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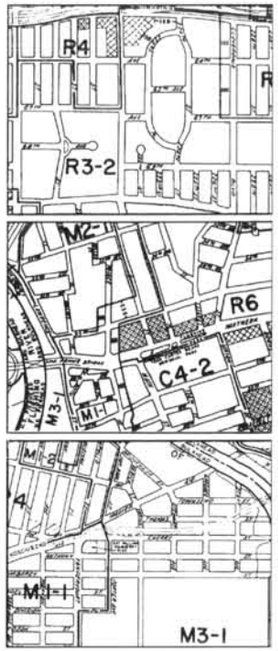
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Planning Architecture

J.R. Stephen N. Barnecut

Completed in partial fulfilment of the requirements for the degree of
Master of Architecture · The Faculty of Environmental Design · The University of Calgary
Supervisor · Prof. John Brown, Faculty of Environmental Design
External Advisor · Prof. Paul Woodrow, Faculty of Fine Arts

March 1999

Abstract

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Supervisor: Prof. John Brown

March 1999

This document is prepared in partial fulfilment of the requirements of the M.Arch Degree in the Faculty of Environmental Design, The University of Calgary.

The planning codes and process in Calgary's inner city make meaningful architecture difficult if not impossible. The goal of this project is to develop an alternative code, or *building envelope*, for the inner city that encourages architecture, and distinguishes the inner city from the suburbs. In developing this envelope, this project explores the conflict between architecture and planning within the context of a utopian conceptual framework. An analysis is conducted of both current planning practice and alternative approaches to urban planning that support complexity and diversity in established areas of the city. The design project is presented as an urban code, supported by an implementation plan and two buildings that illustrate the code's intentions.

Keywords

Inner City, Calgary, Urban Planning, Utopia, Building Envelope, Zoning, New Urbanism, Townhouse

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And to Brandie for your patience, kindness and love. Thank you my dear friend.

The University of Calgary
Faculty of Environmental Design

The undersigned certify that they have read, and recommend to the Faculty of Environmental Design for acceptance, a Master's Degree Project entitled:

Planning Architecture

Submitted by J.R. Stephen N. Barnecut in partial fulfilment of the requirements for the degree of Master of Architecture.

Committee Supervisor John Brown
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Date

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INTRODUCTION: OVERVIEW OF THE PROJECT

Thesis Statement

Immersed in its Modernist utopian origins, current urban planning practice is suburbanizing Calgary's inner city, negatively affecting Calgary's emerging inner city architecture.

Project Overview

This project introduces an alternative *building envelope* for Calgary's inner city. A building envelope is a term that refers to the allowable massing and density of a proposed development project, and its delineations in city planning codes have a direct effect on the design of any project. The envelope proposed here is presented as an alternative to the existing codes applied in the inner city. It is designed to be responsive to the intentions and desires of Calgary's inner city residents and to the urban demands on the city as a whole. Through its small scale and flexibility, it promotes a wide range of architectural responses to the inner city context. In determining the design and nature of this envelope and its conceptual basis, this project investigates current urban planning practice and its effect on inner city architecture in Calgary. This investigation takes the form of a critical essay which comprises an exploration of an ideological framework that describes planning in Calgary, a pragmatic review of the codes that currently shape Calgary's inner city, and a critique of alternatives approaches to inner city planning. The building envelope design proposal is presented in the form of an urban code that is supported by a description, an implementation plan and two architectural examples.

Background

Calgary's skyline is impressive. Unlike most cities which are more uniformly or randomly distributed, Calgary's central business district rises over forty stories above a plain of largely two storey houses. At first this dramatic contrast was the result of disinterest in the inner city. As the commercial downtown grew between 1950 and 1980, corresponding residential growth occurred at the far edges of the city, not in the older neighbourhoods adjacent to the downtown. The contrasting relationship between the downtown and its immediate surroundings was originally an uncontrolled result of massive suburban growth. More recently however, it has been a result of deliberate planning. As distant suburban environments lose their appeal to many Calgary businesses and residents, the inner city has become an attractive alternative. Resulting demands for growth and increased density in the inner city have

been curtailed by new planning codes and guidelines that intend to preserve Calgary's older neighbourhoods. To this end, documents such as the *Housing Guidelines* and *Area Redevelopment Plans* have over the last decades fortified Calgary's standard zoning ordinance. Yet, the suppressive effect these codes have on inner city growth is similarly applied to its architecture. The codes extend planning control into the realm of architectural design. The resulting urban fabric fails to convincingly preserve these neighbourhoods or be bold enough to redefine them. These failings show the inconsistency between the conceptual framework that urban planning in Calgary is based upon and the intended encouragement of a healthy inner city and a meaningful architecture within it.

As a way of revealing this conceptual framework, this project explores the idea of utopia and the powerful effect it has on the shape of cities. The power of an ideal place to generate form is evident both in the idea of planning codes and in the architectural process. The Modernist ideas common to both contemporary planning and architecture are closely tied to the goal of a realized utopia. That each discipline would develop mutually exclusive utopias has a great deal to do with an exclusive interpretation of utopia itself.

The strange lack of a transition zone between the towers of the downtown and the banal houses of the inner city begs the question: what utopia is Calgary modelled after? Further to this, how can Calgary pragmatically make its inner city a successful place with meaningful architecture without dismissing the benefit of utopian ideas? And, how can utopia be reconsidered so that it may serve to inspire good places and architecture? By asking these questions, this project can proceed to provide a design for an alternative building envelope that is both desirable and appropriate to its context, and is both utopian and pragmatic.

Project Goals and Objectives

The intent of the project is to design and determine the basis for an alternative planning approach for Calgary's inner city. The goal of the project is to critique Calgary's current planning process, investigating its biases and the effect these have on architecture in the inner city. Further, the project proposes an alternative approach, supporting this through the design of two buildings that demonstrate its viability. The following objectives are pursued to achieve these goals.

- To investigate the conceptual framework that supports current planning practice.
- To identify the proclivities of existing planning codes and processes in Calgary.
- To discuss alternative approaches and bases for urban planning in the inner city.
- To design and develop an alternative model for redeveloping Calgary's inner city.

The scope of the project is limited to an interdisciplinary review of urban planning in Calgary's inner city from an architectural and planning perspective, and the design of an alternative model for planning in Calgary's inner city.

Qualifiers

For the purpose of this project, the following qualifiers apply:

- In the discussion, the term meaningful architecture is used. While to many this may seem a redundant expression, it is used to distinguish such architecture from the banal, code-driven building that occasionally is mistaken for architecture.

- The North Hill area of Calgary has become a focus for this investigation. This is partly due to familiarity on the part of the author, but also because at its Area Redevelopment Plan is still in the draft stage. This plan is therefore an up-to-date record of planning attitudes in Calgary. And, more optimistically, there is still a chance that it might improve prior to being finalized.

- Little distinction is made between planning and planners, or architecture and architects. Of course, a planner or an architect may differ in attitude or action from his or her peers taken as a whole.

- Throughout, metric dimensions are precise and imperial dimensions are approximate.

Project Structure

The project is presented as a document that includes a critical essay followed by a design proposal. The critical essay is divided into three chapters:

Chapter One explores the utopian origins and nature of current planning regulations and their reliance on abstraction and the replication of successful architectural instances. This chapter proposes that a ubiquitous utopian approach to planning promotes an abstract, suburban anti-city and its imposition reduces the possibility of inner city architecture. It further proposes that current market demands upon Calgary's inner city cannot be translated into meaningful residential architecture within this current urban planning context.

Chapter Two addresses the three planning documents that regulate development in Calgary's inner city. By investigating the actual codes and exposing their tendencies toward suburbanism, this chapter explores the mechanism by which the inner city is currently being encouraged to reflect a suburban utopia that is contrary both to Calgary's requirements and the possibility of meaningful architecture.

Chapter Three is an investigation and critique of potential solutions and alternative approaches to urban growth that attempt to sidestep the failings of current planning practice. Through this investigation, the form of and the basis for the design proposal is determined.

The **Design Proposal** introduces a building envelope and implementation plan that represents an alternative planning approach for Calgary's inner city. It is presented as a code, or ordinance, and is illustrated by two buildings that both determine and demonstrate the viability of this envelope.

Appendix A contains the proposed alternative building envelope entitled the Code for Non-Districted Areas.

Appendix B shows the drawings of the two supporting architectural projects.

Appendix C presents Weaver and Babcock's density allocation proposal.

A **Glossary** provides definitions of utopias and other terms used in this document.

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CHAPTER ONE: UTOPIA, UTOPIA EVERYWHERE ...

> If you know one of their cities, you know them all, for they're exactly alike, except where geography itself makes a difference. So I'll describe one of them, and no matter which.
>
> —Thomas More, *Utopia*

Unlike most North American cities, Calgary enjoys the hegemony of a uni-city, a city that absorbs neighbouring towns rather than coexisting with them. As a result, the city has thus far avoided spawning an edge city—a post-suburban ring of highway dependant developments—by limiting development on the far side of the suburb's edge. Calgary also has a downtown that suffers from after hours abandonment. This chapter posits that both the missing edge city and the moribund downtown are a result of Calgary's planners and developers being primarily interested in building and maintaining the suburb. Through misplaced conviction in the suburban utopia, they have both shaped the city to match this vision and altered this vision to match the city. The result is a compromise that undermines the value of both utopia and the city.

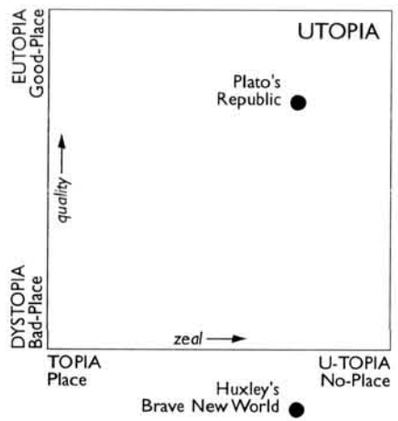
Practical Utopia

Utopia is generally an expression of a place where we would most like to live. Both desirable and impossible, it has long remained an imaginary place. However, the last century has seen North Americans adjust both utopia and reality into coexistence, allowing Baudrillard (1988, 76) to describe America as "utopia achieved." This situation requires that compromises be imposed upon both utopia and reality, a paradox made possible by Modernism. As an attitude defined by efficacy and practicality, Modernism held the city as a "complicated machine" that was the domain of the expert (Southworth & Ben-Joseph, 58; 72). By giving absolute control to experts, the public has allowed both their physical environment and their utopian ideals to be rationalized and abstracted. This essay proposes that our current challenge is to replace this ubiquitous and compromised Modern utopia with a more dynamic, plural vision for our cities. We must unhitch reality from utopia so that each can exist fully and independently.

Letchworth, England was an attempt at building Ebenezer Howard's utopian Garden City. It was laid out north of London by Raymond Unwin and Barry Parker in 1904.

Reprinted from Spiro Kostof, A History of Architecture *(1995).*

Doxiadis's Graph of Utopia



Doxiadis maps Plato's Republic and Aldous Huxley's Brave New World on his graph with the Republic as more eutopian and Brave New World more dystopian. Indeed, Doxiadis associates dystopia with real cities, and is compelled to place Brave New World off his graph somewhere worse than dystopia. Both of these worlds are placed towards u-topia because their escapism restricts them from existing in a real place.

Ever since Sir Thomas More introduced the word "Utopia" in 1516 with his book by that name, it has maintained manifold interpretations and incarnations. Constantinos Doxiadis (1966, 25) in his analysis of utopia observes that some see it as a happy, ideal place, while others consider it as an impracticable place, its existence impossible. Often, it is given both meanings simultaneously, making for more confusion. Doxiadis notes Patrick Geddes' observation that "utopia" could have originated in either of two Greek words: u-topia, meaning no-place, or eutopia, meaning good place. Considering both meanings valid and necessary, Doxiadis proposes a diagram that overlays them on two axes. On one axis he plots *degree of zeal* which progresses from place (topia) to no-place (u-topia). This is a measure of the possibility of realization, or perhaps of place-ness. On the other axis he maps *degree of quality*, which progresses from dystopia (bad place) to eutopia (good place). While this diagram is subjective, which Doxiadis admits, it is useful for considering the utopias that guide us in the planning of our cities. Although Doxiadis used it to position various utopias, this essay is more interested in the terms he applied to the extents of utopia.

Taking this multidimensional understanding of utopia, we can consider the effect utopias have had on the shape of cities in the twentieth century. Of the many, including Sant'Elia's and Tony Garnier's significant works, there are only three that have commanded our imagination. These are Ebenezer Howard's Garden City, Frank Lloyd Wright's Broadacre City, and Le Corbusier's Radiant City. All three utopias were conceived between 1890 and 1930, were a reaction to the unplanned, speculator developed, nineteenth century city, and were an attempt to withdraw from short term solutions in favour of a comprehensive solution (Fishman 1977, 4). Each participated in a movement away from the dystopia of contemporary cities towards the potential eutopia of future cities. By investigating these visions with respect to Doxiadis' understanding of the eutopian/dystopian and topian/u-topian dimensions of utopia, we can more clearly investigate how utopia and reality have come to coexist, and the nature of the compromise that allows this to happen.

Howard proposed redirecting urban growth into new towns that would surround existing cities. These towns were called Garden Cities. Within this overall decentrality, each Garden City would have its own centrality, but be connected by transportation lines to the original city. In order to exclude the greedy and inconsiderate practices of the speculative developer, and the suburban sprawl they were producing even then, all land in these new towns would be communally owned, requiring collective decisions upon its use.

Wright proposed a more thoroughly decentralized city. In his parable of the Wanderer and the Cave-Dweller in *The Disappearing City*, Wright contrasted the murderous Cave-Dweller, or city liver, with the adventurous nomad. He proposed that "the city of the future would be without walls, a city of the Wanderer, where mobility had brought freedom." (Fishman 1977, 157) Wright's Broadacre City was semi-rural, with the homestead considered the conceptual centre. Urban facilities were separated by vast natural and agricultural environments, and were connected through the use of automobiles and personal helicopters.

As with Broadacre City, Le Corbusier's Radiant City was founded on technological advances. But he rejected Howard's belief in cooperative control and Wright's admiration of individual creativity. Le Corbusier believed that only a dictatorial government was equipped to "inaugurate the age of harmony" and dedicated his 1935 book on his city, La ville radieuse, "To Authority" (Fishman 1977, 236). His city was one of high rises and freeways, arranged diagrammatically into zones, each separated by plazas and parks. The centre was a multi-level traffic interchange.

Although each represents a different set of values, within their own logic each was eutopian. Wright's city espoused American notions of mobility and space, and the value of individuality. Le Corbusier and Howard pursued the opposing values of benevolent imperialism and community control from European and English perspectives respectively. All three were decentralized, fully planned cities that genuinely embraced the well being of their citizens. They shared an internal perfection borne from the single-minded attention of their authors. The goal of each utopia was to present a better place to live, and hence more eutopian place, than the cities of the day. But these utopias were unrealizable, as we might suspect from their ambition and know by the failed attempts to emulate them. Early implementations of Howard's Garden Cities in England, such as the cities of Letchworth and Welwyn, resulted in neighbourhoods that appeared similar to Howard's utopia, but politically or economically never attained his cooperative ideal. Le Corbusier's vision could not muster the political support, particularly in democratic countries, that his cities of monolithic towers required. Wright's city has been espoused by North Americans, but in a brutally condensed form: suburban houses crammed together without Wright's large territories of untouched nature in between. None of the utopias came to be fully realized in real places; they were and are u-topian—without place. Howard's, Wright's and Le Corbusier's ideal cities shared the defining qualities of pure utopias—they were perfect yet unbuildable. And yet, the ideas that their cities epitomized became the foundation for urban planning in the twentieth century.

