In *The Minimum Dwelling*, he writes that contemporary cities are “based on old, outdated concepts that tend to paralyse and strangle their free development” (Teige [1932] 2002, 135). The “wholesale reconstruction of cities” designed for “pedestrians and horse and buggy” must “serve modern means of transport.” In order to rationally organize the traffic, the old medieval city had to be discarded. The medieval city is “at odds with the era of railroads, subways, streetcars, automobiles and aviation” (116) as the “rhythmical cadences of foot and hoof have given way to the continuous whirring motion of the wheel” (117).

The Existenzminimum of the CIAM congress of 1929 was part of the European-wide project in the 1920s to build housing for the working class and focused on the rationalization and

²⁰ Spechtenhauser and Weiss note that there is no documentary evidence to confirm if the lectures on housing and the city actually took place. Then director of the Bauhaus, Hans Meyer, with whom Teige had close ties, was dismissed on August 1, 1930 (237). An article based on the lecture was published in *ReD* under the title “Towards a sociology of architecture” ([1930] 1977).

industrialization of the dwelling itself and the city as a whole; these apartments were usually part of a larger utopian project of building entirely new kinds of settlements on the periphery of existing cities. Teige mentions many of them in *The Minimum Dwelling*. The book was not intended to be a “handbook” or “practical manual” for modern house building ([1932] 2002, 4), but a thorough critique of the capitalist city. Teige sums up the crisis of the contemporary city thus: “overcrowding, congested streets, energy wasted, time lost...transport paralysis, and tubercular housing” (135). Only urbanism, defined by Teige as the “scientific and rational approach to managing cities,” (124) can overcome the crises that cities face.

Architectural theorist Rostislav Švácha suggests that Teige's idea of modern architecture as a science entailed the “complete negation of aesthetics” (1995, 326). However, I would qualify Švácha's claim as Teige negates a certain idea of aesthetics that he criticized in his debate with Le Corbusier: aesthetics as the appreciation of singular works of art, rather than the collective sensual appropriation of the city as a whole. In Teige's view modern architecture is not about innovative design elements—“a flat roof or steel furniture”—which he calls “fashionable design fetishes” ([1932] 2002, 12). Teige singles out for criticism the family house, and in particular the 19th century bourgeois house, which the “ruling class” had elevated to the “status of a work of art” (164). Teige's poetist approach of turning away from individual works of art to the city and its everyday technologies is mirrored here in his rejection of the single-family house as a work of art by a single creative mind. Although modern architects remove the ornaments, they leave this characteristic of the dwelling unchanged: “a special, isolated object, posing as a work of art” (165).

It was in this context that he critiqued the star architects who called themselves modern, but who designed villas for the elite. By 1929 with a pressing housing shortage and economic

crisis in Czechoslovakia and throughout the world, Teige criticized Le Corbusier, “who spoke about machines for living and the simplicity of Diogenes's barrel,” but “wastes his time building villas fit for a Midas ([1932] 2002, 182).” He called Mies van der Rohe's Tugendhat Villa in Brno the “pinnacle of modernist snobbism” (7).

But Teige did not only critique the single-family house on aesthetic grounds. His thesis in *The Minimum Dwelling* is unequivocal: the single-family house is “inconceivable and unjustifiable” as a solution for the housing shortages ([1932] 2002, 102). The existing “cramped garden colonies” are “further proof of the irrationality of petit bourgeois ideology and the sentimental illusion of their highly touted cottage dreams” (317). Teige's point was not to completely reject the single-family house, but rather to point to the problem when everyone wants one, a similar conundrum that Andre Gorz (1973) would later point to in reference to cars: they are only valuable insofar as everyone does not have one. Teige's writings were part of a shift in Depression-era Prague urban policy away from building “garden cities” with single-family houses towards apartment complexes with small apartments affordable to the working classes (Švácha 1995, 304). In the context of his rejection of the single-family house as the solution to the housing question, Teige critiqued the garden city approach to urbanism as a response to the overcrowding and unhygienic conditions of apartments in the old city. Although the “hygienic reforms” of the garden city—health, lower densities, fresh air, etc—were a response to the overcrowded and unhygienic apartments in the old city, they were not affordable to the majority of those very apartment dwellers ([1932] 2002, 129). He wrote that Ořechovka, the most well-known of Prague's garden city suburbs, was simply a way for the “Prague bourgeoisie” to elevate their status ([1930] 1977, 188). This is one of the main failings of Ebenezer Howard's Garden City: in the first Garden City, Letchworth, the factory workers could

not afford the houses in which they were supposed to live and had to live outside the city in a surrounding town; these workers could still work in Letchworth, not because of public transportation, but because of the bike which allowed them to commute into Letchworth (Fishman 1977, 75). Teige on the whole critiqued the garden city approach for exacerbating rather than relieving commuting times because of the increasing distance between home and work, which meant less free time and higher transportation costs of transportation (128). Public transportation and the car combined with the new garden cities were supposed to alleviate congestion and reduce commuting times, but instead the opposite occurred: increased automobile congestion between the center and periphery (138). Teige saw the garden suburb as “a false dream, a romantic fallacy, and a dangerous utopia;” its “village-like garden communities” destroy the “former coherence of the disrupted city communities” (138). Teige had no shortage of invective for the principle occupants of the single-family house, and for the institution of marriage generally. In his characteristic style he called the marital bed “a hatching place of the most wretched forms of bourgeois sexual life” and “a roosting place of shocking erotic banality” (173). In minimum dwellings, on the other hand, each person would be free to form relationships, but always with their own bed to return to at night. (As is common in socialist utopias, children would be housed in separate quarters contributing even further to the break-up of the single-family household.)

Although Teige associated his critique of the single-family house with the English garden city approach and the ideologies of Howard and Raymond Unwin, he was much closer to Howard in his approach than he would have ever admitted. The critiques I described above apply less to Howard than they do to Barry Parker and Unwin, the architects of the first Garden City, Letchworth, and the planning principles that developed out of Howard's work after his death in

14th century village as a model for the city of the future, as well as using traditional village architecture, ideals which came from Parker and Unwin (Fishman 1977, 69). This turn to the past also reinforced the “imagined paternalistic order” (70) of the company-run garden cities of Lever and Cadbury, as well as of Bat’a, all cases which Teige critiques as simply a way to improve worker productivity and further control their everyday lives ([1930] 1977, 194; 197). Teige's claim that building the minimum dwelling was insignificant without widespread social change—and not simply a tool for architects and planners—mirrors Howard's own vision for the Garden City as part of “radical social change” based on cooperative living (Fishman 1977, 62). Like Howard, Teige was a proponent of decentralization, critiquing the elevated economic and financial importance of the city centre. Howard did not envision his Garden City as a satellite to the main city, but a new form of settlement that would replace the city. Teige's critique of this aspect of the garden city approach was made years later by F.J. Osborn in the preface to the 1946 edition of *Garden Cities of Tomorrow*. Osborn argues that the over two million people added to Greater London's population between 1898, when Howard first published his book, and 1945 did not “reduce congestion much, if at all” because the importance of the city centre as a business centre only increased and impinged on land formerly used for dwellings ([1946] 1965, 14). Fishman notes that Osborn, who worked with Howard, himself gave up on Howard's hope for a “multicentered society,” and helped develop “satellite towns,” which remained peripheral, physically and symbolically, to the big city (1977, 84). Although Howard envisioned both single-family houses and houses with “common gardens” and “co-operative kitchens” ([1946] 1965, 54), Osborn favoured the detached single-family house as the only environment suitable for a family (Fishman 1977, 84). Teige's critique applies less to Howard and more to the way his ideas were taken up, both by his contemporaries and by those who succeeded him in his efforts.

Howard's ideas achieved widespread recognition largely after his death, but those ideas persisted as a “planning movement,” not a “social movement” intended to overcome capitalism, rather than to save it (Fishman 1977, 62; 65).

A similar fate befalls Teige's ideas: rather than overcoming the dominance of state socialism and capitalism, the minimum dwelling as an architectural and planning model became the vehicle of state control over urbanization as will become evident in the following chapter. It is the way that Teige's utopia of the *Existenzminimum* was actually taken up in state planning not the utopia itself that has been scorned. Its rather unfortunate naming is more likely to conjure up images of a dystopian world out of the mind of filmmaker David Cronenberg than utopian images of a magic-city. In his work on Fordist aesthetics, David Gartman describes the minimum dwelling as “the absolute minimum amount of space for human existence” (2009, 105), while Lefebvre interprets the “minimum” as marking the “lowest possible threshold of tolerability” with its “minimum facilities” and “programmed environment” ([1974] 1991, 316). Lefebvre argues that it marked the end of dwelling or residing as a poetic act, and the beginning of the “functional abstraction” of housing (314). Even at the time Teige was writing there was opposition to his ideas. Fellow architect Vít Obrtel argued that “by reducing the dwelling space into a shelter from the elements, a place to sleep and eat in, by packing into a minimal space all the latest inventions and machines serving the economy, the constructivist...has reached a position that is dangerously close to that of capitalist exploitation (economy of movement in the home = increasing working energy in the factory)” (quoted in Švácha 1995, 259). It bears reminding that the corollary of the *minimum* dwelling, in theory at least, was *maximum* public comfort: cafes, restaurants, places for celebrations and festivals, game rooms, playgrounds, reading rooms, and libraries (Teige [1930] 1977, 198). The current turn toward condo living,

particularly in Willowdale and Toronto more generally, and people making do with minimum amounts of living space, would suggest that this architectural form is experiencing a resurgence. Spaces for children and public spaces around the condominiums, which Teige was addressing back in the 1930s, continue to be a problem.

Teige was guilty of lapsing into a kind of Taylorism, as sections of *The Minimum Dwelling* describe apartment designs that maximize the efficiency of space, and minimize movement within the apartment; he suggests the elimination of long hallways to improve energy efficiency and shorten “domestic communication distances” ([1932] 2002, 248). Gartman similarly characterizes the minimum dwellings as “small, efficient boxes that facilitated their [the workers] quick, cost-efficient entry and egress” (2009, 106). Teige's commitment to rationality and efficiency in dwelling was also applied throughout the city. Generally, he criticized the inefficient transport system where cars and streetcars are stopped by traffic lights and gridlock, whereas “in a modern factory a conveyor belt would never be allowed to get stuck so many times” ([1932] 2002, 117). In a statement seemingly at odds with the poetism of the magic-city, but in keeping with the ideals of the Club for New Prague, Teige wrote that a city is also a “huge factory...whose operations must be rationally ordered” ([1930] 1977, 183).

Teige was sharply critical of the automobile in *The Minimum Dwelling*, decrying it as a “wasteful personal luxury,” which has no place in the city core ([1932] 2002, 316). This was a break from his earlier work where he praised the automobile as “the beauty of reality and pure form, which does not need to be covered in ornaments or talked about in poems” ([1922] 1966, 77). In 1931, a year before the publication of *The Minimum Dwelling*, Jaromír Krejcar, Teige's friend and collaborator—the same person with whom Teige envisioned the destruction of the centre of Prague—published *Krise pražské dopravy* (Prague's transportation crisis). A key aspect

of the book was Krejcar's proposal to a Prague regional transportation competition in 1928. In Teige's review of Krejcar's proposal—called “Public Transport for All”—he writes that the “disorderly herd of private automobiles” dominates the street, which should be “returned” to public transport (Teige 1933, 143). Krejcar proposed removing cars completely from the city centre and replacing them with a network of trolley buses for the narrow streets, trams on the wider roads—the space of which has been freed up by the elimination of cars—and a surface railway for longer trips to and from the city. The proposal was not successful, which Teige attributed to the official thinking of the time—and which eerily resonates with the current politics of public transport in Toronto—rooted in the idea that trams did not belong on the streets of the inner cities and that it was better to put people underground on metro lines so that the automobile could have its “privileged position” on the streets and roads. Teige called Krejcar's plan the urban equivalent of Friedrich Engels's *The Housing Question*, and even though unrealized, he would later recall it as one of the major works of functionalist urbanism in Czechoslovakia ([1947] 1994, 226).

In *The Minimum Dwelling*, Teige discusses his vision for the “quiet city,” at the core of which would be the minimum dwelling. Rather than follow Krejcar's plan, Teige instead wants to place all “high-intensity traffic” underground, so that the city would be free of “intolerable, nerve-racking street noise” and the “chaos of uncontrolled traffic” ([1932] 2002, 316). Teige maintained the strict separation of pedestrian paths and vehicular roads, even though for residential areas “it should be possible to do away with private automobile traffic” (316). Even pedestrians would be inserted into this circulatory network on moving sidewalks that would bring people from their houses to the metro stations. Here the strict separation of traffic would prevail in keeping with modernist urbanism. Teige's naming this city the “quiet city” stands in

direct contrast to the magic-city of light, noise and movement. The irony here is that in texts like *The Minimum Dwelling* there is no sign of the Devětsil walkers, no sign of people wandering at all except on the designated pedestrian paths. Was this simply the case of Teige keeping his poetist and his functionalist writings separate? *The Minimum Dwelling* ([1932] 2002) appeared only two years after the final poetist manifesto ([1930] 2004), but in those intervening years Devětsil had disbanded. Teige uncritically embraced modernist urbanism's separation of functions, but placed it within the larger goal of creating new socialist cities, which I would suggest as quiet cities became the suburb to the magic-city.

4.4 The Green Life of the Deurbanized City

Whereas the magic-city is largely found within Teige's writings on poetism, in his introduction to Teige's *Modern Architecture in Czechoslovakia*, Jean-Louis Cohen suggests that Teige's magic-city calls to mind the 1930 “Green City” competition in Moscow (2000, 38). Organized by state labour unions, the competition was for a “leisure city” outside of Moscow for 100,000 inhabitants (Mumford 2000, 44). It was intended that workers from the city would come here to relax. Buck-Morss notes that the entries in this competition were so radical in their approach to leisure that they could be taken as a critique of the “socialist work world” in which the Soviet system was firmly entrenched (2000, 112). The same might be said of Teige's magic-city. Although Teige's magic-city predated the “Green City” competition—the first iteration of the article introducing the concept appeared in 1924—his vision of the “quiet city” was in all likelihood influenced by the Green City competition.

CIAM historian Eric Mumford (2000) notes that the competition, which brought designs from many of the Soviet constructivist architects, could be divided among two camps: those who favoured detached dwellings and those who favoured collective dwellings. In his green city

vision, Teige aligned with the latter, and developed an idea of the dwelling that was integrated with rather than isolated from its surroundings. He critiqued the idea of a single-family house, its “heavy walls” isolating it from its surroundings as both an example and a metaphor for his approach to the socialist city, in which he sought to unite dwelling with the surrounding environment. Teige envisioned the building as an extension of the body, but also an extension into the wider environment. Freed of the heaviness of its load-bearing walls, the building is “transformed into a breathing membrane, separating and—at the same time—connecting our body with the...energies of the surrounding world” (Teige [1932] 2002, 316). The dwelling is brought to life in Teige's writing, reacting to the “movements of the breathing earth” (316); solar and tidal power, along with electricity, would become a “vital design determinate in housing” (316). Teige is very much in agreement with the modern architectural discourse on nature as sunlight and fresh air, but he pushes the inter-penetration of dwelling and nature radically further. The city provides the “organic linkage between the processes of dwelling and the dynamic processes of animal and vegetable life” (315). He writes that the new housing developments [sídliště] “will cease to be deserts of stone, becoming places where the ebb and flow of human life will draw its vitality from nature in a new symbiosis between human, animal and vegetable life processes” (316). In the development of cities, inhabitants had lost contact with the non-human rhythms of the seasons: “the rhythm of the solar day, equinox and the solstice, has lost its significance in the daily routines...of people in the large cities” (111). “Socialist de-urbanization” would help create a more “perfect symbiosis” between “people, plants, elements, animals and machines” (112). Teige criticized the mechanization of food production and the large distances food had to travel to get to cities (134), and he argued that the lack of green spaces in the city was not just about parks, but the need for trees, forests, pools and especially

gardens, which connect the interior and the exterior of dwellings (315). Teige believed these criticisms could be addressed through reconciling the differences between city and village, taking what is best from both in the new deurbanized, socialist city. Teige imagines a green city long before it was fashionable and in an era not of scarcity of resources, but in the perceived abundance of an infinite nature. The “era of brilliant electricity,” and solar energy would make the green city a clean city (316). Teige's vision of the deurbanized settlement is not that far from the five-sense aesthetics that he borrowed from Marx's manuscripts, which as Buck-Morss notes, also described the reconciliation of humans and non-human nature (2000, 118).

Not only did Teige advocate an architecture without architecture in his debate with Le Corbusier, but also a city without a city in his visions of deurbanization. Teige wrote that by the end of the 20th century there would be “complete de-urbanization” ([1932] 2002, 376). Deurbanization (*desurbanisace*), sometimes rather erroneously translated as anti-urbanism, did not mean the rejection of the city, but rather reducing its importance economically and administratively (but not culturally, in Teige's opinion). Following Engels, Teige defines deurbanization as the “planned route toward dispersed and uniform new types of socialist settlements” of which collective living would be the primary form of dwelling ([1932] 2002, 377). Teige was largely influenced by the writings of Lenin, Marx and Engels—particularly from the latter's 1882-83 pamphlet *The Housing Question*—on overcoming the antithesis between city and country by producing qualitatively different settlements, neither city, nor village, neither the high-rise city, nor the horizontal city.

One of the characteristics of the Russian avant-garde that influenced Teige was its preoccupation with mobility and mobilization (Buck-Morss 2000, 121). Buck-Morss cites the post-Soviet theorist Vladimir Paperny who writes that in the 1920s people were ready to relocate

at any time to such a degree that “no permanent residence is necessary” (Paperny 2002, 32). Teige's writings on architecture and the city are very much influenced by the Russian deurbanist discourse on mobility and movement: “The city must perish....The revolution in transportation and the spread of the automobile will overturn common assumptions about the density and accumulation of buildings and apartments” (Okhitovich quoted in Paperny 2002, 37). Paperny contrasts the movement and mobility of people, objects and ideas that were central to Soviet avant-garde constructivism with the monumentality, stasis and immobility of the Stalin area, which Teige explicitly rejected. With that idea of mobility came a reduced interest in the house. Inspired by the Italian futurist architect Antonio Sant'Elia's claim that every generation should build their dwellings anew, Teige himself asks: “why should a dwelling, which is much like a suitcase accompanying our life's journey, be dragged along like a heavy burden” ([1932] 2002, 351)? It would be part of the reason why he favoured the minimum-sized apartment dwelling over the single-family house.

Teige's model for his “architecture without architecture” in much of his writings was an unlikely character: Diogenes, the cynic of Athens. Diogenes, it was said, lived in a giant barrel, which Le Corbusier called “the peak of wisdom, utility and architectural creation” (quoted in Teige [1932] 2002, 354). Teige translates this into the “casting off of the dead weight of the traditional apartment” and all the “superfluous things contrived by architects” in favour of the minimum dwelling for a single individual (ibid.).

At first glance, deurbanization would appear to be completely the opposite to the trends in global urban society, which are oriented toward life in cities. Sieverts (2003) traces the historical origins of the in-between city back to Teige's time in the 1920s, to the debates in Europe on modernity and to the work of Bruno Taut in *The Dissolution of Cities* and of Hans

Scharoun (xiv), both of whom Teige discusses in his work. Although Sieverts claims his book is a “challenge to action” and not a “history of ideas,” he still acknowledges the importance of the history of urban planning and design—returning to the work of Frank Lloyd Wright, for example—as a way of addressing the “planning and theoretical challenge” posed by today’s in-between city (2003, 99). Although Teige was neither architect, nor urban planner, his critiques of the single-family house and the automobile as solutions to housing and transportation problems were certainly written in such a way as to challenge the architects and urban planners of his time. Inasmuch as Teige's description of the deurbanized socialist city may now appear unrealistic, his visions of distributed settlements that are neither traditional city nor suburb—both of which he explicitly rejected as a model for the future—are the distant cousins to the urbanized landscape that Sieverts describes.

As I mentioned at the outset of this chapter, by the mid-1930s Teige had ceased writing about socialist urbanism as he had become disillusioned with Stalin's Soviet Union following Stalin's embracing of neo-classicism for the Palace of the Soviets and reports from Krejcar who had been working in Moscow in 1934-35. Teige became openly critical of Stalinist authority and especially its monumental architecture, claiming that the renaissance ideals of Soviet architecture do not emerge out “the fantastic dreams of the new, free man,” but out of the ideas of “stuffy Soviet academics and bureaucrats” ([1936] 1969, 77).

In 1947, he returned to his ideas, writing that the machine for living, which he believed was to be the starting point of architecture and urbanism, had turned into a “dwelling for a machine, a mechanized human” ([1947] 1994, 289). The idea that the anaesthetic had come to dominate the peripheries of cities was a major focus for Teige in his last work on architecture and urbanism, an extended introduction to *The Inhabited Landscape* (1947), written by the architect

Ladislav Žák and itself a plea for regional planning and landscape architecture. The very same technologies Teige once praised had become part of the problem, particular in the post-war landscape, which he wrote had been ravaged by both war and the expansion of the capitalist and socialist economies. Teige criticized the technocratic non-aesthetic approach to architecture, which turns “woods, meadows and rivers into...the asphalted, paved world with street lamps, ribbons of highways, billboards, gas stations, reservoir dams, noisy power stations, factories and train stations” and turns dwellings and cities into “the 'world we live in,' but where it is impossible to live” ([1947] 1994, 283).

In the essay, Teige affirms the conclusions of his earlier writings claiming that it is in the deurbanized landscape, rather than the city, that he sees the possibility for a reconciliation of art, nature, and dwelling. Like the poetist park in the city, the urban landscape should become a vast, regional park inspired by landscape painting ([1947] 1994b, 284). Modernist urbanism could turn the regional (unloved) landscape into a park, where art and nature, dwelling and culture would intertwine: “the realization of poetic space in nature's space” (286). In these urban landscape parks, asks Teige, why should one not find the “artfully balanced compositions of Calder’s mobiles, which move in the wind like aspen leaves (286)?” He called it the “surrealist landscape.” He did not turn to beautiful works of architecture, but rather sculptures in forests, along long country roads, and in the open spaces of the inhabited landscape. It is in this description that Teige returns, almost 20 years later to his debate with Le Corbusier, rejecting all pretenses to architecture in his vision of “the earth and nature as the people's dwelling without palaces, without temples, without architecture” ([1947] 1994b, 286). The phrase “architecture without architecture,” which I argue resonates with Teige's debate with Le Corbusier that architecture should create instruments and not monuments, also had a meaning beyond this

strictly functionalist perspective and into an understanding of the relationship between the dwelling and the environment or landscape in which it would be situated, something a part of it rather than separate.

With Teige's surrealist deurbanized landscapes we are—in perhaps a surreal fashion—back to the work of Henri Lefebvre. At first glance, deurbanization would appear to be completely the opposite to Lefebvre's own writings on the global urban society, but as we have seen, they shared the same appreciation for re-structuring the urban along the lines of the work of art, and in *Right to the City*, Lefebvre expressed the same appreciation for the gardens and landscapes that surrounded and were an integral part of the city, but unlike Teige he did not think that they should replace the city ([1967] 1996, 173). Lefebvre explicitly pointed to the dangers of collapsing the distinction between the interior and the exterior of dwellings, which Teige advocated in his visions of the quiet, green city. Lefebvre suggests that rather than creating a unified space, this fractures space and tears apart the “urban fabric,” specifically, the street and the city itself ([1974] 1991, 303). As I mentioned above, pedestrians and streets seemed to disappear from Teige's vision of the deurbanized, green city. Teige's work very much finds a place in Lefebvre's critique of the simultaneous homogenizing and fragmenting of abstract space.

But at the same time, Teige's poetism and functionalism in the magic-city resonates strongly with Lefebvre's conceptualization of the work and the product, which were not to be seen as separate things, but overcome through their separations and through a broader understanding of production. Lefebvre also takes a broad notion of play, freed from its “subordination to the industrial and commercial production of culture” as a heuristic principle for the right to the city ([1967] 1996, 171). Play is sport, theatre and fairs not yet dominated by consumer culture. For Lefebvre, what attracts people to the urban is “movement, the

unpredictable, the possible and encounters” and play is central to this (172).

In what could be seen as a variation on the magic-city, Lefebvre writes that “the ideal city would involve the obsolescence of space: an accelerated change of abode.” Lefebvre calls this ideal city “the *ephemeral city*, the perpetual oeuvre of the inhabitants, themselves mobile and mobilized for and by this oeuvre” ([1967] 1996, 173). The ephemeral city, like the magic-city, is the “apogee of play and supreme oeuvre and luxury” (ibid.). Overcoming the binary between work and product meant the production of space on the model of art, but not the art as a singular work “isolated by and for the individual” (Lefebvre [1974] 1991, 422). Lefebvre imagines that art would become “*praxis* and *poiesis* on a social scale. The art of living in the city as a work of art” ([1967] 1996, 173). Teige's work offers an important contribution in this regard.

Conclusions

In 1939, Teige moved out of the city centre to the suburb of Smichov. The new house, built by leftist architect Jan Gillar, had three floors, and housed not only Teige and his long-time partner, Jožka Nevařilová, but a host of others. It was not a collective dwelling, nor a family house as Teige and Nevařilová had separate bedrooms in their apartment. It backed onto the green spaces of Prague's periphery.

After he wrote the introduction to Žák's book, Teige became increasingly marginalized by the new ruling regime. In 1950, the Communist Party began a press campaign discrediting him (Dačeva 1999, 381). In October 1951, a short while after this campaign, Teige died of a heart attack while waiting for the tram (Dluhosch 2002, xi). His apartment was sealed by the police, and most of his personal papers and library were taken and never to be seen again. His death was followed by the suicides of Nevařilová (on the same day) and, ten days later, Eva Ebertová, another long-time female companion (Aulický 1999, 386). Teige's work was not revisited until

the late 1960s, during the Prague Spring, when the first two volumes of his collected works were published (in Czech) in 1966 and 1969. (The third and final volume would not be published until 1994.)

In 1947, the same year that Teige returned to his work on architecture and urbanism, Theodore Adorno and Max Horkheimer first published the *Dialectic of Enlightenment*. The opening paragraphs to the essay on “The Culture Industry” begins with a critique of architecture, both capitalist and socialist, very similar to the one Teige makes. They write that the urban planning projects that were to give individuals their own spaces in “hygienic small apartments” have turned into “dismal...residential blocks” that “subjugate them...more completely to their adversary, the total power of capital” ([1947] 2002, 94). In the face of these dismal residential blocks of socialism, Teige claimed in a 1947 letter that optimism was an “addictive narcotic” and the only position left was “radical pessimism” and “the most apathetic detachment”(quoted in Effenberger 1994, 567). Both Adorno and Horkheimer's and Teige's claims appear to bear out Lefebvre's argument that even though the theorists of the 1920s believed their ideas to be revolutionary they were, in the end, suited to the state, be it industrial capitalism or state socialism ([1974] 1991, 124).

This does not mean Teige's ideas should be reduced to those dismal residential blocks (which we will meet again in the next chapter). The minimum dwelling which Teige advocated throughout his life is not simply an isolated apartment building, but an entire socialist way of life, premised on the rejection of private property, material wealth, like home ownership, cars, etc. The figure of Diogenes provided a model for Teige of a paired-down consumption, based on a rejection of physical toil and the luxuries of capitalism: “the *socialist Diogenes* will not be the slave of things” (Teige [1947] 1994b, 280). The minimum dwelling was also inseparable from

the environment in which it was situated: the deurbanized, green socialist city. His rejection of physical toil and work, and embracing a luxury rooted not in things, but in poetism, a poetry for the five senses, links Teige to many of the ideas that would eventually be put forward by the Situationists, even though he also advocated the very functionalist urbanism that the Situationists rejected. In the chapter, I tried to show that Teige, like the Situationists, are part of a history of modernist urbanism, rather than its exceptions, even if their ideas did not find the same ready audience as *The Athens Charter*. The magic-city is an important precursor to Constant's covered city and other megastructure, utopian ideas developed in the 1960s. Although there is no sense that the magic-city was to be contained in a single structure, many of the ideals of mobility, transience, fun and play that Banham associates with the movement were important to Teige's idea of the magic-city as a "Epicurean garden of poetry...magnificent and entertaining" situated in the midst of the growing metropolis of work ([1928] 2004, 89). Like the Situationists, Teige did not see functionalist urbanism as an end in and of itself, but rather as a means to achieving both the magic-city and the socialist, green city, which culminate in his rather vague vision for a surrealist landscape. Like the megastructure, the magic-city and the socialist city attempt to reconcile work and pleasure, the instrumental and the monumental, bringing us back to some of the underlying themes in the debate between Teige and Le Corbusier, and in the discussions in the previous chapter on aesthetics and anaesthetics. Sieverts's call to engage all the senses in responding to the in-between city has its precursor in not only the Situationists' unitary urbanism, but also in Teige's poetism and marxism.

In the midst of the industrial metropolis of the 1920s, and its industrial suburbs, Teige called for the magic-city and the socialist green city, and in the 1960s in the response to the urban explosion, architects, planners and utopian visionaries called for new kinds of structures

that would contain this explosion. The expression culminated in Expo '67, which becomes a key event in the birth of South City.

