Curating Experience

Concepts for Analyzing the Future of Our Qualitative Environments

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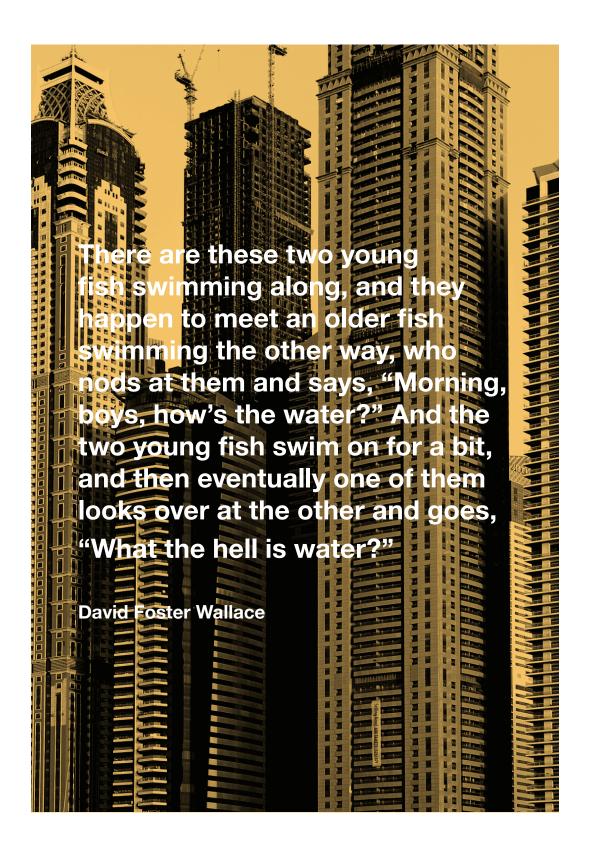
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Abstract

Built environments have evolved to represent much more than form and function alone. When our surroundings are designed and established according to the transformational idea of place, they have the capacity to become powerful humanistic canvases, which are integral to the development and definition of people and their well-being. However, as urbanization's impacts intensify and continue to influence our experiential environments, the role and perception of our form's tacit qualitative responsibilities are drastically and permanently changing. This project responds to society's depreciating capability to recognize or evaluate the indicators of these increasing, quantitatively driven, impacts. Variables in how individuals are developing their intuitive spatial frameworks and qualitative perspective, which are affecting their capacity to effectively evaluate livability and quality of life, are explored as an opportunity for intervention. It is proposed that an inclusive mutual dialogue between designers, stakeholders, and occupants alike is needed in order to provoke meaningful problem-framing of this topic; first, however, it is important to establish a mutual platform of accessible knowledge. Findings from the research of placemaking concepts and theory identify experience and expression as fundamental principles for communicative and transformational environmental design methodologies. As a means of engaging occupants to informally educate themselves and their qualitative perspective, these principles are then translated into an inclusive toolkit for use by occupants within/ during their experience of places, towards developing their analytical processes of visual thinking.

Keywords: qualitative environment, urbanization, urban design, visual thinking, experience, expression, design methodology, placemaking, place theory, livability and quality of life



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Dedication

To my sister,

and the future generations that will be making sense of the design decisions we make today.

I hope the future can be a place for you to flourish.

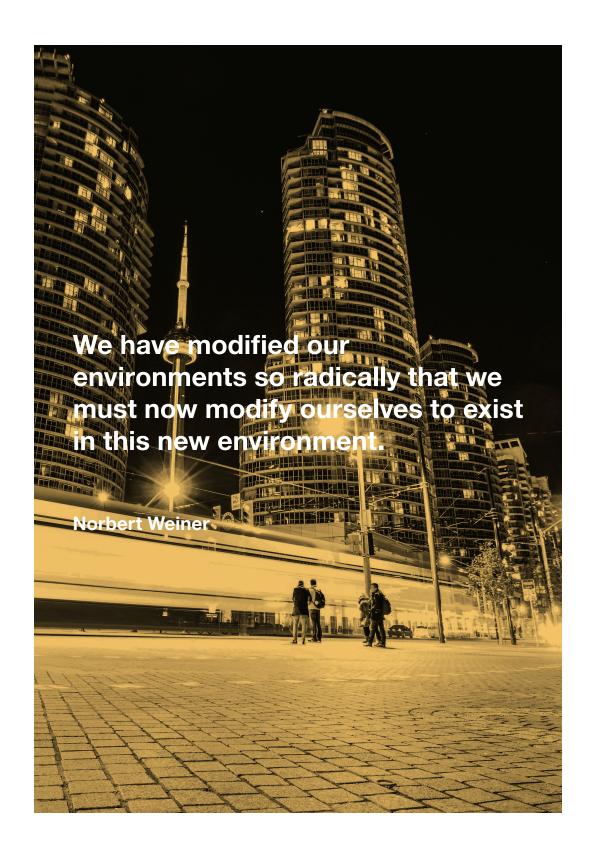
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The Urban Ethic