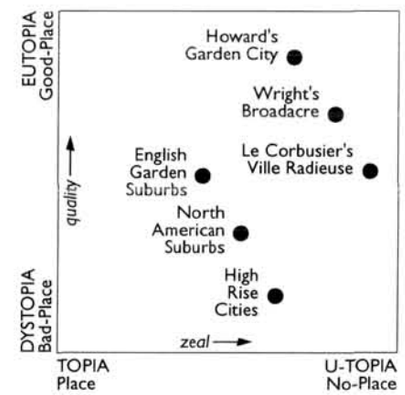
It sounds absurd to build cities based upon a utopia, a concept we appreciate both for its idealism and impossibility. But when Baudrillard (1988, 78) describes America as utopia achieved, he is not surprised. Not burdened by history as his fellow Europeans were, he concludes that America "allowed itself to imagine it could create an ideal world from nothing."

The idea of realizing a utopia was not foreign to North Americans in the middle of the century. Ideals that others considered ultimate and secretly impossible, North Americans put into operation. With Modernism, what were formerly ideological utopias, whether social or humanitarian, were replaced by a utopian realism. Tafuri (1976, 50) calls this attitude "utopia as a project."

With little distinction made between a compelling idea and a compelling project, North Americans distilled the ideas of the three utopias into a *practical utopia* that continues to define our cities today. This practical utopia gleaned and repurposed many aspects of Howard's, Wright's, and Le Corbusier's visions. The Garden City was reinterpreted as the garden suburb, Broadacre City was abstracted into provisions for mobility and low density, and Radiant City loaned its high rise aesthetic and its demand for authority. This composite utopia is a simplification, and often a simulation, of the original ideal cities—one that reduced the original visions to standards and minimum requirements. By using this rationalized version of utopia and allowing real cities to be abstracted into zoning districts and transportation networks, both utopia and reality were compromised in order to coexist. The effect was a practical, predominantly suburban, utopia that became the blueprint for the modern rational and decentralized city.

This practical utopia is distinguished by placelessness and authority, two aspects within the three utopias that have emerged in the translation from utopia to reality. Placelessness was not intended by the original authors. The partially executed and proposed examples of their utopias were distinct and highly detailed, and represented a degree of specificity and quality in design over and above other contemporary places. As demonstrated by Howard's Letchworth, Wright's Taliesin and Le Corbusier's Unités, the manifestation of their visions were sophisticated and detailed wherever the mind and hand that

Utopias Envisioned and Built



If we use Doxiadis' graph to map the three utopias discussed here alongside the built work they inspired, the graph could look something like this. If we were to further plot the work done directly by these visionaries, such as Letchworth, Taliesin and the Unités, these could be crowded into the upper left hand corner.

The Pruitt-Igoe project in St. Louis epitomizes abstract modern planning and architecture. Because of vandalism and serious crime, people refused to live here. The complex was dynamited in 1972, fifteen years after it was built (MacDonald 1996, 13).

Reprinted from Donald MacDonald, Democratic Architecture *(1996).*

conceived them was directly involved. It is the effect of putting these visions into large scale operation that shifted the visionaries' utopias into u-topias. Lewis Mumford (1963) distinguished utopias of reconstruction and escape, the former providing "a condition for our release in the future" and the latter merely an "immediate release from the difficulties or frustration of our lot." Doxiadis (1966, 28) continues this thread by associating u-topias with escape and topias with reconstruction. He suggests that "a u-topia cannot be a condition for the realization of a plan as there is no-place for it." Put another way, the desire not to be in one place presents insufficient insight for the design of another place. Regardless of this, the authors' visions of reconstruction were translated into common visions of escape. This shift in approach, the common decentrality of each utopia, and the abstraction applied to their realization, have together established the practical utopia as a model for environments that are void of place. Each of the utopias by Howard, Wright and Le Corbusier had the benefit of authorship. The practical utopia does not.

Consequently, in the translation of these utopias into reality, an authority was appointed to manage the execution. This collective agreement was made possible by the mutual adoption of Modernism by architects and planners, developers and governments in the 1950s. Southworth & Ben-Joseph describe this direction as superseding the City Beautiful movement, reforming the environment through the use of "expert knowledge, state regulatory mechanisms, and public welfare provisions." The implementation of science and technology, not civic art and architecture, was seen as a cure for both the physical and social urban woes of the industrial city; hence, the authority of this practical utopia was derived from the efficacy movement, one that proposed that, "The affairs of citizens are best guided and conducted by experts" (Taylor cited in Southworth & Ben-Joseph 1997, 58). Without the authorship inherent to the paper utopias, the authority of the practical utopia was bestowed upon the planning expert.

Grafting Architecture

This essay posits that the practical utopia remains in effect in Calgary. Like most cities, Calgary has preserved the authority of the planning expert, most recently in a form that empowers both city planners and community leaders. Under the authority of these experts, there are many interests in the development of Calgary's inner city, including those of architects, developers, builders, and the public. Yet in the act of making buildings, these interests are channelled through two professional groups—architects and planners. Unlike in the middle of the century, when the utopian visions of all these groups managed to overlap in a consistent deluge of shopping malls and destructive urban renewal, today there is a growing division. Architects representing developers and builders, are often at odds with the authority of planners, themselves aligned with community representatives. By investigating this conflict we can examine the effect of the practical utopia on Calgary's architecture.

Architects floundered at the end of the mid century utopian collusion. Modernism had been discredited by scholarly studies and subsequent events which revealed the irrationality of its diagnostic method and the void of meaning in the environments it created (Hubbard 1995, 7). Architects' zealous, but misguided mechanization of social and urban problems had contributed to the creation of many dismal places this century. Architects were clearly partially responsible for conceiving and executing the practical utopia, and this continues to be a burden on the profession. Architects' past miscalculations and current lack of consensus on good design has en-

gendered the distrust of the public (Dixon 1996). This has perpetuated the association of architects as experts at a time when experts are increasingly suspect. However, architects in the last thirty years have re-evaluated their diagnostic approach and reintroduced themselves to context and experience. In 1962, Robert Venturi ([1962] 1992, 16) called for an architecture of complexity and contradiction and proposed richness of meaning as preferable to clarity of meaning. Architects have since accepted that the insights of their field are not a universal diagnosis of the human condition (Hubbard 1995, 12) and have abandoned ultimate solutions such as the practical utopia in favour of a responsive, contextual approach to design. Now, encouraged by a new public interest in urbanism and city living, Calgary inner city residential architecture is surfacing from a quarter century of neglect. Calgary architects and designers are again introducing innovative solutions to inner city housing. Many are proposing denser, mixed-use buildings and contemporary architecture as they explore new possibilities for urban form.

Conversely, planners have remained entrenched in the abstract notion of a city planned by numbers. In superficially discarding Modernism, they only abandoned its aesthetic, retaining its diagnostic methods and expert control. Their support of the practical utopia continues. Recently, in what could be seen as an effort to legitimize this single-minded approach, planners have invited a form of public participation in the urban planning process. The involvement of the public was nominally introduced to create a more responsive process that took into account the real needs and desires of the public. It was believed that the "input provided by the community can provide the Development Officer with an understanding of the unique factors and neighbourhood concerns affecting the site" (Housing Guidelines 1993, section 5.3). Yet, community leaders who began to participate were themselves compelled to assume the roles of experts in order to understand and participate in the abstract planning process. The gradual delegation of authority to community leaders has allowed planners to abdicate the responsibility of taking a community perspective. Further, it has put community leaders in an unaccountable position of authority where they can further their own personal agendas. Other than the tacit goal of the practical utopia, there is no comprehensive Charter that Calgary's planning experts must respect—only differences in professional or personal opinion, and the political weight each carries. The result is that the public is even further alienated from the planning process. Instead of embracing architects' recent proposals for new inner city residential architecture—each driven by members of the public—the Calgary's Planning Department and most inner city Community Associations have reacted by reinforcing the Land Use Bylaw and planning process to effectively exclude many proposed housing types, styles, and densities. This near absolute control by community and bureaucrat experts, much of it highly subjective and political, has restrained the efforts of inner city designers and developers to build, and oftentimes even envision, new solutions and expressions for Calgary's current housing needs.

In the essay "Erected Against the City", M. Christine Boyer (1990, 36) compiles a set of differences between architecture and planning and concludes that regardless of the particularities, it is clear that there is a gap between the two. Using terms introduced by Foucault, she posits that architects produce utopian—what Doxiadis might call eutopian—spaces, perfected regions of the city, while planners produce *heterotopian* spaces: "places of deviation or abnormality, places of compensation or illusion, and places that juxtapose several incompatible sites, mixing functions and times." Being ideal, both utopias and heterotopias only exist virtually in real places, their representations only having occasional encounters with the city. Purely utopian places are only perfect within the bounds of imagination. The places that architects build can be perfect because

Calgary inner-city architecture is no longer being neglected: Jeremy Sturgess's Connaught Gardens demonstrates that inner city housing can be more sophisticated than rows of detached houses or apartment blocks.

Reprinted from Alberta Architecture, *http://www.architecture.ab.ca/alberta/index.html.*

blocks of socialist Berlin, while architecturally similar to the Unité, become something else in conglomeration. Both without place-ness and redeemable quality, they represent the closest thing to a combined dystopia (bad-place) and u-topia (no-place).

Eutopian places inspired by utopian visions, uniquely successful by their contrast and fit with their particular surroundings, are therefore inherently poor bases for public policy in other places. Such original places are the work of contradiction and genius, and are vital by their relationship with their context. The practical utopia, compiled from successful architectural examples and abstracted inferences of appropriate urban proportions, is an exemplar of dystopia. If planners seeking the healthy city choose first to sterilize these places by abstraction, then render them anonymous by replication, they are merely replacing the dying cells of the diseased city body with clones from an ideal monoculture. For a while, the city continues to look and behave much as it did before while it slowly loses its character and personality. The eyes dim and the pathological effort of planning becomes a relentless autopsy.

The Boundless Suburb

The practical utopia is suburban and abstract. Without accompaniment, it has been a poor model for the development of cities. The replication and abstraction of exemplary eutopias, has produced segregated, artificial cities. Being the underlying intent of the practical utopia, the contemporary suburb is the epitome of this city form. Its land uses singular and separate, and its building types infinitely repeatable, the suburb clearly is the product of the practical utopia. Kunstler contrasts the superficially idyllic scene of the suburban street with its plodding artificiality, its unreality, and its inauthenticity:

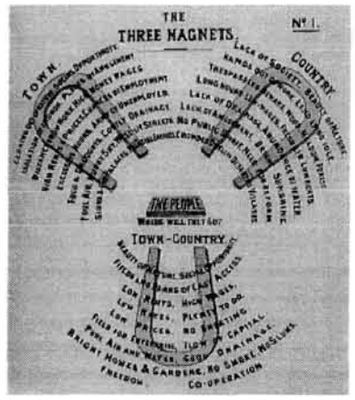
> The subdivision is an abstraction: a metaphor. It is an assemblage of little cabins in the woods or little manors in the park or some hybrid of the two. It is essential to this metaphor that each of these houses be understood as existing in isolation. The fact that there are, say, 350 of them distributed around a tract of 175 acres only elevates the unreality of the metaphor. We want them to behave as an ensemble, as a living pattern, but the houses refuse. To do so would contradict their splendid isolation (Kunstler 1998, 84).

The ideal "little cabins in the woods" or "little manors in a park", the two basic building units of North American cities (Kunstler 1998, 30), have been isolated into a self-insulated commodity that can be replicated in close proximity over large tracts with little damage to their inherent illusion. The edge of every site can be imagined to conceal every other site, every yard private and infinite, and proximity irrelevant because of the car. As well, the suburb can be described in, and produced from, abstract terms. Lot width limits and setbacks describe the suburban landscape in all the detail it requires to be built, sold, or re-sold. The suburban site can be described in quantitative terms as effectively as a real estate agent can describe the suburban house in terms of the number of bedrooms, bathrooms, and cars that fit in the garage. Builders and residents take a statistician's view, ignoring quality in favour of the numbers.

Compared to the urban city, with its paradox and propinquity, the congruity of suburbs is anti-city. Its land uses separated and rationalized, its components replicated and re-replicated, this anti-city forgets the original "isolated cabin" utopia through the abstraction of codes and bylaws. The practical utopia of the contemporary suburb it turns out has nothing to do with the model, and everything to do with the process of deployment. Today the original value is gone altogether, and the simulation no longer masks its absence. In Kunstler's words (1998,

This tightly cropped house advertisement reveals how we prefer to see the suburban house as isolated from its context—the ideal cabin in the woods.

Reprinted from a newspaper advertisement for "The Ankrom II" from Sterling Homes.



Howard's three magnets, although originally intended to promote suburban living, reads like an advertisement for the city directed at the contemporary urban professional.

Reprinted from Ebenezer Howard, To-Morrow: A Peaceful Path to Social Reform *(1898).*

17), suburbia is "an idea of place rather than a place." The simulacrum of the "little cabin in the woods" exists for its own sake on its own terms. It has become but a representation, or a sign of itself. And this is why it has been so successful. There is no original suburb: it can only be judged on its own terms, and these terms are strictly abstract.

At the end of the century, we are both compelled and repelled by the suburb. Baudrillard (1988, 77) calls this the "crisis of an achieved utopia", where its duration and permanence become a problem. On one hand, we are still taken with the escapist's u-topia of the "little cabin in the woods", regardless of the vacant city it produces. As we have become accustomed to thinking of our cities and living spaces in abstract terms, be they spatial or financial, the suburbs' rational idealism still retains an appeal. Indeed, the corollary to North America being utopia achieved is that any change represents a move away from utopia; therefore, change is avoided and the suburb proceeds. Neither the suburban utopia nor the anti-city it creates can be confined. It remains compelling enough to erode both our rural and urban environments. Leon Krier (1990, 204) claims in his critique of zoning that the suburbs not only spread over the countryside destroying nature, but that they also gouge inwards, effectively disembowelling the city. The original city that begins as a distinct figure on the ground of the country devolves into the central business district, a grotesque memory of the city. The surrounding suburbs render the urb meaningless: "the anti-city is out to kill the city." Or, put another way, the practical utopia is out to kill urban complexity.

On the other hand, as it becomes increasingly unaffordable and absurd, the hollow promise of this frontier cabin metaphor lies exposed. In many ways, North America is not possible anymore. As implausible as it seems, we have run out of space. Or perhaps, the surface tension that holds cities together has reached the limits of its tenacity, and what space that remains is much harder to reach. The previously positive heterotopias of the back yard and drive-in have become marginal in their ubiquity. Within this crisis, the idea of the centralized city has become more attractive. The potential for remembering what it is to dwell within urban spaces has surfaced among those aware of the practical utopian failure, and the urbs are, after fifty years, again beginning to re-emerge. Developers and builders are attracted to the favourable return on inner city investment. And Ebenezer Howard's urban magnet of "high money wages, social opportunity, and gin palaces" is attracting a new array of urbanites. Architects are taking the opportunity to rethink predominantly suburban cities such as Calgary. Residents are demanding local cafés, neighbourhood organic food markets and innovative living situations, and they are attracted to the variety of services and facilities still available in the inner city.

But in Calgary, despite this crisis and the growing pressures of urbanism on the inner city, the suburbs continue to drive inwards. This is a direct result of anti-city planning. As a reaction to the rampant, and often thoughtless development of two earlier oil-driven economic booms, City planners were afforded even greater power to protect what they had previously spared of Calgary's early twentieth century neighbourhoods. To save the inner city neighbourhoods from being absorbed by the city, their suburban character was defined and set into code. The Planning and Building Department now uses a triad of codes, including the *Land Use Bylaw*, the *Housing Guidelines for Established Communities* and *Area Redevelopment Plans*, to define and enforce what amounts to an imposed suburbanization of the inner city. But defining the inner city's appearance is killing its inherent character. John Brown (1997) concludes that Calgary's planners mistakenly assumed that character was found in the architectural style of the inner city's houses, not in the nature of their development. The resulting new buildings with their historicist architectural details "re-produced

as visual simulacra in vinyl and stucco" are a mockery of the architectural precedents, themselves dubious. The innovation of the inner city's origin, such as stick frame construction, and the animation, such as its market driven development, have been lost in the abstraction. Through codifying the inner city, its development ceases to be production—it becomes re-production. In an attempt save these neighbourhoods, the planners have embalmed them. The transition zone abolished, the suburban anti-city now begins at the foot of the central business district.