5. Only Visions without Cranes: The Case of South City, Prague



Fig. 5.1. South City, surface parking lot with Trabant. (photo by Lubomír Kotek.)

Although Karel Teige's criticisms of Stalin may not have been welcome in the immediate post-war years, in 1954, four years after Teige's death, Soviet President Nikita Khrushchev gave a speech in which he extolled the virtues of the industrialization of building that Teige had supported (praising Czechoslovakia on a number of occasions, as he had visited Prague earlier that year). Khrushchev discussed the importance of pre-fabrication and building with reinforced concrete, claiming that “given concrete, electric motors, and lifting cranes, and other machinery—it is impossible to continue to work in ancient ways” ([1954] 1963, 161). In a speech paralleling Teige's critique of Le Corbusier 25 years earlier, Khrushchev called for standardized designs in building and critiqued those architects who would rather “build monuments to themselves” (165). He also criticized socialist realism with its “needless adorning of facades”

and “unnecessary decorations” (168) and its architects, who claimed that they were rejecting constructivism and the “dull 'box style' characteristic of modern bourgeois architecture,” but reacted by “decorat[ing] building facades excessively...thus wasting state funds” (171). No apartment building should be a “replica of a church”—the architect might need “beautiful silhouettes,” argued Khrushchev, but “the people” need apartments (170). The speech presaged his speech on the “Stalin cult” a little more than a year later in 1956, and in many ways it signaled a return to the ideas of the inter-war avant-garde on the machine for living, architecture as instrument, and the industrialization of building.

In the same year that Khrushchev denounced Stalin, he also claimed that the Soviet Union would not follow the lead of the US in increasing private automobile production and promoting individual consumption. In his history of cars in the Soviet Union, Lewis Siegelbaum (2008) writes that one of the reasons for the low automobile production in the Soviet Union in the 1950s and early 1960s was that Khrushchev was seen at the time to be “ideologically hostile” to private car ownership (84); Khrushchev called the standard (and sacred) practice of private cars and drivers for Communist state officials “wasteful” (224). Khrushchev wanted better public transportation and networks of affordable taxi fleets that people could easily access without worrying about parking or servicing their own cars (Gronow & Zhuravlev 2010, 134). In 1964, Khrushchev was replaced with Leonid Brezhnev a “fervent automobilist” who apparently had a fleet of 12 luxury foreign-made cars (Siegelbaum 2008, 241). The state began to prioritize automobile production and promote individual ownership, both of which increased significantly in the 1970s, although acquiring cars was still very difficult.

It is in this context, which reflected the general attitudes in the Soviet Union and the Eastern Bloc, that I want to situate the building of South City: the importance of mass production

and the standardization of building, and socialism's simultaneous rejection of the private automobile in favour of public forms of transportation and acceptance of the car, particularly in the late 60s and 1970s. This approach reflects and is influenced by modernist urbanism's overall contradictory relationship with the automobile that I discussed in Chapter Three.

The circulating modernist urbanisms that this dissertation has been addressing reached its zenith in mid-1960s Prague, during the period known as the Prague Spring; this included architecture and urbanism. In 1965 and 1966, the chief architect of South City, Jiří Lasovský, visited the suburb of Vällingby in Stockholm, Cumbernauld in Edinburgh, and other new towns in England (pers. comm.), places which, as we will see in the following chapters, also influenced the thinking of Humphrey Carver and the architects and planners charged with redeveloping Willowdale. Elke Beyer writes that the 1960s was “the last moment of serious debate among architects and planners about designing an all-encompassing city model for a Communist future” (2011, 72). Following Khrushchev speech, special attention was given to building satellite cities, which would serve all the needs of the inhabitants (87). The 1964 Prague urban plan included plans for what would be the city's three biggest post-war developments, all notably including city in their name, and all situated on the periphery of the city: North City, Southwest City and South City. This was not just about architecture of individual buildings, but the constructing of entirely new cities, and South City was to be a model in this regard. Although Khrushchev rejected the individualist caprices of the architect, which would in the post-1954 period turn the architect as artist into a “technical expert” (Beyer 2011, 89) and “technician” (Zarecor 2011, 295), the plans for South City, and in particular its city centre, were very much in keeping with both the architect as artist and the utopian and monumental modernist urbanism of the 1960s.

Much of that utopianism dissipated in August 1968 when the armies of the Warsaw Pact

invaded and occupied Czechoslovakia, beginning the period of so-called normalization, which lasted until the end of communism in 1989. The prefabricated apartment blocks became *the* architectural and cultural emblems of the normalization of the 1970s and 1980s, a period in which the industrialized production of housing wholly dominated and smothered the attempts by the architects, artists and planners who had been gathered together to make a great work of art out of South City. South City did not realize the urban utopias of the 1960s, but rather became a product of what architects and planners call “crane urbanism,” so named for the construction cranes that “built” South City and countless other places like it. This chapter illustrates the tension in the representations of space, between the city as a singular *work of art* of architects, planned in advance, and the *products* of crane urbanism “reproducible and...the result of repetitive actions” (Lefebvre [1974] 1991, 75).

Rostislav Švácha once called South City “the ugliest housing development on the planet” (1998, 49), and its notoriety is also due in part to Vaclav Havel's antipathy toward it. In a 1990 speech in Prague's Old Town Square, Vaclav Havel said that one of the best things about Prague's metro is that “every day, tens of thousands of people from South City can go to another city, where they can see a real city, and not just the strangeness in which they live” (Havel 1990). Havel visited South City not long after the 1989 revolution and on Czech Television he likened the apartments to rabbit-pens (Sova 2009).²¹

Although South City, like Mourenx, could if we follow Havel be seen as a “propaganda leaflet” (Lefebvre [1962] 1995, 119) for post-war abstract space under socialism, its history, utopian origins, and everyday reality offer a much more complex tale. The utopia origins of South City begin, appropriately, in Montreal at Expo '67.

²¹ Unless otherwise noted, all translations of Czech texts are those of the author.

5.1 Locating South City's Origins

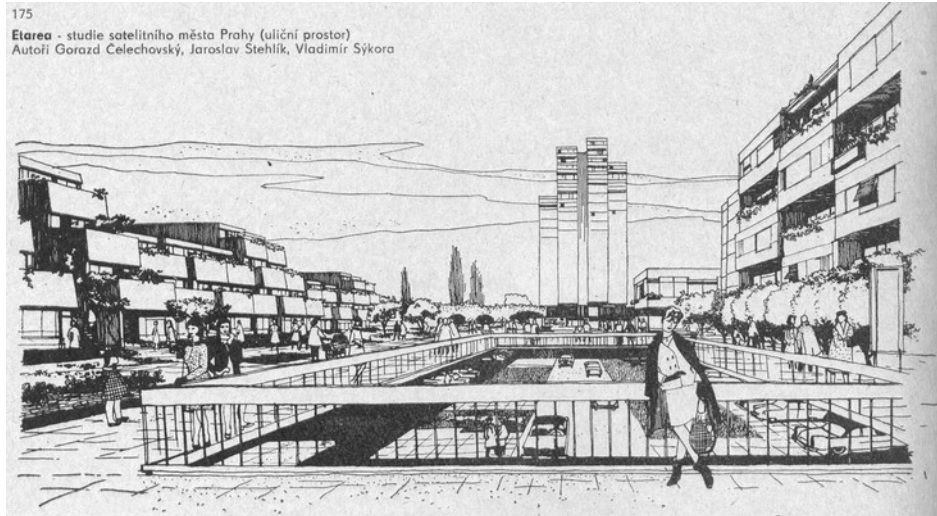


Fig. 5.2. Above-ground streetscape design for Etarea. (*Architekti Praze*, 1971.)

“The countryside in Czechoslovakia is still beautiful in all its variety. Its preservation for future generations is part of the world progress of conquering the effects of technical civilization” (cited in “McGill-Expo '67”). These words concluded a narration accompanying a short slide projection presented in the “Conflicts” section of the Czechoslovakian pavilion of Expo '67 in Montreal. Alongside this slide projection was a large relief model of Etarea, an experimental suburb for 130,000 people to be situated in the verdant landscape 10 km south from Prague. Designed by the Pražský projektový ústav (PPÚ, Prague Design Institute) Etarea was to alleviate the “anxieties of the modern age” and provide an alternative to the disconcerting “anonymous, amorphous metropolis” (Čelechovský, Stehlík & Sýkora, 1967, p.401). Expo '67, along with Etarea, was an homage to modern technology and to human ingenuity in mitigating the effects of industrial society.

According to its designers, Etarea would allow for the rapid mobility of vehicles, information and goods while creating a relaxing, conflict-free suburban environment through the separation of cars and pedestrians. The city would use an elaborate pneumatic tube system with

central distribution points to deliver food—ordered via computer—directly to households. If residents did not want to push-button shop, they could walk to any one of the 13 local centres, which would be in the form of elaborate, above-ground pedestrian-only environments. The separated pedestrian spaces were part of this modern utopia of free and easy movement that included a monorail and planned growth of one car for every three residents. Recreational spaces—forests, an artificial lake and a beach—would be close to dwellings so people would not need to flee the city on weekends to their *chata*, or country house, nor to the centre of Prague except for work or on exceptional occasions. Etarea's designers claimed that “the majority of people's interests could be satisfied right in the city” (Čelechovský, Stehlík and Sýkora 1967, 400.) There was a cover article on Etarea in one of Prague's daily newspapers with the headline “Happy City” (*Večerní Praha* 1967, 1). In 1967, at the congress for the International Union of Architects (UIA), which took place in Prague under the theme of “Architecture and the Human Milieu,” the film *Etarea: City of the Future* was screened.

In the end, Etarea remained a happy city on paper only; it was never realized. But there were many similarities to South City, which was being designed at the same time also by the PPÚ, and which has been described as “Etarea in praxis” (Jišová 2005). South City, like Etarea, emerged out of the utopian atmosphere of Expo '67. It is the largest of the Czech post-war housing developments, or *sídlišťe* in Czech (I discuss this term in detail below)—approximately 20,000 dwellings for 80,000 people—but also one of the least dense of the time.



Fig. 5.3. Map of the City of Prague. (Geoportal hl. m. Prahy)



Fig. 5.4. Map of South City. Central Park runs east from the Opatov metro station. (Open Street Map.).

In 1965, the Department of the Chief Architect of Prague announced a design competition for South City. Jiří Voženílek, the first head of this department, which was created in 1961, was one of the few members of the Czechoslovak inter-war avant-garde who continued to be active in the post-war period and had close ties to Karel Teige. One of his most significant contributions in the inter-war period was his work on a master plan for Zlín, a garden city built for and around the Baťa shoe factory in the 1920s. In 1948, he became the first director of Stavoprojekt, the state organization that replaced private architectural studios, and in 1951 he became the director of the newly-established “Institute of Architecture and Town Planning” through which he advocated the industrialization and typification of dwellings (Zarecor 2011, 23; 262). He was also a consultant on the Etarea project.

In 1967, the Chief Architect's office announced the results of the South City competition. The winning design came from Prague architect Jan Krásný, a professor at the Technical University in Prague, and it was then passed on to Jiří Lasovský's atelier to make a detailed urban plan. In his review of the entries, Voženílek writes that the site of South City was chosen carefully so it could be an urban entity unto itself, but also well-connected to the city, close to cultural and social amenities. South City was built on the site of two already existing independent communities, Chodov and Haje in the south-east part of Prague (now part of the Prague 11 district, see figures 5.3 and 5.4); in 1967, Prague widened its borders for the first time since 1921, annexing 21 independent municipalities, including Chodov and Haje (Borovička and Hruža 1983, 90). The location was also chosen so that South City could have “direct contact with the open landscape” (Voženílek 1967, 91): to the west of the planned zone of light industry was the Kunratický forest-park, to the south-east the Milíčovský forest, and to the north-east, the Hostivař recreational area complete with an artificial lake, all within walking distance of the

different neighbourhoods. South City would be literally a city in a park to which all residents would have access. The site was also chosen for its proximity to Czechoslovakia's first highway, the D1, running between Prague and Brno, which would divide South City's residential zone from the planned administrative and industry zone; work began on the highway in 1967. South City would be the gateway to Prague (Voženilek 1967, 91).

There were 41 entries to the competition for South City, offering different takes on these conditions including one design inspired by architect Karel Honzík's *domurbia*, where residents would live in seven megastructures, each with 60 floors and 10,000 residents. Honzík developed his idea of *domurbia* in reaction to the growing distances between shops, cinemas, cafes, etc.: “These days, one has to go two, three or five kilometers just to buy some writing paper” (quoted in Hruža 1967b, 151). *Domurbia* is a complex of buildings that would contain as many urban amenities as possible “under one roof”: administrative, apartments, artist studios, workshops, shops and services, and cultural and recreational spaces. The concentration of activities in one place frees up the surrounding land for either agriculture or recreation (ibid.). *Domurbia* was a variation on the megastructure, very much current at the time Honzík was writing, and although the idea was rejected, it lingered on particularly in South City's plan for a multi-functional city centre to be surrounded by parking lots and public transit (I return to this plan later in the chapter).

5.2 Crane Urbanism

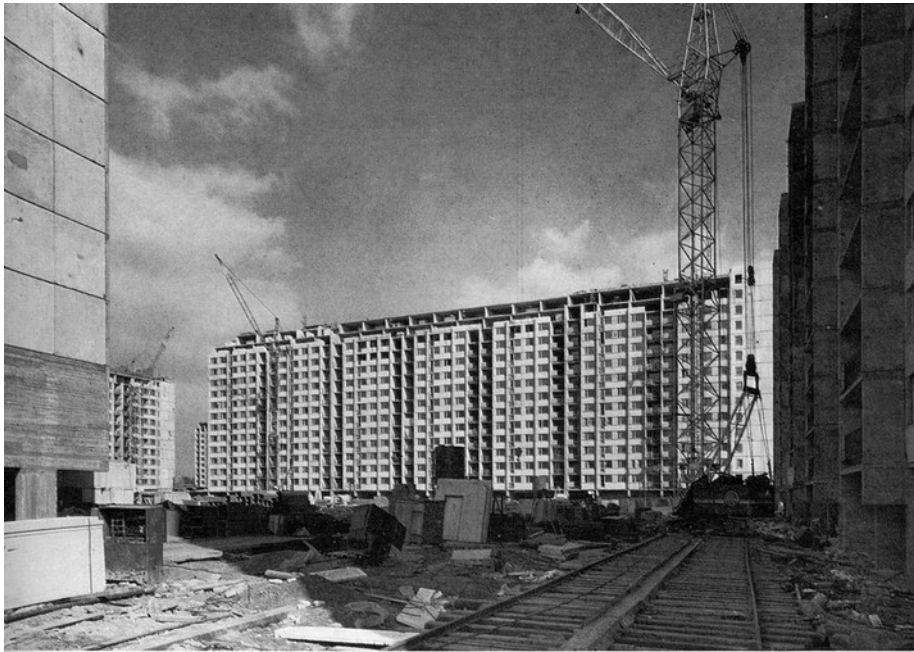


Fig. 5.5. Building the paneláky in a Prague sídliště (*Architekti Praze*, 1971.)

In a 1970 newspaper article, and much repeated in the press of the time, South City's chief architect Jiří Lasovský encapsulated the task of city building of the 1960s: we were to build in 15 years what usually took 800. Lasovský is referring to the medieval city of Olomouc, which at the time had a similar population to what was envisioned for South City. The comparison calls to mind Lefebvre's likening the medieval town of Navarrenx to the way a snail secretes its intricate shell and Mourenx to a transparency projected on the landscape. The idea of a city built quickly also resonated with the utopian urbanism of the 1960s, in both East and West. In the “megayear 1964” architects and planners would accept no less than an “instant city,” and even the monumental megastructure may have been too cumbersome for these demands (Banham 1977, 208). The “megaradicals,” as we will see, were not only to be found at Expo '67, but also in the architectural and building departments of the Eastern Bloc.

The PPÚ, which was charged with overseeing the design of 25 of the 67 new housing

developments in Prague between 1957 and 1985, including South City, explicitly evokes the difficulties of reconciling the art of city building with industrial production. In a 1971 PPÚ publication, the architect and theorist Otakar Nový writes: “Great works, which our ancestors needed hundreds of years to make, we are today capable of managing in a few decades thanks to socialist planning, typification and industrial methods” (n.p.). Nový goes on to ask (perhaps rhetorically): “is it really possible to compare great works thousands of years in the making with a building project of three, four, or five decades” (ibid.)? Nový was reiterating Le Corbusier's claims almost 50 years earlier in *Urbanisme* (1925). In the section entitled *Nos moyens*—translated into English, rather awkwardly, as “Our Mechanical Equipment”—Le Corbusier writes: “*We have in our hands a technical equipment which is the sum of man's acquired knowledge. And armed with this equipment...we can create great works*” ([1929] 1987, 109). For Le Corbusier, an urbanist needs “an idea, a conception, and a programme,” and the means to realize it; each technological age is marked by its ideas and the different technologies with which those ideas are realized. The new mechanical age that Le Corbusier praises “gives our dreams their daring” (101).

But as Lasovský's opening statement suggests, the only way to realize the vision of a city in 15 years, rather than 800, is to use the materials and techniques of modern industrial production. Although the realization of an instant city using new methods of production reached its apogee at Expo '67, South City presents a much different story, one in which “*nos moyens*”—the construction cranes, reinforced concrete, and pre-fabricated concrete panels—overshadowed the visions of the architects and the planners.

The privileged actor in the industrial construction of housing developments like South City was the crane. Jiří Hruža describes crane urbanism thus: “For them [the state building

organization] it was easiest if everything was made with one kind of panel, brought to the site and assembled” (2006, 38). The crane could also not function without the rail tracks upon which it moved. Hruža adds: “it was neither cheap nor easy to build the track for the crane, so once it was there, they wanted to assemble around it as many apartments as possible” (ibid.).

The most stark image and defining characteristic of South City's crane urbanism is not simply the crane itself, but the tracks upon which it slowly moves and the panels which it moves into place and which are then assembled by the workers. The method of construction was just that: an assemblage, of which the crane played a key role. The pre-fabricated panels were assembled and then attached, one after another, one on top of another. Cranes are not mere means through which a vision is realized, but “full-fledged mediators,” which “translate what they transport” (Latour 1993, 81). In parallel fashion to the description of automobility in Chapter Two, I argue that the crane does not “determine the action (72),” but allows for and encourages a certain kind of building, which made it difficult for the architects to realize their visions of the city.

Without the visions of the architect there is no South City, but without the cranes there is also no South City. The birth of South city takes place in a space already coded by technologies of industrialization and state power, expresses a tension between the city to be born and the technologies that would induce labour, to bring about the birth as quickly as possible. Crane urbanism is a major aspect of what Katherine Lebow in her work on new towns in Poland calls “state socialism's promised shortcut to modernity” (2013, 4).

In the Czechoslovak state's fifth (1971-1975) and sixth (1976-1980) five-year plans, the plan was to build over 100,000 apartments (Říha 2007, 21), while in Prague, according to a 1968 interview with Voženílek in the daily newspaper *Večerní Praha*, the state planned to build 12,000

apartments yearly from 1971-1975. South City, with its 20,000 apartments, would make a significant contribution. (To get a sense of the magnitude—and legacy—of these numbers, twenty percent of the country's current housing stock was built in the 1970s.)

It was up to the architects and planners to locate large enough parcels of land, usually on the periphery, to fulfill these demands (Hrůza 2006, 38). Not only did the placing of the crane tracks help determine the arrangement of the buildings—much to the horror of the architects—but the only place where there was enough room for the tracks, and where the economies of scale of crane urbanism and the state building quotas could be met was on the city's periphery. Crane urbanism might be better thought of as crane *suburbanism*. Aside from a few exceptions, the products of crane urbanism mostly occupied the periphery of cities, marking the zone between the city and countryside beyond. They are referred to in Czech generally as the *sídliště*.

5.3 The Crisis of the Sídliště

The dominant, if not defining, element in the Czech *sídliště*—and in peripheral developments throughout the former Eastern Bloc and Soviet Union—is the seemingly endless blocks of identical apartment buildings made of the pre-fabricated concrete panels, known in Czech pejoratively, as the *paneláky*.²² Like the automobile, the *paneláky* are part of a system of building that involved the mass production of pre-cast concrete panels at factories across the country, which were then brought on-site to be assembled by the workers and the cranes. There is no shortage of invective both during the period of normalization in the 1970s and 1980s, particularly from architects, and in the period immediately following the end of communism.

²² I have chosen to leave both *paneláky* and *sídliště* untranslated in this chapter. Not only do both words encapsulate the themes this chapter addresses—crane urbanism and modernist urbanism—they both do not have an English equivalent that would carry the meaning of the Czech, both on the denotative and the connotative level. Although *sídliště* far predates the settlements of the socialist period, they have come to be generally equated with socialist city building and architecture, and specifically the *paneláky*. For the latter, native English speakers in Prague have adopted the word, usually referring to the *sídliště* colloquially as “the panelaks.”

Eric Dluhosch, the translator of *The Minimum Dwelling* calls the paneláky “the most depressing collections of banality in the history of Czech architecture” (2002, xxv), while another theorist describes them as “white teeth” devouring the rolling landscape (Koukalová 2007, 75).



Fig. 5.6. South City, 1982. (Photo by Jaromír Čejka.)

Before I address the specifics of this crisis, which Jiří Hruza explicitly raises in an article called “The crisis of the sídliště” (1967a), I want to discuss the complex meaning of the term sídliště—the difficulty of translation itself a significant feature—because it speaks to the new kinds of building materials and technologies that came in the wake of Khrushchev's speech, and the subsequent attempts to transform the existing sídliště, largely seen as simply collections of individual buildings in the landscape, into city spaces.

Lucie Zdražilová, who has researched and written extensively about the post-war sídliště

(e.g. 2007; 2013), notes *sídliště* is an archaeological term that predates its usage in the postwar context and can refer to any permanent settlement for a group of people and more generally a settlement (*osídlení*) of any kind (2007, 41). Architect and urban planner Karel Maier calls the *sídliště* a “mass housing complex,” which does not refer only to its post-war incarnation: since the industrial revolution, the *sídliště* have been about how to house a lot of workers in one place (1998, 2). However, the term as it is used today has come to invariably refer to the post-war housing developments built from the pre-fabricated concrete panels. In his 1985 seminal sociological study on dwelling *Lidé a sídliště* (People and the *sídliště*), Jiří Musil writes that the *sídliště* are “one of the most distinct markers of socialist-city building and socialist architecture” (13). In the Czech online dictionary *Slovník.cz*, sixteen different English translations are offered. These include housing estate, housing development, neighbourhood unit, commuterland, commuterdom, and very simply, blocks. Although housing estate has been the most common translation, I find it does not resonate with a North American audience, nor does it capture both its positive and negative connotations, similar to such heavily-loaded terms like suburbia or the French *grandes ensembles* (the *sídliště* are sometimes similarly referred to as “large dwelling complexes”). The *sídliště* have been tied to the avant-garde of the 1920s, and in particular the PAS group, to which Voženílek belonged and through which he advocated the industrial production of dwellings (Maier 1998), the Athens Charter (Musil 1985), and the inter-war avant-garde's focus on building small, economical apartments (Zdražilová 2007).

Although some *sídliště* were built within Prague's inner city in the 1950s, by the 1960s with a huge pent-up demand for housing, new developments moved to the expansive spaces on the periphery. Recent scholarship (Hirt 2015) has referred to these *sídliště*, in the context of Eastern Europe as a whole, as socialist suburbs. If suburbanization is understood simply as “de-

centred growth” then the sídliště are the “socialist version of the suburbs” (183). This is especially the case for South City, which although it had originally been planned to include 16,000 “clean, light industry” jobs adjacent to the sídliště,²³ that space was eventually given over to a second South City residential development. This exaggerated South City's character as a dormitory suburb—Musil notes that the sídliště were generally located far from work, the city centre, cultural destinations like the cinema and theatre, and in some cases schools (1985, 19). Yet even the moniker of suburb is problematic given its association with the single-family homes of the garden suburb, part of the rich tradition of urban planning in 1920s Prague (Švácha 1995, 152), or the unplanned, suburban sprawl of the post-Communist period. Hirt suggests that even the *chata*, or country house, to which Prague's residents, especially those in the sídliště, flee to every weekend is a contender for the socialist suburb (2015, 177).²⁴ Other scholars suggest that the sídliště are not a socialist version of suburbs, but a “direct application of functionalist city planning principles” (Sýkora and Mulíček 2013, 136) and even if they look different from the 19th or early 20th century city, they are still part of the city-building project.

It was still difficult for people to believe that the sídliště were actually part of the city. In his study, Musil compares life in the sídliště with life in the older, inner city neighbourhoods of a number of different cities in Czechoslovakia. He writes that many of the people who moved to the sídliště did not come from the city, but from surrounding villages and towns to work in

²³ “Schválení podrobného územního plánu Jižního Města na území Chodov a Háje,” (Approval of the detailed urban plan for South City on the lands of Chodov and Haje), Records of the Meeting minutes of the bureau, council and local authorities ÚNV, NVP a HMP (1945-1994), Archival record December 28, 1968, Prague City Archives.

²⁴ According to Sýkora and Mulíček (2013), nearly one-third of Prague residents had a country house; the country houses made up for people's inability to own property or land in the city, and also allowed them to escape from the confines of the paneláky (137). Bren argues that this private ownership was tolerated by the regime because it kept people out of the cities where they might cause political trouble, and in their homes. It was in line with the stated goals of the period of normalization in the 1970s and 1980s: the “quite life” and the “policy of peace” (2002, 123).

Prague. The majority of the people interviewed were unable to categorize the sídliště in terms of traditional concepts like city, suburb or small-town. The sídliště, he concludes, “is a phenomenon that cannot be classified with the help of old terms” (Musil, 1985, 319).²⁵ Musil suggests then that regardless of how the sídliště look, the modernists of the 1920s were successful in their attempts to create entirely new environments for living (320).

Sýkora and Mulíček's argument is in line with the way architects and urbanists of the 1960s understood the sídliště. The biggest developments of the post-war period—North City, South City, and Southwest City—signaled a “necessary transition” from the smaller and more isolated sídliště to much larger settlements: “cities” (Borovička and Hřůza 1983, 89). As part of that transition, the crisis of the sídliště refers to the composition of the urban environment as a whole and not just as a collection of buildings. Although the sídliště became increasingly stigmatized in the post-socialist period for their lack of urbanity, this was nothing new. In the 1960s, the existing sídliště were already being described as “grey, monotonous, dull, [and] lifeless” (Gottlieb & Todlová 1969, 211), “parasitic cities” (Nový 1971, n.p.) and “dormitory suburbs” (Hřůza 1967a, 1). The negativity does not simply stem from the ubiquitous paneláky. To capture something of the spirit of this critique—and simultaneously a certain fascination with the sídliště that has continued to this day—I quote at length from a *samizdat* novel by the dissident Egon Bondy:

You used to be able to take an intoxicating walk through the beautiful landscape and still be in the city. Now there are the sídliště....Even the sídliště necessarily have their poetry. But it is a poetry of boredom or, at best, a poetry of pop-art. People go there to sleep, and other than a television they do not have much. Not a pub, nor even a cinema. A smattering of green. The seamless blocks seem to stretch for kilometres, one after the other. The buses are packed beyond capacity. ...

²⁵ Musil's aim in his study was not to examine the architecture and urbanism of the sídliště, but to look primarily at the social and psychological significance of these new relationships, which for him, was the most pressing question at the time. Surprisingly, he found that people were slightly happier in the sídliště than in the inner city.

Somewhere tucked away are a few pre-war villas, and sometimes even a little garden pub. I'll sit there, the towering walls of the paneláky obscuring the horizon. The garden pubs are in bad shape, it does not seem to occur to anyone to take care of them...Surprisingly, their patios are half-empty, even though tens of thousands of new residents live around them. They are sitting at home watching television. Thirty years ago, there were many more of these garden pubs, and they were always full of people. Now, its an exercise in melancholy just to sit there, but I don't mind it. I only wish that in all of those apartments people have at least two TVs. ([1983] 1992, 20-21)

The crisis of the sídliště, as Bondy evokes it, was not a crisis of the individual dwellings. All the aesthetic criticisms aside, people on the whole were satisfied with their brand new mass-produced apartments, which included many modern amenities they were not accustomed to having, like televisions. The problem, more specifically, was related to the space of the sídliště as a whole, particularly in the relation between dwelling and mobility. In his study, Musil suggests that the sheer quantity of housing does not alone define the post-war sídliště, which introduced completely new relationships between dwelling, shopping, and open space, marked most importantly by the disappearance of the street (1985, 15). Hrůza writes that common spaces of streets and squares traditionally serve both a social and a transiting function (1967a, 1). Following a long line of modernists, he argues that developments in modern transportation meant traditional streets were no longer an option in planning. But in the new sídliště, where separation of pedestrian and car traffic had become the norm, all attention was given to the function of transportation—usually, car, bus and metro—while the task of replacing the social function of the traditional street had, regrettably, been forgotten (ibid.). It is within the context of the disappearance of the street in the sídliště that I now turn to the plans for South City, which in many ways would directly respond to these kinds of environments, like the one Lefebvre describes in *Mourenx*.