section one

Introduction

Our built-form environments are "growing and changing faster and more drastically than at any other point in human history." By 2050, World Bank projects that cities will have accumulated more than seventy percent of the entire human population, compared to the current figure of housing just over half. For global economies, this translates to less than forty years to fulfill the combined built-form accommodation needs of 2.7 billion in-migrants – a figure of our growth that previously spanned two centuries. World Bank further suggests a thirty to fifty trillion dollar investment in urban infrastructure over the next twenty to thirty years, "This equals the value of all companies listed worldwide on the stock exchange." For North America's leading urban identities, such as Downtown Toronto, this phenomenon is perpetually redefining urban fabrics by inducing more than forty thousand new residents annually. As these figures are only set to increase, it is imperative that urbanization be

recognized as more than a condition or trend of humanity's modern development, and more so a definition of our habitats' future state.

Moreover, these figures indicate the unprecedented status of urbanization's key drivers: density and demand, an uncertainty which makes discerning the future of our built-form ecosystem a challenge. These drivers are perpetually influencing how urban design, through its planning and development, must adapt and reconfigure to resolve and translate a new state of built-form convention. Amid such a volatile point in the development market's growth, Pont and Haupt aptly highlight in their density research Spacematrix, "This trend of increase in consumption of space calls for further research on the relationship between the capacity and the quality of space... What qualitative measures can be used to compensate for and counteract the effects of higher densities?"3 Their proposition is a primary example of the humanistic, qualitative, problem framing processes that are appropriate for progressing contemporary development strategy. However, these investigations are being critically overlooked by the industry's increasing focus on quantitative priorities and objectives, which are efficiently addressing the rudimentary circumstances of urbanization at the expensive of its more laboring, yet critical, human-oriented qualities. As these are the processes that are generating future human habitats of which we occupy and become attached to, the persisting communication of these quantitated ideas is changing how both society and culture perceive the essence of these human environments. The emerging problem is not just developing and integrating qualitative methodologies, but that as urbanization becomes more ubiquitous to North American civic identities, there is an increasing disconnect between society's desire for urbanity's qualities and their ability to appropriately identify and analyze what the places are and mean. As the ones who will be most affected by these developments, it is imperative that occupants be individually capable of translating and validating the equitability and suitability of these built-form solutions for sustaining a desirable quality of future lifestyle.

The Purpose

Humans share a fundamental relationship with the form systems that compose their environments (the human/form relationship). Amongst many of the meanings and responsibilities this relationship has evolved over the course of humanity's development, of principle importance is its capacity to translate, support, and maintain the qualitative dynamics that define the places we occupy and value. These dynamics are communicated throughout this study as the physiological and psychological imperatives that we have come to depend on of our surroundings, experientially and subconsciously. From a functional perspective, these are the fundamental characteristics of our surroundings that maintain ideas relative to mobility, shelter, and security; but from a qualitative perspective, these dynamics translate into key outcomes for maintaining our idea of place, which are *livability* and quality of life – the key intuitive metrics this study intends to instill and develop.

In this project, I will explore built-form design's transformative capacity and capability to define these intrinsic qualitative outcomes. The need for this territory of investigation is underscored by urbanisms emerging integration with the identity of humanity's future. Within this meshing, it is important that we not only recognize our evolving reliance on form systems, but also that it translates a latent dependence on form's corresponding quality and design. Yi-Fu Tuan demonstrates design's growing transformative responsibility in his phenomenological exploration *Space and Place*, identifying that throughout history, humans have had a veiled cognitive dependence on the endurance and resilience of their surrounding's qualities. He elaborates that when the characteristics of stability are absent, "Places are quickly drained of meaning... [becoming] an irritation rather than a comfort." However, Tuan's example, though, is only one of our environment's many iterations which map the qualitative interactions and connections that we have come to inherently rely on of the human/form relationship. With the emergence of this tacit responsibility to essentially

define the existing and future quality of our lives so dynamically, I believe society is overlooking a critical problem frame regarding the contemporary state of this relationship: have we unknowingly give built-form too much authority?

Although the narratives concerning urban growth have been developing considerably over the past decade, many lack the dialogue and platform which enable individuals to frame these 'bigger questions.' Instead, as the prevalence of density and demand's figures and projections illustrate, we are being propositioned on *what* to see or identify. This diverts one from engaging in the framing process that provokes them towards making meaningful conclusions or inspiring motivations for change.