Small Utopias

Jane Jacobs ([1961] 1992, 8) believes that city planners are taught the way cities ought to work, not the way they do work. Planners attempt to anticipate the growth of the city, but instead they determine it. This attitude is similar to that of the map makers in the Borges fable that Baudrillard (1994, 1) describes in *The Precession of Simulacra*, but instead of a map so detailed that it covers the entire empire, the planners have devised a zoning diagram that is so inflated it covers the entire city. In time we have forgotten what the city is like because all we can see is the map. Now, after decades of zoning, the original city has almost vanished. Like the shreds of the empire that remain on the map in Baudrillard's inverted interpretation, fragments of the real city linger in what is otherwise a physical incarnation of the zoning map. As Weaver and Babcock put it (1979, 268), zoning is "simply an imperfect reflection of the present that serves to inhibit, rather than direct, movement into the future." By planning cities with zoning, there is no difference between anticipating growth and predetermining it.

Development must be encouraged not predetermined. Architectural eutopias and escapist, suburban u-topias are not realistic models for the myriad and diverse requirements and expressions of any citizenry, nor is the pathological fixing of a city's problems. Modern city planning cannot continue to burden itself with what Jacobs ([1961] 1992, 357) describes as the "unsuitable aim of converting cities into disciplined works of art." Weaver and Babcock (1979, 265) introduce the analogy of city planning as putting together a jigsaw puzzle where planners neither have all the pieces, nor the leisure time to sort them out let alone set aside the difficult ones for later. This analogy could be furthered with the observation that there are pieces that planners prefer to work with—eutopian places that exist by design or chance. Through favouring these pieces and forcing them into monotonous configurations, the image that the puzzle comes to resemble is not a eutopia, but the abstract quilt of the practical utopia.

If the 1950s represented an era when both utopia and reality were compromised to overlap, the last three decades are a time when reality has bent entirely to accommodate (a necessarily abstracted) utopia; indeed, it has bent so far, that reality no longer seems available, nor producible. Our practical utopia has adopted the authoritarianism of Modernism, but discarded its demands for authenticity. Le Corbusier's aesthetic may have failed, but his attitudes toward city planning have thrived. City and community planning experts now decide upon much of the architecture of proposed projects. We have reacted to the failure of the practical utopia by putting more, not less, power into the hands of the experts. Planning codes are layered upon codes in a spiralling effort to create the ultimate code that produces good cities and buildings. The result in an example of Kunstler's (1998, 176) is "a destructive template left in place (zoning) with extra procedural bullshit layered on top of it (the commission) to make sure that nothing gets built under the bad template." Layered authorities be-

Despite its contemporary materials and proportions, this North Hill, Calgary infill demonstrates current code biases with its tack-on front porch, picket fence and ornate Victorian tracery.

Big Utopia: residential slabs in the former East Berlin.

come redundant and impenetrable. If we are leery of Le Corbusier's high-rise utopia, shouldn't we be more concerned about his authoritarian politics that are being further entrenched by growing codes?

The problem with using utopian models in planning and architecture is a matter of scale. The city-wide application of a single, ubiquitous utopia such as the practical utopia described in this chapter is inherently alienating and produces mediocre environments and buildings. Small utopias and heterotopias are not possible within a ubiquitous utopia. Doxiadis (1966, 54) believes that with utopia being much easier to realize now than in the past (the suburb being a good example), what is necessary is "as many utopias as possible, especially utopias about quality in life." This alternative allows utopias to be small and multiple, rather than vast and ubiquitous. Such utopias could be nested, with smaller utopias fitting within larger utopias—one person's ideal house being compatible with a larger vision of the ideal neighbourhood. We could then each be able to imagine wonderful utopias and have diverse, plural cities.

After investigating the effect of the practical utopia on Calgary (a discussion furthered in the next chapter), it is clear that utopia cannot be the responsibility of only one group of experts, but must individually be the responsibility of every citizen in Calgary. Suburbia has been a both a very compelling built utopia and urban form, and may accommodate the needs of many people, but it should not be the required mode of living for those who choose to live otherwise or elsewhere. Without having to maintain the current singular, practical, suburban utopia, we could free the bureaucracy of planning experts required to perpetuate and authorize it. Planners could again devote their work to the encouragement of places for enacted utopias: the heterotopias of the city such as the public square or the shopping street or even the seedy nightclub. Establishing conditions for such heterotopias should be the primary concern of Calgary's city planners. Doing so would reintroduce planners to the qualities of intensity and diversity that Jacobs calls key to a successful city. And architects could be trusted to design and build meaningful architecture inspired by the diverse utopias of the many residents of Calgary.

Conclusion

The conflict between the practical utopia maintained by city planners and the development of the inner city as a transition zone between the downtown and the suburbs has been described here as a failing in the conception of utopia. The practical utopia, conceived as ubiquitous, has empowered planners to apply a consistent set of rules across the entire city regardless of the varied ideals of its inhabitants. Yet, a ubiquitous, escapist utopia cannot accommodate the varied utopias of individuals and groups, or of planners and architects. An alternative approach to planning the inner city would have to exist as an exception to the rules established by the practical utopia. Or inversely, and preferably, the rules could be the exception to the alternative.

CHAPTER TWO: DECRYPTING THE CODE

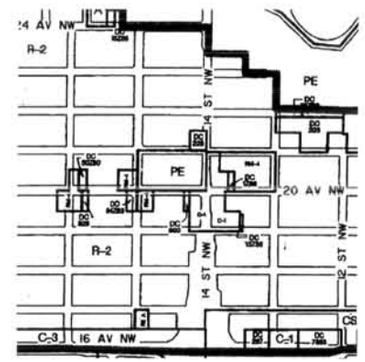
> It is literally against the law almost everywhere in the United States to build the kind of places that Americans themselves consider authentic and traditional. It's against the law to build places that human beings can feel good in, or afford to live in. It's against the law to build places that are worth caring about.
>
> —James Howard Kunstler, *Home from Nowhere*

Kunstler's inflammatory perspectives on zoning and the planning process favour the effort of architecture. This is not because he is an advocate of architecture, as such. His outright promotion of Traditional Neighbourhood Developments á la Seaside, Florida puts his aesthetic judgment at odds with most architects'. Rather, it is because he believes in recreating North American cities as places (or as eutopian topias in Doxiadis' terms) that his arguments are compatible with meaningful architecture. In *Home from Nowhere*, Kunstler surveys the many American obstacles in effect against creating what he calls traditional and authentic places. Generally, it is these same obstacles that prevent meaningful architecture from being built in any North American city.

The first chapter of this paper touched on these obstacles in a general discussion of the failings of the practical utopia as a basis for contemporary urban planning. This chapter proceeds by investigating the actual planning codes and procedures that are directly responsible for maintaining the practical utopia in Calgary and preventing the development of meaningful architecture in Calgary's inner city. Further, this investigation reviews the obstacles that artificially and unreasonably restrict architecture both directly through aesthetic controls, and indirectly through the control of densities and use.

Enter the Code

As discussed earlier, the authority for the control of planning, and thereby architecture, belongs to the Calgary Planning and Building Department. The authority to enact planning codes is derived from the Planning Act of 1977 and the Statutes of Alberta, also of 1977. Although the Department administers a Byzantine array of plans and permits, especially within the inner city, all are fundamentally based on two urban planning concepts: zoning and development control.



Brasilia, the capital of Brazil, is a manifestation of abstract planning. The city is laid out as a physical diagram of the government's political structure. Although this formal arrangement was contrived, zoning is intended to achieve the same artificial clarity of land use relationships in a market driven development system.

Reprinted from Spiro Kostof, The City Shaped *(1991).*

The *Zoning Handbook* for New York City begins simply: "Zoning shapes the City." (1976, 7) Indeed, since New York passed the first American comprehensive zoning resolution in 1916, zoning has come to shape most North American cities. This ordinance essentially gives a City the authority to designate certain areas of the municipality for specific land uses. Originally these were described simply in terms of "residential zones" or "industrial zones", but have evolved into a wide array of zones, each of different uses and densities.

Zoning originated in Germany, where in 1891 Frankfurt-am-Main and Altona were using ordinances that stipulated zones for use, building height, and set backs. By 1912, Karlsruhe used an ordinance that designated sixteen classes of streets (Goldberg and Horwood 1980, 12). Modern planning was quick to seize upon this rational, standardized system for harnessing the chaos of industrial cities. It appealed to the Modernist because it allowed a person to conceive of the city in simple terms as the relationship of uses of various densities. Zoning allowed for a utopian vision of the city that was abstract but practical.

Development Control, an alternative form of city planning, is originally a British system. Unlike the American attitude where property owners have the right to develop their land to its "highest and best use", the British system requires all development and land use changes to be permitted by the government (Goldberg and Horwood 1980, 13). Land use is not predetermined as in the zoning system. Use is determined at the time of development through an application and administration process.

Canada's system is a hybrid of the two, and has many redundancy as a result. In the British tradition, the Uthwatt Report in 1942 established the philosophy that "land ownership represents duties to the community as well as rights of development to the owner." This document represents the root of current Canadian legislation that permits the Crown to exercise restrictions upon the use of privately held land. Most Canadian cities have adopted a zoning ordinance, as per the American example, but some provinces such as Alberta innovated the planning process by introducing development control legislation modelled on the British Town and Country Planning Act of 1947 (Goldberg and Horwood 1980, 13). Development control was seen as less rigid than zoning ordinances, and offered the flexibility of having a quasi-judicial review body able to grant variances and bonuses (Goldberg and Horwood 1980, 16). As well, development control allowed for some participatory democracy on the part of the public, permitting Community Associations to voice their views on projects while they are under consideration.

Zoning and development control are largely redundant systems. They represent different attitudes to control. Zoning pre-defines the nature of what is to be built before a project is proposed. Development control takes the opposite approach of considering a project for approval after it is proposed. In Calgary, where both systems are used in tandem, the redundancy is apparent whenever a development permit is required for a project within a zoning district that is clearly described in the ordinance. The relevance of the dual system is brought in question by situations where either zoning or development control could have been effective singularly. This is particularly pointed when a proposal that fully meets the requirements of the zoning ordinance is struck down in the development permit process.

This situation is common in Calgary's inner city, where an inordinate number of the City's codes and planning process apply. New residential development within the mapped boundaries of the "Established Communities" (an official term that seems a slight to all the surrounding, comprehensively planned

suburbs) are subject to three planning codes, in addition to the development permit process. The first code is a general one that applies to all development within the city. The second is a design guideline that applies only to the Established Communities. The third code comes in the form of area plans developed for individual neighbourhoods.

Land Use Bylaw

The first code is the *Land Use Bylaw*. It sets out basic requirements for developments, such as setbacks, lot coverages and building heights within a land use zoning framework (Brown, 1997). It is general in nature and does not usually determine the design or use by which buildings are shaped. Still, Calgary's Land Use Bylaw is the code that primarily enforces the development of the inner city as a suburban utopia. This in turn has a direct effect on the architecture of the inner city, limiting it to the simple figure/ground paradigm of the detached house, and artificially restricting the variety of uses which architecture can both respond to and encourage. This control is executed through the use of specific zones, or districts, in the inner city, and also through one of the general requirements for residential districts.

The general requirement that keeps inner city densities artificially low is the accessory building limitation. The Bylaw (section 20(5)(f) and (g)) disallows suites above garages, otherwise known as accessory apartments. This is done with two specific rules: one that limits accessory building height to 4.6 metres (15 feet) with an eave at 3 metres (10 feet), effectively disallowing a second storey, and another that bluntly states that "an accessory building shall not be used as a dwelling unit." While this may be reasoned as a method of mitigating parking problems, it is effectively a method of use segregation. The result of this rule is that people who can only afford to rent a small suite are kept out of, or at the periphery of, districts where people can afford to rent or own an entire house. This rule also restricts homeowners who would use the extra income from rent in order to meet their mortgage payments. Kunstler (1998, 131) singles out this rule as the reason "affordable housing" districts became necessary after the implementation of zoning. Rules such as this effectively zone out "the very conditions that formerly made housing available to all income groups and integrated it into the civic fabric." People who work in an area that they would otherwise be unable to live in, such as the gardener or unmarried schoolteacher that Kunstler mentions, now must commute from "some distant low-income ghetto." Either planners really believe that the Fonz was a bad influence on the Cunningham kids, or they have a utopian agenda that is even more extreme than the suburban fantasy of *Happy Days*.

Aside from the accessory building rules, specific zones control the variety of land uses allowed in the inner city. The R-2 and R-2A zoning districts are used predominantly in the inner city. The purpose of the R-2 zoning district is to "provide for low density residential development in the form of single-detached, semi-detached and duplex dwellings" (Land Use Bylaw, section 23(1)). In the North Hill area, 78.5% of the Land Use Designations have this low density zoning. Only 5.5% have zoning considered medium density (North Hill ARP, section 1(b) p11). This represents a remarkably suburban density for an inner city neighbourhood of which most lies within two miles of the central business district, one of the largest employment areas in the city.

This suburban density and land use is exacerbated by the preclusion of an entire architectural form. Traditional townhouses are not permitted in the R-2 and R-2A districts in the Established Communities. The Bylaw does not provide for zero-lot line housing on individual lots, the prerequisite for townhouses.

The minimum 1.2 metre (4 foot) setback from the side property line is maintained by these two new houses. As little grows in these spaces, it will likely be fenced or gravelled, and used for storage.

Except within the central business district, where townhousing rarely makes economic sense, building to the side lot line requires the placement of a legal restriction on the adjacent property whereby the neighbour cannot build within 2.4 metres of the non-conforming building. As well, this can only be done on one side of the property, not both (Land Use Bylaw, section 23(3)(b)(iii).

This prohibition is due to the Bylaw's skewed definition of "townhouse". The Bylaw defines a townhouse as "[a] single building comprised of three or more dwelling units separated one from another by party walls extending from foundation to roof, with each dwelling unit having a separate, direct entrance from grade and includes all row, linked, patio, garden court or other housing which meet such criteria." (Land Use Bylaw, section 4(115)) This definition is distinct from the common definition of townhouse. The Oxford Dictionary defines town house as "a terrace house or a house in a compact planned group in town." (Paperback Edition, 1994) Townhouses in a row are conventionally called rowhousing in America or a terrace in Britain. Each unit is considered a distinct house, and each house sits on its own lot. By this common definition, the word townhouse refers to what the City considers one unit, not a group of such units. The Calgary Bylaw's adjusted definition has been conformed to the tenet of the practical utopia whereby every building must be separated from each other as objects in a void. Through use of this definition, "townhouses" in Calgary have become large "manors in a park", each of which happens to have within it more than two residential units with grade access. Because of this definition, there is no land use district in Calgary that provides for traditional freehold townhouses with party walls at the side property line.

This represents a significant misuse of land. A standard inner city lot is 7.6 metres (25') wide by 36.6 metre (120') deep. The R-2 district requires a side yard width of 1.2 metres (4') on each side of the house. In an average infill house development, the front yard depth is 6 metres (20'), the house depth is 13 metres (42.5'), and the garage depth is 7.5 metres (24.5'), leaving 10.1 metres (33') for the back yard. Such developments produce 31.2 square metres (335.8 square feet) of side yard and 76.8 square metres (826.6 square feet) of back yard. The amount of side yard is therefore equal to over 11% of the area of the lot, and 40% of the area of its back yard. This deep, narrow side yard becomes a service space that is usually paved or gravelled, often dark, and always indefensible. In neighbourhoods with back alleys, the space between houses is the least available to public surveillance let alone to those within the houses themselves. If this land area could be transferred to the back of a house, the back yard could be increased in area by over 40% to 108 square metres (1162.5 square feet). Such land would be more useful, and more conducive to the growth of vegetation and trees. The resulting housing configuration would be less perforated, and thereby safer, and would help define the street as an urban space which residents could adopt as their own.