5.4 South City as Work of Art

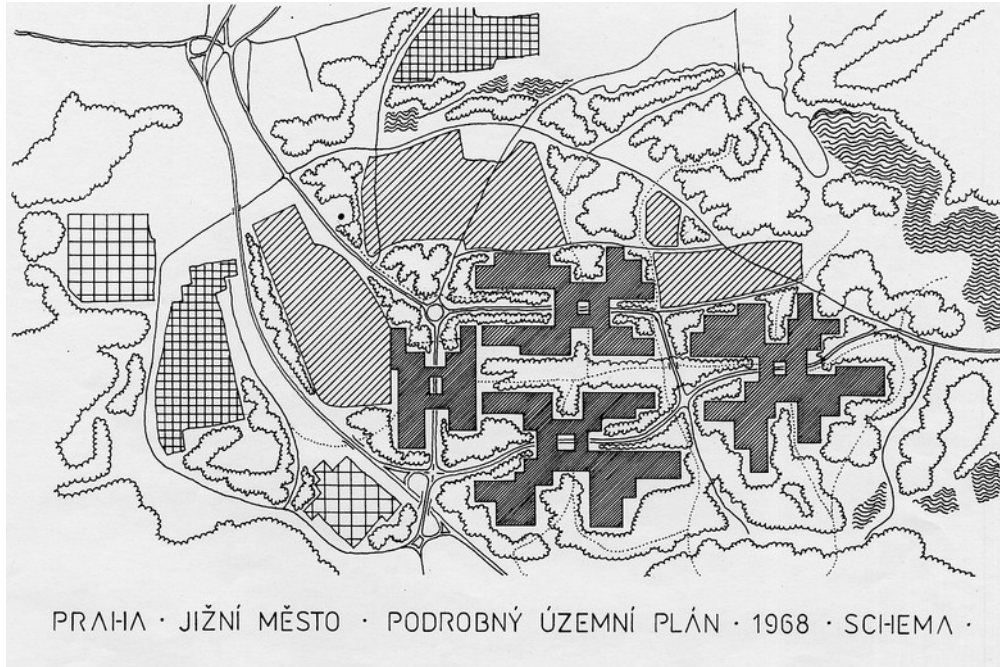


Fig. 5.7. Urban plan for South City. The darkly-shaded areas show the four neighbourhoods of South City, and the dotted line shows the pedestrian network between and around the buildings. The other shapes show the settlements of the villages of Chodov, Haje and Opatov, for the most part left intact. (Courtesy of Jiří Lasovský.)

Like Etarea, the conception for South City was to a large degree governed by questions of mobility, of the growing importance of the automobile in the late 1960s, and the need to not only accommodate it, but to also control and regulate its effects spatially. The simple projection in the official planning documentation of one car for every 3.5 people dictated much of the look of South City; in fact, the ratio exceeded the car ownership rates of any country of the time aside from the US and Canada, and was not reached in Prague until the early 1990s (Pucher 1999, 227; 1990, 281). In 1960 Czechoslovakia, there were only 14 cars per thousand residents, whereas in France that number was 130, in Canada 224, and the US 345. It suggests that the “Socialist Car” of the 1960s, as I discussed in the introduction, was very much about catching up to the West (Siegelbaum 2011, 2). Elke Beyer (2011) notes that the “specific socialist character” of city

centres in the GDR and the USSR of the 1960s was the opportunity for people to linger in pedestrian-only spaces—easily accessed by public transport. Places to hang around and be seen in. Even in the post-1968 period, architects and urbanists continued to focus on pedestrian spaces. In 1983, Hruža and Borovička wrote that the sídliště needed “living street spaces” (175).

In “Sociological Notes on South City” (1969), an article in the main architectural journal of the time, *Architektura ČSR*, sociologists Miroslav Gottlieb and Marketa Todlová place South City's plans within the currents of sociological thinking on the city, drawing largely on work from the West, including Lewis Mumford, Alexander Mitscherlich, and Rene Kaes. In a seeming critique of Honzík's domurbia and the megastructure ideal, the authors suggest that the sídliště need more than just one large complex where cultural and community amenities are located. They also need lively pedestrian streets where people can sit outside at cafes and restaurants, and not just “corridors” that channel people from one destination to the next (213).

Lasovský took up this task of providing the possibility for such spaces. In response to the “deurbanizing tendency of the Prague sídliště with their atomizing division of functions” he looked for “another philosophical concept of the city” on which to base South City's designs (1982, n.p.). There is an implicit critique here of the separations of *The Athens Charter*, which had already begun in the early post-war period within CIAM itself and in particular at the 1951 CIAM meeting on the Core (Welter 37). The goal rather was multi-functional centres (Lasovský visited Cumbernauld's Town Centre megastructure), work close to dwellings, and shops and cafes easily reachable on foot on what he called the *obytná ulice*, or habitable street.²⁶ The greenery from the surrounding forests was to permeate right into the centres of the

²⁶ There are different possible translations of *obytná*, including residential, habitable, inhabitable or living. Based on Lasovský's own descriptions of these streets, I am inclined to translate the term as habitable street.

neighbourhoods. Above all, the orientation called for a hybrid of city and suburb that would offer a rich infrastructure for cars, pedestrians, and public transport.

Although he did not subscribe to the rigid division of functions characteristic of Athens Charter urbanism, Lasovský still made a clear separation between movement within South City on the habitable streets and movement without on the major ring roads surrounding the neighbourhoods. In an interview with the author, Lasovský, who is now in his 80s, but still eager to talk about South City, recalls that one of the main goals of South City's planning was to minimize automobile movement within South City by offering parallel infrastructures for pedestrians, cars, and public transport. The key to the level of automobilization—one car for every 3.5 people—was the series of parking garages in the downtown, in each of the local centres and in the periphery around the four neighbourhoods, freeing up the areas between buildings to be pedestrian focused.

All through-traffic in the residential areas would be pedestrian. An extensive pedestrian network would link South City's four neighbourhoods: Opatov, Litochleby, Haje, and Chodov. Reflecting Ebenezer Howard's plan for his Garden City (Fishman 1977, 41), South City would have both local, neighbourhood centres and one main centre. The local centres would be situated above the main thoroughfares and like in the plans for Etarea would entail a complex network of above-ground pedestrian-only walkways and shops. The main city centre, South City's downtown, would be located at the Opatov (formerly, “Friendship”) metro station. In an attempt to create a diverse environment, the four neighbourhoods of South City would also be designed by a different collective of architects and would each use different building materials and technologies—prefabricated concrete panels as well as brick and poured concrete, for example (Lasovský, pers. comm.).

The neighbourhoods were composed in such a way that the tallest buildings were clustered around the local centres, and the further from the centre one got, the less dense and tall the buildings became until one reached the open spaces and the one- and two-story row housing on the periphery. To bolster its labeling as a socialist suburb, South City was one of the few Prague sídliště where single-family houses were built; in the 1970s and 1980s, single-family housing made up only seven percent of new housing construction in Prague (Maier, Hexner & Kibic 1988, 60). These houses were to have their own parking garages and would be built directly adjacent to the green spaces. Car and pedestrian traffic were to be mixed on the periphery. Smaller shops would dot the periphery so that residents could buy essential goods without having to go to the centre. In this way, the plan for South City brought together aspects of both city and traditional suburb. Although South City is the largest post-war sídliště in terms of area, it is one of the least dense, a testament to its suburban character.

According to official documentation, the pedestrian habitable streets were to be a new way of approaching the Prague sídliště, becoming “the distinct element in the formation of the environment.”²⁷ It was on these habitable streets that Lasovský believed the possibility for spontaneous encounters would emerge, places to play chess, to sit and read, “places for people-watching” (pers comm.). These streets would be complemented by a system of recreational pedestrian paths that would wind from the periphery to the individual centres. These recreational pedestrian paths would follow strips of greenery that extended from the peripheral landscape allowing pedestrians to walk around the city or to the park out into the forests “without conflict with traffic and from most parts without any interruptions in the path” (Lasovský 1975, n.p.).

²⁷ “Schválení podrobného územního plánu Jižního Města na území Chodov a Háje” (Approval of the detailed urban plan for South City on the lands of Chodov and Háje), Records of the Meeting minutes of the bureau, council and local authorities ÚNV, NVP a HMP (1945-1994), Archival record December 28, 1968, Prague City Archives.

The habitable streets and the pedestrian paths were formed through the strict separation of traffic. In their description of the detailed urban plan, Lasovský, and fellow architects Jan Krásný and Miroslav Řihošek write:

the most difficult task ahead is minimizing the harmful effects such as noise, vibration, exhaust, and traffic collisions on the residential environment. The most promising way to restrict such effects is the complete segregation of pedestrian and transportation spaces. There is a purity to the zoning plan in terms of pedestrian traffic and it is the result of both sociological and architectural work. The pedestrian paths and spaces create a self-contained system. (1969, 446)

Although automobile use was to be minimized within South City, like other cities, both socialist and capitalist, the design was dictated by what was seen as the inevitable future growth in automobile use. In a 1970 article on South City in the newspaper *Lidová demokracie*, its authors ask: “does the emphasis on pedestrian traffic mean that in the time of the explosion of automobilization residents will be doomed to just walking? Never.” Here South City is firmly placed with the evolution of automobility, particularly in the context of increased attention to automobiles in the Brezhnev era.

The headline to this article reads “South City does not want to be a sídlíště.” South City was to become “a real city.” Relying on what he hoped would be the vibrant, lively pedestrian-only spaces between buildings, Lasovský claimed that “alienation, dehumanization, and loss of identity” associated with the earlier sídlíště “would have no place” in South City (1973, 1). Lasovský emphasized in both his writings of the late 60s and early 70s and in his interview with the author that South City would be a place “people would not just inhabit (*bydlet*), but where they would feel at home (*doma*) (Lasovský, pers. comm.).

The city centre was to be the main element in the total work of art of South City, worthy of CIAM's plea to architects and urban planners to attend to the heart of the city. It would also

affirm South City's role as mediating the relationship between the city and the countryside. Its position next to the highway would allow South City to be a “go-between” or “intermediary city,” for people from surrounding villages to come and shop, and a marketplace for farmers from those villages to sell their products (Gottlieb & Todlová 1969, 214). With its city centre it could be a “centre of lesser importance for the suburban surroundings” (ibid.). Once it was established that the metro would be extended to South City, its planners also envisioned it as a place for people to park their cars and then head to Prague, or a place for people coming or leaving Prague to “have a break or even spend the night” (*Večerní Praha*, 1970). Lasovský came up with a plan for the city centre along with scenographer Josef Svoboda, who himself played a key role in the art direction of the very-popular Czech multi-media installations at Expo '67.

Lasovský and Svoboda's plans for the city centre are well-documented in a 1978 article entitled “Centre for 100,000.” This article, like those before it, plays the contrast between the sídliště as strict product of industrial technologies and the vision of a new city: “Ten years ago, when the project originated...it imagined building a city” and yet the completed areas “are still reminiscent of a sídliště” (Novotný 1978, 4). But, South City still had a chance to become a city and it lay with the city centre. The most prominent feature of the proposed centre was that it negated “all the laws of functional zoning” combining shopping centres, cinemas, cultural centres, a public square with a retractable domed roof, a factory, “a hot-dog stand next to a jewelry shop,” administrative buildings, and a residential area with low and high-rise buildings, entitled “Habitat” (ibid.) The entire centre was to be pedestrian-only, “without a single conflict with other transportation modes” and a variety of pedestrian routes to choose from. South City's centre would be a “transportation paradise.”

Leading off to the centre heading east would be Central Park, one kilometre long and 100

metres wide, built from the earth, which had been excavated to build the metro and was accumulating in the space where the park was to be (fig. 5.8). Lasovský believed it would be a waste of energy to truck all the dirt away. For Lasovský, the “dirt was the inspiration” to transform the lunar landscape into a “supersculptural park” that would be a “symbol of the Czech landscape, with its hills and valleys, footpaths and passageways” (Novotný 1978, 5). In this way, South City's city centre and central park would heed Teige's call to create a magic-city in the midst of the industrial production of dwelling. Although the park has slowly been built up over time with small rolling hills, a pedestrian and bike path, some playgrounds that call to mind the original plans, it did not become the work of art that Lasovský had dreamed for. In the 1980s the landscape artist Magdalena Jetelová would again propose to create a work of landscape art out of the park, but that too went unrealized.

5.5 The Incomplete City?



Fig. 5.8. The mound of excavated earth sitting in what would become South City's Central Park. (Courtesy of Jiří Lasovský.)

Only visions. This is how Vítězlava Rothbauerová, a participant in the design competition and the chief architect of a later additional development in South City in the 1980s, describes the many ideas for South City (pers. comm.). The pent-up post-war demand for housing provided a significant opportunity for architects and urbanists to design entirely new cities. With a planned, socialist economy, and the state holding all the land, this process was made even easier and attractive, but that opportunity came about precisely because of the pressure to meet the state housing quotas for production. To meet that goal required the mass production of the pre-fabricated concrete slabs that make the paneláky. Rothbauerová's own

experience in the 1970s is illuminating:

Together with the suppliers and investors, we agreed to develop a new kind of panel building for this [a second South City] development. We were excited. Of course, this promise was quickly broken as the construction workers already knew by heart how to assemble these buildings and they were not going to burden themselves by having to actually look at the drawings. There were five types of the VVU-eta system for assembling apartments and they were repeated throughout the whole country. (pers. comm.)

In the wake of the Russian occupation of Czechoslovakia in 1968, Jiří Voženílek, although close to retirement age, was forced to resign his post as Prague's Chief Architect and was no longer allowed to lecture or teach (Hrůza 2006, 37). The state construction company ceased to “coordinate on the ground” with the architects and with the PPÚ (Lasovský 1975, n.p.). In the ensuing two decades, city building was wholly dominated by the industrial production of housing. Lasovský was fired as chief architect and his atelier was disbanded—they had been printing anti-occupation material in their office (pers. comm.). He was still allowed to design the park and the city centre, but in the absurd fashion that befits the era of normalization, Lasovský claims that they knew it was never going to get built because there was only grant money to produce the models, but not the funds to actually realize the plans. In spite of that—or because of it—they were *really elaborate* plans.

Although Lasovský and the other architects had imagined different building methods and material for each of the neighbourhoods, only the concrete pre-fabricated panels were used, and the only difference was length—the ideal was the infinitely long building with almost no variation from one section to the next—and height: 4, 6, 8 or 12 stories. In an interview with the author, Lasovský draws attention to the effects of crane urbanism in South City, pointing out that the unbelievably long buildings that characterize the sídliště were often a result of economizing on costs: it was cheaper to keep building, or to build in the immediate vicinity of the crane, than

to have to move the track upon which the crane moved.

Although Lasovský envisioned the separation of cars and pedestrians, he envisioned within those pedestrian spaces the intertwining of green spaces and dwelling spaces, of the greenery on the periphery permeating to the doorsteps of the buildings. But to build the tracks for the crane, entire swaths of land needed to be bulldozed, and so frustrating the architects' plans to have people walk out of their houses and directly onto a network of pathways surrounded by greenery (Blažek 1998, 41). This is what gave so many of the *sídlíště* their characteristic barren look in their early years. Voženílek admitted that the biggest mistake of his long career was his support for industrial house-building technologies, specifically the *paneláky*, as they had to be prefabricated in large factories and transported significant distances to the construction site and the heaviness of the panels on the trucks destroyed the unprepared road system (Musil, pers. comm).

This process is captured most profoundly in Věra Chytilová's film *Panelstory, or how a sídlíště was born*, shot during South City's construction in the late 1970s.²⁸ South City's lunar-like landscape is not simply the scene on which the film unfolds. Although the film includes a cast of characters—the people living in the *sídlíště* and trying to negotiate the muddy landscape and the workers building it—the actors are also the cranes, exposed pipes, mounds of construction material, panels flying through the air, and piles of excavated earth surrounding the apartment buildings. What marks South City's destruction is not that the former villages were leveled to make way for the *paneláky*—some homes were lost, but many of the original houses of the villages remain intact—but that people moved into the *sídlíště* before it was finished; mothers negotiate make-shift sidewalks with baby carriages and confused people try to locate

²⁸ The film was never released publicly in Prague (Horton, 2002).

apartments in a landscape in which there are no street signs, nor apartment numbers. If Lefebvre had ever written “The Birth of a City” about Mourenx, it would have been a fitting companion to Chytilová’s film.

Destruction here works on two levels: one, in the sense of liquidating tradition in favour of a new kind of city, and; two, the actual destruction of the landscape, to make way for the roads, subway and apartment blocks. Ivo Obrstein, a Czech architect active at the time describes it thus: “in South City, 6000 apartments had to be built yearly....They fulfilled the quota, but the nature in the area was destroyed as a result” (Obrstein 2006, 58). The attention to building dwellings to the exclusion of anything else, save for the most essential infrastructure was typical for the sídliště of the post-war period. This was especially the case with South City as the infrastructure costs alone were immense, in particular building the metro out to South City. Thus, the projects had to economize “at any costs” and the victims were usually the details of the urban plans (Maier, Hexner & Kibic 1998, 55).

For example, the habitable streets became clogged with parked Trabants, Skodas, and other notable cars of the Eastern Bloc as the parking garages did not get built and the surface parking lots on the periphery of the neighbourhoods were deemed unsafe—for the cars, that is—and too far from the apartments.²⁹ In an article criticizing South City's realization, Lasovský wrote that the hallmark of the plan, the habitable streets with preference given to pedestrians, “disappeared,” and the overall composition of the plan—that is, the contrast between the dense-

²⁹ During communism, the surface parking lots in South City were called “unfillable” because of the waiting lists to buy a new car during communism (Kotek 2009). These days, there are plans to finally build the parking garages, but parking in South City in both these garages and on the street will no longer be free. One South City myth is that it is harder to find a parking spot there than in the medieval core of the city. The proposed parking fee and the new multilevel parking garages have outraged residents and local politicians affiliated with the opposition party, Hnutí pro Prahu 11 (Movement for Prague 11).

built up centres and the open spaces of the periphery—was lost because of the “considerable pressure of the building technology, deforming the attempts at city building.” He wrote that the “final impression” was one of an “inhospitable, uninhabitable” environment (1975, n.p.).

Although it was hoped that these habitable streets would be lined with small shops and cafes, in the period of normalization there was “little street life, and so it was easier to have everything in one big building” (Rothbauerová, pers. comm.). The thoroughfares that run through and around South City are just that; as the planners had anticipated, these were not meant for pedestrians, and so there is little chance for convivial encounters or spaces that one would want to linger in. A replacement for the social function of the street had once again been forgotten. Although South City still suffers from a lack of shops around the buildings, supermarkets have proliferated in the surrounding areas and to which people can easily drive (see fig. 5.14), and there is now a shopping mall next to the highway.

South City's very naming already implies incompleteness a reference to an elsewhere that South City needs in order to exist; a more accurate translation of Jižní město would read Southern City, which along with North City and Southwest City formed the three key post-war housing developments in Prague. These developments were from the beginning places named in relation to an elsewhere, to the centre of Prague. It is above all a city of connections, a functional place valued for its connection to the city—be it by bus, metro, or car—and to the urban landscapes that surround it. A place valued, in other words, in its relation to other places.

Arriving in South City via the subway station Opatov, one of three subway stations stopping in South City, offers a particularly interesting experience of the unfinished city. It was at Opatov where the city centre was to be situated. Emerging from the Opatov subway one is greeted by grassy fields whether one heads west towards the family houses of old Chodov or to

the east towards Central Park and South City's longest paneláky. There are a handful of shops inside a passageway beneath the street, while at street level there is little but the bus stop, a few kiosks and two remarkable (and remarkably ugly) concrete walls running down the middle of the very busy thoroughfare, ostensibly there to prevent pedestrians from crossing the busy road. One of the most interesting features of this banal landscape is the spiral walkway leads from the ground level up to the bus stops and the street; it is a tangible reminder—and one of the few elements actually built—of the plans to build a city centre on multiple levels (fig. 5.13).

It is in those spaces where traffic has been strictly separated that South City's anaesthetic character is palpable: a neglected park, an unused pedestrian walkway, or any one of the local centres, which together with the thoroughfares from which they are separated, are exemplary of the modern practices of separating out (see figs 5.10 and 5.11). What is most remarkable about South City is the material sense of separation that can be talked over with architects, seen very clearly on maps and diagrams, but that needs to be understood by being in and moving through the spaces. One of South City's local centres in the Opatov neighbourhood, has a half-finished system of above-ground pedestrian walkways; one can now climb the stairs of these walkways and look 200 metres down the road to the other walkway to which it was supposed to connect. There was not enough money to build an entirely separate infrastructure that would be situated above the busy thoroughfare below.

David Harvey singles out the image of creative destruction as key to the “practical dilemmas that faced the implementation of the modernist project” (1991, 16): in South City's case, the dilemma was how to build a city in 15 years that would usually take 800 to build. The figures Harvey chooses as emissaries of this creative destruction—drawing on Berman (1983)—are now ubiquitous in the history of modernist urbanism: Baron Haussmann, Le Corbusier, and

Robert Moses. The artists, architects, poets and philosophers play heroic roles in envisioning the modern future, although Harvey notes that the results may be “tragic” (1991, 18-19).

Harvey's creative destruction is defined by its creative visionaries, but what if the agent of creative destruction is not the heroic man of modernism, but the very tools and technologies through which the modernist project is realized (and without which those heroic architects are rendered impotent)? Lefebvre notes that dominant space is “invariably the realization of a master's project” ([1974] 1991, 165), but his reference points were the heroic modernists of the inter-war period. If the main figures, and scapegoats, of architectural and urban modernism are so often its male anti-heroes who do we turn to in the case of South City? Although the general layout of South City accords to Lasovský's original master plan, most if not all of the architectural details were ignored. To hear the architects' side of the story, one could plausibly claim that the crane had taken Lasovský's job as chief architect. In a recent edited collection on the culture of dwelling in the 1970s, one contributor notes: “In the end it was rather the tracks of the crane, transporting the prefabricated panels around the construction site, that determined the architecture and arrangement of 'mass housing'” (Koukalová, 2007, 75). Peter Lizon, an architect who took part in the South City competition writes: “the creative freedom of the site planning design was strictly dictated by the runs [tracks] of the construction cranes lifting the heavy concrete wall panels” (Lizon 1996, 109). In neglecting the creative impulses of the architects and the planners, crane urbanism is the ultimate expression of anonymous mass production that characterizes 20th century industrialization, aptly named by Sigfried Giedion *Mechanization Takes Command* (1948). Hruža recalls that it was not necessarily political pressure that forced architects and urbanists to build solely with the pre-fabricated panels: “in reality, the worst lobby was the state building organization—our biggest partner and the biggest

antagonist” (Hrůza 2006, 38). The “housing construction 'machine'” had become a “sacred cow of social policy” (Maier, Hexner, and Kibic 1998, 57). Lasovský went as far to claim that in South City there is a “total absence of architecture” (pers. comm.).

In her history of housing in Czechoslovakia from 1945 to 1960, Kimberley Zarecor points to the tension between the architecture of the unique building and an architecture of manufacturing, mass production, and materials. Offering a response to Lasovský's claim that there is no architecture in South City, she writes that when the architect ceases to practice his or her art, then architecture becomes “mere 'building' instead of architecture with a capital A” and is written off by historians as simply “economic and technological determinism” (2011, 296). It is no wonder then that architects would resort to such strong language—“strictly dictated” and “determined”—when describing crane urbanism as for them it is simply the state and the crane as the arm of the state imposing its will. From Lasovský's perspective, there is no “Architecture” because there were no great, monumental works of architecture that emerge from the mind of the heroic architect. In his history of concrete, Forty (2012, 249) notes that the biggest threat to architects in the post-war period was the system building of the paneláky, where the architect became simply a “technician,” whose main role was the site arrangement of the buildings. The point here is not to offer a distinction between the two kinds of architecture, but to see them both as parts of a complex assemblage, be it automobility, where the architectural and urban designs play an important role, or crane urbanism, where the architect has been reduced to mere technician in an assemblage that includes the workers who committed to memory the lego-like assembly of the pre-fabricated apartments, the unnamed inventors and engineers who came up with the particular panel technology, members of the state building company that pressured the architects, and, of course, the machines themselves. Whether a star architect designing a

sustainable city or a team of engineers both are inseparable from the “complex network” of architecture, of constructing buildings and cities (Zarecor 2011, 296).

Conclusions

To return to the Teige/Corbusier debate, I would argue that South City is at once instrument and monument, in its vision and its realization. It is a monument to crane urbanism and the functional city of *The Athens Charter*. As vision it was to embrace both the instruments of mass production and the monuments of 1960s utopian urbanism. As Rothbauerová suggests, without the cranes, they are just visions. South City was not just the work of art of the architects and their visions, but a work of art of the state.³⁰ Read in this way, South City's crane urbanism realizes Teige's dream for an architecture without architecture, one produced solely through function. Instead of claiming that South City “completely perverted” Teige's ideas of “architecture-instrument” (Švácha 1999, 134), I would suggest otherwise, not to argue the opposite—that it embraced his ideas—but that the idea of an architecture without architecture was achieved at a level Teige could not have imagined. Crane urbanism was the fulfillment of Teige's dreams, except that instead of Devětsil at the helm, it was the state in control.

Like in *The Minimum Dwelling*, the magic-city as the place where the pedestrian appropriates space, the space of imagination, and the space where people linger was nowhere to be found. The plan for the city centre was an attempt at building the magic-city, not only a nod to Expo '67 with its “Habitat” residence, but also a reference to the utopian ideas of the 1960s. In the age of automobility, the architects and planners of South City, like the megastructure visionaries, tried to put the car in its place, on the periphery, creating a city centre that would

³⁰ Here I am drawing inspiration from *The Total Art of Stalinism* (1992) by Boris Groys, who argues that socialist realism was not a perversion of the Russian avant-garde, but its realization on a level unimaginable to those artists.

draw on the energy of Expo '67. All that was missing was the magic, the city, the people, and the buildings themselves.

South City did become the quiet city (and now 40 years later it is also a very green city). All transport was put underground rather than on trams and light rail as some of the original designs had proposed, there was no industry in the area, and the residences are surrounded by forests. As Bren argues in her work on *chata* culture in the post-1968 period, a “good communist” under normalization “defined himself within the contours of his private life,” not in the public life on the city streets (2002, 126-127). In many ways, South City, its focus on the private space of the apartment and the absence of a downtown, cafes, and streets is a good example of this. Gustav Husák, as he assumed control of the Communist Party, saw to it that the party “safeguard the quiet life” as a response to the events of the Prague Spring—a “normal person wants to live quietly” (Husák quoted in Bren 2002, 123). The quiet city favours the private life of the apartment, offering people refuge from the cold order of normalization, and the subway an easy way to get out of the city.

The irony is the paneláky themselves, as the ultimate example of architecture as instrument, became in the socialist and the post-socialist period *the* monuments of socialism. In the on-line documentary *Highrise*, which features South City, one resident recalls how people would refer to the longest panelák as the “Great Wall of China.” Urban theorists and historians are beginning to appreciate and treat the paneláky as aesthetic objects, as if they were products of individual artists, not anonymous engineers, and recouping them as architecture, comparing them to the geometric constructions of Dutch painter Piet Mondrian (Švácha 1998: 49) while residents' associations have the facades painted to give them a unique identity (see fig. 5.15). We could call it, quoting Benjamin scholar Irving Wohlfarth “the aura of the auraless” (1978, 57).

To many of these residents, they enjoy and understand South City as a quiet city. Rostislav Švácha argues that suggesting the sídliště should look more like a city centre is both an “inadequate and incorrect” approach to the sídliště because from its very inception it was built on different ideas than medieval cities like Prague or Olomouc (2000, n.p). For all of its dysfunction in the beginning, South City has very much become a functional city and it is through the four functions of *The Athens Charter* that people understand their experience: dwelling, work, recreation and circulation. The dwellings are modest, a rainbow of colours replacing the uniform grey, and although the density was increased from the original plans, people like the open spaces between the buildings and are often in opposition to new development proposals in South City that would reduce the amount of open space. Many of the respondents in Musil's study, conducted in the early 1980s, appreciated the spaces between buildings, wishing that the spaces would be even larger, and although the network of pedestrian pathways was not built according to Lasovský's plan, people still appreciate the separation between cars and pedestrians. There is an excellent public transportation network that includes three subway stops, numerous bus routes, and a soon-to-be-constructed tram link, which allows people to quickly and easily commute to the centre, and any resident has easy pedestrian access to forests, bike paths and a lake in the eastern part of South City (see fig. 5.16). In this way, the birth and growth of South City follows a very circuitous route back to Teige's quiet city. For the magic-city, residents can always get on the subway and in 20 minutes frequent the same cafes and streets that Teige and his Devětsil comrades did in the 1920s.

Both Etarea and South City are models of the “city in the suburb” that Humphrey Carver was advocating at the same time in the suburbs of 1960s in Canada. It is to his work that I turn in the following chapter.