The purpose of this study is to develop a less specific but more engineered dialogue that confronts the changing qualitative conditions of our human/form relationship, and whether or not our circumstance of dependence is overshadowing our capacity to perceive these intensifying qualitative issues. This project intends to accumulate the necessary foundational content for individuals to define their own qualitative knowledge frameworks, and start formulating their own 'big questions.' Hopefully, this lens for perceiving the places we occupy will inspire individuals to criticize the suitability of this place-prescribed future that is *cities*, and what principles of lifestyle it is, or is not, supporting. In Edward Relph's research *Place and Placelessness* he states,

Hugh Prince writes, "A knowledge of place is an indispensable link in [our] chain of knowledge. [...] And in terms of the practical everyday knowledge that we need to organize our experiences of the world, there can be little disputing this, for we have to know, differentiate, and respond to the various places where we work, relax, and sleep.⁵

This practical 'knowing of places' identifies that how built-form will define our future environments is of equal importance to our shared and personal *idea* of these future environments. The settlements that we occupy are much more than dimensions and habitable configurations; through the human/form relationship, they are canvases to construct

intuitive spatial frameworks, understandings, and experiences. The best design does not necessarily inform the best city, the human dimension of the human/form relationship needs to be able to acknowledge and respect the correlation between the quality of life and the quality of design.

What is concerning to the future of our mutual perspective is Architect Rem Koolhaas's claim that our culture is becoming normalized to urban identities of transition – where "people and their ideas move in, out and through." About Tuan's concept, we must consider that these notions represent contradictory qualities of what should describe suitable and equitable future environments. Koolhaas continues in saying that the extent of this impact has influenced the very "essence of metropolitan culture" to define itself by characteristics and capacity for 'change.' As David Brook highlights in his study *A History of Future Cities*, "Love them or hate them, these dis-oriented-ed metropolises matter. They are places to be reckoned with because they are ideas as much as they are cities, metaphors in stone and steel." 8

The Significance

Change

Adaptability is an innate responsibility of the human-form relationship. However, urbanization's current [and intensifying] state of change has generated unprecedented circumstances for this characteristic to function effectively. Among these circumstances demand is one of the most influential, defining our 'culture of consumption' and the expedited timelines the built-form industry now responds to and within. As the pressures of

fulfilling demand efficiently compound, influential stakeholders are increasingly resorting to 'knee-jerk' solutions and strategies to produce density: outputs that are consistently prioritized by quantitated metrics. As the relationship's dynamic continues to favor its builtform component, this consequently is giving more authority to those who [traditionally] have the most influence rather than those who are most affected. This scenario (Sitting Pretty, Figure 4) is facilitating the market's built-form solutions to circumvent a product's, otherwise critical, adoption chain process. Because of sustained circumvention, it can be interpreted that occupants are being inclined toward 'reactive' participation in the contemporary market and environment due to the pace and volume current development employs. This makes defines particularly difficult conditions for consumers and affected individuals to methodically intervene. Ron Adner frames this as, "When does the best product lose? When the consumer doesn't have a chance to choose it." Occupants (consumers and end-users), whom are facilitating this scenario, are now in a position of adoption and adaptation rather than having the authority of either, which has led to accepting a consistent imbalance of gains in the hierarchy of the market's outputs. Umit Toker suggests that our demand is catalyzing "the forces of real estate development" to shape our habitats through motivations that are "not particularly interested in people's wishes and preferences unless those wishes related to profits." Thus, it is of little surprise that qualitative outputs, and their need for investment, are becoming the most susceptible to modern development's quantitated 'consolidation' processes. Besides the alluded impacts, as a long-term development strategy 'Starchitect' Bjarke Ingles expresses,

These principles have had a significant side effect in the realm of architecture: a grey goo of sameness accounting for the vast majority of the urban tissue, where most attempts to stick out have been beaten down into the same non-offensive generic box, and all libido invested in polishing and perfecting the ever finer details. The sum of all the [quantified] concerns seems to have blocked the view of the big picture. ¹¹

Its Perception

Integral to this study is a diminishing mutual ability to measure the qualitative impacts of urbanization by standards of *livability* and *quality* of *life*. This depreciation is indicated by demand's role as a key driver of the modern imbalance within the human/form relationship. Underdeveloped qualitative thinking is a significant component of this is the inability to rationalize appropriate motivation or find a channel of provocation. Critically impacting the shared perception of urbanization's [qualitative] implications is a divergence in our perspective's understanding and comprehension. This acknowledges that people understand urbanization; they understand that our cities are growing—and rapidly at that, places of residence are becoming denser, and there is incredible demand within urban real estate markets. Therefore, it is not society's understanding of urbanization that is a cause for concern. What requires specific focus is the mutual level of acceptable comprehension of urbanization - this is where society's perspective diverges. Today, to comprehend urbanization is synonymous with an ability to recollect statistics, which is significantly reflective of the territory's focus on quantitated principles – in both identifying imperatives and creating solutions. For example, to know that urban construction will globally increase by 128 percent in the coming decades is not an authentic realization. As a statistic, it should be used as an indicator for informing one's lens for evaluative thinking; but a conventional degree of contemporary perspective is not informed to distinguish between the quantified and qualified impacts of such statements.