The planners who write the code have made some effort to accommodate denser housing. The R2-A district is intended to "provide for the option of townhouse development ... to increase the variety of dwelling types." This promotion of variety is commendable and rare, but its implementation is poor. The R-2A district shares the R-2 restrictions on zero-lot line development, making townhouses on their own individual lots impossible. It's only concession is to include "Townhouse Developments" as a discretionary use. Such development must be set back from the street equally to the furthest set back adjacent house (up to 9 metres—three times as much as a proposed detached house), and must be "compatible in terms of mass and character with existing residential buildings on neighbouring sites." (Land Use Bylaw section 24 (5)(b)(v)). The Bylaw here is intended either to ensure that townhouses are

never adjacent to houses, or to erase any distinction between houses and townhouses. We make a distinction between these types of buildings because they do have a different mass and character, and represent different architectural ideas. Townhouses are urban in character, and are upright and often formal. Houses are suburban and low, and tend to lounge on their lot. How could a townhouse share the mass and character of a house without indeed being one. With this rule, the Bylaw discourages townhouses except where there already are townhouses (which are few in Calgary), providing an effective method of segregated uses (and people).

The Bylaw also mandates suburban densities and architecture through entry restrictions. Both districts R-2 and R-2A require that a detached building not have more than two points of entry, excluding garage doors and sliding glass doors. (This represents an advocacy on the City's part of sliding glass doors, and although this may be unintentional, it is a clear impingement on architectural design.) Neither can such a building have an entry onto a stairway, or provide independent entry to the basement (Land Use Bylaw, section 23 (3)(h)). These rules are all intended to insure that a building cannot be split up into multiple residential units in the future. As with accessory apartment rules, this is a measure to restrict an increase in density and effectively separates people of various incomes into their own neighbourhoods. (Planning rules such as this in other cities have effectively maintained racial segregation) To their credit, many Calgarians have no respect for the spirit of this rule and continue to divide their houses into non-conforming, illegal suites in order to make ends meet.

Parking stall requirements also limit density. Fearing "parking congestion", a concern Calgary can only pretend to have in most parts of the inner city, the R-2 district requires two parking spaces for every lot subdivided after 1982 (Land Use Bylaw, section 23(3)(j)). Two stalls is the maximum number that can be fit off a back alley without resorting to tandem stalls; therefore, a total of two parking spaces per unit means that a standard 7.6 metre (25') lot could not have more than one residential unit built upon it, where otherwise three units might have been possible. This rule maintains an artificially low density, while at the same time ensuring that poorer people in smaller units have to live in a minor sea of parking in order for their multi-unit building to meet the requirement. Reliance on the car is promoted by rules such as this, despite continued pleas from the Transportation Department for people to use alternate modes of transportation (CityVision, Spring 1998). No provision is made for modifying this guideline with regard to proximity to transit lines or work places.

The segregation of different uses in the inner city is determined by single use zones such as R-2. Commercial uses are not permitted within residentially zoned land. Zoning large contiguous tracts as one low density district limits architectural expression to the monosyllabic discourse of the single family detached home. The rich architectural possibilities inherent to mixed-use buildings, as demonstrated by many of Calgary's pre-World War I examples, are effectively banned from the city through single-use zoning districts.

Zoning has been used effectively as an instrument of use segregation and density restriction, the two primary means and ends of Modern planning. Through these codes the practical utopia remains abstract, allowing the real city to be developed in its exact image. In this way, the practical utopia is feasible. Yet, in predetermining the city through abstracted districts, each with separate uses, problems have arisen and opportunities have been lost in the inner city. People have been segregated into groups of various incomes, and gentrification by wealthier newcomers has forced poorer residents out of inner city neighbourhoods, rather than developing a social mix. The provision of affordable housing has become an issue, as

This North Hill, Calgary row of shops is a product of land use segregation. The demand for housing on this street is demonstrated by the large number of nearby basement suites, and yet building apartments over these shops is presently inconceivable.

This post-war flat-roofed house would meet resistance in today's planning climate. Such houses are not uncommon in Calgary's inner city.

have traffic increases from peoples' errands taking them well outside of their neighbourhoods. The opportunity for innovative architecture to remedy these problems, and to further enrich the appearance and organization of the inner city, has been overlooked. Giving architecture the chance to genuinely respond to the inner city context will involve the consideration of techniques other than zoning.

Housing Guidelines

The second code that affects the inner city is included within the *Low Density Housing Guidelines for Established Communities*. While not officially a part of the Land Use Bylaw, it is to be used by the City in an "advisory capacity" when considering development permit applications. The Guidelines are presented as a handbook intended to help the house designer through the design and development permit processes. These guidelines are an attempt on the City's part to raise the standard of house design within a province that does not require architects to be involved in small residential projects. Directed at novice builders and untrained designers, the Guidelines introduce sun shading and landscaping issues, as well as drafting standards. However, the Guidelines are highly prescriptive, tending to favour the form of the existing housing stock inasmuch as it can be reduced to component characteristics. This strategy promotes a preconceived aesthetic that is compatible with the suburban utopia, and incompatible with the creation of meaningful architecture.

The Guidelines maintain that they "are not intended to prescribe rigid rules or propose specific design solutions which could bring about a homogeneous appearance to Calgary's established communities. The reality of Calgary's established communities is that they represent a mosaic of styles and personal expressions" (Housing Guidelines 1993, section 4.1). Still, the Guidelines go on to define building envelopes that encourage sloped roofs (section 4.4) and "prominent" entries (section 4.5). Moreover, the Guidelines require that new buildings "respect the character of their surroundings," the interpretation of which is so subjective that judgments which cite it often preclude the tolerance and flexibility of any other code. These are design limitations not guidelines.

In section 4.4 of the Guidelines, a distinction is drawn between the envelope allowed by the Land Use Bylaw and the massing of a building. This is of course fair, given that to respect site coverage rules set out in the bylaw, being 45% for most residential lots, a building couldn't use the entire envelope made available in the Bylaw. The Guidelines assert that "The Land Use Bylaw defines a maximum building envelope within which a building can be constructed, but does not dictate the actual form of the building." Thereafter, the Guidelines proceed to do just that: designers are disallowed to take advantage of the full 10 metre (32.8') height limit allowed by the Land Use Bylaw in "the majority of situations", and are also discouraged from building houses with predominantly flat roofs (despite their being not uncommon in many of the Established Communities). Where a new building is proposed adjacent to an existing house that is 6 metres (19.7') or less in height, the Guidelines define a modified building envelope that is only 5.5 metres (18') high, but allow a pitched roof to extend further to 8.6 metres (28.2') by drawing an imaginary plane at 45 degrees inward from the 5.5 metre height. A flat roofed building at the same height as a pitched roof building could only be an absurd 1.3 metres (4.3') wide on a standard 7.6 metre (25') wide lot. A two storey flat roofed building must be restricted to minimum-standard 2.44 metre (8') ceilings without a raised basement to fit within the guideline. Pitched roof houses are granted the benefit of a third floor, where flat roofed houses are restricted to two. The guideline is applying an aesthetic judgment that forces new develop-

ment to emulate the characteristics of the first wave of mail-order, stick-frame houses built in Calgary. It presumes that the existing adjacent home will exist in perpetuity, and will never be replaced in its turn with a building more responsive to the density and uses required by current inner city dwellers.

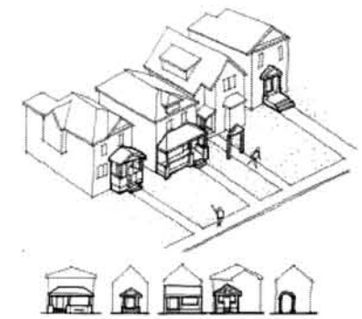
The section in the Guidelines on privacy requires that house designers limit overlooking in rear yards and provide prominent front doors. Overlooking is apparently caused by second storey windows or balconies that may offer a view into another person's property. Perhaps Calgarians are afraid of being the subject of a *Rear Window* scenario, but it's more likely that the idea of overlooking is contrary to the imagined splendid isolation of the suburban house. The Guidelines add force to this utopian idea, and restrict the design of houses accordingly. Designers are also required to provide a symbolic entrance, even when an architectural sequence would be a more appropriate entry. Oddly included in a section entitled "Privacy" (section 4.5), the Guidelines declare that "Entries which are not **prominent** to the street are discouraged" (bold and underline in original). The Guidelines illustrate symbolic entrances, rather than architectural entrances. While porches and porticoes are indeed effective *signs* of entrance, authentic entries are a part of an architectural sequence that draws a visitor into a building. Such entries do not need signs, as they are obvious within the architecture itself. Classical architecture relies on signs of entry while Modern buildings make use of integral, architectural entries. The requirement for a "prominent" entry, as illustrated in the Guidelines, deprives architecture of one of its most important elements, and represents a clear bias against contemporary approaches to design.

In the context of restricting potentially good design in this manner, this code quotes the residential guidelines of the San Francisco Planning Department: "... guidelines establish minimum criteria for neighbourhood compatibility, not the maximum expectation for good design." Despite this, when used as a measuring stick for proposed developments, the Guidelines do expect no more that the emulation of existing housing types and styles. When used as a code, guidelines are a "maximum expectation" of the efforts of most designers. In judgments based on the narrow recommendations of this document, responsive, contemporary design is often considered substandard rather than above standard, and will not be tolerated in "most circumstances."

Architects in particular find this document frustrating. After architects earn their degree and registration they are highly qualified in the design of buildings with an appreciation for their context. To be frank, complying with a planning document that speaks down to architects to describe what good design is, is frustrating for them, particularly when the Guidelines (section 4.2) define the word *design* merely as "the exterior appearance of a building." Perhaps as the Guidelines are directed at anticipating the mistakes of untrained designers, they should apply only to those projects not designed by registered architects. This would remove the significant redundancy of professional architects and professional planners both spending their time scrutinizing small residential projects.

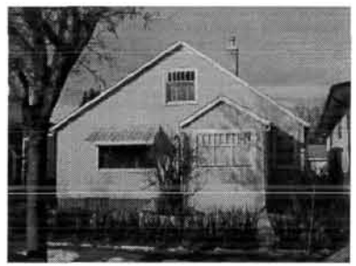
In addition to restricting design directly, the Guidelines do so indirectly by promoting suburban densities. They do this by amending the parking requirements in the Land Use Bylaw. Where the Bylaw only requires two parking stalls for narrow lots subdivided after 1982, the Guidelines (section 4.3) recommend two stalls for *all* new infill developments, even where the dimension of the lot has not changed.

The Guidelines are a product of both gentrification and a fear of change that Calgarians developed during the boom years of the 1970s (Brown 1997). Larry Ford (1994, 176) notes that



"Clearly Identifiable Entrances Can Be Provided in a Number of Ways."

Reprinted from Low Density Residential Housing Guidelines for Established Communities *(1993).*



An entrance such as this does not meet the current requirements for a prominent entry. Many pre- and inter-war houses in the North Hill neighbourhood would similarly fail if proposed today.

gentrification, as has happened in Calgary's inner city, leads to conflicts in personal taste. Gentrifiers in Philadelphia and Toronto have encouraged residents to remove cladding that doesn't conform to their view of their "historic" neighbourhood. He also notes that residents of long-stable neighbourhoods are alarmed by proposals for massive change, and are concerned about diminished views and privacy. The Guidelines respond to both these concerns by being as conservative as legally possible, presenting a vision of future development that is feasible, as per the practical utopia, and attractive, as per a utopian view of older suburbs. However, they fail to accommodate the inevitability of change, locking these neighbourhoods into the aesthetic constraints of the first wave of gentrifiers of the 1970s. Two decades since the gentrifiers first moved in, the Guidelines are restricting the inner city from urbanizing and from being designed in a manner that appeals to the next group of people who want to live there.

Area Redevelopment Plans

The third code exists in the form of *Area Development Plans*, documents that are written for, and apply to, particular areas within the city. Almost every Established Community is represented by an ARP. These documents, co-written by the City and the Community Association for the area in question, are legally binding supplements to the Land Use Bylaw. They largely consists of practical land use redesignations and transportation plans that are meant to improve the structure or appearance of the area, but they also tend to characterize the neighbourhoods in terms of their historical roots, and give the force of law to the Community Associations' utopian goal of maintaining a continued traditional, suburban appearance.

For example, the North Hill ARP (currently a draft) enforces this intent by setting a maximum height for houses at 8.5 metres (27.9'), a further reduction from the Housing Guidelines. (While the ARP does allow for heights over this in "unique circumstances", these would never be approved by a Community Association concerned about setting a precedent.) Additionally, the historicist attitude found in the Housing Guidelines is also present in the North Hill ARP. Porches and front balconies are encouraged, nominally to promote "neighbourliness" (NH ARP, section 3.4: 14) but also to emulate the appearance of traditional homes that have these features. The incentive of site coverage relaxations is even offered to new houses with front porches. Indeed, according to the ARP, buildings on corner sites should incorporate elements such as window treatment, building projections, wrap around verandas and decks (NH ARP, section 3.4: 18). Excepting projections, these are rarely features of contemporary architecture.

More obviously, the North Hill ARP states that "new development (and renovations) should respect the existing mass and forms, rooflines, font and rear setbacks, building orientation, finishing material and design quality of the surrounding dwellings" (NH ARP, section 3.4: 14). This guideline doesn't require that new houses look just like old houses, but in practice, when new houses don't look like turn-of-the-century houses, they generally meet disapproval. Deyan Sudjic (1993, 176) recognizes that rejecting the styles of the recent past is not a specifically Modernist tendency: "Each generation, it seems, has to learn to despise its predecessors as an inescapable part of its adolescence...." He concludes that it is only with maturity that we appreciate the merits of recent works. The North Hill ARP is indicative of this lack of maturity in its not-so-veiled disdain for flat roofs, subtle entrances, and dramatic but simple architectural features.

Area Redevelopment Plans adds to the obligations set out in the Housing Guidelines to design new homes in an historicist and suburban manner, each resembling a "cabin in the woods" or "manor in the park" despite being only eight feet apart from one another. ARPs further the agenda of the practical utopia and disallow innovative or responsive architectural solutions. They also muddy the permit application process. A design that is perceived as good by design professionals, may be disallowed through the Community Association's interpretation of the Guidelines. Often, the subtlety between a project respecting its context and looking like its neighbours is lost in the practical application of the Guidelines and the Area Redevelopment Plan.

Weaver and Babcock (1979, 37) agree with Ford's view of gentrification. In their study of zoning, Weaver and Babcock observe a pattern where older neighbourhoods are "rediscovered" by people willing to rehabilitate the existing housing stock, and in turn, the surrounding neighbourhood. However, they note that the people who arrive first "create an environment that is pleasing to themselves and immediately march on city hall to have that pattern of development cast into the permanent stone of the zoning ordinance." The North Hill ARP (draft) is a product of this behaviour, and its intent is illustrated by this statement in its "Vision Statement and Goals" section:

> As you approach the North Hill communities, you see large trees and well-kept houses. There is a village atmosphere with young and old mingling in a way reminiscent of earlier, gentler times (NH ARP, section 2.0).

Needless to say, many would disagree with this characterization of "earlier times". The attitude that the ARP presents is a nostalgic and pseudo-historical one that gives little credit to the actual nature of the communities that it attempts to represent. It is a vision of a good place that did not exist (a utopia) that is only loosely based on the good places (eutopias) that inner city neighbourhoods actually have become.

Area Redevelopment Plans, if they adhered to their vision statements, might offer intriguing readings of the city, perhaps being small scale utopian perspectives that inspire a positive collective effort. But ARPs are only cloaked as utopian visions for their neighbourhoods, reading more like treatises drawn after battle. Given the history of the relationship between communities and City planning departments, such documents follow. After decades of being disregarded, most of Calgary's inner city residents have acquired the power of active Community Associations. Through fighting the city on its belligerent transportation policies and destructive zoning techniques, Community Associations were compelled to put forth planning experts, and in many inner city neighbourhoods in the 1980s demonstrated enough political will to establish an armistice with the planning experts at the City. Area Redevelopment Plans may nominally give a "local policy context" to the Bylaw, but they read like legal pacts whereby a Community Association allows the City to pierce its expressway network through the heart of its neighbourhood, and in return the City agrees to forestall urban development in the area. This could be described as lubricating the traffic network by giving people no reason to stop. The ARP therefore usually includes a good deal of down-zoning alongside a reduction of height limits in order to maintain its suburban appearance. Such down-zoning is common to "rediscovered" neighbourhoods, and is allowed by the City in deference to the power of the gentrifying middle class. (Weaver and Babcock 1979, 39).