Fig. 5.9. Typical street within the residential area of South City. (This and all subsequent photos by Steven Logan, May to Aug. 2012.)



Fig. 5.10. Main thoroughfare in South City with above-ground pedestrian infrastructure.



Fig. 5.11. Pedestrian walkway. Part of South City's anaesthetic pedestrian landscape.



Fig. 5.12. Contrasting facades in South City. This picture is taken from a field where one of South City's local centres was to be built.



Fig. 5.13. Pedestrian ramp in the area of South City's proposed downtown. The ramp was originally grey, but was painted red (permanently) as part of the 2012 Street for Art festival.



Fig. 5.14. "By Far the Best": Tesco hypermarket advertisement in South City.



Fig. 5.15. One of the first reconstructed facades in South City by V. Rothbauerová, the chief architect of a later South City development.



Fig. 5.16. South City seen from the east in the Hostivař recreational area. The family houses of South City as well as houses from the previous settlement can be seen just beyond the trees.

6. When the House Turned Around: Humphrey Carver and the Post-war Suburban Landscape

Very early in life I wondered how cities could grow without destroying the surrounding countryside....I became an advocate of Garden Cities. I wrote books (*Cities in the Suburbs*) and helped to establish organizations (such as the Community Planning Association) hoping to restrain the destructive forces of city growth. But I failed....The big city, with its network of freeways, has become a monster which swallows up the landscape. That is the major change that has occurred in the 20th century.

– Humphrey Carver, 1994

While Prague architects and urban planners were criticizing the sídliště on the city's periphery, and Henri Lefebvre was closely watching the rapid urbanization of places like Mourenx, the urban theorist Humphrey Carver was offering his own critique of the Canadian suburb. The dominant element of Toronto's suburban landscape of the 1950s and early 1960s was not the paneláky, but the mass-produced single-family homes, the purchase, financing and design of which was supported by the Central Mortgage and Housing Corporation (CMHC), a Crown corporation founded in 1946 and for which Carver worked from 1948-1967. The CMHC created a system of mortgage finance, which along with the rationalization of the building industry and new ways of subdividing land and building houses, helped create the “packaged, corporate suburb” (Harris 2004, 123); it is the capitalist post-war counterpart to crane urbanism and the paneláky. The CMHC was central to the formation of the suburbs in the 1950s and 1960s the legacy of which, like the streetcar suburb, is still a part of the fabric of Canadian suburbs (Keil et al. 2015, 90; Harris 2004).

Humphrey Carver has been described as one of Canada's “leading planning theoreticians” (Sewell 1993, 44), the “most influential planner” of the early post-war years (Harris 2004, 15), and “one of Canada's most respected authorities on housing reform and the building of suburbs” (McCann 1999, 129). Although I suggest in this chapter that Carver in his influential position at

CMHC offered a similar critique of the suburbs as the architects and planners in Prague in the 1960s, the most suggestive and productive comparison comes with Karel Teige. The comparisons and contrasts that have emerged over the long time that I have worked with these two figures are the real structuring glue of this chapter. Both struggled with an idea of modernist urbanism that they thought appropriate to the expanding system of automobility in their own contexts.

Both thinkers attempted to unite architecture and urban planning with larger social and political goals. Like Teige, Carver believed he could control the forces of urbanization through so-called slum clearance and “urban surgery” in his early work on public housing in Toronto in the 1930s. Both thinkers had a dual conception of planning and poetics. Teige sought to bring together his poetist magic-city with his more functionalist urbanism in his visions for the deurbanized socialist city, rejecting both the single-family house and the personal automobile. If Teige argued against monumentality, timeless aesthetics, and art as the product of the singular genius in his debate with Le Corbusier, Carver believed that it is exactly those characteristics that are needed to bring order to the suburban sprawl he was criticizing. Teige based his poetism on the potential of new technologies to transform everyday life in the city, rejecting the aura of traditional artworks isolated in art galleries. Carver also admired the new modern technologies emerging from the Bauhaus, but he located his poetic approach to the suburbs on a resurrection of the aura of old cities, not its rejection; following Le Corbusier, he argued that the city needed great architects and planners who could mould the stuff of everyday life into great works of art: planned suburbs. Although Carver *was* critical of the way the single-family house was elevated to near mythical status by suburban dwellers or those aspiring to live in the suburbs, his relationship to the family and its stand-alone dwelling was far more ambivalent than Teige's, who rejected both the institution of the family and the family house. Carver's self-declared “house

lust,” and what he saw as the autonomy and independence conferred on a family with their own house and car clashed with his own calls for a more mature form of suburbanization that would include affordable housing in apartments and public transportation. He attempted to reconcile these positions throughout his career, particularly in his book *Cities in the Suburbs* (1962a), but his insistence on the fundamental differences between the apartment dweller and the house dweller speaks to the larger themes of the dissertation, particularly the work on automobility as autonomous mobility explored in the first chapter and the privileging of autonomous mobility as the defining feature of automobility.

As in the chapter on Karel Teige, I argue that a contradiction marks Carver's approach to urban planning and automobility. In a speech to the Town Planning Institute, Stewart Bates, president of CMHC from 1955 to 1964—who Carver puts at the “intellectual centre of CMHC” (Carver 1975, 55)—remarks: “In parts you are bureaucrats, committed to the daily task of moulding things into standard and uniform patterns. But in part you are designers and humanists trying to release people from the tedium of the mass-produced city” (quoted in Carver 1994, 55-56). Bates was also an important figure in the circulation of modernist ideas. He participated in the 1963 Delos symposium organized by the Greek architect and urbanist Constantin Doxiadis, with whom Jaqueline Tyrwhitt worked closely; the symposium was also attended by Marshall McLuhan, Buckminster Fuller, and Sigfried Giedion.³¹ It took place on a boat trip leaving from Athens and sailing around the Greek islands, and was meant to symbolically evoke the 1933 CIAM congress 30 years earlier when *The Athens Charter* was born, also on a boat trip. In his essay on the symposium, Mark Wigley argues that the aim behind this and subsequent Delos

³¹ McLuhan wrote Bates a month before the symposium in an effort to get CMHC to fund his trip to Greece. His request was denied, but in his letter he made the point that the “electric age” was creating “matters of immediate concern in housing and town-planning” (1987, 289).

meetings was to rethink the work of CIAM in a society increasingly relying on electronic forms of communication (2002, 97). Carver, however, saw new forms of communication clashing with the planning ideas he espoused, and it furthered his resolve that what was needed was a core to give form to the sprawling suburbs, a magnet that would attract people; he was more inclined to return to and implement earlier CIAM work rather than rethink it for the information age. Here, he sided with Lewis Mumford's assessment of the urban explosion in the *City in History* (1961). As I discussed in Chapter Two, Mumford connects the “exploding universe” of the car to a city that had “burst open and scattered its complex organs and organizations over the landscape” (34). Later in the chapter, I will discuss Carver's attempt to take up Mumford's ideas and return to CIAM's focus on monumentality through the core of the city.

Much of the writing this chapter will explore, both published and unpublished works from Carver's archive at the Canadian Centre for Architecture, reflects both the dual, paradoxical task that Bates outlines and the tension between the instruments that Teige promoted and the monumentality of a heroic modern architecture. In his introduction to the Teige/Le Corbusier polemic, architectural critic George Baird argues that neither architect, nor critic have been able to put “monumentality and instrumentality in a satisfactory *architectural* relationship” (1974, 81). Humphrey Carver tried.

6.1 Community Planning

Carver was born in 1902 in England and trained as an architect at the Architectural Association School of Architecture in London. He entered that program in 1924 with a mission: to learn to “make beautiful houses for people to live in” (Carver 1994, 23). After finishing the program he immigrated to Canada in 1930, and took up work with the landscape architect Carl Borgstrom (Carver 1975, 28). Carver considered himself a socialist and in his early work in

Toronto in the 1930s, while Teige was propagating the minimum dwelling through the Left Front, Carver became a housing advocate and involved in the activities of the League for Social Reconstruction (LSR), a group of left intellectuals and academics formed in 1932 (disbanding in 1942). Carver got involved with the LSR through his brother-in-law King Gordon, one of its founders. Carver contributed to *Canadian Forum*, the voice of the LSR in the 1930s, and to one of their main publications *Social Planning for Canada* (1935), in which he set out the “general principles of town-planning” and the need for a nation-wide housing program (Carver 1975, 51). Through his work with the LSR he secured a teaching post at the University of Toronto, and where he took on a central role in addressing social housing in Toronto in the 1930s. In utopian fashion that befits the modernism of the inter-war period, Carver called for “nothing less than the gradual reconstruction of the entire fabric of our civilisation” (file 20/304).³² In the depression years of the 1930s, Carver clung to his “visions and utopias rather desperately” in the face of economic hardship (1975, 46). In his office at the “Housing Centre” at the University of Toronto he covered the walls with images of public housing from the US, and from London, Liverpool and Vienna (1975, 51). When Carver proclaimed in “Planning Canadian Towns” that the goal of planning was to rebuild “obsolete” villages, control and manage growth, and “construct new settlements in which will be embodied the experience of the ages and the hope of the future” (file 20/304), he was aligning himself with the modernists who believed the only way to accommodate the new technologies of transportation and contain the growing forces of urbanization was to rebuild the city anew. Like Teige, Carver follows a long line of modernists who used the metaphor of surgery to explain the radical change needed. He praised the cities that

³² The quote comes from Carver's unfinished book “Planning Canadian Towns,” which he abandoned with the onset of the war in 1939. The ideas in it, however, offer a general outline of Carver's thinking, which he would develop throughout his career, and so I will have many occasions on which to refer to it.

planned a “vigorous attack upon their obsolete central areas—to cut away the deadwood where decay has set in. City surgery is not unlike tree surgery. You have to prune away the part that has lost its vitality in order to get new fresh growth and bloom” (file 20/304). If Teige wanted to tear down medieval Prague, Carver called for a similar kind of urban renewal in the so-called slums of Toronto: he believed that “city surgery” was required for the entire area south of Bloor Street, between Bay St. and the Don River (Carver 1948, 34). The culmination of Carver's work in this inter-war period was his involvement in the “urban renewal” of part of this area that became Regent Park, a project of which Carver was particularly proud.³³

In the immediate post-war period, Carver turned his focus towards community planning (the Canadian equivalent of the British “town planning” and the French “*urbanisme*”). The Community Planning Association of Canada/Association Canadienne d'Urbanisme (CPA) was founded in 1946, and was funded through the CMHC, through Part V of the 1944 National Housing Act entitled “Community Planning and Research,” which was to “encourage public interest in community planning” (Carver 1975, 88). In these early post-war years, the CPA was governed by a cadre of experts—architects, engineers, bureaucrats, all male—designing entire neighbourhoods. Carver called one of the major themes of his early post-war work with CMHC “design for living” (1975, 115) and from 1947-1951 the CPA's publication was entitled *Layout for Living* (the name then changed to the more neutral *Community Planning Review*).

Community planning has its roots in Clarence Perry's neighbourhood unit, which was largely an architectural and urbanistic response to the spread of the automobile. Perry argued that

³³ At the end of his life, when Carver clearly would have been familiar with Regent Park's problems, he remained an unrepentant modernist writing that there were many families without fathers, so “no wonder Regent Park became known as chaotic and a ghetto. To shelter and protect people with problems was the object of the exercise” (1994, 49). He went so far as to suggest that critiques of public housing had to do with their excellent design which made them “stand out from the general dullness of the surrounding city” and thus put their low-income tenants into an unwanted spotlight (1975, 142).

the actual design of a neighbourhood unit was “forced by the automobile” (1929, 30) and that “arterial highways must necessarily run in every direction and turn the street system into a network” (31). Housing would occupy the “interstitial spaces” in neighbourhood “cells”: “the cellular city is the inevitable product of the automobile age” (31). The “automobile menace” was a “blessing in disguise” because it called attention to the need to standardize this neighbourhood cell or unit, which would be bound, but not penetrated by the street network.

To Carver, community planning was the practical application of his idea that the physical design of the city was a “social art,” which “give[s] outward expression to the underlying shape of social organization” (1962a, 59). This connection between design and social organization was what he had initially taken from Clarence Perry's work. Community planning as the planning of something that had once developed spontaneously had now become a “technical procedure” (1948, 42).

Community planning was also an initial response to the homogeneous housing developments of the early post-war period, which Carver became more acutely aware of when he began working with the CMHC in 1948. A year following the formation of the CPA, in 1947, the Minister of Reconstruction announced that five hundred thousand houses were to be built in Canada over five years (Carver 1947, 1). From the purview of the planner with a vision for an entire neighbourhood, the focus on solely building houses results in the piecemeal construction of neighbourhoods house-by-house, “the practice of slicing up suburban land into identical lots without group planning” (File 20/304). The sprawl and homogeneity of new subdivisions was “determined” by CMHC's “mortgage instrument,” rather than by principles of “social design,” which Carver hoped would help foster sociality. In his first years with the CMHC, Carver felt out of place in a “crowd of mortgage lenders” (1975, 114) and in a bureaucracy where houses or

buildings were seen simply as “mortgageable units” or “packages for sale” (File 20/257I) rather than what he saw as the real need: “a considerable number of entirely new communities” (1947, 2). Carver felt that this was the inevitable outcome of the focus on industrialization and standardization of building houses for home ownership to the exclusion of all else, and in particular rental dwellings for families, the young and the old.

This tension is reflected in the contradictions in Carver's own writing. In *Houses for Canadians* (1948), Carver describes community planning thus:

It may be compared with the designing of the process by which the component parts of automobiles are delivered to the assembly line in a rational sequence so that the finished products can be brought to completion as economically and rapidly as possible. (1948, 39)

Carver's description reiterates a point Clarence Perry had already made in *Housing for the Machine Age* (1939) in which he argues that the automobile is “advanced” because it used the latest production methods and is built by a handful of powerful corporations, while housing is “backward” because there are no large-scale building corporations to rationalize and standardize the production of both houses and the neighbourhood unit.

But in an article for *Layout for Living*, Carver writes that although the industrialization of house construction was necessary, “the production of houses can never quite be like the factory production of cars” (1947, 2). Carver shifted his attention from the house as a product to be manufactured on an assembly line to the neighbourhood as a whole: “the individual house is itself only a part of a larger whole. The 'end-product' is not the individual housing unit, but the total community—complete with all the services and utilities which enable urban householders to live as we are used to living” (1947, 2). In moving from the house as end-product to the community as end-product, Carver situates community planning firmly within a modernist

approach to the city that called for producing space as a whole rather than just individual buildings.

Community planning refers to both the quantitative—the sheer number of houses, schools, shops, etc—and the qualitative: “Community Planning would be a dull business indeed if it could be justified only on the inhuman grounds of production efficiency” (Carver 1947, 6). Carver argued that the key element of “civic design” means different forms of dwellings arranged such that a community “comes to possess beauty and dignity.” As such, “efficiency and beauty” can have for one another a “natural affinity” (ibid.). As a planner, Carver favoured the rental dwelling because it offered a better basis for “planning and building a city” (file 20/304). The apartment building, moreover, held no meaning in and of itself, unlike the family house, and as such needed to be incorporated into a larger plan or arrangement.

Clarence Stein and Henry Wright's 1928 plan for Radburn, New Jersey—described as a “town for the motor age” (Stein quoted in Sterne 1981, 84)—is often held as the ideal of community planning and the neighbourhood unit, although it was only partially realized as the company founded to back its development was bankrupted by the 1929 stock market crash (Relph 1987, 65). Radburn is significant for two main reasons: the strict separation of cars from pedestrians, and the house turned away from the street. Radburn residents were to have a system of pedestrian and bicycle paths with which they could get to school, shops, etc. without ever having to cross a traffic artery. The cul-de-sacs, some of the first in North America, ensured that only residents or visitors would use these quiet streets, which would be connected to the major streets on the perimeter of the development. Yet even more significant, for both Carver and future suburban building, was the idea of the “town turned outside-in” and the “house turned around” (Carver 1962a, 40). Literally, the backs of the houses, which included the garage, would

face the cul-de-sac, while the front of the house would face the communal interior gardens, which would be the focus of the “superblocks.” The houses were to be centred on the communal parks and gardens far removed from the street. Carver believed that the “art of the suburbs” could be found in the particular way Stein and Wright brought together “landscape and townscape...by grouping and clustering and arranging landscape spaces and living spaces” and thus giving the arrangement of houses as much significance as the single-family house itself (Carver 1975, 117-8).

In Wright and Stein's plan, the house symbolically turns its back on the noxious, crowded street, and towards the garden and the park. This gesture affirmed the divide between the city and the suburb, between mobility and dwelling, between the house and the street. To turn one's back on someone or something is a gesture of defiance and rejection. It reflects above all the contradiction between separation and unity that marks automobility. Through landscape design and urban planning, the house was to be separated from the street and the suburb separated from the city, yet at the same time, the system of automobility would unite house, suburb, city and the surrounding landscape. In many ways, The Radburn Plan exemplifies the contradictions between separation and unity, between urban and suburban spaces at once fragmented and homogenizing that I described in Chapter Two. The suburb is united through separating cars from pedestrians and cyclists, single-family homes from apartment buildings. Carver would attempt to emulate this ideal in his vision of cities in the suburbs.

6.2 Planning and Poetics

To best understand Carver's approach to dwelling—and specifically, single-family homes and apartment buildings—which he would fully develop in *Cities in the Suburbs* (1962a), I want to turn to his relationship with modernist urbanism. While Teige was developing relationships

with Bauhaus director Hans Meyer and CIAM secretary Sigfried Giedion, Carver admired the work of the Bauhaus from afar, whether first in London while at architectural school or later working in Canada. Carver first came across the work of Le Corbusier in a Paris bookshop while he was on break from his studies in London. He describes his reading of *Vers une architecture* ([1923] 2007) as an “electrifying intellectual experience which immediately changed my whole way of looking at the world around me, at buildings old and new” (1975, 21). There is no shortage of lyrical praise for Le Corbusier and also the Bauhaus in Carver's writing. In “Planning Canadian Towns,” Carver writes, “until Le Corbusier arrived with his dazzling and elusive logic, we did not know how to transmute the industrial city into a noble and poetic form, without losing its contemporary quality” (file 20/304). In this way, Carver was taking up his own position via the debate that Le Corbusier and Teige had begun back in the 1920s attempting to negotiate the tension between Le Corbusier's view of architecture as the timeless and monumental art of composition and Teige's strict interpretation of architecture as function, as instrument. Architecture creates instruments, not monuments, claimed Teige. If Teige sought to destroy the aura of traditional works of art in his theory of poetism, Carver wanted to exalt it in his views on planning suburbs. In this aspect of the debate, Carver clearly sided with Le Corbusier, who emphasized that architecture was above all about composing the elements of the landscape. Le Corbusier argues that composition, which Teige dismissed as the “Godly mission of architecture” (Teige [1929] 1974, 90) is actually the key to the architectural plan and the way things in space come to be “architected” (Le Corbusier [1933] 1974, 96). Carver believed that it was the architect's or planner's job to bring a sense of aesthetics and beauty to the anonymous products of industry.

The contrast between instruments and monuments was central to Carver's attitude

towards housing and post-war suburbanization. Counting Mies van der Rohe, Walter Gropius, and Laszlo Moholy-Nagy among his influences, Carver recalled in a 1968 speech that “we came to believe that the most exquisite beauty and social refinement is the polished product of technology, anonymous and shining, steel and glass” (file 20/257E). Carver had his own understanding of instruments, calling the building of office buildings, shopping centres, and highways as the “art of anonymity,” their function of which is to be neutral, anonymous and conforming (1962a, 117). He refers to the apartment building as “anonymous social design exalted above [the] individualism” of the single-family home (1962a, n.p.). In his own poetical style, Carver describes the new family in a Le Corbusier building “lifted up and shown the horizon from the upper floors of the great city Habitation” (1962a, 45). Carver was fascinated with the idea of the apartment building, which the planner carefully sets amidst a green landscape.

Sigfried Giedion's *Mechanization Takes Command* studies “anonymous history”—the unknown objects and inventors of modern industrial society which “have shaken our mode of living to its very roots” ([1948] 1969, 3). Giedion describes these objects as “modest things of daily life, they accumulate into forces acting upon whoever moves within the orbit of civilisation” (ibid.).³⁴ As a response to the title of his book, Giedion calls for a balance between the domains “fit for mechanization and those that are not” (720). This was also the task Carver set for himself.

In Carver's work, there is a clear tension between the “noble and poetic form” and the city's contemporary, anonymous qualities, and between the “anonymous social design” of the

³⁴ Unlike with Le Corbusier, Carver does not make any references to Giedion's work, although he may have been exposed to his work through his friend and former colleague at architectural school in London, Jaqueline Tyrwhitt, who worked closely with Giedion (Darroch 2008).

apartment building and the individualism of the single-family house; in order to appreciate the “novelty and diversity” of the “architecture of power and speed,” forms must be arranged in the landscape so as not to disturb the city's “internal consistency” (1962a, 14). Carver appreciated the work of the Bauhaus because it did not restrict itself to individual buildings, but was able to mobilize “the whole machinery and equipment of urban life as a subject for design” (file 20/304). Modernist architecture of the 1920s and early 1930s was both a project of city building and producing space and making individual buildings or structures.

In order to assert the importance of planning and design, Carver, much like Le Corbusier before him, points toward two aspects that give the landscape its contours: order or system, “the arrangement of the parts within the whole,” and an “intrinsic quality” that gives a place character in the same way that paintings or sculptures bear the “unmistakable individuality...[of] the hand of an artist” (Carver 1962a, 19). Throughout his life, Carver likened the work of architecture and urban planning to producing a work of art, be it building houses or planning entire cities. In the foreword to “Planning Canadian Towns,” he writes:

There have found their way into this book certain ideas, considerations and expressions which may seem inappropriate to the matter-of-fact business of operating a Canadian municipality. For these we make no apology. The building of a city is Man's supreme work of art; and works of art cannot be explained on accountants' balance sheets or calculated on the engineer's slide rule.” (file 20/304)

In a 1967 letter to the Art Gallery of Ontario director W.J. Withrow, on the occasion of the City Now exhibition in the same year, Carver offers a detailed explanation of what he means by the city as a work of art.³⁵ He was not interested in how photographers capture images of city life, but in the conscious production of the city as a work of art; essentially, his point was that any exhibition on the art of the city necessarily should include urban planners and architects. For

³⁵ The letter was not unsolicited, it arose out of the possibility that CMHC would offer financial support for an accompanying publication.

Carver the new towns of the post-war period that he refers to in the letter—Cumbernauld, Scotland and Vallingby, Sweden—both of which were planned and had clearly defined city centres are not a rejection of the classical city-oeuvres of Paris or Rome, but a continuation of the commitment to building cities as great works of art.

Although Carver praises the art of building cities, he also attributes to the single-family house near monumental status as a work of art. Carver was too invested in the traditions of the single-family house and the family itself to subscribe wholly to the modernist philosophy that a house was simply a machine for living in. In 1964, Carver wrote an ode to the family house (and the family) called “A House is a Place for Flying Apart”:

A house is a machine for living in
with its pipes for bringing in fresh water
and for removing waste
its climate controls and mechanical equipment
for making meals and entertainment.
It is also a more subtle kind of instrument
containing the forces and moods,
the straining activities and the private tranquilities within a family
to grow together
and to grow apart. (1975, 133).

The single-family house expresses individualism, autonomy, and independence, qualities that Carver believes are the aims of family life. The family is not just a core unit to post-war social democracy, but it is a kind of moral guide. In the final sentences to “Planning Canadian Cities,” he writes that “the family is the biological institution around which our Housing must be designed.” The moral foundation of society—“monogamy, family affection and parental example”—function best “within the privacy of an individual home” (file 20/304). If Teige premises his theories of the minimum dwelling on the rejection of the single-family house, the personal car, and the institution of the family, marriage and monogamy, Carver makes them the moral and ethical bedrock of his vision of dwelling. Even as late as in *Cities in the Suburbs*

(1962a) when he was critiquing the homogeneity of the post-war suburb, he still very much ascribed to the rigid gender roles of the family, painting a picture of “car-borne workers and families with car-borne wives” (98), and suggesting that the businesses of the suburban town centre should cater to the “housewife's market basket” (82). As Harris writes, the suburb may have been a retreat from the rationality and efficiency of the downtown, but for women the domestic environment was their workplace (Harris 2004, 30).

Carver went so far as to name his fascination: house lust or philodomy. The terms never actually appear in any of his published work, but they do appear in his notes for a “CMHC Senior Staff Course” in 1957 and again in his notes for an aborted book project from 1965 that would tentatively have been called “A Pride of Cities.” He defines house lust as “the enjoyment of a beautiful house [which] is *par excellence* a satisfying and intellectual accomplishment” (file 20/257A). House lust is a “deep and primitive urge” to “possess and beautify a place you can love.” House lust brought Europeans to North America, becoming the “most important element in the life-style of any community” (file 20/257D). In the 1957 CMHC notes, Carver identifies house lust, along with “social expression,” “conservation of resources,” and “City Beautiful” as making up CMHC's “evangelism” (file 20/257A). By understanding the aura Carver creates around the house and home with his concept of house lust and of the city as a whole composed like a work of art, then one can better understand why he was so dismayed by the mass-produced houses that dominated the post-war suburban landscapes.

6.3 Post-Suburbia or, Cities in the Suburbs

In 1955, a few months after Stewart Bates became president of the CMHC, the CMHC established the “Development Division” and the “Advisory Group” to deal with the “creative” elements of the corporation: research and education on materials and techniques of construction,

housing design, and community planning (Carver 1975, 135). For Carver, the change at the CMHC signaled a move away from simply “suburban mortgage lending” to addressing the city as a whole (136). Carver became the chairman of the Advisory Group, and he remained in that position until his retirement in 1967; he describes these years as “the most constructive part of my working life” (1975, 149). Community planning would continue to be an important pillar of this approach. Carver wrote *Cities in the Suburbs* in 1961 while on a one-year sabbatical from CHMC. Although John Sewell calls *Houses for Canadians* (1948) Carver's most influential work, in a 1967 letter to urban planner Len Gertler, Carver wrote that *Houses for Canadians* was “out of date” and “never made a very good book;” he preferred to stake his “reputation” on *Cities in the Suburbs* (file 20/229). The book is one of the early critiques of the architectural uniformity of mass suburbia, which Carver himself situates among other urban critics of the time, including Lewis Mumford in *The City in History* (1961).³⁶

For Carver, the mass production of the single-family house that began in the late 1940s—and the government-supported mortgages that allowed families to buy houses—along with the changes in urban transportation from the streetcar to the automobile had scattered throughout the urban periphery the “bits and pieces and functions of a city” (1962a, 7). The streetcar stops kept the suburbs compact, its strip of shops and services accessible on foot to the people who lived nearby in houses that were for the most part self-financed and self-built. When I explore Willowdale's history in the next chapter, I will be able to offer a more comprehensive picture of these two kinds of suburbs which were so important to Carver's thinking. Carver's work in *Cities*

³⁶ It is worth recalling Mumford's text here because like Carver he offered a critique of the uniformity of the suburbs. As an antidote to the “suburban exodus” and urban congestion he pointed to the contribution of Petr Kropotkin, the Russian anarchist geographer, and his decentralized urban communities that took advantage of new farming techniques and the “flexibility and adaptability of electric communication” and Ebenezer Howard's Garden City, which introduced the idea of cities limited in size and surrounded by a greenbelt. Mumford's focus on *both* Kropotkin and Howard's work is largely ignored in the critical literature on Mumford, which dismisses him as a snob (Hayden 1984) or an out-right anti-urbanist (Jacobs 1961).

in the Suburbs should be seen in the context of these two changing suburban assemblages: self-built house-streetcar-linear urban form and the mass-produced house-automobile-sprawl.

To understand Carver's work in *Cities in the Suburbs*, it is also necessary to return to “The Heart of the City,” the theme of the 1951 CIAM congress. It was co-organized by Carver's former colleague at architectural school in London, Jaqueline Tyrwhitt, and included two Canadian CIAM groups: Ottawa, represented by Alan Armstrong, the community planning expert in Carver's Advisory Group and the first director of the CPA, and; Vancouver, represented by Peter Oberlander, who was Carver's assistant in his first years at the CMHC. Just as CIAM's 1929 meeting on the *Habitation minimum* was central to Teige's *The Minimum Dwelling* ([1932] 2002), the idea of the core of city and suburban life developed at the 1951 CIAM meeting is central to Carver's visions in *Cities in the Suburbs* (1962a). Although he makes no direct references to the meeting he seemingly refers to the work of CIAM on a number of occasions, writing, for example, that “Le Corbusier and the advance-guard of European architects were the first to rediscover the 'core'” (1962b, 110). In his 1957 “CMHC Senior Staff Course,” he describes “three scenes” in the city: “the Core,” “the old city” and “the suburbs.” The aim of the core is to create some “civic design” in the commercial centres of cities (file 20/257A). In *Cities in the Suburbs* (1962a) he writes that the suburban explosion has been matched by an increasingly powerful and concentrated downtown, and although it is “the core” of the city, it is no longer “the heart of the city” (1962a, 7). The core of the city has turned into the “control centre for the new public and private bureaucracies” and this “tremendous upheaval” has caught “the art of town planning unprepared” (1962b, 59).