The qualitative dialogue of this study is intended to present a platform for analytical perspective and opportunity to challenge your comprehension of what these numbers mean, not just to society and culture, but to yourself as well. The detrimental effects of ambiguous comprehension are its implications on a mutual level of qualitative perspective and provocation, which is necessary to reassess what *demand* means, and what we

are demanding. However, a significant barrier in readily intervening in individuals' comprehension of their own demand, or its impacts, is the increasing prevalence of quantitative thinking frameworks, which are being systemically reinforced by ideas and perceptions of urban habitat's economic accessibility and suitability. Planner James Howard Kunstler suggested that these compromising results could be part of an introspective focus, translating to an individual's disregard for the contextual impacts of what they are buying into, "[thinking] less in terms of buildings or towns [and] more about acquiring a product called a "home"." As Landscape Architect James Rutledge explains, "You're the person most affected by the work. You live with the results. If you don't exercise your rights as a critic, you sign a blank check." ¹³

Due to the economic changes demand brings to the market, existing and prospective occupants are already reconditioning expectations and desire, which is influencing how they rationalize 'comprehensions' like suitability. Suitability is constantly redefining due trends of space consumption and occupations, such as gentrification and centralisation [to culturally highlighted amenities]. These types of causal impacts from qualitative spatial trends are forcing people to *accept* affordable developments which are "usually disadvantaged by decisions made about physical development, such as the [location] of site [and] infrastructure, or the policies that shaped development." These are places "lacking of intentional depth and providing possibilities only for commonplace and mediocre experiences." As Brown and King identify in their 2016 article *City or Suburbs: Where can you afford to live?* the essential qualitative analytical task that would be needed to provoke change and influence the demand for such outputs are now increasingly shrouded in the quantitative rationalizations of our day-to-day. They articulate (*Figure 1*), "For many Canadians, the decision between city and suburb boils down to how strongly you weight three important factors —your money, your time and your overall lifestyle. No two families prioritize in

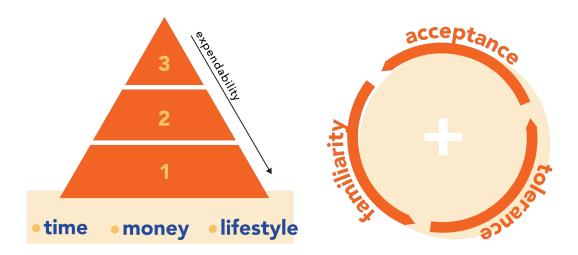


Figure 1 (left): Decision Hierarchy (Brown and King, 2016)

Figure 2 (right): Familiarity Cycle

exactly the same way." The importance of this framework is that it is an indicator of how urbanization's dialogue and identity are foundationally developing; unlike the context of early American settlement culture, choosing a lifestyle is no longer simply a qualitative distillation of "fundamentally different values and interests," it is about perceptions of value. It is important to recognize that the organization of these factors employs foresight processes. However, they are principally impacted by decisions of expendability, which is a quantitative rationalization-logic of value. The decisions are then contained to, *at what cost* does the most important factor come at? This communicates a key indicator of what is driving demand in the current market. The outcomes of these decisions are exampled by the perpetual increases in traffic and commuting, as well as continued developments relating to 'sprawl.' Without qualitative reinforcement of what these concepts can mean, through a persistent communication of qualitative dialogue, it can be no surprise that a mutual qualitative perception is being skewed. This is a particularly critical condition for urban identities with a nascent built-form heritage. For a young context, such as North America

in comparison to Europe, the lack of strong qualitative cultural foundation translates to a malleable vulnerability. Over time the implementations and implications of phenomena like urbanization can shape a society's perspective of what to accept of their context's human/form relationship. Given that "the suburb, not the city," defined [North] American lifestyle, this flexible propensity may already be illustrated.¹⁸

This emphasis on *demand* within urbanization's qualitative dialogue underlines pivotal incentive for future and existing inhabitants of these environments to leverage within the market. Not only is it important for them to establish qualitative perspective for intrinsic comprehension, demand is also a critical component to the adoption chain within the built-form development ecosystem. Continued circumvention can be intervened by understanding the opportunity of *demand* to be a tipping point within the market and influencing the adaptations and adoptions of future solutions. The scenario: *The Bottom Might Drop Out* illustrates that leveraging demand can shift the opportunity for influence back to those who are most affected, using it as incentive for the market's implementations to adapt more equitable strategies. However, the ability for individuals to identify and validate the leverage may be only half of the necessary strategy to impact the future of qualitative outcomes. This is because *familiarity* has indicated a significant self-imposing obstacle for strategies that are premised in changing how individuals fundamentally think. Tuan iterates of the human nature of familiarity to inform satisfaction:

Familiarity breeds acceptance and even attachment. Newcomers are more prone to voice discontent; on the other hand, people may express contentment with their new neighborhood despite their real feelings, because it is difficult for them to admit that by moving for economic [influences] they have in fact [subjected] themselves [to substandard conditions]. People of high income most often express satisfaction, which is hardly surprising since they are where they are by choice, and they have the means to improve the quality of their neighborhood. Less affluent people are less enthusiastic: the reasons given for why they like their area tend to be general and abstract, whereas those given for disliking it are more specific and concrete. Satisfaction seems a rather weak word: it may mean little more than the absence of persistent irritations.¹⁹



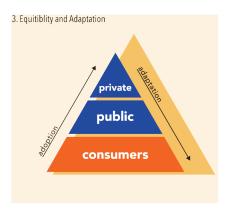


Figure 3: Three Market Scenarios: (1) Current; (2) Potential from leveraging demand; (3) Ideal

Developing a familiarity with the changing state and dynamic of the human/form relationship causally facilitates two trends. On one end, *acceptance* of the compromises occupants are making regarding the availability of and accessibility to quality, exposes society "to the forces of placelessness and [inevitably] losing [our] sense of place." On the other end, society's reactive functioning to the market and *tolerating* of generalized qualitative approaches, reinforces their auxiliary role atop the *Sitting Pretty* scenario. In both *Sitting Pretty* and *The Bottom Might Drop Out* (*Figure 3: (1), (2)*), familiarity is a key point of intervention in changing the composition of how the built-form relationship is being defined and maintained. This is because it is currently critical to supporting the existing organization of the adoption hierarchy, which also results in supporting the state of the

built-form supply and demand market. The cycle of familiarity (*Figure 2*) also concludes that promoting a more beneficial perspective alone may not penetrate the obstacles that have been formed by individuals over time by their experiences and the resulting established tolerance. Furthermore, due to the potential impacts of these trends on how our surroundings are now being designed and willing occupied, populations need to inspire framing and speculation that the implementations of these new and future environments are not 'sustainable' as human habitats - by the standard of many humanistic and qualitative characteristics. Because these potential impacts take time to develop and emerge for identification by the general populace, consideration and analysis of these places, and the human/form relationship, through qualitative foresight needs to be emphasized to society. If this is not initiated in some form or dialogue, we need to consider what some of the future scenarios and circumstances may come to be of these urban habitats; will it come to the point when we deem these environments unhealthy? Alternatively, will humanity continue to adapt their nature according to what is accessible of their surroundings? This foresight lens frames a possible vehicle for influencing what demand is currently facilitating, or being used to achieve. Communicating and building tools for foresight's qualitative comprehension can frame a lens for critical perspective, framing provocation and motivation as key drivers for a change – by impacting demand— in improving the qualitative outcomes of our future.

And Its Future State

Merhdad Baghi, Stephen Coley and David White's foresight and sense-making tool, developed in their 1999 publication *The Alchemy of Growth*, can be used to iterate how potential future scenarios may develop in response to previously specified and additional trends of urbanization. Two further trends of significance for assessing the progressing condition of the human/form relationship's future are: the capability for development-industry to formulate

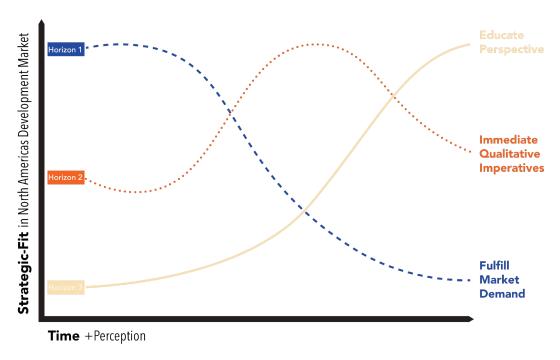


Figure 4: Three Horizons Model, adapted from Curry and Hodgson (2008)

appropriate qualitative solutions, and the capacity of industry to address the dynamic sociocultural evolution of qualitative needs and desires. Two indicators of significance are: the flexibility of society, and the adaptability of form and cultural forms. *Figure 4* maps the progress of three possible future's horizons.

Horizon 1 represents a future based on the market's current course. As previously outlined, the transformation of the built-form environment by way of quantitated imperatives continue to inform density approaches that are not sustainable for efficiently supporting the qualitative needs we evolve socially and culturally. Although the methodologies employed within this horizon would favour the capability to expedite built-form accommodation and density, the long-term impacts of urbanization to North America's built-form would result in qualitative compromises that impact its metrics of livability and quality of life. The methodologies of this horizon will remain 'strategically-fit' until a need for adaptation: the

implemented systems lack resilience, or, induced flexibility – inadequate representation of place and qualitative outcomes resulting in humanity's evolutionary responses.