This compromise is a reflection of the confrontation between eutopian vs. u-topian efforts. The restriction of urban development represents a eutopia rooted in the physical appear-

Imagery used in the Housing Guidelines.

Reprinted from Low Density Residential Housing Guidelines for Established Communities *(1993).*

The North Hill Area redevelopment plan blithely anticipates redevelopment after the widening of the Trans Canada highway to be similar to that of the Macleod Trail Corridor, a congested automobile strip on Calgary's south side (Section 9.3.1). The house on the left will be one of many demolished to make way.

ance of the inner city, much of which is still well treed, populated by well kept houses, and intersected by attractive parks. However, its u-topic situation is also prevalent. Largely lacking mixed-use buildings, medium density areas, and shopping streets, much of the inner city remains suburban, distinct from newer neighbourhoods only by the age of its houses and its gridiron street pattern. Commuter expressways that bore through the inner city have contributed to its suburban character by encouraging residents to shop and entertain themselves outside of their neighbourhood. Community Associations and the City also share the responsibility for promoting both eutopia and u-topia. The City's goals of free-flowing traffic routes in the city appeals to the eutopian ideas of mobility and freedom, while equally impacting the quality of the places near such routes. And the Community Associations' strategy for maintaining the eutopia of existing neighbourhoods through restricting height limits and promoting historicism creates placelessness, or u-topia, through homogeneity and artificiality.

But their eutopian and u-topian efforts are products of single-minded resolutions, not holistically considered solutions. ARPs are a compromise of two dichotomous perspectives that are mutually inclusive only within the abstract context of the practical utopia. Rather than offering a holistic approach to improving the state of the inner city, these documents are eventually destructive. New architecture representing innovative housing and uses, and particularly the mixing of the two, could maintain the eutopian elements of the inner city, while restoring it as a place—a topia. But architecture that does not represent either the aged eutopia of the nostalgic suburb or the Modern u-topia of the shopping strip is not considered. Innovative and responsive architecture is generally not possible in the context of most Area Redevelopment Plans.

Development Permit Process

In the original British conception, the development permit process was an administrative one where a project was considered by a planning authority for approval before building could proceed (Goldberg and Horwood 1980, 13). In Calgary, the City Planning Department uses the process to confirm that a proposal conforms to the myriad codes in effect and meets the requirements of other city departments. But this is not limited to an administrative process. The Department also solicits the input of the public through advertising the proposal and offering it to the local Community Association for their say. This can be a highly political process, where Community Associations and even the planning administrators have the flexibility to exercise their own opinion. As described earlier, a proposed project could conform perfectly to the requirements of the codes, and still not be approved in the development permit process.

Even where an inner city location can be found with site and zoning conditions open enough for meaningful architecture to be possible, the development permit process can contort or prohibit the design. As both an extension of Modern planning and a reaction to it, the development permit process both requires the authority of experts while denying the need for their qualification. The situation is such that Planners with two year degrees or diplomas and Community Association board members who only know what they like, are put in the position of authority over architects carrying a minimum of four years of architecture and urban design training. Certainly checks and balances are required in this process, as architects often are biased towards representing their clients over the community, despite their professional obligations. However, in the case of small residential and commercial projects, so long

as such projects meet the codes, themselves stringent, there is little architects or their clients could do to harm the fabric of a street, let alone an entire inner city neighbourhood.

It is ironic that designers are blamed for the poor buildings in the inner city when the actual design of these buildings is often outside of their control. Even where the client is intent on supporting meaningful architecture, the City Planning Department and the Community Associations have all the power they need to compromise it. So long as design is subject to direct democracy, no project can respond to an individual client or site. Every project must respond to every client and to every site. Unless the development permit process reverts to an administrative procedure, meaningful architecture will remain scarce in Calgary's inner city.

Conclusion

In this investigation of the planning codes and process affecting Calgary's inner city, the impact of the practical utopia is evident. The rules bearing on the inner city consistently orient development towards a suburban manifestation. In this context, a banal architecture of simulated character and metaphorical isolation thrives, and an urban architecture of complexity and contradiction is difficult, if not impossible. Without the opportunity for architecture to meaningfully respond to the real needs and desires of people, it can be nothing more than a façade of utopia.

CHAPTER THREE: ALTERNATIVES TO UBIQUITY

Jane Jacobs ([1961] 1992, 195) states that historically, in all utopias, "the rights to have any plans of any significance belonged only to the planners in charge." Calgary maintains the hegemony of City planners and community leaders with the practical utopia. Its planning codes and process determine a suburban, practical utopia rather than places that respond to the real needs and desires of people living in the inner city. Subtleties in the code that allow for deviation and creativity are difficult to interpret by a planning bureaucracy or untrained community leaders, and the tendency is towards the reversion to conformity. While there is a token nod to the opportunity for architects, citizens, and developers to investigate new architectural forms or distributions of residential buildings, approval on all proposals that are not suburban, segregated or isolated is difficult if not impossible. The City's planning codes define and enforce what amounts to the continued suburbanization of the inner city. In this context, meaningful architecture is rarely possible.

There are alternatives to current zoning and development control practices that could be more effective tools and models for planning cities and encouraging meaningful architecture. Four alternatives pertinent to the inner city have been selected for review in this chapter. Weaver and Babcock call for zoning reform with an infusion of public participation; Kunstler recommends Traditional Neighbourhood Development ordinances; and Goldberg and Horwood advocate a flexible form of development control, but additionally put forward spot zoning as an alternative.

Four Alternatives

One. Weaver and Babcock (1979, 264; 269) believe that zoning, and the long-term plan that it implements, may be effective in the suburbs, where planners are writing upon a "much cleaner slate", but are "unreasonable and unrealistic" within the existing constraints of the city. They advocate a process of choosing "solutions" for current short term problems, and then extrapolating the eventual results of those choices over the long term. If the results are undesirable, then new solutions will have to be chosen. They recommend a city plan that is independent of the zoning ordinance. The map would be "more than pablum and pretty pictures" and would "relate to immediate problems and near-term programs, not to a planner's vision of Utopia, U.S.A."

Weaver and Babcock become less reasonable when they propose that this plan would be generated predominantly through public participation. They believe that if people took owner-

Set-back lines, used commonly in contemporary planning, promote distancing buildings from the street, creating undefined, amorphous streetscapes (Kunstler 1996, 138).

ship of the plan, it would be less subject to change or avoidance. This may be true, but how much faith can we put in the content of this plan given the ignorance of Community Associations when they have only an "advisory" part to play in the process? Weaver and Babcock seem oblivious to the NIMBY (Not In My Back Yard) and BANANA (Build Absolutely Nothing Anywhere Near Anything) syndromes common to most community organizations. Community Associations may be a great resource for advice on the subjects specific their own area of the city, but would have little to offer to neighbourhoods on the other side of town. And if the plan would have to be approved by a City authority, as Weaver and Babcock propose, it is possible that the authority may act as a sieve for both bad and good ideas.

Although Weaver and Babcock's general plan is implausible, in terms of zoning reform in inner city scenarios, they propose an effective system of commodified density allocations. They deem this more complicated system necessary to avoid the slums that neighbourhood wide up-zoning in declining neighbourhoods have produced. They observe that in situations where land value is stable but the value of houses is decreasing, up-zoning property to allow for greater density increases the value of land without increasing the value of houses. With the increased land value, the property is too expensive to purchase with only a house on it, and given a limited housing demand, only so many properties in the up-zoned area can take advantage of redevelopment. The result is that the houses themselves are subdivided into multiple suites, and are allowed to deteriorate until the cost of keeping them and the cost of demolishing them are equitable. Density allocations would be available for trade such that property owners could purchase allocations from other sites in the neighbourhood to increase the density of his or her property; therefore, density increases could be controlled and available only to a limited number of sites in the neighbourhood (Weaver and Babcock 1979, 288).

This alternative has a great deal of potential as an amendment to current zoning laws. It however does not concern itself with any aspect other than density except tangentially, and presents only part of the remedy to the existing restrictions placed on inner city architecture. A chart of Weaver and Babcock's proposed density allocations appears in Appendix C.

Two. As a New Urbanist, Kunstler laments a loss of consensus in city building after World War II. In *Home from Nowhere* he describes pre-War urban fabrics—not dissimilar from Calgary's inner city—as the product of cultural agreement, not rules. Indeed, Kunstler says that to make our cities better we must throw out our zoning laws and master plans and replace them with a "new traditional town-planning ordinance". Such an ordinance would be composed of an urban code and an architectural code. The former defines the hierarchy of streets, block types and sizes, parks and squares, and how buildings relate to public spaces such as streets and squares. The architectural code specifies design elements such as roof pitches, porch dimensions and cladding materials (Kunstler 1998, 136). This code is intended as remedy to the "incompetence of architects", whom Kunstler mistakes for the developer-hired drafting technicians that actually design most houses and small projects today. Kunstler understands that he is recommending a New Urbanist authority to replace the existing Modernist authority, and believes that by exercising it in the form of a Traditional Neighbourhood Development plan, that we can relearn the value of civic art through the force of example.

An architect might be offended by his recommendations. They are restrictive and prescriptive, and require a greater deal of conformity than even current zoning and housing guidelines do. The thing to realize is that Kunstler isn't thinking like a planner. He is thinking like an architect. He is considering a neighbourhood as a comprehensible composition that exists in three dimensions, not in two as a zoning map does. He is

talking about the form of buildings and, unlike any Modernist planner, he is thinking creatively and responsibly about the spaces between them. He is describing figure/ground relationships, events in space, and the contrast of public spaces and private spaces. He is recommending that we begin to consciously design, not merely plan, our cities.

The popularization of the Traditional Neighbourhood Development by town planners and architects Elizabeth Plater-Zyberk and Andres Duany is proving that Kunstler may be right about how to effectively design new subdivisions. But Kunstler admits that installing a TND in an existing city is much harder to do that apply it to a new subdivision. He describes a couple of scenarios where a TND ordinance or attitude was adopted as optional to the existing zoning, which were at least a step in the right direction (Kunstler 1996, 165; 229). In these situations, developers could optionally choose to use a TND for their own urban redevelopments rather than the existing zoning laws. Yet, he cites no examples of healthy inner city neighbourhoods adopting a TND. The combination of an Area Redevelopment Plan and the Housing Guidelines may be an example of how such an ordinance can evolve into existence, but these documents have little of the vision or the force of law that a TND does.

Traditional town-planning ordinances have been criticized for not delivering upon their promise of producing a real town (Stanwick 1998). This is a issue of marketing, not manifestation. Without deviating from the pro-urban goals of the *Charter of the New Urbanism*, the Traditional Neighbourhood Development could be renamed and repurposed as an "Urban Neighbourhood Development" and positively affect development in the inner city. The Congress for the New Urbanism offers this:

> The principles which define New Urbanism can also be applied successfully to infill and redevelopment sites within existing urbanized areas. In fact, the leading proponents of New Urbanism believe that infill development should be given priority over new development in order to revitalize city centers and limit sprawl. (Congress for the New Urbanism Web Site, http://www.cnu.org/newurbanism.html)

Regardless of what many New Urbanists claim they are making, the urban and suburban places that TND ordinances produce remind us of what it is like to use a eutopia as a fully rendered model for our cities, rather than using an abstract notion of the way cities ought to be. Their authenticity lies in the intent. If a community collectively chooses to put itself under the mantle of a TND rather than a suburban zoning ordinance, it would likely be better off because of the urban intent intrinsic to the code. But for neighbourhoods that thrive on individual expression, clashes of urban relationships, and accidentally beautiful places, an overriding intent may undermine their potential.

Three. Goldberg and Horwood (1980, 96) advocate a flexible form of development control. Developers and redevelopers would present their proposal to all concerned parties, including elected officials, property owners, and citizens who could then discuss the proposal and resolve the best possible form it could take on the land. Zoning would be replaced by "a well-defined and carefully proscribed control process where the various decision points and variables are clearly specified in the law or in the regulations governing the approval process." They refer to Houston, a North American city without a zoning ordinance, as example of a city with a well-defined and well-publicized development approval process.

The traditional imagery of many New Urbanist projects, particularly Seaside, Florida, detracts from the movement's stylistic agnosticism and interest in urban redevelopment solutions.

Reprinted from Alex Krieger, Towns and Town-Making Principles *(1991).*

America's Most Wanted, *1994*

Vitaly Komar and Alexander Melamid produced this work by surveying the American public on what they most wanted in a painting. This "design by committee" produced a painting that nobody would want.

Reprinted from the exhibition pamphlet for The People's Choice, *Independent Curators International.*

This arrangement may only work effectively when a cultural agreement of building exists, such as that which Kunstler attributes to pre-World War II communities. Otherwise, this form of development control could produce the mediocre results associated with design by committee. The "control process" would have to clearly state what concerned parties would be permitted to comment upon, and should be able to limit communities from discussing whether properties would be rented or owned, limit officials from considering project profitability, and limit citizens from discussing architectural issues. If indeed the process was fair to every party's rights or area of expertise, the idea of people reaching an agreement through constructive negotiation is an attractive one.

Four. Goldberg and Horwood (1980, 97) also introduce the judicious use of spot zoning as a method of encouraging innovative projects. Spot zoning is described as "the ultimate bane of the zoner's existence" being viewed as "a compromise of the basic principles of zoning and land use controls and, therefore, morally reprehensible and beyond the realm of serious consideration." They proceed to describe its advantage of allowing innovation and experimentation within small-scale parcels of land. Planners are happy to up-zone entire blocks at a time, with the belief that these blocks will eventually stabilize at a higher density. Goldberg and Horwood share Weaver and Babcock's perspective that mass up-zoning is counterproductive and risky. It is simply a matter of scale. An enterprise zone on the scale of Canary Wharf in London produces a monstrous clot of urbanization within a very short time, straining the fabric and infrastructure of the city for many years. A small enterprise zone, perhaps the size of a few lots or a block at most, raises the possibility of something interesting happening that could never be large enough to overwhelm the neighbourhood.

Goldberg and Horwood see spot zoning as an opportunity to developers who propose an excellent project. Such a project would be accommodated, even if the land were not zoned for it, through a spot zone. This may work if the process for earning a spot zone was well-published and well-defined, otherwise few entrepreneurs would waste their time preparing a project that exceeds current zoning restrictions and would likely not be approved.

Conclusion

Each of these planning alternatives undermines zoning either by circumvention or abolition, recommending a shift from a u-topian to a topian perspective. They share an understanding that cities need to grow within their existing sites, demonstrating an urban approach to planning rather than a suburban one. This is exemplified with the promotion of increased density, innovative development, mixed-use projects, and the consideration of the space between buildings as an urban condition that should be designed. As well, the opportunity for individuals to create their own cities is inherent. In Jane Jacobs's ideal city, "it is the planners who have no significant plans of their own. The common good is served through maximizing the individual's opportunity to pursue his own ends" (Fishman 1977, 270). Each person is entitled to strive towards their own utopia that neither excludes nor is excluded by collective ideals of the neighbourhood or the city. Through responding to the needs and ambitions of individuals, these four alternatives are more open to architectural solutions to urban problems than zoning can be, and therefore offer an opportunity for architecture to thrive.