I would argue that Carver took the idea of the core and brought it to the suburbs heeding the call of the president of CIAM, Jose Luis Sert, who argued that the core was as much about

“suburbanism” as it was about “urbanism” (1952, 4). What may have in the past come together more spontaneously without urban planning—like the streetcar suburb—now had to be intentionally composed and arranged; for the attendees of the CIAM congress, this meant giving space back to pedestrians. As Giedion explains, through history the core has been about “the right of the pedestrian” to be at the centre of “community life.” Giedion believed that this “human right” had been “overridden” by the car and the aim of planners and architects of the core should be the “reconquest of this human right” (1952a, 18).

Carver's interest in establishing a core in the suburbs relates to his growing concern that technologies of mobility, including the automobile, were becoming more important than the ideas of tradition and monumentality which he associated with the city centres of old Europe. Communication technologies like the telephone, radio, and television allowed people to be physically isolated from one another while still maintaining social proximity. In his notes for an aborted book project in 1965, Carver claimed that the mobility of the population was “one of the worst features of city life” (File 20/257D). People were too “restless” and “unattached” to form coherent, stable and permanent communities (*ibid.*). The new transportation and communication technologies along with the “vehement dedication to home ownership” and the “single-family house” are the “anti- nucleation” influences of a mobile-centred way of life (Carver 1962a, 67).

In an article written for The United Church of Canada in 1967, Carver describes the mass- produced suburbs, the skyscrapers, and apartment buildings as evincing a lack of “symbolic representation.” The urban landscape is “expressionless,” “anonymous” and “unsymbolic,” as such the “genuine natural environment of a mobile industrialised society” (File 20/257J). The art of city building is not simply about instruments—the “ultimate efficiency” of automobiles and expressways and the “glistening efficiency” of the downtown skyscraper is an

art of a “cold and compromising kind.” It is worth recalling that Teige, writing in 1947, had found that the world he was living in—the world of highways, billboards, gas stations, factories and train stations—was impossible to live in ([1947] 1994, 283).

Carver's critique of the existing suburbs was at the same time a critique of the universal goals of home ownership. His opinion toward home ownership is conflicted, if not contradictory: he acknowledges the autonomy and independence the house gives a family, but it also becomes a “self-contained island” and an “anonymous part of the great telecommunication system” (1962a, 67). Houses were allowing families to isolate themselves and thus discouraging any concrete forms of city organization. Carver writes that “the city is an abstract continuum...without recognizable shape or focus...in which individuals float in a kind of unattached space” (68). This very much reflects the argument Raymond Williams makes in his discussion of the complex of communication and transportation technologies he refers to as serving “an at once mobile and home-centred way of living: a form of mobile privatization” (1974, 26). Williams argues that television broadcasting served a dual function, allowing people to connect to the outside world without leaving their homes. The increasing privatization of the suburban population was made more pronounced by the separation of work and family life, and necessitated “new kinds of contact” (27). Before the Internet, Carver suggests that “ubiquitous mobility and telecommunication,” was turning the city into “a universe within which everyone is in the immediate presence of everyone else,” but which was “depreciat[ing] the value of local community” (Carver 1962a, 67). Carver's thinking is very much a product of the “contradictory pressures” of mobility and the “dissolution of older and smaller kinds of settlement” (Williams 1974, 27). His call for cities in the suburbs was a way of reproducing those older settlements calling not for new kinds of contacts, but for reproducing the old forms of contact—life in the

core.

Within the context of post-war suburbia where cars and houses are “ephemeral, disposable, mortgageable [sic], replaceable, exchangeable” (1978a, 5), Carver pleads with the reader of *Cities in the Suburbs*: “can we leave nothing permanent behind” (1962a, 75)? In his preparatory notes describing the purpose behind the title, he writes:

The stuff of which cities are made is scattered in pieces and fragments through this expanse. Can we somehow arrange their pieces so that the new “cities in the suburbs” will be triumphant in their comparison with the dignity and excellence of the finest cities of other ages? (file 20/303)

In these notes, Carver reiterates his commitment to community planning, writing that the single-family house along with the family may form a “sacrosanct, closely-knit and internally responsible unit,” but there is no corresponding image for the larger neighbourhood of houses; “the mass result of a large number of these houses...expresses nothing in particular” (file 20/303)—at least to Carver—aside from the triumph of industrial and construction technology. The monumental civic space of Carver's cities in the suburbs were to be a corrective to the mobile and home-centred way of life, a return to a mythical past that was in the process of being erased.

In *Cities in the Suburbs*, he argues for a network of “suburban Town Centres” at key junctures in the suburbs which would attempt to contain the explosion of post-war urbanization and offer a focal point and gathering space for suburban neighbourhoods. Carver also acknowledges that one of the failings of suburbs like Levittown or other post-war, mass produced suburbs was the lack of a diverse stock of housing, both owner and tenant occupied, to accommodate a diverse population: young and old, families and single people, rich and poor, etc. If the “standardized material” of the suburbs is to be made into a “work of art” it needs “variety, surprise and contrast” and not just row upon row of sprawling family houses (1962a, 16). Carver

describes the unwritten laws of post-war suburbia thus: “No kind of building but a family house shall enter here. No apartment houses for young people or flats for old people. No corner store. No housing for those who are outside the privileged circle of home-owners” (ibid.).

In *Cities in the Suburbs* (1962a), Carver imagines urban environments that could harmoniously blend the poetic and the anonymous, the traditional and the modern, and the monumental and the instrumental. In concrete terms, Carver envisions suburban town centres for every four or five neighbourhoods of 5,000 residents each, and so a centre would serve roughly 20-25,000 residents, which Tyrwhitt in her scale of differently-sized cores calls the “TOWN or URBAN SECTOR,” the “smallest unit that, in the western world, can be socially and economically self-sufficient” (1952, 104). This type of core, within the “urban constellation” of cores of different sizes, usually has a “civic character” (ibid.). The city centre has four parts: a marketplace, a place for performances and education, the seat of government, and finally the church, which deserves a “special place in the arrangement of the city” (1962a, 96). In contrast to his argument in *Houses for Canadians* (1948) that house building should be carried out by large private corporations, here the government plays a larger role in purchasing ahead of time the land that would become the city centre. Clustered around the city centre would be apartment buildings for the young and the old, and the people who could not afford homes. He describes the lives of apartment dwellers who take transit as “dependent” and “incomplete” and so they need to be close to the city centre (1962a, 18). The single-family homes, whose dwellers according to Carver are self-sufficient, autonomous and independent, could be located much further from the town centre.

In his suburban town centres, Carver seeks to construct an art of living and dwelling outside of the dictates of technological and corporate efficiency. Carver believes that “true

artistic expression” can only be found in places concerned with the “meaning of life itself” which did not evidently include alienating forms of bureaucratic labour (1962a, 117). Carver wants to emulate the timelessness and monumentality of the churches, cathedrals, and squares of Europe. His suburban town centre is a near mythical place freed and strictly separated from the efficiency and the “practical engineering approach,” which has “blotted out any opportunities for excellence in the modern city” (ibid.). He wants to understand and in effect offer a template for a suburb that was not defined by its arteries and expressways, nor by modern forms of work. Although the model of sub-centres that followed in the late 1960s as we will see with Willowdale was premised on precisely the opposite—the combination of offices and residences—it speaks to his interest in maintaining a utopian space separate from the sphere of bureaucratic work. This was also how he distinguished the Canadian, democratic approach from the Soviet approach to building linear cities in which the worker lives next to the factory, separated by a green belt: “this model plan expresses the subservience of the worker to the machine.... We prefer to recognize a man politically, not in his capacity as a worker, but as a private citizen” (1941, 1).³⁷

Carver's vision of cities in the suburbs illustrates the tensions between separation and unity, between explosion and implosion. Although his town centre offered rental dwellings and public transportation, it did not question the separation that defined modernist urbanism, and it promoted the idea of automobility as autonomous mobility, perpetuating rather than demystifying a suburban life—defined by home ownership and a car in the garage—as independent and autonomous.

Although he acknowledges the importance of different kinds of dwellings and access to public transportation in his suburban town centres, he still privileges the car and the house as the

³⁷ Carver's example was Magnitogorsk, a town planned by Ernst May, and which Teige mentions in *The Minimum Dwelling* ([1932] 2002) as an example of a linear socialist city.

sole bearers of autonomy and independence. The car “is a completely, self-contained, self-propelled machine” (1947, 2) and the single-family household “a self-contained, independent operational unit” (1962a, 18). Here I am pointing out a certain tension in Carver's thinking between the home and the car that reflects some of the fundamental problems I discussed in Chapter Two with regards to the bracketing off of automobility from its supposed side-effects.

This contradiction between separation and unity is most visible in his view of nature and its relationship to automobility. Although Carver offered significant praise for Howard's Garden City and Stein and Wright's Radburn Plan, he offered two important caveats. In his preparatory notes to *Cities in the Suburbs* he claimed that the “failure” of the Radburn Plan was turning the house so that its back faced the street. It was not because he believed that street life should be accorded more importance, but that the “route of approach taken by a car cannot, in fact, be regarded as the back....Life and liveliness revolves around the family car as a possession almost as important as the house itself” (file 20/303).

Carver felt that the automobile had also changed the relationship between city and garden too profoundly for Ebenezer Howard's designs to continue to be relevant. Howard's Garden City was unique in that it allowed residents to reach green spaces by foot or on bike, not unlike South City, but cars offer access to an “infinity of open country outside the city” such that Howard's idea of the “city-in-a-garden” has been replaced by the “house-in-a-garden” (Carver 1962a, 55). Self-sustaining satellite cities in the age of automobility are unnecessary because “free-ranging travel on regional parkway systems” can easily connect the suburban home dweller with the open countryside (60). For Carver, the car was an object of liberation from the built landscape to the “infinity of open country outside the city” (55).

6.4 Where the Suburb meets the Country

The re-worked relationship to both the agricultural and recreational spaces of the city's hinterland is central to Carver's vision of *Cities in the Suburbs* as it was for Teige's deurbanized green city. But whereas Teige sought to collapse the distinction between dwelling and nature, Carver envisions their simultaneous unity and separation. For Carver, the greatest benefit of the system of automobility is its ability to connect people to nature, a subject and an *idea* of nature that Alex Wilson develops and critiques at length in *Culture of Nature* (1991). For Wilson, nature understood as a space of recreation is inseparable from the system of automobility that allows people to access these places at all. Wilson nicely captures the relationship between nature and technology found in Carver's thinking: “the love of nature flourishes best in cultures with highly developed technologies, for nature is the one place we can both indulge our dreams of mastery over the earth and seek some kind of contact with the origins of life” (Wilson 1991, 25).

Before I look at this aspect of Carver's work, I want to discuss Carver's upbringing in England and his appreciation of landscape—he began his career in Toronto working with a landscape architect. Carver's years in England were formative, and in particular his childhood lived amidst the “green and black landscapes” (Carver 1975, 49). Born in a suburb in Clent, England, Carver lived between two different landscapes. On the one side was the Black Country, a “shadowy grey landscape under a pall of smoke” and on the other the Forest of Arden, the “gentle, static, and lyrically beautiful” villages of pastoral England (9). In the contrast between city and country, Raymond Williams writes that “we become conscious of a central part of our experience and of the crises of our society” (1975, 289). Williams also grew up gazing upon the landscape of the Black Country, but from the other side of the border, in Wales and so “our experience” was directly related to Williams's own experience. The idea of landscape was

important to Carver. He named his autobiography *Compassionate Landscape*—“two of my favourite words”—as a “kind of thank you to the world which has given me so much enjoyment—the mountains, the sea, the woods and gardens, in all their seasons—and all the people I have known” (1994, 69). Williams writes that the very idea of landscape already implies separation and observation (1975, 120). It was also inseparable from the car, as Carver believed the car gave urban dwellers the opportunity to fulfill the dreams of landscape painters: “to reach into the further world of imagination and infinity” (Carver 1962a, n.p.) Carver's vision in *Cities in the Suburbs* was a landscape that both belonged to and was separated from the urban region. In the following section I want to show how through the contrast between these two landscapes in England, and later between the urban and rural landscapes of Canada, Carver became conscious of himself as an urbanist and modernist.

This paradoxical belonging and separation was magnified by the car, which allowed and to a certain degree necessitated thinking beyond the city and to the region as a whole, which included the country and recreational regions. Although Carver laments the “ubiquitous mobility” of both transportation and communication technologies, his monumental view of nature at once separated from and connected to dwelling is impossible without the car. Although he does not attribute it to the expansion of automobility, Carver writes that Muskoka can be “as much a part of Toronto as the corner of King and Bay” (1962a, 54). Carver claims that places like Muskoka are “part of the urban scene,” but his stance following both Wilson and Williams is one of separation and mastery. At the same time that the automobile and its highways would separate dwelling from nature it would paradoxically act as that which would unite city, suburb and landscape solving the problems of “metropolitan unity” (1962a, 58). Rather than see the suburb, city and landscape as separate entities, Carver believes they should be thought of as “all-

inclusive regions containing both the city and its outlying possessions in the woods and on the lakes” (ibid.). Carver rightly acknowledges that the forests and lakes of the outlying regions should be considered inseparable from the city—it is often the source of drinking water—but they became part of the region in a particular way, as “a place of leisure...attached to the schedules and personal geographies of an urban society,” and to where urban inhabitants travel on weekends or on summer holidays (Wilson 1991, 26). Harkening back to the first parkways of the New York City region, Carver suggests that parkways and freeways would create a unity between the suburb and its “spacious playgrounds” (58). The highways would be the bridge between the city and the country, giving urban dwellers a chance to “share with farmers an interest in cultivating the land for crops and fruits and dairy products, *as much for their scenic as for the food value*” (Carver 1962b, n.p., emphasis added). These recreational and agricultural spaces are enveloped and to a large degree created by both urbanization and industrialization. Still, Carver's attention to the disappearing farmland in the area around Toronto was prescient, as in 1970 the Toronto-Centred Region Plan called attention to the “quantities of land...removed prematurely from agricultural and recreational use” within the “commuting area surrounding Metropolitan Toronto” (quoted in Sewell 2009, 43).

Like Carver's sense of house lust, nature was something to be “possessed” as an “open space for recreation” (1962a, 54) or conserved for “future use and enjoyment” through planning parks and highways (57). Carver's understanding of nature is inseparable from both the automobile and the single-family home and reflects the modern obsession with controlling nature and the natural world. Nature is something one goes to, that one looks after, cares for, enjoys and protects, rather than something inseparable from human, cultural activity. Carver creates a mythic utopia around the house, the car and nature.

Ironically, it is the automobile that for Carver can renew the city and suburban dwellers' relationship with the "open horizon of land and sky" (1962b, 48). Carver's post-Garden City is premised on a very North American idea of nature that is above all seen from the car whether on a nature parkway, campground or in a remote part of Algonquin Park. Carver's experience of nature is solitary, but also fragmented, made more atomized by the distances between the dwelling and nature that the car, in theory, overcomes. In many ways, Carver's views echo automobile advertisements in which the urban and suburban dweller's relationship to nature is inseparable from automobility.

Although Carver argued that the city, suburb, countryside and hinterland beyond should be thought of as part of one urban region, he still believed that "the suburban city should meet the country with a 'clean' edge" (1962b, n.p.), ostensibly so he could continue to have these experiences. The European walled medieval city is often looked at in this way, its walls marking the boundary between city and countryside and mediating the relationship between city and rural dwellers. This was also Ebenezer Howard's view of the relationship between city and countryside: it was accessible to anyone on foot or on bicycle. Carver laments the fact that the sprawl of the regional city has not only eliminated that fine distinction between city and countryside, but has threatened the city's food supply by encroaching on the valuable agricultural land in Ontario.

By his own admission, this rather simplistic "clean edge" divide between city and country had already been thrown into confusion with the rapid processes of suburbanization and the expansion of automobility. As early as the 1930s, Carver saw the spread of a new kind of suburbanised landscape that calls to mind Sieverts's description of the in-between city:

On account of the mobility and flexibility of modern transport, the suburbanization

of the rural hinterland has been enormously accelerated; the city has set up a process of infiltration and “softening” of the country. There is no longer a clear division between Town and Country. Previously it had always been possible to walk out from the gates of the city and find oneself immediately in the country; now the front has become fluid and in between Town and Country there is a wide transitional area which is neither one nor the other. (File 20/304)

Carver premises his vision of nature upon a simultaneous, and contradictory, critique of “ubiquitous mobility” as described above and a celebration of mobility and mastery in the access to the hinterlands which the car provides. In a revealing passage from *Cities in the Suburbs*, he asks: “What's the use of a car if you can't get to the water, the woods, and the mountains? What's the use of getting there if water, woods, and mountains are not yours to enter (1962a, 55)?” These are quite remarkable questions because they identify the main role of the car as not about commuting, but as a form of escape and as a way to create connections to the surrounding countryside. For Carver, the car is simply a tool, an intermediary between suburb and landscape, when in actuality it is in Latour's sense a mediator that in connecting these two places, irrevocably changes them both. Suburb and nature fundamentally change with the expansion of automobility, as the car increasingly becomes the sole bearer of auto-mobility; as I mentioned in Chapter Two, the role of connecting nature and city had originally fell to the bicycle. The idea of escaping the city and the notion of a recreational landscape are inseparable from the system of automobility that develops in tandem with the *idea* of nature and with the very ability to get to those places. It is only through automobility that the recreational landscape and the suburb can be at once separated and connected. This is a nature formed and formatted by automobility and an idea of nature denied to those people who do not or cannot drive.

With Carver's praise of the ability of the automobile to connect people to the “playgrounds” of nature, we are back to this chapter's epigraph, the crux of which was Carver's claim that he failed to keep the “destructive forces” of city growth from swallowing up the

countryside. As automobility expands, so do the distances between built-up parts of the region and the surrounding countryside making them more difficult to reach particularly for those who do not own a car and in Carver's case for those too old to navigate a busy highway. The lack of green spaces within the city exacerbate this divide, leaving the car-less inhabitants stranded on an island of concrete and pavement.

Instead of uniting the region as Carver thought the scenic parkways and freeways would do, automobility creates a wedge between urban inhabitants and the region to which they supposedly belong, but which they have no access to. It took Carver until the age of 92 to reach this conclusion. But in light of this realization, he was able to retreat to the world of his single-family home in the well-to-do leafy neighbourhood of Rockcliffe Park Village in Ottawa where he declared “small is beautiful. We like it just the way it is” (Carver 1994, 98).

Conclusions

Humphrey Carver failed. At least, if we are to believe the claims of a 92-year-old man looking back on his life. We could say he failed to put the instrument and the monument into a satisfactory relationship. Carver came face-to-face with the contradictory effects of automobility, its seemingly limitless expansion, the freedom to go where one want, when one wants, paid for by the network of highways filled with traffic. If Carver's admission of failure is to be pinpointed—that he believed it was *his* failure is itself revealing because it means he believed the expansion of automobility *could* be controlled—it is with this contradiction between separation and unity, and Carver's belief that the system of automobility could be controlled through urban design, as if to solve the problems of automobility means simply the proper arrangement of dwellings, roads, shopping centres, and freeways and parkways.

In his discussion of Lefebvre's abstract space, Stefan Kipfer writes that abstract space is

hegemonic because of the way it incorporates the aspirations of the occupants of single-family houses and apartments, in the same way that automobility is hegemonic because it offers potential car drivers flexibility that other modes cannot. Kipfer suggests that the “bungalow” and the “high-rise tower”—and I would add the car—“embody hopes for social reform, domestic harmony, and a reconciliation with nature” (2008, 2000). All of these hopes are at work in Carver's support for rental dwellings, his “house lust,” and his love of nature. As an influential urban theorist, Carver was a key actor in this post-war production of space that defined the everyday life of automobility—that is, car-driving and the house in the suburb were about autonomy and independence. If the work of automobility theorists show anything, it is that car drivers and home dwellers are just as dependent as their apartment-dwelling, public transportation-using neighbours. The illusion of autonomy, freedom and independence that perpetuates the expansion of automobility, creates an inequitable system that favours car drivers and home owners.

Carver though had already begun to realize this after his retirement in 1967. He referred to himself as an “old man groping and stumbling in the dark...trying to raise in my mind some picture of the... 'post-suburbia' habitat” (1979). “I will stumble on,” he wrote in a 1970 speech in Waterloo entitled “Freedom of Choice versus Planning in the Urban Community,” “to try and make sense of this conflict between 'planning' and 'freedom of choice’” (File 20/241). He was referring in particular to the conflicts around the planned Spadina Expressway in Toronto; the debate around its building was raging at the time until its cancellation in 1971. Carver not only saw a new turn in suburban growth, but he saw an increasing distrust around him of the grand visions of planners like himself, and it created in him a “desperate feeling of inadequacy,” as he admitted in that speech at Waterloo. Carver felt that it “dreadfully unpopular” to be a planner at

this time (file 20/241), in part because the top-down planning characteristic of community planning was being rejected by activists like Jane Jacobs. He seemed clearly disturbed by these changes as he struggled to maintain and reconsider his own positions as evident in the following realization:

In planning the urban environment, are we now for the first time beginning to understand that man is himself part of that environment. He is not only the person who makes the urban environment and the person for whom it is done. He is also a critical part of the ecology. And he is a confusing creature, as perverse and controversial as Jane Jacobs, as innocent and angry as some people who have to suffer living in slums.

Although he continued to describe the people “living in slums” in typical modernist fashion, Carver was also re-thinking the role of planners, and his view of the environment and ecology. By the late 1970s, Carver acknowledged that the spread-out pattern of post-war suburbia spurred by the “footloose automobile and cheap fuel” was no longer “quite so sensible.” In the post-war period, he reflected, the “sacred goal of civilisation” was for every person to own a house and a car. In this context, CMHC, and the associated industries of building and finance, “acquired an aura more sanctimonious than any ministers of the church” (file 20/132). Although he may have thought Jane Jacobs both “perverse” and “controversial,” it was in light of her work that he rethought his planning ideas. He admitted in a 1979 speech that in “sorting things out” planners create “destructive, sterile and uncivilised” environments.

I want to see Carver's attempts to imagine the city in the suburbs as one of modernist urbanism's response to the urban explosion—the demise of the classical city, which Carver associated with the European cities of old, the rise of urban developments on the peripheries of cities marked by CMHC's house building and community building machine, and the increased dominance of automobility. Carver's lifelong work can be seen as a struggle between what he saw as the anonymous forces of technological expansion and automobility and the idea to build

cities as great works of art, very much in the tradition of the cities of the past. Carver encompasses both positions in the Le Corbusier/Teige polemic, and at the same time inhabits two positions simultaneously in his reaction to the urban explosion: a traditional one that upholds the nuclear family, traditional roles, moral values, nature, and a technocratic and bureaucratic one that calls for the efficiency and professionalism of a corporation like the CMHC (Ross 1995, 4). Carver offers a utopian vision of dwelling freed from the dictates of industrial and technological rationality, but, paradoxically, access to that utopia was restricted to those who could own their own house and car. Carver agreed with Teige in one way that the single-family house could not be a catch-all solution for housing shortages. Teige attempted to radically socialize utopia by giving everyone access to green spaces, but that was premised on the outright rejection of the house and garden. Carver attempts to fight against the in-between landscapes of the urban periphery, what he called the forces of “anti-nucleation,” by the conscious building of suburban town centres.

Expo '67 marked “the beginning of the end of optimistic dreams” that Carver associated with the 1955-67 period, when he was chairman of the CMHC Advisory Group and when “the concepts of a new urban Canada began to ferment in people's minds” (1975, 193). Carver felt Expo '67 was remarkable in the way it faced the problems of housing and urban life in general, particularly through Moshie Safdie's Habitat, where he and his family stayed. (During Expo, one of the units was reserved for the use of senior CMHC bureaucrats.) I could imagine Carver, on the cusp of retirement, standing in one of the small gardens in Safdie's Habitat and feeling a sense of pride at Canada's achievement at Expo, while at the same time feeling a tinge of sadness for the end of an era, *his* era.

In the next chapter, I turn to the rebuilding of Willowdale, in the suburb of North York.

The political context radically differs from South City, but Willowdale's redevelopment also emerges out of a modernism in the 1960s that was preoccupied with mobility and creating centres within the suburban landscape. In the wake of the publication of Carver's *Cities in the Suburbs*, North York's planners were beginning to think about turning Willowdale into a city centre in the suburbs.

7. Vision(s) in Motion: The Case of Willowdale, Toronto



Fig. 7.1. Looking towards Willowdale from the South side of Highway 401. (Photo by Steven Logan.)

At Weissenhof, Germany, in the year 1927 Europe's best architects planned and developed a Demonstration Project of community planning and architectural design....North York is the appropriate locale for a *new* Demonstration Project for North America.... Inventiveness, daring, advanced ideas and concepts in the Yonge Street corridor, just as at Weissenhof 41 years ago, might become the “norm” for developments throughout Canada, indeed the world.

– North York Mayor James D. Service, 1968

In 1962, the year Carver published *Cities in the Suburbs*, he also wrote a companion piece on the “Need for Focus” in housing where he elaborated on his city in the suburb idea. He turns specifically to Yonge Street—“The Main Axis of Toronto”—on which “a series of focal points” can serve for the design of “sub-centres” (59): “At St. Clair and Finch are well developed hearts of local communities; these may be prototypes for future centres farther out on the axes of the city's growth” (1962b, 62). Yonge and Finch was to be the northernmost starting point for Willowdale's redevelopment. Here Carver connects his thinking on cities in the suburbs explicitly with Toronto, seeing Willowdale as a prototype for future cities in the suburbs.

In 1968, North York Mayor James Service gave a speech on the occasion of the public

presentation of what was known initially as the Yonge Redevelopment Plan. In that speech he compared Willowdale to the Weissenhof housing project, clearly placing high expectations on the redevelopment of this suburban strip, which was to become the centre of the newly-formed Borough of North York. The 1927 Weissenhof experimental housing settlement in Stuttgart, Germany under the direction of architect Mies van der Rohe, brought together 17 architects, including Le Corbusier, Bruno Taut, Mart Stam, Ernst May, and others, to build 33 houses. Teige called Weissenhof “an event of international significance for the entire modern world” ([1932] 2002, 187), while Ladislav Moholy-Nagy called it the “most spectacular demonstration in the history of modern architecture” ([1947] 1965, 108). Service situated Willowdale's redevelopment within the history of modernist urbanism.

Less than 40 years later, urban critic John Sewell (1996) wrote an article on Willowdale in *Now Magazine*, one of downtown Toronto's free weekly newspapers. Sewell is a former mayor of Toronto and has written two important books on Toronto's “struggles with modern planning” (1993) and with the shape of Toronto's “suburban sprawl” (2009). He claimed that the stretch of Yonge Street that runs through Willowdale, with its seven lanes of traffic, had become “a rushing river of noisy, dusty, smelly, dangerous vehicles” impossible to cross. He added: “nor is it fun walking on the sidewalk beside this mayhem” (17). Sewell quotes then North York Mayor Mel Lastman who felt that “the streetscape turned out like hell. It's awful. It's not what I wanted” (17). The street is again a focal point in the legacy (and critique) of modernist urbanism.

In many ways, these three moments in Willowdale's history sum up many of the themes that this dissertation has thus far been exploring: the circulating character of modernist urbanism, from 1920s Germany to 1960s suburban Toronto and the tension between urbanization and automobility and the need to build a city that would respond to these forces as Carver elaborated

at length upon; the end result, which Sewell describes as overrun by cars, is precisely what the post-war CIAM architects had wanted to prevent by restricting the use of cars and separating pedestrians from cars.

With the title of the chapter—visions in motion—I want to make explicit how Willowdale was an important node in the circulation of modernist urbanism, and how it sought to address the forces of suburbanization in Toronto and North York by creating a city in the suburb. In this chapter, I suggest that the visions for Willowdale, first articulated in the 1960s, were guided by the idea of “vision in motion,” itself inseparable from automobility and changing forms of dwelling, and a concept which, as I showed in the introduction to the dissertation, circulated among urban planners and theorists. Both the Weissenhof and the Moholy-Nagy references beg the question: what can a bedroom suburb of the city of Toronto, not known for its avant-garde architecture and urbanism, have to do with the leading ideas and figures of 1920s modernist urbanism? How did Willowdale become a demonstration project for the quintessential modernist city in a suburb?

The naming of this chapter acts as a unifier for many of the ideas presented in the case studies. In one sense, the term refers to Moholy-Nagy's description of changes in space-time experiences that were being expressed by modernist architects, artists and theorists, and in reference to cities specifically, in how planners and architects were enamored with and taken in by the new speeds of the automobile and the architecture of automobility, mainly highways; for Moholy-Nagy and others, vision in motion was cars in motion. This will become particularly clear when I describe Willowdale's redevelopment plan by the urban planner Murray Jones and the modernist architect John C. Parkin. I also want to read the chapter title in a second sense as visions or ideas in motion, a distinct take on and elaboration of “Corbusier's circulating

modernist urbanisms” (McFarlane 2010, 727) discussed in Chapter Three. Ideas on circulation travel well, they circulated. Yet, as the title suggests, they were just that: only visions. As in South City, and many other modernist developments, the grandiosity of the visions and the demands they placed on the landscape, not to mention the city's coffers, virtually assured that they would not be realized. Willowdale was no exception. Although most of the monumental proposals in the Yonge Redevelopment Study remained only visions, they represent one of the final attempts to realize a great work of modernist urbanism in the age of automobility.