Horizon 2 consolidates immediate quantitative and qualitative ideals into built-form imperatives and development strategy that is motivated to accommodate improved output quality. The strategic fit would be perpetually sinusoidal as society's demands and desires fluctuate without the proper dialogue for communicating and translating evolving needs and desires. The loss of 'fit' in this horizon stems from a cycle of urban occupants *understanding* adoption (low-point), proceeded by eventual *comprehension* over time (high-point) – until the qualitative desires evolve again and quantitative and qualitative design strategies need to reorganize and update methodologies.

Horizon 3 characterizes a motivation strategy that leverages tools for education to inform individual's qualitative perspective. This scenario focuses on affected stakeholders familiarizing with the impacts of current built-form strategies and inevitably rationalizing their capacity to influence demand. The enabling and hindering component of this scenario is its reliance on significant investments of intrinsic provocation to influence population segments to build this territory of knowledge, relying on a snowball-effect in the long-term. The resiliency of this horizon's strategies is that there is a strong mutual dialogue between all degrees of stakeholders; communication and comprehension builds a human-form relationship that can quickly reorganize to maintain an equitable balance of gains. This is seen as the ideal outcome and scenario illustrated by Equitability and Adaptation, where occupants/consumers adoption is the foundation of the hierarchy and decision making, which requires industry to adapt to these informed needs and perspectives. Also within this scenario, the market no longer acts as a foundation for the future of our built-form habitat and is instead a condition of civil progression.

Research Framing

The objective of developing this study's research question was to address an accessible channel of qualitative built-form communication and leverage it for individuals to define their own problem frames regarding the quality of their urbanizing environments. Coming from a background in Landscape Architecture, I quickly perceived the principles of this problem territory as being comparable to that of traditional sustainability. In both the ecological and an urban context, sustainability's underlying framework is about requiring awareness and ability to perceive the crucial degradation of [an] environment's quality and qualities – both contexts also represent a fundamental relationship between humans and their form system.

This association led me to revisit Aldo Leopold's 1949 ecology-philosophy precedent, *A Sand County Almanac*. For many environmental industries, this literature inspired meaningful (although slow progressing) comprehension of why America needed to improve their perception of the impacts [industrial] industry's expansion has on the causal relationship shared with our natural environment. I would argue that his literature has been essential to bringing sustainability to where it is in the 21st century. What is extraordinary is that, almost seven decades later, his perspective and theoretic frameworks are still adaptable in the context of a parallel, yet opposite, system – certainly not an adaptability he could have foreseen in the 1940s. Why his writing is relevant to this project is because Leopold similarly identified that most prevalent issues affecting the future, and conservation, of the [ecological] environment, were *economics* and *education*. However, the intention of this project's outputs is not intended to directly influence *economics* rather than build perspective to the development economy's quality-defining role to our built-form environment. Leopold frames the solution, "The usual answer to this dilemma is 'more consideration to education.' No one will debate this, but is it certain that only the *volume* of education needs stepping

up? Or, is it something lacking in content as well?"21

In the context of our changing qualitative environments and the need for improved intrinsic valuations of it, as well as being in agreement with Leopold's rhetoric, I concluded that the most impactful 'content' individuals can acquire is the content they can rationalize themselves. This evolved the research frame:

How might built-form environments be used to [informally] develop an individual's qualitative lens, so they may better perceive place-making outcomes, and their future?

The capacity of this question facilitates the exploration of how to significantly leverage one's environments, which are indisputable as both inclusive and accessible, as a qualitative tool for either instilling motivation or generating provocations. As well, it embraces this territory's sensitivity to subjectivism, informing that a successful equitable approach to conservation attitudes and dialogue require a fundamentally adaptable framework that still produces relative outcomes among individuals.

For non-designers, this is to be considered as part of a greater idea and intent: that qualitative [spatial] design thinking and its education should not be limited to only those who have been designated to do so effectively. Umut Toker explains, "There are individuals on one side who are deemed to have authority to make decisions about the built environment and, on the other side, individuals who must live in those built environments and who are the ones most affected by the decisions." Of course, there is a good reason for this, design decisions that can impact on such a physical and temporal scale should be the responsibility of informed individuals. However, as the dialogue of this project suggests, more appropriate and suitable decisions can be made –or framed– with the ability to mutually communicate the values of this territory. This depicts that designers can also use the results of this research question

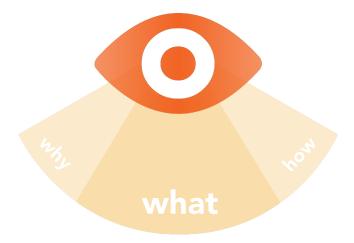


Figure 5: Narrowed Perspective - Conventional perspective of the qualitative environment rationalizes what to see, but not traditionally how or why

as an opportunity to consider the establishment of competent and constructive feedback narratives to understand better the dynamism of qualitative socio-cultural values and how individuals respond to specific design indicators.