DESIGN PROPOSAL: AN ALTERNATIVE BUILDING ENVELOPE

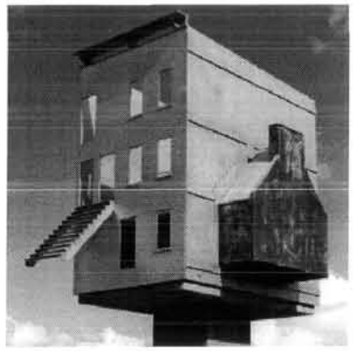
The building envelope proposed here is a small utopia. It is intended to nest between a larger vision of Calgary being a varied and plural metropolis, and the smaller visions of individuals wishing to live and build in the inner city. The primary goal of the envelope is to encourage meaningful architecture. The envelope is also intended to achieve three secondary goals: to allow townhousing, to allow 'trinity apartments' and to spatially define the street. It draws upon a number of sources for both its content and implementation, including the alternatives presented in the previous chapter, the Wellington Code (and others) by Andres Duany and Elizabeth Plater-Zyberk, and the positive intentions of existing Calgary codes. The building envelope is presented as an urban code entitled the Code for Non-Districted Areas (offered fully in Appendix A). It is supported by an implementation plan and two buildings designed to exemplify its goals.

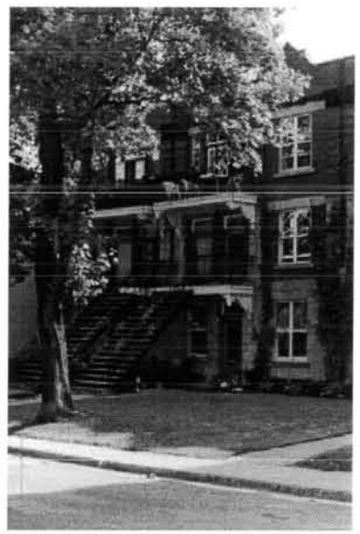
Goals

Meaningful architecture can only thrive where constraints are not too loose nor too tight. Therefore, the Code is rigid, but only in the description of boundaries. What goes within the boundaries is the concern of the architect, the landowner and the builder. The terms of the Code do not attempt to describe architecture in any way, and the supporting design projects presented here are only two interpretations among many.

The allowance of townhousing and trinity apartments is intended to promote increased density in the inner city. Aside from the fact that the inner city already has development pressure on it, increased density reduces both our reliance on automobiles and development pressures on the countryside peripheral to the city. This envelope anticipates the inner city entering a period of steady urbanization to mitigate mounting demands on transportation and other infrastructure, and to alleviate development pressure on the land surrounding the city.

Townhousing is considered here in the traditional sense as separate buildings that abut one another. To allow for this building type, this envelope supports zero-lot line development, or in other words, buildings that may be built right up to their side property lines. The amount of space saved is significant. As is detailed in the last chapter, allowing construction on the 1.2 metre (4') wide side yard currently required of a standard inner city lot would make over 11% more of the area of the lot available for yards or building. Further, if the standard lot were narrowed to eliminate these side yards, 87.8 square





A pair of "Trinity Houses" in upscale Westmount, Québec.

metres (960 square feet), or 32% of the original lot, could be used elsewhere. Put another way, if the allowable width of a lot were to be narrowed by 2.4 metres (8'), 32% of the property could be transferred to adjacent properties. And if the allowable lot width were narrowed by a full 2.6 metres (8.5'), from 7.6 metres (25') to 5 metres (16.5'), fifteen lots could stand where previously there were only ten.

Trinity apartments or trinity houses are common to many eastern North American cities, and renowned in Montréal for their exterior staircases. They are so named because traditionally "the father lived in one apartment, the son in another, and the 'holy ghost,' the tenant who helped to pay the mortgage, lived in the third" (Weaver and Babcock 1979, 34). With this traditional model, they are an example of architecture that brings home owners and home renters into proximity with one another. Even used otherwise, they are an example of an urban density which has proven to be acceptable and successful in many North American cities. It allows more people to live in a neighbourhood without having to awkwardly convert older houses, build apartment buildings, or even give up the front and back lawns which Calgarians so enjoy.

Defining the street is another important goal of this building envelope. Current side yard and setback requirements create a perforated and ragged street edge. Without a well defined street wall, the street fails to be seen as a space in and of itself, and people have difficulties identifying and appreciating it. Allowing the elimination of side yards encourages less perforation in the street wall. And, instead of setback lines where buildings can be anywhere behind the line, this building envelope proposes build-to lines that a certain percentage of a building's façade must meet. The build-to line encourages all the buildings on a street to form a consistent street wall which effectively defines the street as a space (Kunstler 1996, 138).

A shift that this envelope wants to make from the current zoning scheme is to shift common land uses that are considered discretionary into being unconditionally permitted. Currently full size single family homes, a building form that is predominant in the inner city, both in terms of existing and current development, is considered a discretionary use in the R-2 district that blankets most of the inner city. By considering this use permitted in this code, owners, developers and residents can be certain about what is allowed and expected in their neighbourhood. Additionally, all existing uses that become subject to this code will be considered permitted.

Although this code draws from a Traditional Neighbourhood Development ordinance and from existing Calgary codes, it rejects the stylistic demands of the former and the inflexible, suburban density restrictions of the latter. Additionally, because of the redundancy of public participation and land use ordinances as discussed earlier, this envelope also dismisses the development control process in situations where it is irrelevant, such as the case of proposed projects that fully conform to this envelope.

This code should have little bearing on aesthetic or stylistic aspects of proposed projects. Although the examples given in this project are Modern in style, this is a representation of the personal taste of the author, not the requirements of this code. The intention is to be as open as possible both to the heterotopias that planners should encourage and to the small utopias that architects and their clients strive for when they design and build in the inner city.

Implementation

The implementation of this envelope could be likened to an act of cutting areas from the zoning map that currently defines Calgary in order reveal the city beneath. This could be described as 'de-zoning'. It is different from Goldberg and Horwood's spot-zoning as all affected sites would be governed by the same universal code, rather than a site-specific zoning variance. Even after extensive use of spot zones, such zones would continue to act as figures on the ground of the zoning map. De-zoning, after being implemented widely, would allow a universal code—one that is more transparent to the city—to become the ground that the remaining zoned sites would be figures upon.

The concern that Weaver and Babcock raise about neighbourhood-wide up-zoning must be addressed in the implementation of this ordinance. If areas are permitted to be "removed from the map," the wholesale rejection of current zoning is possible. In low density areas, this might result in the same land value increases and house value decreases that have historically occurred in up-zoned areas. However, given that a majority of Calgarians clearly prefer low density living environments (NH ARP, section 1(b): 11), it is likely that given a choice, most residents would not opt to de-zone their entire neighbourhood, or even a large portion thereof. To respect this, the implementation for the proposed envelope would be based on a process where the decision to de-zone is made on a very local level.

Much like the residents on any block can ask the City to pave their laneway (at the residents expense), existing zoning and development control could be replaced with this code by request on a block by block basis. If a majority of the land owners on a block chose to do this, the block would be placed exclusively under the Code for Non Districted Areas. Every land owner on the block would be levied a fee, perhaps garnished from their taxes, to cover the City's administrative and increased infrastructure costs, but also to offset the increase of value their property may gain. This levy would discourage property owners from de-zoning merely to increase the value of their property without making improvements to it. Instead, the levy would make de-zoning attractive only as a means to increase property value through further development of their land.

As discussed before, this envelope also encourages streets to become exterior spaces that are defined by the buildings that surround them. So as to develop a consistent spatial experience for the street, a block would be defined as all the lots between two intersections that share a street . The result of this definition would be to create streets of cohesive character, with shifts in development scale or use kept at the lane.

It is anticipated that the first blocks to take advantage of the Code would be inner city low density areas with largely absentee land owners, and many rented houses or units. This code would advantage these landowners by allowing them to increase the density of use on their land, and realize a greater return on development investment than currently permitted on their property. The new envelope would permit these blocks to become mixed-use districts that could develop to the needs of the surrounding community unhindered.

While it is less likely that this envelope would be adopted in suburban locations, it would be appropriate for town centres and local shopping streets in both new and existing suburban development.

This new development in Chicago presents an effective street wall. Although these are separate houses, they each stand at a build-to line, allowing the road and front gardens to be perceived as a distinct space—a street. If the city's streets were narrower and the houses less fortified, this could be a more intimate, residential space.

In Parc Extension, a suburb of Montréal, detached houses and townhouses share a single street in a pleasantly random harmony.

Concerns

This code is generated from the position that Calgary's inner city would improve by being consistently built up to a greater density, and accepts that little harm can be done to views, shading or traffic when buildings comply with it. While there may be dissent to the change on the part of some land owners who may prefer the current state of their block to the potential of new development, land owners must accept that their existing utopias should be flexible enough to accommodate those of others. Aside from its other benefits, increasing density is one of the few ways that the growing number of people who enjoy living in urban situations can be accommodated. Consequently, this implementation does not give individuals the power to stall any development that the majority of their immediate neighbours would prefer to enjoy. Rather, it accepts that a block which elects to use this code has chosen to prioritize increased density, more local shops and services, and a lesser reliance on the car, and that these goals outweigh the dissent of residents who may still want to live within suburban environments in the inner city. This is not intended to wrest control from the community if developers intend to overstep this code. The existing development control process would be in full effect for all projects that do not fit within the envelope, such as proposals taller than 10 metres (33'), wider than 30 metres (100'), or those with no residential use.

Planners may be concerned about the loss of control in areas that are de-zoned through private election. They may also be concerned about projects that do not require development permits, increases in density in unexpected locations, or patterns of development that are inconsistent with the surrounding development. However, urban planning cannot continue to use consistency and rationality as the benchmarks of success. This essay has argued that diversity and complexity are more appropriate values to have when attempting to embrace the many visions held in a city. Planners should take note of the City of Houston which has no zoning bylaw. They encourage development through the placement of infrastructure, such as services and thoroughfares. This gives planners the ability to encourage or discourage development according to its relationship to infrastructure (Goldberg and Horwood 1980, 45). The responsiveness of development and architecture to the needs and desires of its citizens is not unduly hampered by this more persuasive and less legislative means of urban planning.

Description of the Code

The Code For Non-Districted Areas has been compiled from a number of sources including the alternatives presented in the previous chapter, the Wellington Code (Krieger 1991, 64–69) and Palm Beach County TND (Krieger 1991, 102–103) by Duany and Plater-Zyberk, and existing Calgary codes. This section discusses the rationale for each item in the Code, noting source material where applicable. The Code is presented in full in Appendix A.

(A1–2) The requirement that buildings contain residential uses is critical to keeping neighbourhoods active at all hours. This promotes safety, community and land use diversity.

(A3–4) Industrial uses, such as light manufacturing or artisinal uses are encouraged, but limited to those uses that are compatible with residential uses. Keeping workplaces in proximity with housing improves the effectiveness of alternate modes of transportation, such as walking and public transit.

(A5–7) Residential density is restricted to ensure that substandard or tenement housing cannot be built.

(B1) Build-to lines are used instead of set back lines to create a consistent street wall. Excepting at corner lots, builders may choose a 3 metre or 6 metre build-to line depending on how they wish to use the front yard. The resulting regularity of façades establishes the street as a well defined exterior public space.

(B2) Buildings may be built immediately adjacent to the property line allowing utilization of what would otherwise be a narrow side yard. Buildings can be built away from the property line, but where they are not on the property line they must be 1.2 metres (4') or further away from it. This prevents the unattractive and potentially dangerous spaces that result from houses being closer than four feet apart.

(B3) Buildings are restricted to the front of the lot to ensure that adjacent buildings have fair access to light and air from the back yard. This restriction retains the traditional Calgary pattern of development where buildings are at the street and yards are to the rear. By keeping this pattern, new development will almost always be compatible with older development.

(B4) Buildings on a corner are required to be built to the 3 metre build-to line. This helps to define the corners of intersections from both the perspective of the street and the intersection itself. Such buildings may be built up to the side property line to further emphasize the importance of the corner. It is anticipated that many corner buildings would take advantage of this relationship to include commercial uses on the main floor.

(B5–7) Accessory buildings are encouraged. The restrictions define the shape of such a building so that it remains diminutive to the main building allowing for the adequate circulation of light and air.

(B9) A separation between a building and an accessory building is defined to ensure adequate access to light and air for all users of the property and adjacent properties. Sometimes on shallower lots, this precludes the possibility of an accessory building.

(B10) The permission of a covered passage is meant to accommodate trinity houses—buildings with a unit on each floor—such that each unit has immediate access to the same floor of a tall accessory building. This provides a desirable utility space to upper floor units, as well as reduces the need for a second stair in the accessory building.

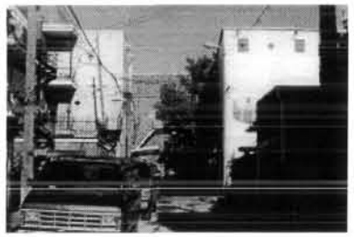
(C1) The cantilever and build-to proportions ensure that at least a third of the façade is built to the build-to line. These rules allow a great deal of flexibility for modelling a façade with projections, cantilevers and recesses.

(C2) Porches that come right to the front property line (often the sidewalk) allows a street to become more intimate and personal to its residents.

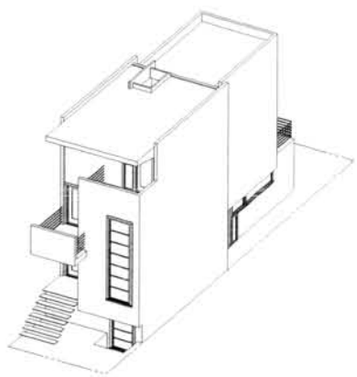
(C3–5) Excessive encroachments are not permitted to ensure that every lot enjoys some unobstructed outdoor space. The deck restrictions are adapted from the Land Use Bylaw.

(D1) A common building height promotes a consistency of development that should in most cases establish a consistent street wall. This is represented in metres rather than storeys to allow the greatest freedom of design possibilities.

(D2) Tall and narrow accessory buildings are an effective means of offering utility space to residents in medium density housing, particularly where it can be accessed directly from stacked units. Tall and wide accessory buildings are not allowed as they would block air and light to adjacent buildings.



These tall accessory buildings in the Plateau area of Montréal provide utility space for upper floor residences, and enclosed parking for the ground floor unit.



House A is a single family house designed for a lot narrow, shallow lot. A garage is provided at the rear of the building.

(E1–3) Restrictions on parking are unfortunately necessary, despite their restrictive effect on urban density. Without control, frustration on the part of residents and business owners would inevitably result. While many cities (outside of North America particularly) operate without restrictions, leaving private enterprise to provide required parking, this is not an option that Calgary is prepared for at this time. Parking densities for this Code have been adapted from Duany/Plater-Zyberk's Wellington code.

(E4) As per Duany and Plater-Zyberk's Traditional Neighbourhood Development Ordinance for Palm Beach County in Florida, on-street parking counts towards the parking requirements of adjacent buildings. This allows otherwise excess parking stalls to be accounted for more appropriately.

(E5) Parking lots are not allowed where they erode the definition of the street. This code follows the Wellington code where Duany/Plater-Zyberk expect parking behind buildings, in mid-block, or underground.

(E6) Parking issues can be solved on a black by block basis by multiple owners establishing centralized, off-site parking lots. Additionally, owners of properties with excess parking could offer stalls to developments with parking deficiencies. This is not an idea foreign to Calgary: this solution has been adapted from its Land Use Bylaw.

(E7) Where there is no rear lane or the main floor is not used as a residence, parking may be accessed through the front of a building. Vehicular front access is allowed for commercial uses so that businesses can offer their customers direct access to parking. An upper floor may be built over this access allowing the creation of a traditional court entrance or possibly a porte-cochere. In purely residential developments, front access parking is discouraged to avoid car and pedestrian cross traffic at the sidewalk, and to avoid the reduction of on-street parking stalls caused by driveways.

(E8) Parking requirement may be reduced where a property is close to public rapid transit. This allows areas near train stations to be denser in response to the demand for transit. Students and commuters without cars would find such slightly denser neighbourhoods, likely populated with more shops and services, an attractive place to live. This allowance is adapted from the New York City Zoning Resolution (Bhattacharji 1976).