7.1 A Short History of Dwelling and Transportation in Willowdale



Fig. 7.2: Looking east from Yonge Street along Hillcrest Avenue, 1913-14. The image appeared in a booklet on Kingsdale prepared by Wright's Ltd. It shows the beginning of the transformation of this still largely rural landscape. The tracks of The Radial Line are visible in the foreground. (Photo courtesy of John Quigley.)

Willowdale occupies an important place in the history of urbanization in Toronto because

it grew up on Yonge Street, the main north-south street connecting the city to its hinterlands and dividing the east and west parts of the city. Beginning in 1896, Yonge Street was traversed by The Radial, an electric streetcar traveling between downtown Toronto and Jackson's Point, approximately 90 km to the North. Willowdale along with the other cross-road villages of Lansing and York Mills to the south and Newtonbrook to the north, were the key stops along the route through the then City of York. Willowdale began as an important crossroads and in its links to transportation has been village (horse-drawn carriage), suburb (streetcar and automobile), and now city sub-centre (subway). In a similar way, Banham (1971) shows that Los Angeles, supposedly the quintessential “autopia,” developed in tandem with the inter-city rail lines, and only later would the ubiquitous highways come to dominate, largely following the routes established by the railroad. Los Angeles, he writes, is better thought of as a “transportation palimpsest,” and so to equate the city with cars ignores the city's history with other forms of transportation (1971, 75).

Although Willowdale began its life as a cross-roads village along Yonge Street, from the beginning of this research, identifying Willowdale as an actual place has been difficult, as opposed to South City, which as a planned development with an architecture very distinct from its surroundings, had very clear boundaries. With no distinct boundaries to speak of—technically it now only exists as a municipal electoral boundary—Willowdale is as much an idea as a place. It was, and is, at once village, suburb, postal district, and city centre. Willowdale existed according to the laws of landmarks, zoning, and roads making up Toronto's grid system. In his history of Willowdale's farms, Scott Kennedy notes that “the name 'Willowdale' has defined different areas through different eras” (2013, 9). He adopts the postal district boundaries set in the mid-20th century to define where Willowdale begins and ends to tell his story of farms (10),

yet Willowdale the place is much like the letters of the word “Willowdale” scrawled on an envelope: it defies physical boundaries. Willowdale is also defined through the way it is mapped, presented in city plans, real estate pamphlets, photographs, and in the imagination of its inhabitants, planners, architects and developers. South City may have clearly demarcated physical boundaries, but like Willowdale, it too is much more than the seemingly static buildings in the landscape, defined by and through the complex relationship inhabitants, planners and architects have with the sídlišťě.

Although South City was conceived as late as the 1964 Prague urban plan, Willowdale began its existence, in name, as a post office, established on March 28, 1855, and so I will briefly sketch this early history. Willowdale was named by one of its most prominent residents, the Scottish land surveyor William Gibson. He moved there in 1829, and in 1851 was made Superintendent of Colonization Roads. Opening up the landscape to settlement, in this case mostly farming, meant clearing roads, colonizing an already lived-in wilderness. At this early stage of colonization, transportation and private property re-defined the landscape. In this colonial environment, urban planner and theorist Hans Blumenfeld writes that the “street plan was the city plan” because the only public spaces were the concession roads. Surveyors were the “high priests” whose straight lines ignored the contours and natural forms of the landscape (Blumenfeld 1967, 305). The area around Willowdale was no exception—the 200-acre rectangular lots ignored the hilly landscape and the many rivers that ran through the landscape.

Being situated along busy Yonge Street, Willowdale and the other Yonge Street communities have always been the beneficiaries of the latest changes in transportation. In 1828, a stagecoach line began running up and down Yonge Street between Joseph Bloor's Hotel in the city of York (now Toronto) to Mr. Barber's Tavern in Newmarket, and then on to Holland

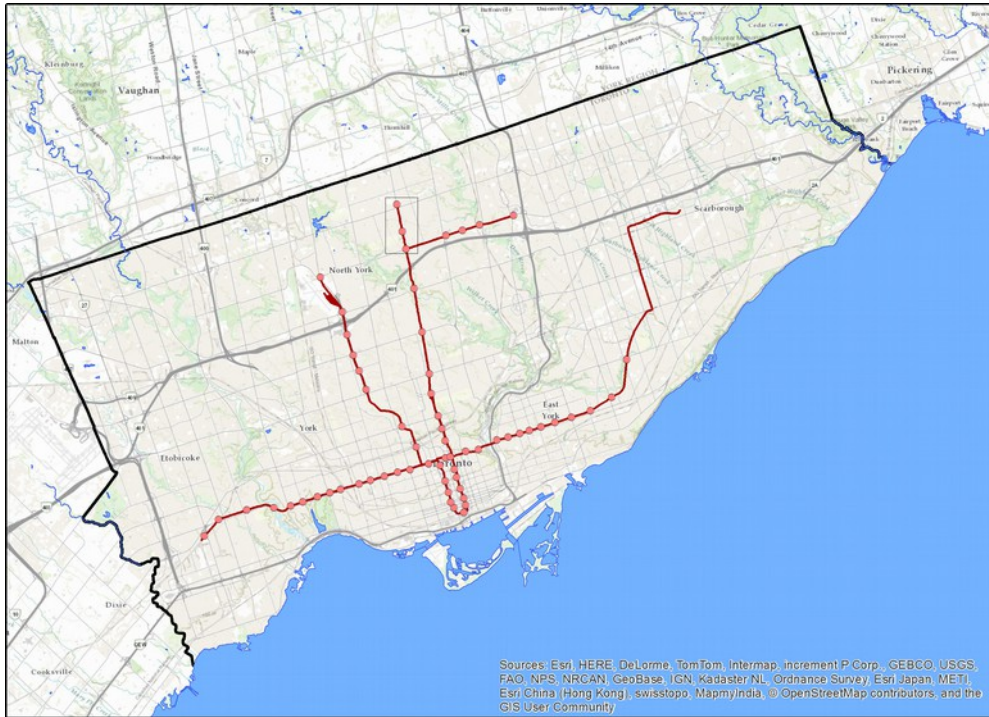


Fig. 7.3. Toronto urban region. (Base Map - ESRI World Topographic MapTransit Layer, Municipality Boundaries, and Water. DMTI Spatial, ArcGIS software. Prepared by Rosa Orlandini, York University Map Library.)

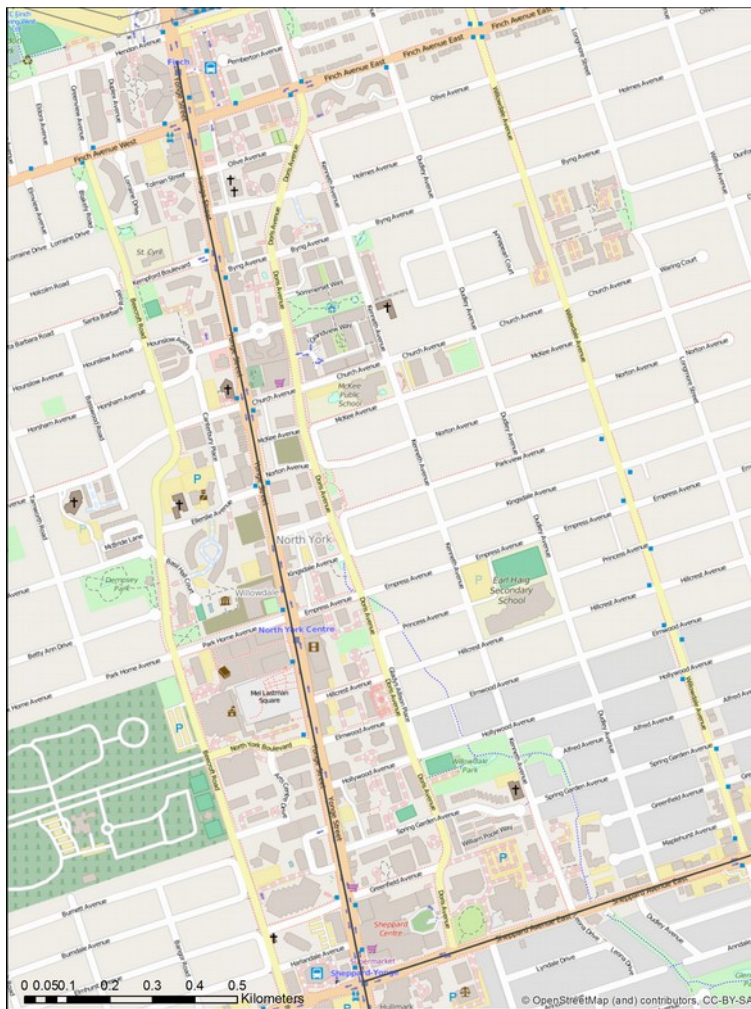


Fig. 7.4. Map of Willowdale. (Open Street Map; Transit Layer: DMTI Spatial. York University Map Library, Rosa Orlandini.)

Landing (Hart 1968, 141). The coach carried both passengers as well as the “Royal Mail bags” (142). By 1890 the line was electrified and the Metropolitan Street Railway Company operated it from Bloor Street to York Mills, and by 1896 the Radial line was extended through the Yonge Street villages up until Jackson's Point, carrying passengers, mail, freight, milk and newspapers (256).

I want to focus my attention, however, on two points in Willowdale's history pertinent to the themes and focus of the dissertation: its development as a streetcar suburb beginning in the 1910s and then its transformation in the immediate post-war period into a mass-produced suburb. Willowdale and its surrounding villages remained largely farming communities well into the 1920s. Still, subdivisions had already begun in the 1910s when landowners began selling their plots of land to real estate developers keen on taking advantage of the bucolic surroundings and The Radial (fig. 7.2). It was in the first decades of the 20th century, following the streetcar line, that the first streetcar suburbs developed along Yonge Street. Like the automobile after it, The Radial and highway building were important for bringing food into the city from rural areas and for linking the urban with the suburban. Remarking on Toronto's lack of roads and lack of “suburban and interurban electric lines,” a *Toronto World* newspaper article from 1914 remarks: “Toronto has long been impoverished in this respect, but the dawn of a better day has broken. North, east and west of Toronto steam rollers, concrete mixers, engineers and gangs of laborers are laying road crowns that will be a 'joy forever.’” The article was written on the occasion of a city planning exhibition at The Arena (also known as The Arena Gardens), in which Willowdale's most prominent developers, Wright's Limited participated. Their Kingsdale suburb was right in the middle of the village of Willowdale; Kingsdale was also a stop on The Radial. They began purchasing land in the 1910s, subdividing it and selling the empty lots. The owners would build

their own houses using bricks from Wright's Kingsdale Brick Co, and construction material from two other Wright businesses in the area: Kingsdale Lumber Company and Hardware and Builder's Supply Company. Wright's Limited founding partners, R.C. Nelles and Charles Wright, both built houses and lived in Kingsdale. One of Willowdale's most notable historical houses—The McKenzie House—was built after John Mackenzie sold his farmland to Wright's Limited. It was featured in a Wright's Limited pamphlet touting the luxurious, and exclusive, houses being built in the area.³⁸

Wright's Limited advertised themselves as “townbuilders and wholesalers of land,” installing water mains, sidewalks, shade trees, and providing access to electricity. Sewell writes that the post-war Don Mills development was the first modern development where a developer would address local improvements (1993, 201), but Kingsdale, although without the overall planned character of Don Mills, was essentially a private development—established as a “police village” in 1916—and as such an important, but unacknowledged forerunner to the dominant Don Mill's model. In one of their newspaper advertisements in *The Toronto World*, they claimed: “From the rush and the Crush of King & Yonge to the freedom and fresh air of Kingsdale by car in 35 minutes.” “By car” ostensibly referred to the streetcar, which was depicted in the graphic accompanying the ad traveling up Yonge Street towards Kingsdale. The houses people did build were within walking distance of the streetcar stop and the shops, inns, and taverns that dotted the crossroads of Yonge Street. By the 1920s, the Yonge Street villages were already considered a “settlement of commuters” who used the streetcar to get to work (Hart 1968, 260).

³⁸ In their brochure entitled “City and Suburban Development in Toronto,” Wright's Limited tout that “houses are restricted to \$2500.00 and upwards thus ensuring a good select community of residents.” The date of the brochure is unknown, but it was likely produced for the 1914 city planning show.



Fig. 7.5: Yonge Street looking north from Parkview Ave, 1955. (Ted Chirside, Ted Chirside Collection, Toronto Public Library.)

Although many houses were built in the 1920s, Wright's Limited success was short-lived. In April 1924, North York took over the running of Kingsdale, and by the 1930s following the depression, Wright's Limited was on the verge of bankruptcy because of the inability of land owners to keep up with their monthly payments. Although the two world wars slowed urbanization, it rapidly picked up again amidst the housing shortages of the post-war period. In 1948, the tracks of The Radial were removed—officially marking the end of Willowdale's streetcar suburbs—to make way for diesel buses and in 1956, Yonge Street was widened to six lanes (Hart 1968, 269) (fig. 7.5). In place of the self-built homes of the early streetcar suburbs, came the Levittown-style, mass-produced bungalows and small houses for returning war veterans. In place of town builders like Wright's Limited, came CMHC whose small house

designs—bungalows and one-and-a-half storey houses—dominated the post-war Willowdale suburb. Like the earlier grid system, the features of the landscape were once again ignored, as Wilket Creek, which runs through Willowdale, was buried under an asphalt pathway and turned into a storm sewer. “The Toronto Bypass” highway (later renamed as Highway 401) laid out in the 1943 Master Plan for Toronto would pass just south of Willowdale. By 1959, it was completed to just east of Yonge Street (Hart 1968, 269).

As the remnants of the farming community disappeared, North York's population rapidly increased. In 1948 the population was 38,000, by 1958 it was 200,000, and by 1968 when North York's mayor, James Service unveiled the redevelopment plan it had reached 425,000 (Hart 1968, 302). It was the third largest municipality in Canada and it was increasingly car dominated. In a 1969 *Toronto Daily Star* article, Murray Chusid, a North York alderman described it thus: “We're car-oriented, all right. They made North York possible, and they're its curse. You can't go anywhere without one. Nobody ever goes for a walk anymore to meet his friends: you drive. You drive your kids to hockey practices and to school. You drive yourself to work and shopping and even to the park.”

It was in this context that Service, elected in 1965, and the North York Council approached John B. Parkin Associates to prepare a plan to make Willowdale the site of a civic centre and centre for North York. Although much of Willowdale was redeveloped in the 1980s under Mayor Mel Lastman's watch, it was Service, North York's mayor of the late 1960s, who commissioned the first plan. Although no square bears his name, nor plaque recalls his short time in office, he is, I would argue, key to the envisioning of North York's modernist redevelopment, an unknown figure marked most of all by his monumental gestures.³⁹ In February 1966, John B.

³⁹ Not only did he fight with downtown Toronto to have Jones and Parkin's proposal to build a communications tower in Willowdale, but in 1969 he proposed building and commissioned a report on a domed stadium called

Parkin Associates presented their concept for a \$600 million civic centre, which the Council approved of and then commissioned along with Murray V. Jones and Associates a detailed plan (Osbaldeston 2008, 178).⁴⁰ In *Pioneering in North York* (1968), Patricia Hart, co-founder of the North York Historical Society, placed the plan firmly within Willowdale's development: the model appears next to an 1860 map of North York as the frontispiece to her book.

Willowdale's redevelopment was planned amidst intense conflict around expressway development in the city that began with the 1943 Master Plan, which in addition to The Toronto Bypass, included the Spadina Expressway and the Crosstown Expressway north of Bloor both of which were canceled in 1971 in the face of public, downtown protest (see Sewell 1993, 177-182). The redevelopment was a reaction to unchecked urbanization and the growth of automobility. In similar fashion to the earlier suburbs built around the streetcar, then the car, Willowdale was to become North York's new downtown in anticipation of the subway, which was extended north to York Mills in 1973, then to Sheppard and Finch in 1974, with an additional station built between Sheppard and Finch in 1987.⁴¹

Like South City, Willowdale's re-building happened on the cusp of change. Both places were envisioned in the wake of the utopian atmosphere of Expo '67, which Carver marked as “the beginning of the end of optimistic dreams” around a “new urban Canada” (1975, 193). For South City it was the Russian occupation in 1968, the regime change, and the resultant period of

“Metrodome” to be built in North York (near Sheppard and Wilson Avenues) and which would accommodate major league baseball, the National Hockey League, and football.

⁴⁰ In the plan itself, Murray Jones and John C. Parkin's signatures appear. Although the plan was likely a collective project involving many actors as there were over 200 employees at the Parkin firm alone (Fraser, McMordie & Simmins 2013, 45), for simplicity's sake, I will refer to the authors as Parkin and Jones. This is also complicated by the fact that there was another John Parkin at the firm—John B. (no relation to John C.).

⁴¹ North York Centre, as the station is called, is situated right in the middle of the village of Willowdale and what was the suburb of Kingsdale. Although opened in 1987, transport planning consultant Edward J. Levy notes that North York was already pressuring for the stop in the early 1970s while Finch station was under construction (2013, 102).

normalization in the 1970s and 1980s. In Willowdale, there was no such political upheaval, but the canceling of Toronto's expressway projects in 1971 did signal a move away from heroic modernism and its dominant image of a car speeding along the highway. Willowdale's redevelopment plan, however, offered a final optimistic dream of modernist urbanism.

7.2 The Sub-centre Approach or, The New Scale

Both Filion (2001) and Sewell (1993) trace the focus on sub-centres to Metropolitan Toronto's 1980 Official Plan, which aimed to shift downtown office space to the suburbs, a key aspect of the “suburban mixed-use centre policy” of which Willowdale would be one of the two key centres (Filion 2001, 143). Although Sewell traces back this interest to policy discussions in the 1960s, he makes no mention of Carver's work, nor of CIAM's important work on the core. One of the key factors in the idea behind both vision in motion and the “ideas that travel” section was the importance accorded to suburban “cores” first articulated in CIAM's 1951 meeting. Tyrwhitt continued her interest in the core, organizing a conference in 1964 at the Harvard Graduate School of Design on the “Role of Government in the Form and Animation of the Urban Core,” a topic close to both Carver's *Cities in the Suburbs* and Willowdale's redevelopment.⁴² Willowdale's redevelopment generally heralded a new direction in the future of a Metropolitan Toronto concerned with unchecked suburban growth. In 1953, The Corporation of Metropolitan Toronto was formed, known as Metro, which created a federation out of 13 municipalities, including North York. Metro was responsible for regional planning, while the municipalities would address local concerns. In 1962, the Metro Toronto and Region Transportation Study (MTARTS) strongly advocated a regional plan for Toronto (see Sewell 1993, 208-214) addressing many of the concerns Carver was expressing in *Cities in the Suburbs* (1962a). Carver

⁴² In a letter written to Tyrwhitt in 1964, Carver indicated that he would be attending the conference (File 20/220).

was a part of the “advisory committee” to MTARTS (Carver 1975, 165). In a 1964 letter to CMHC president Herbert Hignett, he suggested that the authors of the MTARTS asked for his input because they were likely interested in his “suburban town-centres” as “an essential part of the physical scheme of development that would have to be served by transportation” (File 20/220).

In 1967, Hans Blumenfeld, former deputy planner for Metropolitan Toronto, called for a new approach to the metropolitan landscape. Echoing the concerns of the time, and in particular Carver’s *Cities in the Suburbs*, he called for a system of “sub-centres” in the metropolitan region whose design would explicitly address the demands of automobility and rapid urbanization. Blumenfeld is very much a part of the “visions in motion” theme in this chapter and the dissertation. He lived and worked in the Soviet Union between 1930 and 1937 working with the “State Institute for Projecting Cities ('Giprogor')” first in Moscow then in Nizhni Novgorod and where he became part of the cadre of international experts that descended on the Soviet Union in the 1920s and early 1930s, including Mart Stam, Ernst May and Teige's friend Hans Meyer as well as another of Teige's close collaborators the architect Jaromír Krejcar (whom Blumenfeld does not mention).⁴³

He soon emigrated to the US and then he moved to Toronto to work on Metropolitan Toronto's first regional plan in the 1950s. In his essay, he adopts his own approach that developed the need for interrelations expressed by Giedion, Moholy-Nagy, McLuhan and Tyrwhitt.⁴⁴ He called it “synopsis” or “together-seeing” drawing on the work of Patrick Geddes.

⁴³ See Chapter Six “In the Soviet Union 1930-1937” in Blumenfeld's autobiography *Life Begins at 65* (1987). In *The Minimum Dwelling*, Teige mentions that 30 of May's Frankfurt colleagues accompanied May to Moscow, where he took the position of “director of the Institute for Urban Development of the Tsekombank” in Moscow ([1932] 2002, 214).

⁴⁴ Blumenfeld worked with Tyrwhitt whom he noted in his autobiography “cooperated with Marshall McLuhan on a journal [*Explorations*] the contents of which I found difficult to understand” (1987, 238).

Although he claimed not to understand McLuhan's journal *Explorations*, he understood the need for the “seeing together of the interaction of all the factors which determine the life of society” and “a seeing together of all the elements of the physical environment” (1967, 305). Two aspects are important for Blumenfeld in this together-seeing: the new “extra-human scale” emerging with new technologies, such as the automobile, skyscrapers, and freeways, which, in being “extra-human” were part of “‘outer' nature like mountains and rivers” (308), and; a “system of sub-centres” through which and in which these new elements of the physical environment could be ordered and expressed (310). It is the skyscraper—the “product of mechanical means of vertical transportation”—along with the “horizontal extension of the metropolis” associated with the automobile that “obliterated the street as a defined space of inter-related proportions” (309). With the street “obliterated,” the key element in the design of the sub-centres of the metropolitan landscape are separate environments for both pedestrians and cars. Bringing together the work of Moholy-Nagy, Tyrwhitt and the idea of “together-seeing,” Blumenfeld proposes a “total image” of the city made up of a “sequence of memorable images along the paths of vision in motion” (310). Essentially, he envisioned a system of sub-centres connected via highways and roads, each with its “concentration of tall structures.” Blumenfeld does not cite Moholy-Nagy, but he was likely familiar with his work and the term.

In each of the sub-centres, urban designers must shape “pedestrian islands” and connect them with one another. The pedestrian is not a part of vision in motion, but rather relegated to “pedestrian islands.” This signals much of the contradictory thinking of the 1960s, including in the urban planning of the Eastern Bloc which sought to associate all of urban space with the problem of automobility and in doing so turned pedestrians into “endangered species,” who needed to be isolated on their islands (Beyer 2011, 75).

To design for a “motorized world” means designing the “view to the highway” and the “view from the highway,” where “the driver’s vision in motion can build up a composite memory image of the metropolis comparable to the composite image which was built up by walking through the streets of older and smaller towns” (309), much like the way Tyrwhitt described Fatehpur-Sikri; although, Blumenfeld writes the “system of spaces” in the modern city can no longer be apprehended by walking. The new sub-centres must account for the change of scale the car introduces, and provide a memorable landscape comparable to the pre-automobile city.

The idea of sub-centres became an explicit focus in the 1975 Metro Toronto Transportation Plan Review which, echoing Blumenfeld and Carver, called for a system of sub-centres, including one in North York (Sewell 1993, 217); although, according to North York planners, the municipality had been interested in developing a sub-centre as early as 1963, when township staff prepared a “rough draft” of a plan for a Civic Centre (Matthew & Davidson 1983, 1). In 1979, North York planners affirmed this need to “identify and encourage the growth of a series of urban sub-centres within Metropolitan Toronto” (City of North York). Sewell (1993) notes that by the end of the 1970s, the sub-centre approach was “common wisdom,” becoming part of Metropolitan Toronto's “Centres policy,” its official response to both unchecked urbanization and also an implicit critique of Athens Charter urbanism and its separation of functions. The policy outlined that the sub-centres should be “multi-functional,” “pedestrian oriented” and “intensely developed.” Sewell suggests this meant rejecting the “modern idea of separated, segregated uses” (1993, 219). This approach continues today. According to Metrolinx, the Ontario government agency developing a transportation system for the Greater Toronto and Hamilton Area, there are three “mobility hubs” in Willowdale—Yonge & Sheppard, North York Centre, and Finch (Metrolinx 2012), which follow the old villages and Radial line

stops of Lansing, Willowdale, and Newtonbrook. Metrolinx defines a “mobility hub” as

places of connectivity between regional and rapid transit services, where different modes of transportation come together seamlessly. They have, or are planned to have an attractive, intensive concentration of employment, living, shopping and enjoyment around a major transit station.

Metrolinx emphasizes the importance of modes of transportation coming together seamlessly (pedestrians and subways), in spaces that are increasingly defined in relation to an elsewhere. Following Sewell, there is also an implicit critique of the separation of functions, although everyday life is still understood in terms of these four functions (leisure ostensibly being “shopping and enjoyment”). Although Willowdale's planned sub-centre went through many iterations throughout the 1970s and 1980s, I will focus on the first plan by Jones and Parkin because it embodies the characteristics of modernist urbanism, and particularly the utopian spirit of the 1960s that I have been discussing throughout this dissertation. As the sub-centres approach continues today in the form of mobility hubs, it is important to provide a historical context for what is now accepted practice and to argue that the modernist urbanism of the 1960s occupies a critical juncture in that approach.

7.3 The Modernist City that Never Was

Mark Osbaldeston opens his book *Unbuilt Toronto: A History of the City That Might Have Been* by suggesting that Toronto could be thought of as a ghost town, a city haunted by the “ghosts of things that never were, the buildings that were themselves the dreams” (2008, n.p.). The Willowdale redevelopment plan represents an interesting example of this idea because in retrospect it was very much an “Ideal City” as most of the features of the plan were not retained in the later iterations of Willowdale's redevelopment. The plans for Willowdale and South City are both part of a city of ghosts, in particular the plans for South City's centre, which could easily

feature in a book on “unbuilt Prague.” In *Unbuilt Toronto*, Osbaldeston examines Jones and Parkin's proposal to build a communications tower in Willowdale, although Mayor Service's comparison of North York to the Weissenhof project adds another layer to a city haunted by “things that never were.” Jaqueline Tyrwhitt writes that “Ideal Cities” or “Utopias” “have more often than not never been built at all, but have remained mere story-tales or diagrams,” and when they do get built, they rarely take “the form patterned in the dream” of their makers (1954, 40). Toronto's literary imaginary does not just exist on the pages of novels, poems, or short stories, as Amy Lavender Harris describes (2010), but also in forgotten, unrealized urban plans tucked deep in the recesses of municipal libraries. Yonge Street has long been the stuff of Toronto's imaginary, but rarely has that imaginary ventured north of Bloor Street.

Murray Jones and John C. Parkin were two of the most significant actors in Metropolitan Toronto's urban and architectural landscape. Parkin built many of North York's most noted modernist buildings in the Don Mills area, including the Bata International Centre (1965), Ortho Pharmaceuticals (1955), Don Mills Shopping Centre (1959), and the firm's own office (1956). Murray Jones was one of the first leaders of the Metro Planning Department and his deputy was Hans Blumenfeld; together, they prepared Metro's first regional plan, a draft of which was finished in 1959, but the Metro Council did not adopt it (Sewell 2009, 36-41). Through his firm, Murray V. Jones and Associates, Jones prepared a number of “urban renewal” schemes for cities in Ontario, including Hamilton, in the late 1960s.

In their plan, Jones and Parkin explicitly draw upon Hans Blumenfeld's 1967 essay on “The Role of Design” in their search for a “uniform philosophy” of “sub-centre planning and realization” (Jones and Parkin 1968a, 2). In envisioning Willowdale as a sub-centre, they explicitly took on Blumenfeld's challenge to “unfold the total image as a sequence of memorable

images along the path of vision in motion” (quoted in Jones & Parkin 1968b, 2). Along the paths of Yonge Street, Willowdale would become that “sequence of memorable images,” dominated by a communications tower and a city hall that would straddle the street. Their plan firmly places Willowdale's envisioned redevelopment within the circulation of modernist ideas, particularly around Moholy-Nagy's ideas discussed in Chapter One, and Carver's call to build cities in the suburbs as monumental works of art. Accompanying the publication of a shortened version of the plan, Mayor Service writes, in seeming reference to the sub-centre approach that the emergence of “regional cores” in Etobicoke, Scarborough and North York is a “recent phenomenon which...will strengthen Metropolitan Toronto by providing variety, vitality, a visual focus and a social identity to these hitherto ‘dormitory’ areas” (1968a, n.p.). The Willowdale plan was an attempt put into practice the sub-centre idea, based on the principles of modernist urbanism: not just the separation of pedestrian and car traffic, but the shaping and connecting of pedestrian-only areas.