Hypothesis

Curating Experience hypothesizes that for an individual to effectively use their environment to educate their perspective, they require tools for translating place. This hypothesis assumes two key interdependent ideas, represented by each respective word. 'Place' iterates that our environments dynamics of quality and experience are critical to supporting and managing an equitable balance between human systems and form systems. 'Translating' proposes that expressive characteristics of environmental design are for naught if end-users' perspectives cannot conventionally comprehend or interpret their presence within a setting—that motivations of how and why supersede what. Moreover, to properly evaluate environmental

design, and the influential system it functions within along with its indicators, will require a capability and capacity to distinguish between an object, and the quality of an object, "Through all the senses as well as with the active and reflective mind." By leveraging built-form surroundings as the most effective vehicle for this education, existing and prospective stakeholders of these 'future' habitats can learn to: *comprehend*, *evaluate*, and *predict* the relationship between qualities and qualitative outcome.

The output of this study will contribute to two pillars of this hypothetical concept:

Visual Thinking development will enable individuals to adaptively and rationally "cut through perception and see [...] what is." An understanding and comprehension of how to see quality and qualities will develop one's spatial intuition. Michael Brawne iterates spatial intuition as, "The basis of intuition that stems from your experience," which enable individuals' to develop personal methodologies to, "Understand the quality of a project, or of material, light, sound." Brawne's articulation restates that our qualitative perspective is an individualized 'theory of knowledge.' Society's perspective is increasingly developing within qualitatively compromising settings, which indicates that these intuitive thinking processes are currently being impaired. An example of this wavering is if you were to express to someone that there will be close to 10 billion people on the planet by 2050; our convention is to become encapsulated in statistics of the subject. This is because we don't have a reinforced framing process to immediately consider 'what it will be like' to passively interact with this added population on our already busy streets.

Furthermore, improved visual thinking can address two obstacles that are currently impeding constructive cross-disciplinary/cross-experience qualitative dialogue and communication. The first obstacle, "A difficult mental conversion which translates two-dimensional outlines into three-dimensional volumes." Brawne elaborates, "Of all the conventions used by [spatial

designers] it is the plan which is the most curious and unreal; a horizontal cut which reveals all the spaces on one level at the same time and from the point of view which never exists for the ordinary user; only low walled ruins reveal their plan form clearly."²⁷ The second obstacle is formed by using different dialects of the same language, Schuler explains, "As planners, architects, designers, we use maps, pictures, numbers, and words as our language . . . But for the public their language is all about the experience. What they see, what they feel, what they touch."²⁸

Qualitative Analytical Logic will structure an inclusive and adaptable framework for individuals to rationalize subjective motivations of *why* critical perspective of built-form is required to reshape demand. The logic's content would be informed by distillations of place-making wisdom and knowledge into mutually salient definitions that translate into equitable language for participation in constructive dialogue. This platform is meant to address non-designer's typical abandonment of the role of a critic; these are stakeholders who associate with the thought process: "The designer is the expert. Who am I to question his efforts?" To reiterate: "You're the person most affected by the work." With a foundational understanding of *why* and *how* to visualize the qualitative nature of the human/form relationship, an individual is then well equipped for *what* to see – and make appropriate valuations. This dynamic can contribute to developing a greater body of knowledge within the qualitative design from constructive and effective feedback, where "we are far from finding devices that measure satisfactorily the quality of a feeling or aesthetic response."

Analytical framing in conjunction with developed visual thinking also promotes provocation and comprehension of what specifically our environments are lacking, as well as enables an individual's scanning and foresight capabilities. This underlines the potential for one's perspective to actively consider how their settings will equitably [d]evolve over time and shape future outcomes of *livability* and *quality* of *life*.

Methodology

Landscape Urbanism

Associating *Curating Experience* within the territory of Landscape Urbanism facilitated the creation of an effective knowledge-development framework for this qualitative research investigation. Walheim explains this context as "a disciplinary realignment in which landscape supplants architecture's historic role as the basic building block of urban design."³¹ This approach leveraged a foundational perspective in Landscape Architecture as a guide to navigate and distil from advanced Urban Design philosophies and theory, which were grounded in 'place' and 'place-making.' In particular, this was utilized in comprehending and attempting to translate three experiential dynamics of urban place-making: complexity, causality, and physiological impact/influence.