(F1–3) Tree requirements promote the urban forest. A 50% canopy coverage is a goal that keeps streets shady in summer and sheltered in winter. (Housing Guidelines, Appendix VII)

(G1) Lots can be as narrow as 5 metres (16.5 feet), easily accommodating a single home with two parking spaces off the rear lane.

(G2) A standard lot width of 7.5 metres (25 feet) is retained for other uses to ensure that adequate floor space and parking is available for commercial and industrial uses.

(G3–4) A maximum lot width ensures that front doors access the street at a regular interval. This retains the street as the primary pedestrian traffic artery, rather than interior corridors.

(H1–2; I 1–2) Lot depth, area, and coverage restrictions keep lot sizes consistent throughout a neighbourhood. Lots of greater size than allowed in this Code would have to seek alternate zoning.

(J 1) Rooftops are urban outdoor spaces, and should be available for use.

(J 2) Shared footings and foundations represent a good economy of material use. While such sharing may not always be possible as adjacent buildings are often built at different times, new construction that offers a footing or foundation to an adjacent unimproved property for later use is encouraged. This arrangement is not otherwise legislated, and is left to the property owners to come to terms on an agreement.

Description of the Supporting Projects

The two buildings designed for this project both demonstrate the feasibility of and exemplify the goals of the Code for Non-Districted Areas. The process of designing them was integral to the process of developing the code, and they have both directed and been determined by each other.

As examples of the goals of the code, the houses are urban in density and character. They are Modern in design, subscribing to a formal rigour that this author believes is appropriate to the contemporary urban context. Modern design is also recognized here as a current direction in inner city residential architecture in Calgary. Seen as important contributors to the space of the street, their façades, while modelled, maintain the continuity of the street wall. As a demonstration of feasibility, each building is designed as if it were to be sold by a speculative developer; therefore, contemporary expectations for layout, features and size are met.

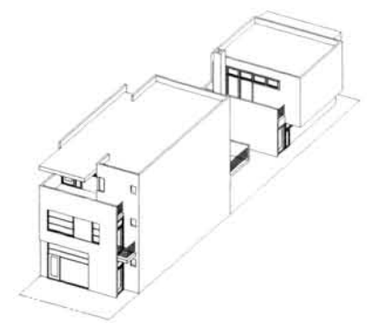
House A is designed to fit within the smallest building envelope possible in the Code as a way of both determining the minimum specifications of the envelope and demonstrating its feasibility at this size. The smallest lot possible is 5 metres (16.5') wide by 22.75 metres (75'), upon which the Code allows only a single family home and does not allow an accessory building. The challenge in the design of this building was to produce a single family townhouse that meets the current market expectations of a garage, two-and-a-half baths and distinct formal and informal spaces.

House B is a building that attempts to maximize the density and variety of uses allowed on a lot 7.5 metres (24.6') wide by 36.6 metres (120') deep. By including two two-bedroom apartments over a shop and an additional apartment over a garage, this building pushes the envelope to the limit. In fact, for this to be permitted under the Code, one of the residential units must share the on-street parking spot in front of the building with the shop. Alternatively, an additional stall could be acquired from a nearby property that has one in excess of its requirements. The challenge in the design of this building was accommodating the complex program into a single building and its accessory building in a manner that Calgarians would find suitable as a condominium. For this reason exterior stairs were not considered, nor were shared laundry facilities. Each unit is self contained, excepting that storage is available to the shop and all three residential units in the basement of the main building.

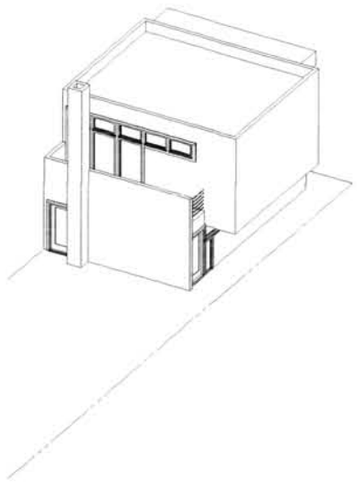
Conclusion

Utopia has had a powerful effect on Calgary. The ubiquity of the practical utopia has diluted Calgary's architecture and made it difficult to distinguish the inner city from the suburbs. But utopias are at the heart of almost every successful place, be it a building or a street. With due concern towards scale and detail, an ideal vision is a most effective generator of place.

We must unhitch reality from utopia. As hard as they try, planners, nor any expert, can perfect Calgary. It will always be a work in progress. If we disentangle the practical utopia from the city, we invite many small utopias to drive the develop-



House B has a complex program. In addition to its accessory building, it contains two residential flats and a small shop on the main floor.



The accessory building behind House B contains a small apartment and a garage for two cars.

ment of Calgary. Each utopia could operate in concert, with architects and planners offering their professional skills and encouragement in the process of urban design and building. Utopias would be inclusive not exclusive.

The City of Calgary must reconsider the current direction of the inner city planning process in recognition of the diversity and difference between its citizens, and the complexity and contradiction of its city. Its codes must be more transparent.

APPENDIX A: CODE FOR NON DISTRICTED AREAS

This ordinance would be the only code in effect wherever current planning legislation was suspended through the implementation of de-zoning. This Code for Non-Districted Areas shall be taken as consistent with the goals of all Area Redevelopment Plans and replaces the Housing Guidelines where they apply. It also replaces rules that apply to specific zoning districts, but otherwise operates in conjunction with the Land Use By-law.

Land Use

A1. On each lot, at least fifty percent (50%) of the net building area shall be used residentially.

A2. On each lot, one hundred percent (100%) of the net building area above the second floor shall be used residentially.

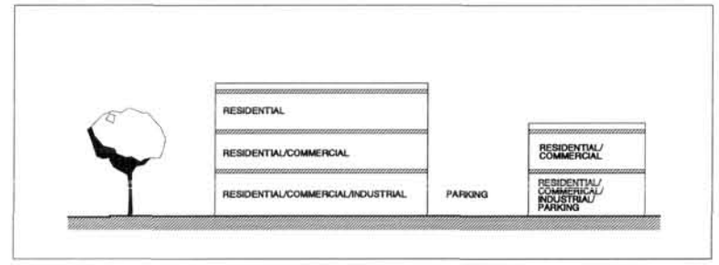
A3. One each lot, none of a building above the first floor shall be used industrially.

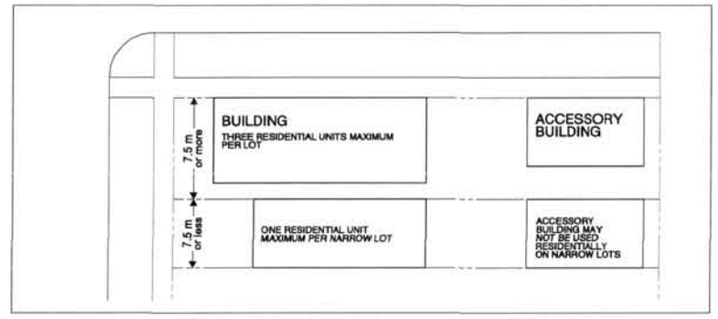
A4. *Industrial uses on a lot may not have* significant negative impact, such as traffic or pollution (air, noise or otherwise), upon other uses on the lot or those of adjacent properties at any time.

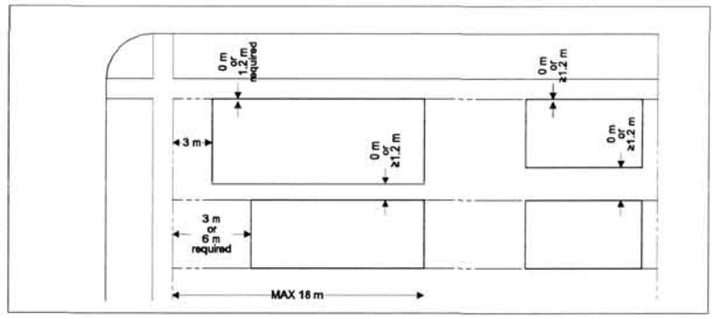
A5. Maximum of one residential unit on a lot less than 7.5 metres of frontage.

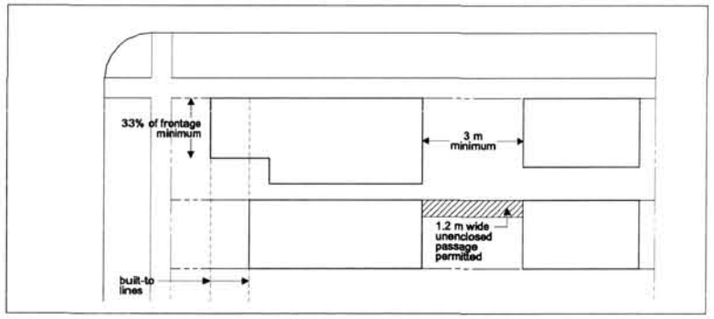
A6. On lots with frontage equal to or greater than 7.5 metres, three residential units are permitted per 7.5 metres of frontage.

A7. An accessory building is permitted on each lot.









Building Placement

B1. Buildings may be built to 3 metres (9.84') or 6 metres (59.0') from the front property line.

B2. Buildings may be built to 0 metres or to 1.2 metres (4.0') or more from each side property line.

B3. Buildings may not be built outside of the area within 18 metres (50') from the front property line.

B4. Buildings on a corner lot must be built to 3 metres (9.84') from the front property line and set back to 0 metres or to 1.2 metres (4.0') from the street side property line.

B5. Accessory buildings may be built to 1.2 metres (4.0') or more from the rear property line.

B6. Accessory buildings may be built to 0 metres or to 0.6 metres (2.0') or more from each side property line.

B7. Accessory buildings may not be built outside of the area within 10 metres (32.8') from the rear property line.

B8. At least 33% of each building elevation must abut a required build-to line.

B9. Accessory buildings with a footprint greater than 10 square metres must be separated from buildings by a minimum of 3 metres (9.84').

B10. Buildings and accessory buildings may be connected by above grade, exterior, unenclosed passage(s) that are no wider than 1.2 metres (4.0') and have a floor no higher than 7 metres (32.8').

Permitted Encroachments

C1. Up to 33% of each building elevation may project as a cantilever.

C2. Balconies, stoops, open porches, covered walkways, bay windows, raised dooryards shall be permitted over any part of the front yard.

C3. Excepting over the front yard, a cantilever may not project more than 1.8 metres (6.0') from a building facade.

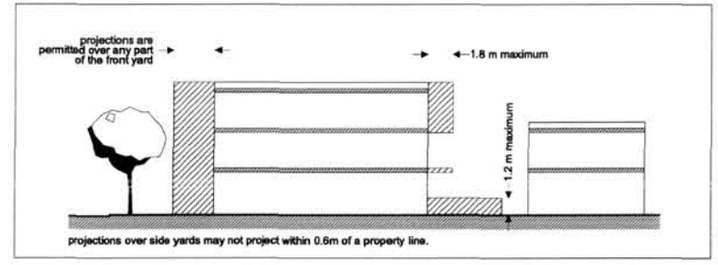
C4. A freestanding deck shall not exceed 1.2 metres (4.0') in height above grade at any point, except where it projects over a rear yard where the grade is such that the building has an at-grade basement level entry. (Adapted from Calgary Land Use Bylaw.)

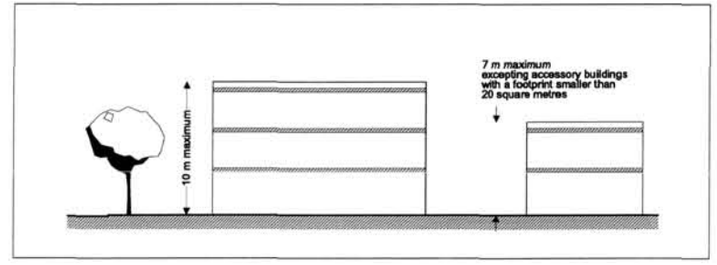
C5. Cantilevers over side yards may not project within 0.6 metres (2') of a property line.

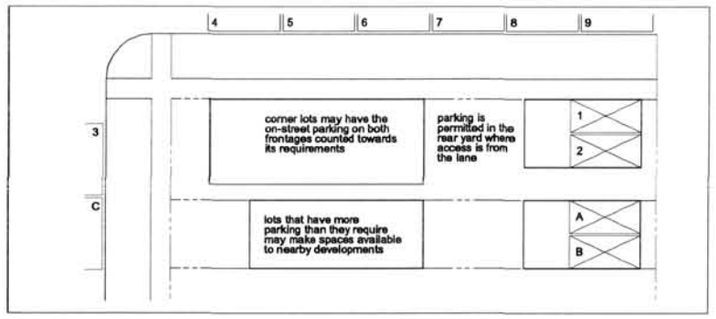
Building Height

D1. Buildings may be built to a maximum height of 10 metres (32.8').

D2. Accessory buildings may be built to a maximum height of 7 metres (23.0') excepting that accessory buildings with a footprint of 20 square metres or less may be built to a maximum height of 10 metres (32.8')







Parking

E1. There shall be one parking space per 25 square metres (269 square feet) of net floor area of building for restaurant, office, entertainment, artisanal, or industrial use. (Adapted from Duany/Plater-Zyberk.)

E2. There shall be at least one parking space per residential unit.

E3. The first two required parking spaces must be on the lot.

E4. On street parking directly enfronting a lot shall count toward fulfilling the parking requirement. (Adapted from Duany/Plater-Zyberk.)

E5. Parking lots and parking garages shall not abut street intersections, squares or parks, or occupy lots which terminate a street vista (Adapted from Duany/Plater-Zyberk.)

E6. If more than two parking spaces are required, additional spaces may be provided on a site other than that of the building that requires the parking provided the alternate space is within 120 metres (394 feet) of the building, is used exclusively as a parking space and can be secured for a time period equal to that of the buildings use. (Adapted from Land Use Bylaw.)

E7. Vehicular access to parking may not be through the frontage unless the main floor is used for nonresidential purposes or there is no lane.

E8. Parking requirements may be reduced by 25% for lots within 500 metres of an LRT station.

Landscaping

F1. One tree must be planted in each of the front and back yards.

F2. Where the front yard is occupied by an allowed encroachment such that a tree cannot be planted, only a tree in the rear yard is required.

F3. New developments should retain healthy mature trees and planting, and where this is not possible, they should be replaced at a value consistent with what has been removed. (Adapted from Housing Guidelines.)

Lot Width

G1. A minimum of 5 metres (16.5') for buildings of 100% residential use.
G2. A minimum of 7.5 metres (25.0') for buildings including commercial or industrial uses.
G3. A maximum of 30 metres (100')
G4. A single building may not be built on multiple lots.

Lot Depth

H1. A minimum of 22.75 metres (75')
H2. A maximum of 46.00 metres (150')

Lot Area

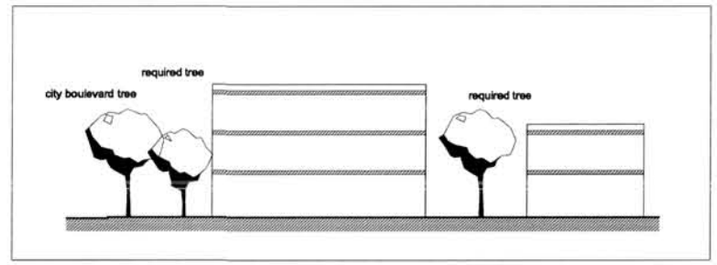
I1. A minimum of 113.75 square metres for buildings of 100% residential use.
I2. A minimum of 170.63 square metres for buildings including commercial or industrial uses.

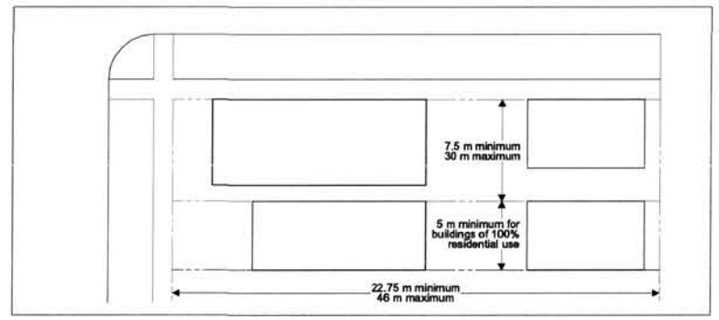
Lot Coverage

J1. There are no limits to lot coverage excepting those established by the above build-to and set back lines.