Whereas the architects of South City made no claim to building upon the history of the villages that had previously occupied the space—even though the villages for the most part were left intact—Jones and Parkin specifically situated their redevelopment plan within Willowdale's history of dwelling and transportation and the “natural development” of Yonge Street and the villages that had by the 19th century already become “complementary sub-centres...providing local services to surrounding farm lands as well as functioning as links in the transportation routes which connected other centres” (1968b, 3).

On the change in scale Jones and Parkin concurred with Blumenfeld. The compact areas of Toronto's earlier settlements were “determined by an economy and level of technology fundamentally different from that which obtains today” (1968b, 1). Those compact areas

reflected the fact that people either walked to work, traveled by horse-drawn carriage, or later by streetcar. Jones and Parkin believed that the “metropolitan area,” which came about with changes in transportation and communication—they cite streetcars, telephones, subways, elevators and cars—had lead to the “disappearance of the city as it was traditionally known” (ibid.). They also argued that the term “suburbs” was as “obsolete as the term 'city'” (2). A new phenomenon of settlement was taking place and as of yet there was not a word to describe it; their plan was an attempt to formulate a theory and philosophy of “metropolitan sub-centre” planning, to give it both form and content because at the time, they argued, there were very few examples of the sub-centre approach to planning. They did turn to Europe for examples, and specifically planning in Stockholm, where new towns and subways were built as part of one operation (4). This was similar to planning for South City where public transportation was integral at both the planning and building stages. They also refer to the town centre of Vallingby, Stockholm, and Cumbernauld. Vallingby was one of the most well-known of the post-war new towns situated on the end of a metro line, while Cumbernauld, which I have had occasion to mention throughout this dissertation, is best known for its monumental town centre, which like the proposed North York city hall, also straddled the main road. At the same time, they distinguished the Willowdale plan from Vallingby, noting that Willowdale was already “largely settled” and the state owned very little of the land, and as such the problems of implementation would be different. We have already seen in South City what happened when the state not only owned all the land, but held a monopoly on construction as well. The opportunity was there to design a completely new city, but its implementation, particularly in its details, proved impossible under the conditions. Jones and Parkin's point was that with the subway planned to come to Finch Avenue, development would happen either way. At the same time, the authors shared the interests of the architects of

South City, Vallingby, and many others by insisting on the necessity of a unified plan that would separate pedestrian movement and vehicular traffic.

One of the aims behind the plan's concept was to “provide for a growing metropolitan sub-centre while also preserving existing areas” (Jones and Parkin 1968b, 5). Although many houses would have to be expropriated in Willowdale's transformation—according to a *Toronto Telegram* article, the plan put the initial number at 4000 homes (Kish 1968)—the suburban character of the neighbourhoods beyond Yonge Street from both the inter-war and post-war period were to be preserved, separated from the new downtown by two north-south minor arterial roads running east and west of Yonge Street between Highway 401 to the south and Finch Avenue to the north. These roads—Beecroft Avenue to the west of Yonge Street and Doris Avenue to the East (see fig. 7.4)—would channel local traffic away from Yonge Street, which was to be solely a “through-movement artery” (Jones and Parkin 1968a, vii). The area between Beecroft and Doris would become the “primary corridor of intensive development” (ibid.), marking the divide between city and suburb, between high density and low density, between commercial development and high-rise residences and the quiet suburbs beyond, reinforcing modernist urbanism's contradictory goal of uniting urban space through separation.

Willowdale's redevelopment was to follow a linear growth pattern with development concentrated at three nodes—the Sheppard, North York Centre and Finch subway stations—where the subway, car and pedestrian systems would meet. Given the intensity of the traffic, pedestrian traffic at these nodes would be “discouraged as much as possible,” with the bulk of pedestrians directed to either underground passages or above-grade crossings (Jones & Parkin 1968b, 79). In terms of design, “graphics, lighting and street furniture” were to be coordinated with this “sequence and rhythm of spatial development” (77). At these nodes, the building forms

would intensify. This pattern was to suit the rhythms of both car drivers and pedestrians: “for the automobile user the rhythm of the street space opening and closing identifies, at the speed of the automobile, the intensity and nature of the uses proposed, while the pedestrian is oriented to Yonge Street only at points of intense common activity,” that is, the three central nodes (103). The most intense node would be that of the Civic Square (at today's North York Centre) which would include both sides of Yonge Street, joined by a City hall which would straddle Yonge Street and include a pedestrian overpass. On the west side of Yonge Street would be the civic square, a 1000-foot communications tower complete with revolving restaurant, and an above-ground parking lot with a permanent farmer’s market underneath at ground level and whose “colourful stalls and fresh produce,” Mayor Service claimed in a *Globe and Mail* article would, “give the extensively planned new sub-city...a needed touch of abandon, disorder and surprise” (MacKenzie 1968). On the east side of Yonge Street would be a performing arts centre, an “Art Complex” and gymnasium with underground parking.

Linking to these nodes would be a major north-south pedestrian system at grade on both the east and west sides of Yonge Street and which would be the “focus for all local activities” (Parkin & Jones 1968b, 80). Local retail, low-rise housing and other neighbourhood facilities would be situated between Yonge Street and the pedestrian walkway and would face the walkway. At points, the walkway would either be covered in the form of an arcade or a completely enclosed mall. It is unclear from the plan if Jones and Parkin had imagined that the walkway's entire length would be covered. The extensive pedestrian system would also offer a way to cross Highway 401—a pedestrian bridge was planned on both the west and east sides of Yonge Street—extending south through the largely forested areas south of the highway and towards the York Mills subway station (see fig. 7.6).

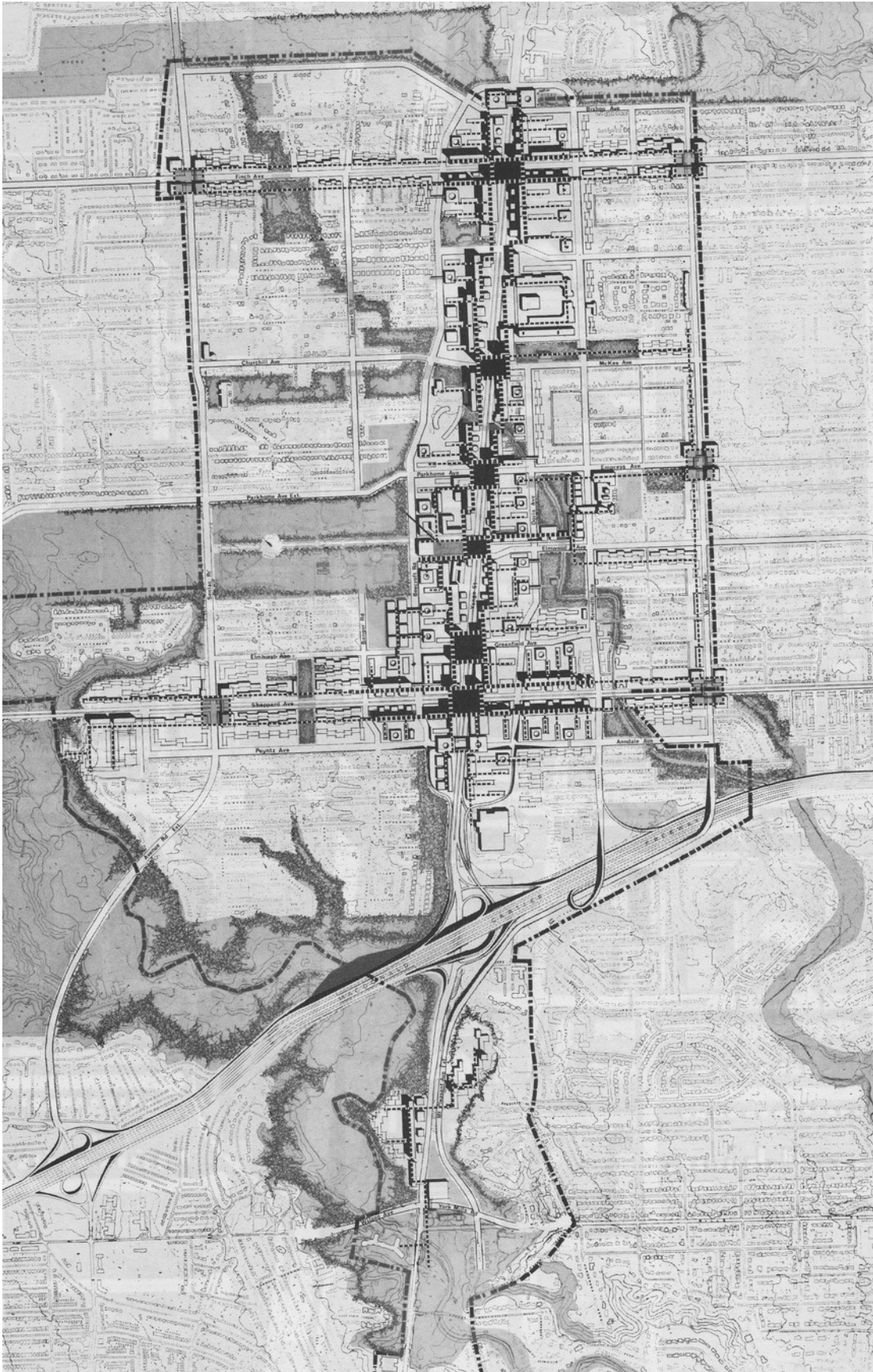


Fig. 7.6. Map of planned pedestrian network in Jones and Parkin's study, including the pedestrian bridges over the highway. (Yonge Redevelopment Plan, 1968.)

All of this attention to a separate pedestrian system with stores and community services oriented away from Yonge Street signal what was to be one of the most radical and bizarre aspects of the plan: the removal of all sidewalks from Yonge Street (see fig. 7.7).

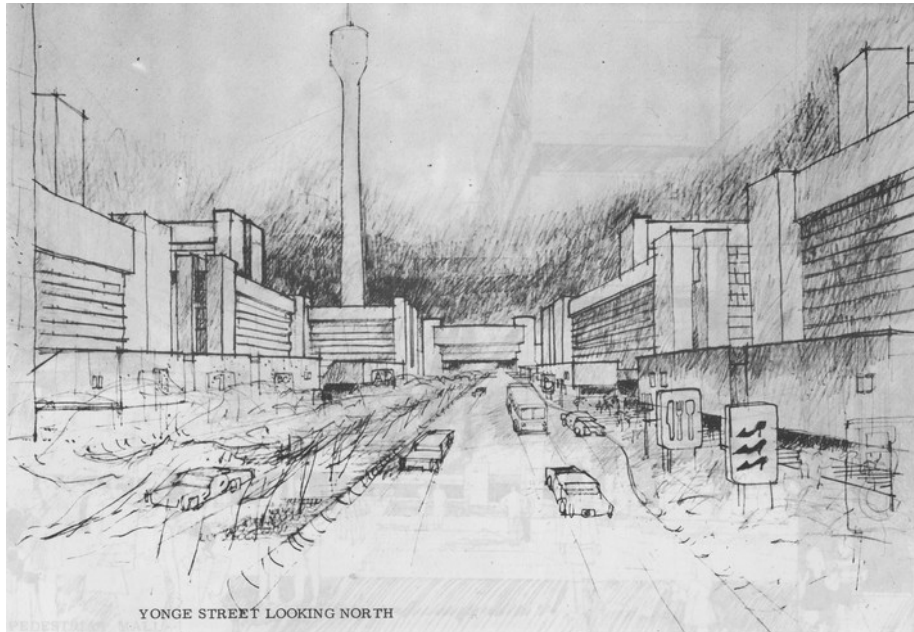


Fig. 7.7: Yonge Street looking north in Jones and Parkin's vision for Willowdale. (Yonge Redevelopment Plan, 1968.)

They would be replaced by a “traffic buffer for landscaping” (1968b, 102) and a place for “automobile oriented signs and show cases” (*District 11 Plan*, 45). This setup could better relate advertising to the new scale of the car. This interest in developing advertising “as an art form at the city scale” (Jones & Parkin 1968b, 112), reflects Moholy-Nagy's interest in turning static advertising into a “kinetic process” aimed at the “rapidly changing position of the spectator at the wheel” ([1947] 1965, 246). The cars would pass *under* the new North York city hall, while also giving pedestrians an opportunity to cross Yonge Street and look down on the traffic spectacle below. It also reflected the way that the everyday became spectacular in the 1960s megastructures: Towering over arterial roads, they gave drivers a “Futurist-revival experience” of passing through a building (Banham 1976, 171). These were the new monuments to

circulation, the modernist successors to the Arc de Triomphe in Paris. That Moholy-Nagy treated the car driver as a spectator for new forms of art sheds light on what Jones and Parkin's attempts to turn Yonge Street into an arterial world where car drivers could enjoy the rhythms of the changing urban landscape. Much of the urban design in the plan coupled with the widening of surrounding roads can be read through this one goal: allowing the automobile unfettered movement up and down Yonge Street.

The monumental gesture of a city hall straddling Yonge Street was complemented by an equally monumental communications tower (this was before it had been decided to put the CN Tower in its current downtown location). Here the tower—proposed to be anywhere from 600 to 1300 feet in height—with its revolving restaurant would loom over Yonge Street, a monument to the new scale of transportation and communication to which Jones and Parkin alluded. In their effort to build a core around a central monument, they echoed city builders through time who sought to erect monuments in the places they believed a core would develop. In *The Heart of the City*, Giedion cites the following: “In Rome, Sixtus V had the imagination and foresight to place his obelisks on spots where he felt a Core could arise, and around them some of the most beautiful squares of Rome have since developed” (“Conversation at CIAM 8” 1952, 39). The communications tower and the city hall, rising above and around the street, were to be Willowdale's monumental symbols to the changes in transportation and communication that Jones and Parkin believed made both the city and the suburb obsolete. One could imagine that if it was built, the tower would not mourn the death of god like Bataille's obelisk, but rather the death of the street and a human scale that, Blumenfeld claimed, had been eclipsed by the extra-human scale of cars, freeways, skyscrapers. In this way, the tower and the city hall stand for the logic of modernism's majesty and authority.

By 1969, Parkin had moved to Los Angeles to take up practice there. In a 1969 *Toronto Daily Star* article entitled “North York: Where a New High-rise Changes the Skyline Once a Week,” Parkin said:

People need a distinctive group of buildings for their sense of loyalty. Toronto has the City Hall, London has Westminster Abbey, Paris has the Arc and the Eiffel Tower and so on. The role of architecture is a profound one in this loyalty and North York's problem is an absence of a specific symbol people can attach themselves to. I'm looking out the window of the classic example of what I'm talking about: Los Angeles, 60 suburbs in search of a city.

In many ways, Parkin's remark echoes Carver's own plea in *Cities of the Suburbs* when he asks: “can we leave nothing permanent behind” (1962a, 75)? He was referring to the monumental architecture of a church, a town hall, etc., an architecture that sought to combat what Carver called the forces of “ubiquitous mobility” and “anti-nucleation.” Parkin's reference to the exploding landscape of Los Angeles reiterates this view: Willowdale with its communications tower and megastructure-like city hall would offer a counter-image to the forces of suburbanization.

7.4 Looking for the City in the Suburb



Fig. 7.8. Yonge Street looking north from Sheppard Ave., 2014 (Photo by Steven Logan.)

In some ways, the fate of Jones and Parkin's plan follows a parallel path to South City's, which one of its architects expressed with the phrase “only visions.” In a 1968 *Globe and Mail* article, Alderman Murray Chusid called the plan “pie in the sky,” to which Mayor Service, the plan's most ardent backer, responded: “if its pie in the sky then he'll be eating it in the sky, in the revolving restaurant on the tower” (Mackenzie 1968). Mayor Service, who was voted out of office the following year, lived to eat his words, so to speak. Although he was trying to convince Bell Canada and the CBC to locate their operations in the tower, by January 1969, the CBC had already chosen another location. Neither did North York get its monumental city hall spanning

Yonge Street. In February 1969, the plan was debated in North York Council and due to protests, largely from ratepayers' associations in the area, its approval was delayed; people carried placards reading “Burn the Model” and “Nuts to Hi Rise Living.” One month later, over 600 residents attended another council meeting specifically to discuss the plan; they were overwhelmingly in opposition to the “high-rise” plan, as it was referred to in a *Toronto Daily Star* article, particularly the plan which they believed would lead to the demolition of 1,200 homes over a 20-year period to make way for the high-density development.

When North York planners revisited Willowdale's redevelopment in the early 1970s, now under the title of “The Yonge Street Centre Area” they deemed Jones and Parkin's plan “too grandiose,” and now they wanted to avoid “monumentality” (ibid.). In addition to the communications tower and the city hall across Yonge Street, Jones and Parkin's plans to remove pedestrians from Yonge Street and create a network of separated pedestrian infrastructures was also abandoned. They wrote that the scale of the plan was “simply unacceptable and provoked concerted and aggressive public opposition” (Matthew & Davidson 1983, 1). When a new redevelopment plan was being formulated in 1977, extensive public consultations took place. Interestingly enough, one of the key aspects addressed by the public during consultations was making the area attractive for pedestrians. Jack Layton, president of the Ward 9 South Resident's Association, wrote that “we are greatly concerned about the pedestrian orientation of the new downtown area” and called for bike lanes on Sheppard and Finch Avenues, and Yonge Street, none of which were ever built. More than 40 years after Jones and Parkin's plan, in an issue of *Spacing* magazine devoted to “suburbia,” Toronto architect John Van Nostrand imagines reinvigorating the unused spaces around Toronto's expressways by creating “land bridges” around and over the existing highways (2009, 46). Jones and Parkin attempted to do exactly as

Van Nostrand describes by linking green spaces on either side of the Highway 401 with two pedestrian overpasses, a network that if actually built would have effectively united the spaces so brutally separated by the highway. Today, if one wants to approach Willowdale from south of the Highway 401, one does so in a car. To come on foot or by bike is a monumental task in and of itself as the highway is 16 lanes. The sidewalk snakes under the highway running alongside the highway off-ramp—all the while separated from the traffic by a chain-link fence, as if one might actually ponder the ridiculous idea to cross the road.

This points to a key theme in the dissertation as a whole: Blumenfeld's call, among others, for the obliteration of the street and the creation of separate pedestrian and car infrastructure. Jones and Parkin followed a long line of modernists, including Humphrey Carver and Karel Teige, who argued for separating cars and pedestrians, creating networks of pathways separated from the neighbourhood roads, a key feature of the Radburn Plan going back to 1929, and a key feature in the plans for South City. In short, the space of modernist urbanism is united through the separation of cars and pedestrians and the creation of new spaces for both, be it a highway for cars, a ring road or a pedestrian street.

Although South City was not imagined as a linear city like Willowdale, Lasovský still clearly distinguished between the habitable streets within the development and the thoroughfares that would surround it. There would be no through traffic on the streets around the apartments. Willowdale's problem with traffic centred on the roads of the streetcar and post-war suburbs, which followed the city's grid system and so drivers could use them as shortcuts.

This leads us to the one key aspect to Jones and Parkin's plan that was for the most part kept: because of the potential for residential traffic mixing with the increase in traffic that was going to come with redevelopment, the authors proposed turning Beecroft Avenue and Doris

Avenue into a ring road which would contain the redevelopment and separate it from the suburbs. Construction work did not begin on the ring road until the mid-1980s; it not only diverts traffic from Yonge Street, but functions as a physical barrier separating the high-density from the low-density development, the general feature of the plan which is most visible today (see fig. 7.9). The ring road is one of Willowdale's most important, lasting elements of modernist urbanism: it simultaneously fragments and homogenizes the landscape.

The ring road, which took some 30 years to build, has two main functions: to carry traffic as efficiently as possible between Sheppard and Finch Avenues, and to separate the downtown from the suburbs beyond. But the ring road is more than a simple intermediary, it is a mediator that, like the crane in South City, brings together the interests of traffic engineers, architects and urban planners with asphalt, cul-de-sacs and traffic bollards. Although it separates city from suburb as intermediary, as mediator it mixes human and non-human (Latour 1994, 41), the ideas of engineers and planners with asphalt, trees and cement curbs. It is a key actor in Willowdale's assemblage of automobility simultaneously allowing and restricting the auto-mobility of both cars and pedestrians. By acting as a barrier to the quiet suburban roads, it is an active agent in the preservation of the suburban way of life, a vestige of both the post-war period and the early suburban period of Wright's Limited. A material symbol of this preservation is the historic McKenzie House, which sits directly adjacent to Doris Avenue, on the suburban side; it was in danger of being demolished because it was in the path of the proposed ring road route. The house was built in 1913 with the money John McKenzie made from selling his land to Wright's Limited to develop Kingsdale. In 1993, the Ontario Historical Society convinced the city to move the route a bit further west to save the house (Kennedy 2013, 174; see also Micallef 2015).

The ring road is a physical marker that with a clean edge marks the separation of city

from suburb and illustrates the tension in Carver's own work between what he called the “anonymous social design” of an apartment or in Willowdale's case these days, condominiums,⁴⁵ and the “individualism” of the family houses, between the landscapes of ubiquitous mobility associated with the stretch of Yonge Street dominated by towers, cars and subways, and the suburb of quiet streets, parks, and schools. In 1985, the president of the Willowdale Ratepayer's Association reacted to the ring road design proposals by claiming: “It's not a ring. It's a noose around the community” (Fitterer 1985). The ring road, though, is less a noose and more a defense mechanism, a way to deal with the sheer shock of the influx of new inhabitants and the workers in the office towers by keeping their cars away from the quiet suburban streets; it disrupted the grid system that had persisted in Willowdale since Toronto was first planned in the 1790s. The streets around the ring road end in cul-de-sacs and in some cases they have not been barrier enough for the cars: bollards have been installed to prevent cars from driving over the sidewalk (see fig. 7.10). As a strict line of separation it reinforces the very boundaries, both physical and conceptual, between “city” and “suburb” that Jones and Parkin attempted to overcome in their plan. It is an example of the simultaneous fragmenting of space, and its homogenization, a landscape increasingly defined by automobility. When the street's main function becomes one of funneling traffic, which the ring road does almost exclusively, it cannot function as a meeting place becoming rather a place where cars and pedestrians compete for space, with the former monopolizing most of it. The ring road, designed exclusively for cars, generates its own problems, creating a barrier for people trying to cross the road (see fig 7.11). At Beecroft Avenue and Park Home Avenue, one busy intersection along the ring road west of

⁴⁵ The area has seen 60 new condominiums since the late 1980s along with the removal of many of its historical buildings and the two-storey brick buildings along Yonge Street which housed a diverse range of independent businesses (Blackett 2009, 44).

Yonge Street, three sisters were struck by vehicles on three separate occasions within a seven month period in 2013 (Gallant 2013). Interestingly enough, the mother of the teenage girls who were struck claimed that it was not the problem of the intersection, but simply bad driving, which downplays the ring road's sheer ability—as a thoroughfare—to turn good drivers into bad drivers. The irony is that these very scenes are the ones that prompted planners like Jones and Parkin to point out the dangers of the automobile, and to give pedestrians their own spaces; instead of questioning automobility's domination, they tried to adapt to it. As I argued in Chapter Two, the car can be seen as extending a person's auto-mobility, but at the same time it also makes the human body ever more vulnerable—particularly the bodies of pedestrians—and so produces a “counter-need, to use technology as a protective shield against the colder order that it creates” (Buck-Morss 1992, 33). The ring road functions in this sense as an enabler of the auto-mobility of car drivers, allowing them to pass more quickly through the streets, in the meantime creating “a colder order” for the non-car users of the street.

Sewell's (1996) critique of Willowdale which I raised in the introduction, focuses on the street as a place to gather in. He writes that a downtown needs a street that “pulls things together” (21), not spaces of separation, which often took the form of underground retail or above-ground walkways, both of which are “deadly for street life” (21). Sewell was writing about Yonge Street (see fig 7.8) not the ring road's Beecroft or Doris Avenues, but his critique may have been more appropriate there. The speed limit on both streets is 50 km/h, and strictly residential, and although cars and pedestrians share the same space it too is “deadly for street life.” Sewell critiques modernist urbanism's tendency to physically separate pedestrians from cars, but in doing so, also dismisses the possibility of other gathering spaces than the traditional city street, which Parkin and Jones attempted to imagine.

For Carver, the conditions of the re-centralization of the suburbs was also about “pulling things together,” however his focus was not the street, but the town square. In the end, Carver and Sewell's viewpoints are not as diametrically opposed as they may first appear, as both decry a landscape of automobility in the interests of something that “pulls things together,” which for Carver was “centres for attachment.” For all of Sewell's vitriol, perhaps tailored to *Now* magazine's city-reading audience, three years earlier in *The Shape of the City* he wrote that aside from the problems for pedestrians, Willowdale's example suggests that “the opportunities for a successful suburban downtown seem apparent” (1993, 220). Although there are few spaces for pedestrians—Filion shows that 43% of the land area in the redevelopment area is devoted to cars as opposed to 26% in downtown Toronto (2001, 151)—*Spacing* editor Matthew Blackett calls the civic square (Mel Lastman Square), “one of the most dynamic public spaces outside the city core” (2009, 53).

Separation is not only conveyed in Willowdale through bollards and cul-de-sacs, but through signs. There is one street sign in particular in Willowdale that one should never see in a dense urban neighbourhood (or *any* neighbourhood for that matter): the familiar human figure of traffic signs with a red cross through it (figs. 7.12 and 7.13). Henri Lefebvre begins one of his preludes in *Introduction to Modernity* ([1962] 1995) with the following: “Try talking to the traffic lights on the corner of the street. No matter how much you insult them or plead with them, they will just ignore you: they go on working...A signal does what it says, says what it does, and nothing more....As basic as a thing in all its nakedness, the signal is what it is. Yet it has a use; it fits me into a system. How could I drive through life without these signals” (95)? This was part of Lefebvre's critique of the functionalist urbanism of Mourenx. Every place has its assigned function. The place to gather is in the places assigned for gathering, not on the street corners, but

in the city square. Rather than a place of encounter, the city becomes a place of connections, and a link to an elsewhere. Every object is “reduced to nothing, but its own function”: shop in the shopping centre, recreate in the nature park, work in the industrial zone, etc. For Lefebvre, this approach to space focuses solely on “functionality: speed, readability, facility [*facilité*]” ([1974] 1991, 313). The admonition of the street sign has a clear and unambiguous message: pedestrians are not welcome here. The newly built communities of condominiums and single-family houses around the neighbourhood keep themselves isolated from the surrounding streets and sidewalks. In a landscape devoted to the mobility of workers, cars and subways, the urban landscape becomes increasingly anaesthetic.

New developments in Willowdale, like the two towers which now dwarf The Gibson House museum, itself the reconstructed residence of Willowdale's most noted pioneer, tout the fact that residents have direct access to the subway from their building: they do not have to go outside to leave their apartments. Subways, in this way, reinforce the separation and segregation that predominates in Willowdale even though they offer an easy connection to the downtown. Although new residents are assured mobility, they are also warned by developers and local politicians that their children will not have access to the local schools. Every weekday morning one can see lineups of children along the ring road waiting for a bus that will take them to schools outside the district. There is still a strict divide between the “vertical city,' a virtual town in the air without schools” and the “flat city” across the ring road, neighbourhoods which were deliberately built around a school (Brown 2012).

Jones and Parkin attempted to envision a sub-centre for Willowdale that would be neither city nor suburb, and although it was still a landscape firmly planned from within the system of automobility, it imagined Willowdale as part of not separate from the “total image” of the

metropolitan landscape, connected to the rest of the urban region as one of its most important sub-centres. Separation, in theory, meant two separate infrastructures, one for pedestrian and one for automobiles; the pedestrian bridges over the highway also offered a way of uniting city, suburb and nature. The lack of pedestrian infrastructure speaks to the imbalance in the environments of automobility, where the car and the car driver, for obvious reasons, hold a privileged role over the pedestrian forced to negotiate the car-dominated spaces and coerced into desiring the automobility that the car provides.

Conclusions

The transformation of Willowdale into a “mobility hub” dominated not by the isolation of single-family houses and cars, but rather by the connectivity of condominiums and public transportation, suggests on the one hand a move away from an assemblage of automobility dominated by cars, but on the other hand, one still firmly within the abstract space of capitalism. As the last chapter in the dissertation, the story of Willowdale's development offers not only a summing up of the themes of the chapter, but it also presents a jumping-off point for discussing and gesturing towards the future of automobility in the conclusion.

In its different iterations as village, suburb, and sub-centre, Willowdale also suggests different assemblages. If the crane urbanism of South City was defined by its construction cranes moving along the tracks, a different form of crane urbanism is prevalent in Willowdale. In Willowdale, crane urbanism does not refer to the open spaces necessary to build the tracks of the crane, but the complete opposite: intense development where the cranes—a fixture on Willowdale's skyline—are no longer on tracks, but are actually part of the building they are helping to construct; as the building grows, so does the crane along with it. The capitalist version of crane urbanism is a very different assemblage than was its socialist counterpart: it

includes condominiums, public transportation, the sub-centre and mobility hub strategy, and politicians who measure Toronto's vitality by the number of cranes in the sky. Interestingly enough, it is the cranes and the high-rise condominiums that return us to Teige's minimum dwellings, as many of the critiques leveled at Willowdale—lack of pedestrian space, lack of basic public infrastructure, like schools—Teige himself addressed and plagued the sídlišť of the 1960s. Of course, Willowdale does not question the basic family unit as Teige did, reaffirming rather Carver's belief that cities in the suburbs should accommodate both the autonomous and independent house dwellers and car drivers and the dependent and incomplete lives of apartment dwellers and public transportation users.