Additional Rules

K1. There are no restrictions on the use of roof tops as patios or gardens.
K2. Footings may not encroach on adjacent properties, unless they are shared or built to be shared by legal agreement.

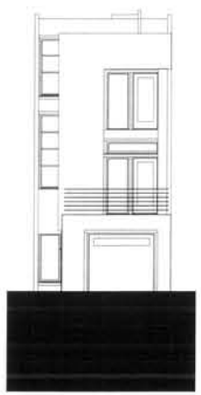




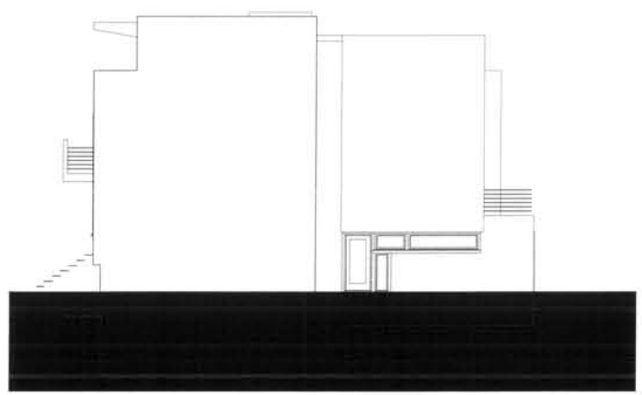
APPENDIX B: PROJECT DRAWINGS

House A
Elevation
Front
1:200

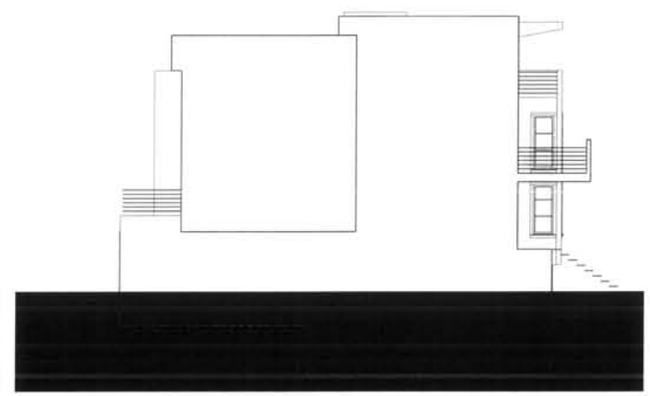
House A
Elevation
Rear
1:200



House A
Elevation
Right
1:200



House A
Elevation
Left
1:200



House A
Plan
Roof
1:200

House A
Plan
Third
1:200

House A
Plan
Second
1:200

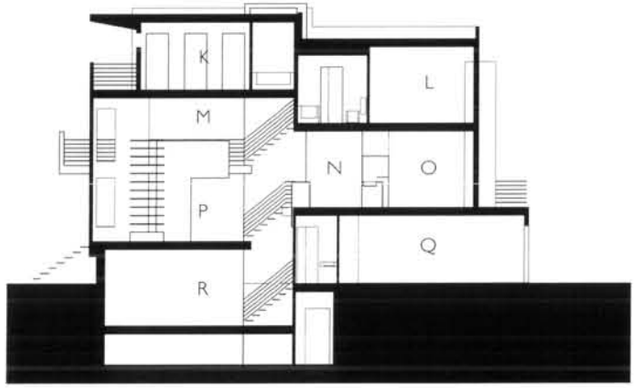
House A
Plan
First
1:200

House A
Plan
Basement
1:200

Bedroom	A	K
Bedroom	B	L
Mezzanine	C	M
Kitchen	D	N
Dining	E	O
Living	F	P
Entry		G
Garage	H	Q
Multipurpose	J	R

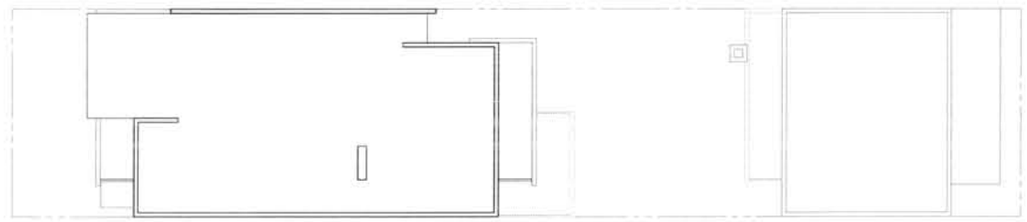
House A
Section

1:200

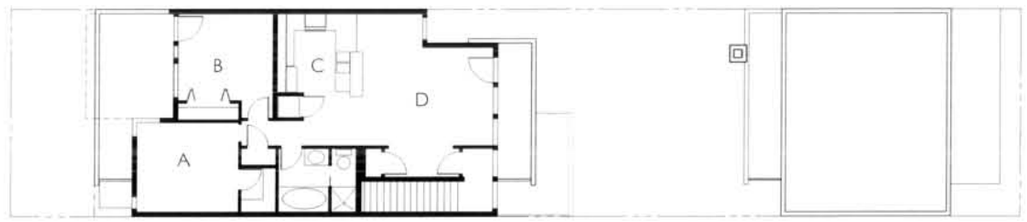


A Bedroom
B Bedroom
C Kitchen
D Living Dining
E Living Dining
F Kitchen
G Bedroom
H Bedroom
J Kitchen
K Living
L Bedroom
M Shop
N Garage

House B
Elevation
Rear
1:200

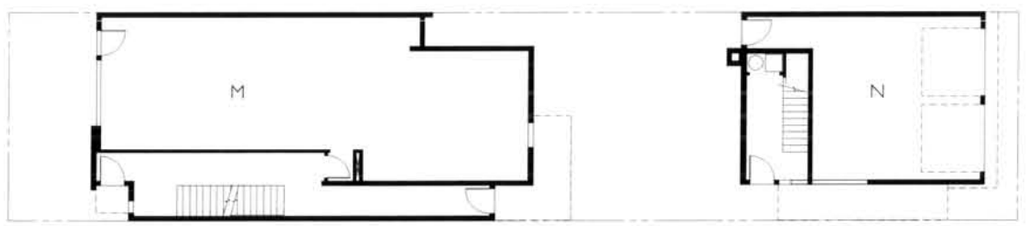


House B
Elevation
Rear
1:200

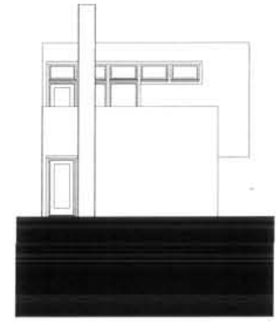


House B
Elevation
Rear
1:200

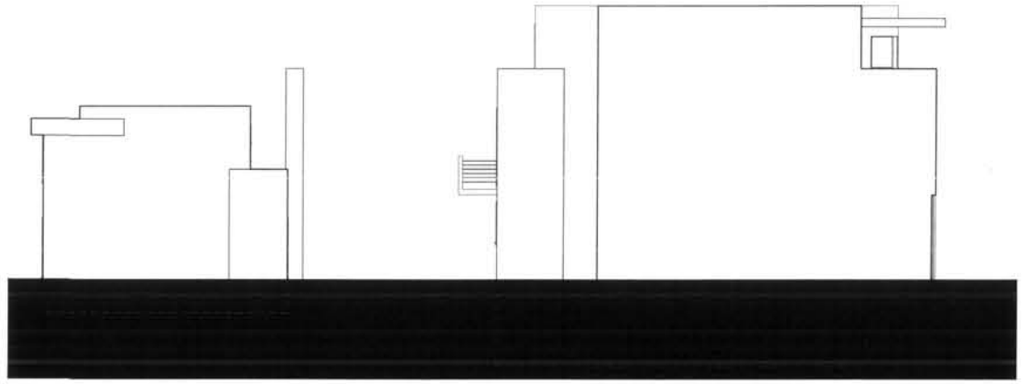
House B
Elevation
Rear
1:200



A Bedroom
B Stairwell
C Rear Corridor
D Utility Storage
E Bathroom
F Exterior Corridor

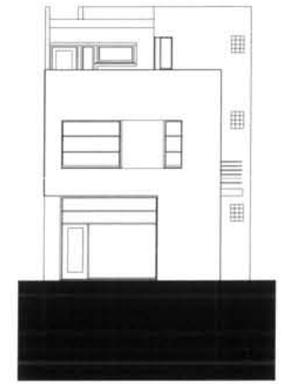


House B
Accessory
Elevation
Front
1:200

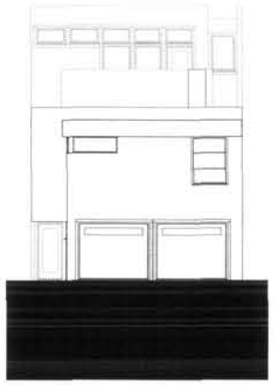


House B
Accessory
Section
Left
1:200

House B
Elevation
Left
1:200



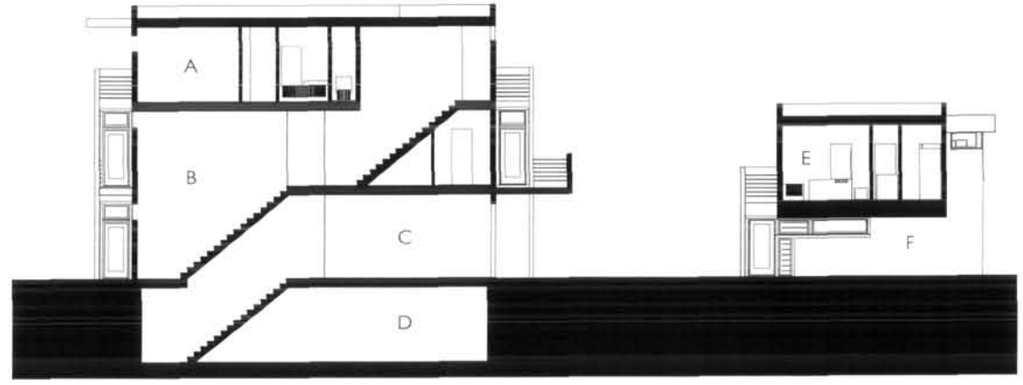
House B
Elevation
Front
1:200

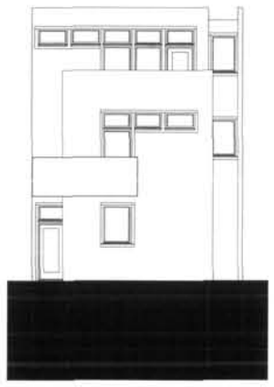


House B
Accessory
Elevation
Rear
1:200

House B
Section

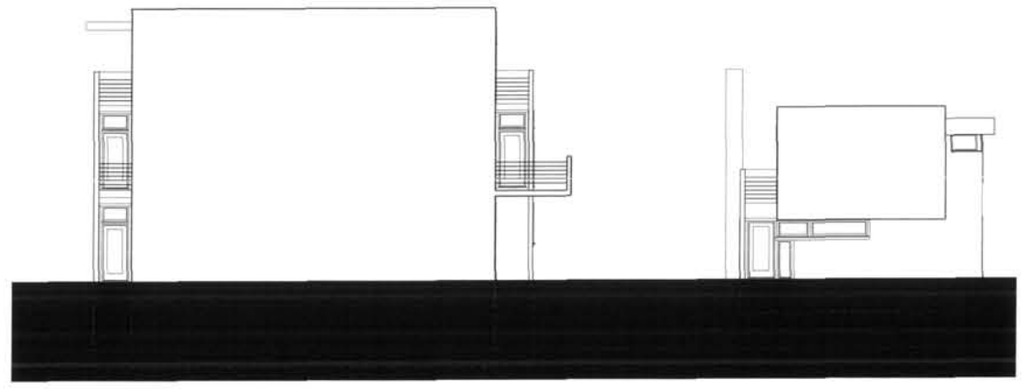
1:200





House B
Elevation
Rear
1:200

House B
Elevation
Right
1:200



House B
Accessory
Section
Right
1:200

APPENDIX C: WEAVER AND BABCOCK'S DENSITY ALLOCATION PROPOSAL

In *City Zoning: The Once and Future Frontier*, Clifford Weaver and Richard Babcock (1979, 288–290) present a system of density allocations as an alternative method to up-zoning for allowing increased density in an established neighbourhood. Because the system distributes a density increase over a larger area rather than on a lot by lot basis, a neighbourhood can grow without the negative effects associated with up-zoning, such as the resulting artificial boost in land value and sudden glut of under-utilized land. Weaver and Babcock describe the implementation as an "Overlay District" that allows for limited transferable development rights within an existing zoning district. They give the following example:

> We have assumed that our block has 24 single-family dwellings on separate 6, 250-square-foot lots. Let us further assume that, after studying the existing infrastructure serving the block and the character and location of the neighbourhood, the city determines that the block would, if appropriately redeveloped, have a total carrying capacity of approximately four times its existing density, or 96 units. Rather than rezoning each lot for four units and inviting disaster, this is how the overlay regulations would assign density values to each lot:

1. Density absent any redevelopment—1 unit as permitted in the underlying district.

2. Density for conversion or redevelopment involving a single lot—2 units, subject to site and structure performance standards.

3. Density available for transfer to a non-contiguous lot—1.5 units with the right to maintain one unit on the transferror lot subject to the underlying district regulations or 3 units if the transferror lot is to be maintained as neighbourhood open space or parking.

4. Density for transfer to a contiguous lot where the contiguous lots will be redeveloped as a unified whole—3 units.

5. Density for development as a transferee lot in connection with a density transfer from any contiguous or non-contiguous lot—sum of (a) total units being transferred plus (b) equivalent to total units, up to a maximum of 3 units being transferred.

6. Maximum density of development permitted on any parcel—one unit per thousand square feet of land area in a single contiguous parcel.

In addition to the variable densities assigned to each individual lot, density bonuses or incentives might be established as follows:

1. Density bonus for specified infrastructure improvements—0.1 unit per 1,250 square feet for providing proportionate share of designated improvements or cash contribution to fund established to provide such improvements.

2. Density bonus for consolidation of separate lots—0.1 unit per 1,250 square feet of contiguous lot area in excess of 25,000 square feet where the development provides common open spaces and parking meeting the ordinance requirements.

3. Density bonus for design excellence—0.02 unit per 1,250 square feet of contiguous lot area in excess of 25,000 square feet for development design judged excellent in integrating new development into existing development pattern.

The foregoing density allocations and bonuses are fixed so that if a developer succeeded in putting together all 24 lots and achieving all available bonuses, he would be entitled to 96 units, the assumed maximum density of the block. The densities might logically be set slightly higher on the assumption that the maximum bonus situation would never be achieved. The basic transfer densities might be set lower to encourage the use of the bonus density incentives.

GLOSSARY

UTOPIA. An imaginary or visionary place that is ambiguously happy and ideal or impracticable and impossible.

EXPERT. This word is used in this paper to refer not to people with a special skill or knowledge, but rather to those who operate and are treated as if they had such. Community leaders who, rather than advising on local concerns that they have specific knowledge of, instead make binding decisions on planning or architectural matters, are considered *de facto* experts here.

EUTOPIA. Good place. An interpretation of utopia that recognizes the quality of its ideals. A description of a real place that is considered good.

DYSTOPIA. Bad place. A place or utopia that is considered bad.

TOPIA. An place that exists or has the potential to exist.

U-TOPIA. No place. An interpretation of utopia that recognizes its impracticability. A description of a real place that it so abstract that particularities are irrelevant.

PRACTICAL UTOPIA. The term used in this paper to describe both the model and the result of the Modern compromise of utopian vision and pragmatic execution made possible by the abstraction of both.

STREET WALL. An edge of a street that is defined by a consistent wall of building façades. Streets without such definition are more appropriately called roads.

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Colophon

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