In many ways, Willowdale represents an important attempt to contain the urban explosion associated with automobility that I have discussed throughout this dissertation, concentrating different activities in one place. Jones and Parkin specifically attempted to situate Willowdale within the “total image” of the new metropolitan landscape, now defined by a system of sub-centres. A city unified through its focal points. Yet at the same time it affirms the fragmentation of abstract space. As Wolf (1996) argues, subways complement the “segregated” city exemplifying the separation of functions, particularly in freeing road space for car as buses and streetcars are removed from the street. There is of course a strict separation physically and symbolically between the flat city and the vertical city, as if they were part of two different assemblages. Here Willowdale's ring road also offers an excellent example of modernist urbanism's contradictory practice of seeking unity through separation, a road deemed necessary because of the rapid increase in automobiles in the area.

Willowdale is a microcosm for the separation between city and suburb that Blumenfeld and Jones and Parkin were attempting to address in formulating a sub-centre philosophy and that

recent scholarship on the suburbs itself has attempted to overcome, calling on urban theorists to question “the uncritical divide between city and suburb” (Fiedler & Addie 2008). Willowdale's ring road is a physical marker that reinforces that divide instead of overcoming it. It reinforces the dichotomy between the area within the ring road, where commercial and residential high-rise development dominate, and the area outside the ring road where the symbolic values of the family-oriented private life prevail; both areas are united as prime places for real estate development. Like the dominant feature of abstract space, the ring road “homogenizes *through* separation” (Kipfer 2008, 201).

The residents of Willowdale may at first glance appear far from the car-driver rhetoric of vision in motion, of Moholy-Nagy, Giedion, and Blumenfeld's fascination with the view to and from the highway. In Willowdale, it is more often than not the view from above to another condominium or the view underground on the subway coming to and from Willowdale. Do those who dwell in the condominiums, who take the subway to work, or who simply walk to work in an adjacent office building represent the future automobility without cars? In the conclusion to this dissertation, I turn to this subject, calling into question the claim that a beyond to automobility simply means exchanging a house for a condo, a commute by car for one by subway.



Fig. 7.9: Aerial photograph of the eastern section of the ring road. High-rise development can be seen to the east of Yonge Street, while the low rise suburb remains intact on the east side of the ring road. (Greater Toronto Area (GTA) Orthophotography Project 2013, ScholarsGeoPortal.)



Fig. 7.10. Separating the suburb from the city on Willowdale's ring road. (Photo by Steven Logan.)



Fig. 7.11. "This is not a crosswalk." It was deemed necessary to erect a sign in front of an apartment entrance where people might confuse the brick surface for a crosswalk. (Photo by Steven Logan.)

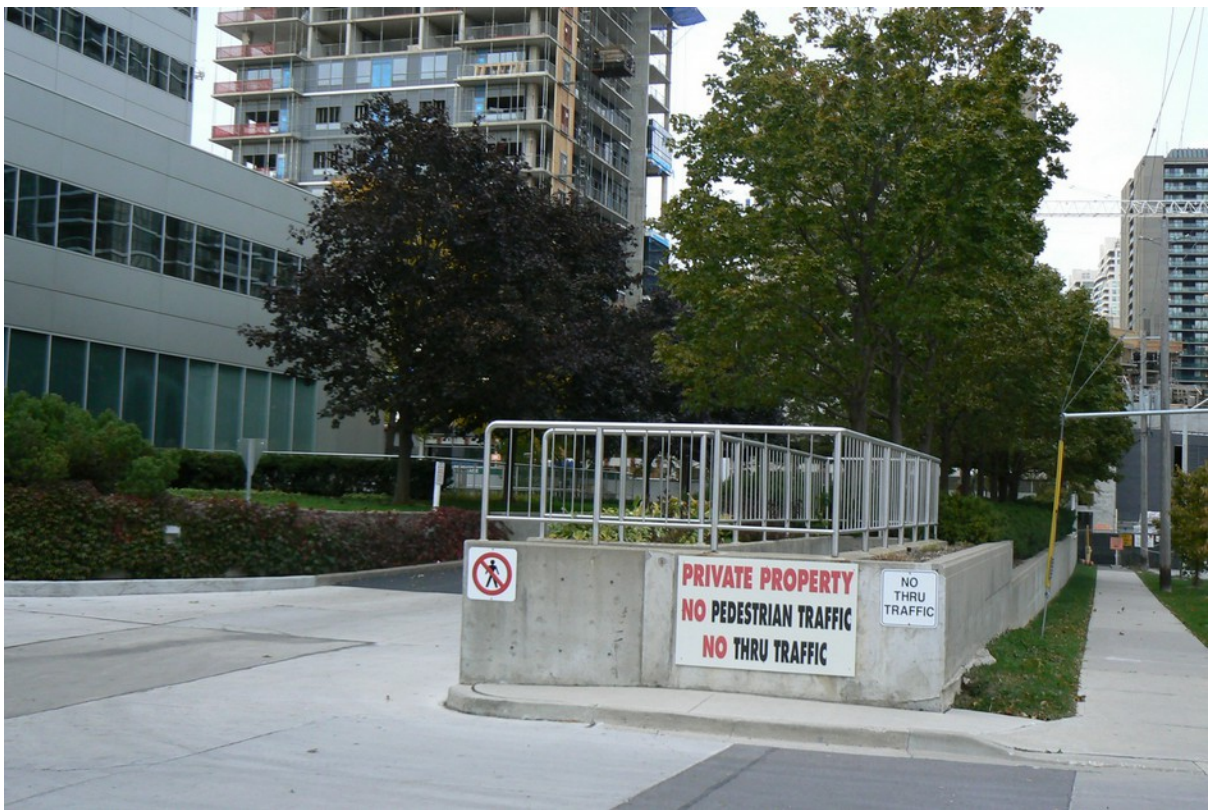


Fig. 7.12. “No pedestrians allowed”: Development in Willowdale. In a seemingly pedestrian landscape, people are not welcome in this condo development close to Yonge Street. (Photo by Steven Logan.)



Fig. 7.13. “No pedestrian” traffic sign along the ring road in Willowdale. (Photo by Steven Logan.)

8. Concluding Remarks: Beyond the Car or Beyond Automobility?

The literature that I examined at length in Chapter Two considers some beyond to automobility in a number of different iterations: *After the Car* or “post-car mobilities” (Dennis & Urry 2009a; 2009b), “beyond automobility” (Böhm et al. 2006), “post-automobility” (Walks 2015), and “Beyond the Car” (Conley and McLaren 2009), to name just a few. All of these critiques speak to both the individual automobile and the system as a whole, and to how an “evolved automobility” might meet the desire for an auto-mobility that is currently fulfilled by “dinosaur cars” and their very “old-fashioned Fordist technology” (Sheller and Urry 2000, 739; 74). It almost seems impossible to write a book about automobility without concluding on what lies beyond automobility and I feel compelled to weigh in on this debate and situate my own work within these critiques of automobility. In this conclusion, I return to the concept of automobility as a system, environment and assemblage, emphasizing as I have throughout this dissertation that any critique of an automobility beyond cars must also pay heed to the production of space that is necessarily a part of an urban society beyond automobility. This conclusion asks: how to move beyond automobility without reproducing the separations and homogeneity of abstract space, without reproducing the city-suburb dichotomy and without reproducing the idea that the individual is somehow separate from her surroundings? I want to show that any future automobility assemblage has to take into account the multiple scales at which automobility operates, from the human scale to the “extra-human scale” of non-human nature and infrastructure (Blumenfeld 1967).

Before we can begin imagining a beyond to automobility, we have to be clear about what we mean by automobility, which takes us back to the two dominant definitions I was working with in Chapter Two: in one sense, automobility refers to an individual's capacity for auto-

mobility, be it on foot, on a bicycle or in a car, while in its second sense, automobility refers to the wider system dominated by cars and that allows for auto-mobility in a car to be expressed at all, including the highways, parking lots, roads, and urban design and planning. But this system is as much coercive as it is flexible, as car drivers and non-car drivers are forced to negotiate the territories that automobility creates and territories that modernist planners and architects argued needed to be strictly separated. As most theorists of automobility argue, the two definitions are inseparable, and importantly for this conclusion, they speak to differences in scale: between the individual and the wider system.

Does beyond automobility simply mean beyond the privately-owned, steel and petroleum car? Or, does it mean beyond automobility as the autonomous mobility of an individual somehow separate or independent from his or her environment? Can automobility still exist without the car and without these separations? As I discussed in Chapter Two, the bicycle and the horse before the car were understood as offering a similar kind of auto-mobility to the car, although most of the urban planning and advertising of the 20th century was premised on the idea that the car was *the* dominant bearer of auto-mobility. If automobility is an assemblage that is constantly made and remade, always unfinished, then it is conceivable to imagine its transformation along with the territories and spaces it creates (Farias 2011, 369; McCann & Ward 2011, xv).

One set of responses suggests that we should take heed of Peter Sloterdijk's argument that any break with the automobile will require that “motorized humanity is converted beforehand to a completely different means of transporting one's soul” ([1992] 2011, 19). Urry suggests that for automobility to continue, cars will have to be integrated with communication technologies, like smart phones and the internet, rather than continuing to exist as “separate 'iron cages'”

(2007, 134). Much of the automobility literature that looks “beyond it” does so in terms of envisioning new technologies and new infrastructures of automobility that are not car-dominated. In almost all cases it involves predicting what technologies will develop to push societies into a post-car society (see especially Dennis & Urry 2012). Dennis and Urry write that “homes and garages” are increasingly full of electronic goods, “except for the oddly out-dated car” (2009b, 240). The “oddly out-dated” car is now becoming an increasingly networked object integrated with communication technologies and offering new fuel-efficient technologies, like hybrid electric-gas cars or pure electric cars. There is a danger, though, in imagining solely technological changes to move beyond automobility. Beauregard and Haila (1997) suggest a number of reasons why this is the case in their essay on the “Unavoidable Incompleteness of the City,” the title of which could equally be applied to automobility. They argue that new and old processes come together in historically and spatially specific ways. The car will not one day simply disappear from the earth, it will be a gradual process, and with its disappearance it leaves a whole infrastructure behind. Spatial forms, like highways, inhibit “rapid and large-scale transformations” (328). They also write that “the relatively fixed form of the city enables and constrains current and future investments, modes of living, and cultural meanings” (ibid.), and so the transformation to new technologies of automobility is bound to be experienced unevenly.

Beauregard and Haila's point is that there can never be a sharp break with the past, and so claims to a new type of city whether the modern city of the car or the contemporary post-car city “are at best naive and at worst theoretically unsophisticated” (339). The future is by definition unpredictable and so attempts at its envisioning are often about managing and controlling it. There is also a danger of lapsing into technological utopianism or “technological modernization” (Walks 2015, 278), not all that different from modernist urbanism. In his conclusion to the edited

collection *The Urban Political Economy and Ecology of Automobility* (2015), Walks is critical of the focus on technological transformations, or initiatives like car-share and bike-share programs, which are oriented toward individual households and not concerned with wider systemic inequalities, specifically around private property. Walks concurs with Böhm et al. who argue that solutions like a congestion charge simply make automobility temporarily possible rather than solving the inherent contradictions of automobility (2006, 14). These initiatives can also marginalize those with mobility issues, and the poor forced to live further from the centre (278).

If automobility is irreducible to the car, then its transformation cannot be effected by simply making the individual choice not to drive a car, given that it is the environment and not necessarily free personal choice that “drives us to drive” (Soron 2009). In this sense, the human desire to be auto-mobile *as such* that both Sloterdijk and Illich speak to, needs to be distinguished from the human desire for automobility in an environment that makes driving a car both desirable and necessary. Reducing automobility's transformation to individual consumer choice—buying an electric or a hybrid car, or any consumer product for that matter—serves to reinforce rather than overturn the auto-mentality behind today's automobility. Dolores Hayden (1984) makes the following point about housing in her history of suburbia in the US: “new designs alone cannot redeem a throwaway culture organized around obsolescence and the continual consumption of undeveloped land and new products” (229). This is not to say that bike-sharing and car-sharing are unimportant interventions, but without consideration of the scale beyond individual consumer choice to the urban society as a whole, there will always be splintering in urban spaces, divides between the aesthetic spaces of the downtown and anaesthetic spaces of the periphery, where automobility is already unevenly experienced.

As I argued in Chapter Two, something as simple as walking, not necessarily for pleasure,

but to get to school or work, has become a scarce and luxurious commodity for which only the most well-off, usually downtown city dwellers, have access. Walking or cycling is a privilege that one has to pay for (Samuel & Robert 2004, 9), usually in the form of excessive rent and house prices, rather than a right of every urban dweller. The new assemblage of automobility based on walking, cycling, and social connectivity in a convivial urban environment is still the privilege of the few, particularly those who have flexible working conditions, and who can work where they want—in a cafe or the library—and when they want.⁴⁶ Walking to work is not conducive to a fixed start time, as walking often leads to spontaneous social interactions along the way (while in a car it is most often congestion and traffic that causes delays).

Stefan Kipfer makes a similar argument in addressing the French state's appropriation of Lefebvre's concepts of play, the festival, which appear as “commodified traces” in Paris's gentrified city spaces (2008, 205). Urry and Sheller suggest that carfree living has become a “lifestyle choice” for “environmentalists” and a “small cosmopolitan elite able to live in expensively gentrified city centres” (749). In many ways, Corbusier's circulating modernist urbanisms have been replaced with Richard Florida's circulating creative urbanisms. Although he may not advocate the master planning of a Le Corbusier, Florida has made cycling, walking, and vibrant and dense urban neighbourhoods the core of his creative city discourse. It is the wealthy urbanites who use their feet as a mode of transit rather than those living on the periphery of cities forced to spend ever larger amounts of their income on supporting a car or forced to endure long and arduous journeys by public transportation, often by bus.

⁴⁶ As I sit on my front porch writing this conclusion, I am occasionally interrupted, by a friend passing by on bike, by a neighbour looking for help to fix a bike, by another neighbour offering a beer (which I declined). Instead of treating them as interruptions I see them as integral to the formation of this conclusion, which aims to question separations between public and private, inside and outside. The front porch may be the most suitable place to write this conclusion. Although with flexibility also comes precarity.

Walks offers the concept of “active connectedness” as a feature of post-automobility (2015, 279-280), which calls for an *all-encompassing* network of cycling, pedestrian and transit systems, one not simply limited to city centres, nor one driven by the logic of economic growth. If automobility and modern space in the 20th century was defined by separations—city from suburb, cars from pedestrians—then post-automobility should create spaces of connection. If separation and detachment define modernist urbanism, then attachment, interconnection, and “mixing things up” are characteristics of an automobility in which human activity is inseparable from its environment. As Carver realized in light of Jane Jacobs's (1961) description of the streets of New York City, in “sorting things out” planners create “destructive, sterile and uncivilised” environments (File 20/132). Unfortunately, in practice this approach of mixity has often meant isolated and privileged experiences of post-car automobility as I discussed above, while the rest of the city suffers under the weight of modern separation and anaesthetics. If we are truly to embrace the principle of mixity then all efforts should be made to accommodate cyclists, wheelchair and scooter users, on *all* streets and not just a select few in the central areas.

This approach also suggests that the larger scale of planning, if it works with the idea of active connectedness, can very much be a part of rather than a hindrance to the process of transforming automobility. In his striking portrayals of Ebenezer Howard, Frank Lloyd Wright and Le Corbusier, Robert Fishman (1977) suggests that although Jane Jacobs's critique of the kind of top-down modern planning that Carver embodied was necessary—and I would add the Situationist critique of the Functional City and urbanism in general—the point behind an “ideal city” is worth keeping. Fishman notes that the energy crisis of 1973 in which Illich explicitly situates *Energy and Equity* and the deterioration of the infrastructure of the inner suburbs of the US suggest that the “need for large-scale planning has been growing more acute” (277). It is not

only an ideal city we are concerned with here, but an ideal automobility, an ideal infrastructure.

The critique of top-down planning in the early 1970s was accompanied by a critique of automobility from the perspective of energy consumption. Illich argued that “the energy crisis cannot be overwhelmed by more energy inputs” whether these are green or otherwise (1974, 22). Illich's critique was directed as much at the fossil fuel economy as it was at the post-industrial “green” economy, which in 1973 was still in its infancy. Illich wrote that “even if non-polluting power were feasible and abundant, the use of energy on a massive scale acts on society like a drug that is physically harmless but psychologically enslaving” (18)

It is in this context that I want to push Walks's term “active connectedness” even further, to consider and re-think the question of large-scale planning, extending it to the scale of the entire planet. Beyond automobility means also thinking beyond the scale of the urban region, not to the nation, but to the earth as a whole and the energy regime that in fact underwrote (and continues to underwrite) all of modernist urbanism: fossil fuels. Humans are not only addicted to their self-moving technologies, but to the material forms of energy that drive them. The pursuit of automobility may be an infinite one, always already incomplete or impossible, *by definition*, but the resource upon which it has been largely based is finite; there is only so much fossil fuel in the ground, and as time goes by it is becoming harder, more expensive, and more risky to extract.

When we start to think about the scale of the system of automobility beyond the individual, it is unclear just where to locate the limits of that system: the carbon deposits that are the source of fossil fuels could be anywhere from 150 to 350 million years old (Mitchell 2011, 12). What about the vast amounts of carbon dioxide lingering in the atmosphere? The countless lives lost or affected by traffic collisions? Cars decaying in scrap heaps leaching chemicals into the soil? Any limit seems almost absurd in its incalculability and unknowability. The point is not

simply to imagine a vehicle that does not run on fossil fuels, but to use the inextricable connection between humans and fossil fuels to ignite the imagination to think beyond the idea of autonomous humans, and toward the horizon of human interconnection with nature, technology and infrastructure, of the interconnected fields of the physical, mental and the social (Lefebvre [1974] 1991, 11).

Beyond automobility re-situates the individual —be it the heroic modernists in their cars or the social entrepreneurs on their bikes—within the ecologies to which they necessarily belong, and offers a different understanding of the joys of automobility that are not based on the consumption of cheap fossil fuels and that are not based on individual free choice. As a way of offering this interpretation of automobility, I want to turn to Allan Stoekl's book *Bataille's Peak* (2007), which I briefly made reference to in the introductory chapters, because it addresses the important links between the fossil fuel regimes that underlie automobility, but it also offers an important bridge to Lefebvre's work in *The Production of Space*. Stoekl draws his inspiration from Georges Bataille's *Accursed Share: An Essay on General Economy* ([1949] 1988). Bataille opens his discussion of “general economy” with the example of changing a car tire (19-20). He notes that it is easy to manage this operation as if it were an isolated incident, even though further thought would show that it is not, that the rubber from the tire comes from somewhere, the expertise for changing the tire was learned, etc. But at the same time, even if a person goes through the motions without actually considering all these things, she will still be successful in changing the tire. Bataille offers the same critique of the economy, suggesting that it is simple enough to study the economy of production and consumption as a system unto itself (19). Bataille attempts to offer a much wider understanding of production (and of consumption as well), asking the following: “Shouldn't productive activity as a whole be considered in terms of

the modifications it receives from its surroundings or brings about in its surroundings” (20)? In one sense, Bataille offers a way of understanding the contradictions between auto-mobility, as simply the experience of driving a car, and the system as a whole. In *Bataille's Peak*, Stoekl picks up on the way Bataille links general economy specifically to the human need to expend the energy provided by the sun. Stoekl claims that there is a bad form of energy expenditure rooted in the massive consumption of fossil fuels, and a “good” kind of expenditure that is intimate, the expenditure of the body's energy in cycling, walking or dancing. The production and expenditure of this kind of heterogeneous energy is “on a human scale, and is directly tied to a close bodily relation with things” (Stoekl 2007, 55). The “mode of expenditure” in Bataille's post-fossil fuel and post-sustainable city, imagines Stoekl, is based on non-productive expenditures of all kinds that cannot be quantified or made efficient.

Stoekl's point is not to suggest that walking or biking is the morally superior choice, as this dissertation has shown the choice of whether to drive or not is increasingly a fraught and complex one. Rather, Stoekl does point to the different ways in which energy is expended. It is here that Stoekl locates the critical aspect to de Certeau's analysis even if de Certeau himself was unaware of it: the functional city de Certeau criticizes is inseparable from cheap and freely available fossil fuels, while walking depends only on human energy (Stoekl 2007, 187). De Certeau's walker, like Teige's urban experiences with Devětsil and the unitary urbanism of the Situationists, licenses “a different kind of expenditure of energy,” an expenditure of energy on the intimate scale of the body—and the *dérive* is just one example of such an expenditure of energy: in a post-fossil fuel world, the city transforms from a “machine for living” into an “intimate world” (Stoekl 2007, 230). We are back to the contrasts between Teige's poetism and CIAM's functionalist urbanism: two kinds of cities, two kinds of energy expenditure, but also

two kinds of scales. If Bataille's theory of general economy holds, scale here is fundamental: all human life can be understood as “energy events,” humans and their machines as conduits for the flows of different kinds of energies.

I want to suggest that Bataille's theory of general production is a notable influence on Lefebvre, who references Bataille's work in his discussion of the squandering (*gaspillage*) and expenditure (*dépenser*) of energy in *The Production of Space* ([1974] 1991, 176-180). Stoekl notes that *The Accursed Share*, where Bataille developed his theory, went on to have a “subtle influence” on contemporary French thought, but he does not mention Lefebvre.⁴⁷ Bataille's work, and in particular Stoekl's re-situating it within contemporary debates on sustainability and the city, offers us a way of bringing together the themes of this conclusion with Lefebvre's writings: we might read it as a production of space from the scale of the intimate to that of the universe.

Lefebvre opens *The Production of Space* by arguing that energy, space and time are inseparable from one another, and that any reference to the term “energy” must be met with a corresponding reference to the space in which that energy is expended. Energy does not just fill space; rather, space has no reality without the expenditure of energy be it human power or fossil fuel. Although Bataille is only one of many influences on Lefebvre, these terms do still figure significantly in Lefebvre's understanding of production in its wider sense, rather than its strict sense as industrial production, and in his understanding of the city-oeuvre. Referencing Bataille's work, Lefebvre suggests that any “expenditure of energy,” even if it is a “squandering [*se gaspiller*] of energy” is “productive” because a change is brought about in space ([1974]

⁴⁷ Links between Lefebvre and Bataille have been acknowledge and explored (see, for example, Shields 1996; Grindon 2013), although to my knowledge, Anglo scholarship has not explored the connections between Bataille and Lefebvre in terms of the relationship between energy and space.

1991, 179). The “principle of economy” put forward by a “crude functionalism” is inadequate to the organism's need to expend energy. The contradiction between quantity and quality it means “putting the process of purely quantitative growth into question,” quantitative growth for its own sake not for the sake of some qualitative good (357).

Lefebvre's response to the focus on quantitative growth is the “non-productive” spaces of play, art and *la Fête*—that is, those spaces that do not contribute to economic and industrial growth because they are aimed at producing pleasure ([1974] 1991, 359). Expenditure without the expectation of financial returns for Lefebvre is a mark of an urban society focused on enjoyment (*jouissance*), on the joyful consumption of space itself, rather than on the consumption of mass produced products. This calls for a “qualitative leap” from the production of things in space—of which the automobile is the privileged object—to the production of space (357). From the luxury of consumer objects to the luxury and beauty of public spaces for the enjoyment of all in a city-oeuvre where art would be inseparable from everyday life. A luxury of the commons. Mike Davis draws attention to the utopian ideals of the 1920s Soviet avant-garde to claim that “the low-carbon city” should be less about the technological fix, and more about the “priority given to public affluence over private wealth” (2010, 43).

A retooled automobility must still account for the human, intimate scale, but one that is based on public, rather than private expression, the scale of the energies that underlie automobility—and as such the relationship with non-human nature—and a shift in the human relation to the infrastructure of automobility. The question of the human scale has become increasingly problematic given that the complex infrastructure of automobility which underlies so many of our daily activities far exceeds the scale of individuals, even if it was individuals who built the highways, drilled for oil, and laid the asphalt.

How to bring together the question of large-scale infrastructure with the individual, intimate scale of enjoyment without reproducing the contradictions and inequities of an automobility dominated by the car? This question brings us back to the key moment around which the case studies of this dissertation turned: the utopian modernist urbanism of the 1960s. The megastructure idea in 1960s modernist urbanism sought to pay heed to the need for joy and play that the Situationists were advocating at the time and which Teige and his contemporaries also advocated: call it planning in the service of the magic-city, the joyful and ecological consumption of space and not the market, private property, and the ownership of things. In the 1960s and early 1970s, the dominant role of the automobile in urban society was being questioned, but as I showed from many of the plans, the automobile was for the most part accommodated.

What happens when the human desire to be auto-mobile has to face the finite amount of fossil fuels in the ground, and the increasingly ecologically fraught ways by which it is now extracted, transported, and burned? A re-tooled automobility might appropriate the mandate, which people such as Karel Teige set out: build instruments, addressing both the infrastructure *and* the social needs of automobile-dominated spaces of the suburbs, rather than building isolated monuments by the architectural genius. These are the modernist landscapes where walking is inhospitable, and the arterial roads that surround the neighbourhoods little more than traffic funnels, and where the existing pedestrian spaces need more nurturing. The focus on the anaesthetic spaces of the periphery, rather than downtown neighbourhoods, is not circumscribed by economic production and private profit, but by collective, public luxury and accords with Teige's own rejection of art as the product of the individual, creative genius, and instead art as the collective production of society. Infrastructure, nature and the body in the city beyond

automobility—that is beyond the system of highways and thoroughfares—need to become essential parts of a city-oeuvre. The point is not to reject the car in the city beyond automobility, but to reject a century of thinking that separated the car and the car driver from the spaces that an automobility based on the car itself helped to create. The city-oeuvre has to become an instrument for producing automobility beyond the car, and one that calls for the slow transformation of urban space away from cars.

What might that city-oeuvre beyond an automobility dominated by cars look like? To conclude I offer one example that collapses the distinction between the instrument and the oeuvre, between the intimate scale and the scale of planning that I am gesturing towards in this conclusion and that offers a critique of many of the modernist separations that this dissertation has been critiquing: in a number of Dutch villages and small cities, Dutch traffic engineer Hans Monderman proposed and implemented the elimination of all the traffic signs—traffic lights, stop signs, lane markings, any *sign* of traffic—and the elimination of the curbs that mark the separation of pedestrians and vehicles. The practice is described in *Mental Speed Bumps* (2005), where self-declared “street philosopher” David Engwicht offers Monderman's urban planning, or what I would call infrastructure without infrastructure, as a radical alternative to the modern practices of separating traffic circulation and the social life of the street. Monderman, the “philosopher-engineer” (Reid 2007) separates the “traffic world” from the “social world” suggesting that the former is based on predictability and uniformity and the latter on spontaneity and diversity. His argument is that the traffic world and its signs has its place on the highway, but within the city it has impeded upon and disrupted the functioning of the social world and life of the street (Engwicht 2005, 43). I am reluctant to accept the idea that car traffic does not involve its own sociality, but I do want to call attention to the way that Engwicht attempts to bring

together what modernist urbanism insisted on separating; function (traffic circulation) and magic (encounter, spontaneity, *la Fête*) should not be solved through separation, but through their complete integration (Engwicht 2005, 78). Modernist urbanism addressed this central contradiction by arguing that the social life of the street—the interaction of pedestrians—needed to be strictly separated from traffic and circulation, whether it was The Radburn Plan, “The Core” in CIAM, the 1960s megastructure, Constant's covered city, South City, or Willowdale; in all cases, the separation had to be reinforced by physical barriers and physical separation. For all their differences, both Carver and Teige affirmed these separations, whether it was the suburban town centres separated from the rest of the city and the suburb or Teige's functional city and his magic-city, which could never be found in the *same* place.

I am not advocating the removal of all traffic signs from Toronto or Prague, but I do want to call attention to the necessary tension between the intimate scale of the street and the more anonymous networks of infrastructure. Illich argued that energy and equity could only be maintained in a city where speeds did not exceed that of the bicycle and the streetcar/tram. If we keep with the themes of this dissertation on centrality, and the importance of gathering spaces and multiple cores throughout the urban region, the street without traffic signs is less a catch-all solution and a specific ecological-aesthetic engagement and experiment with urban space. The street and the city should highlight the contradictions of the need for mobility *and* the need for spaces in which one can dwell and linger. Like Teige's architecture without architecture and Sieverts's “cities without cities” (2003), the spaces of infrastructure without infrastructure are spaces of interconnection, beyond the domination of cars, beyond the separations of modernist urbanism, and towards an ecology of urban spaces.

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