This unfamiliar professional distinction is a developing extension to Landscape Architecture which more effectively highlights profession's perspicacious credentials for design-thinking, what I would depict as a comprehensive spatial and humanistic design awareness to the many dimensions and dialogue any one element, spatially and systemically, interacts with or within. Consider that, while Landscape Architecture—where my design background lay—is not recognized as a leading or highly influential design epistemology, it has been a 'founding' contributor in defining the humanistic qualities of our favourite external physiological environments. Historically, it had been, "Frederick Law Olmsted, Ebenhezer Howard and Patrick Geddes [who] all responded to the call for more livable cities, and they, each in their own particular way, invented forms of city planning that were meant to cope with the interaction between nature and the urban." Andersson goes as far to argue, "Olmsted himself can be said to have been more skilled in urban planning than in landscape design." ³³

A lens for Landscape Urbanism was also used because urban planning and development's fundamental morphological idioms of form and arrangement, alone, should not compose an innovative or progressive qualitative paradigm. Pont and Haupt input, "Morphological research at one stage became part of the answer, but as this approach focused mainly on the traditional city, this often resulted in preservationism, selectively extracting elements and symbols of the city to create a culture of 'niceness'." The phenomenological aspect of this methodology addresses avoidance to preservationism, aiming for the development of frameworks for understanding, not criteria for standardizations.

The 'Urban' Ethic

Aldo Leopold's *A Sand County Almanac* describes a critical premise and framework for addressing an environment 'conscience;' in the context of ecology and the landscape he entitled this 'The Land Ethic.' The reason I believed this to be a meaningful precedent for communicating education of urbanization's impacts, through informal and intrinsic channels, is because of the resemblance of which he described the detriment of the human/ form relationship in the ecological context. He described this as, "A limitation on freedom of action in the struggle for existence . . . [requiring] interdependent individuals or groups to evolve modes of co-operation." With slight adaptation, his framing of an ethic fits the intuitive capacity that is required of a solution for qualitative-sustainability in the urban environment, of which he defined:

An ethic may be regarded as a mode of guidance for meeting [urban] situations [either] new or intricate, or involving such deferred reactions, that the path of social expediency is not discernable to the average individual. Animal instincts are modes of guidance for the individual in meeting such situations. Ethics are possibly a kind of community instinct in-the-making.³⁶

An important difference in the natural context versus today's urban context is measurable by Leopold's principle of achieving 'balance.' Unlike 1940's Wisconsin, populations are much

more dependent on their form systems, having a higher value of inherited responsibility compared to the intrinsic responsibilities of the environment in the 40s. In term of building 'community concepts of cooperation,' these inequity of the contemporary market represents favourable circumstances for the hierarchical priorities of *Private Agencies* (Figure: Sitting Pretty) and signify significant obstacles in establishing a more balanced ethic. The sequences iterated in Scenarios Sitting Pretty and The Bottom Might Drop Out are influenced by Leopold's sketching of ecology's 'hierarchy pyramid.' In this mapping, he placed producers (such as nature) at the foundation and layers of consumers (animal food chain) at the top, which was inevitably topped by 'tertiary consumers' (predators). In understanding the potential for intervention in the contemporary systemic process of build-form development, his illustration suggests that we can use principles of an 'ethic' or 'community conscience' to reframe our perception of this modern hierarchy pyramid. Although public/private developers and influencing agencies produce these form systems for consumers, consumers/ occupants are producers of demand. This key driver defines the sustainability of our development market - meaning that they should form the foundation of this pyramid and hierarchy of adoption, whereas public and private agencies should respond in the subsequent layers and adapt based on these needs and desires of the foundation (Scenario: Equitability and Adaptation - Figure 4:(3)).

Methods

Literature Review was the primary method of research. It became a significant process of discovery, education, and cataloguing. After this extensive literature review I was surprised to find how relevant 19th and 20th century content still is, although seemingly overlooked in the content of modern design education – although the contexts have evolved,

the frameworks presented are still equipped for contemporary applications, or in the least, insight. Having reviewed over one-hundred resources during the course of this process I feel it is important to recognize that, although only a fraction of this total contributed to referenced/quoted material throughout the body of this document, all works which have been cited in the Bibliography are valuable in their own right to establishing and advancing a much larger scope of knowledge for anyone further interested following this document. Reviewed literature of communication-related design (e.g. graphic design, marketing) introduced key concepts and understandings regarding stakeholder motivations, need-based perspectives that are not as prevalent for spatial design agencies.

Synthesis was used to formulate a flexible and adaptable solution, as Rutledge points out, "Design criteria should be ordered through analysis of each situation rather than through reflection upon what has been found to be applicable to other circumstances." 37 The synthesis was performed in several steps: information was first categorized according to identity: agency (a practicing body of influence), externality (affected stakeholders and nonform entities), or form (compositions of the urban environment). Then, cross-disciplinary analysis of collected information was performed to identify patterns of possible 'concepts.' Last, the common themes were arranged according to their ability to communicate and strengthen an understanding place and its fundamental components. These were then able to inform the methodology for designing platform/preliminary tools.

Systems Thinking perspective will remain an essential application within this territory of research and design development. Notably, it assists in framing and understanding causality and translating what certain complexities of urban fabric mean socio-culturally and morphologically. The concept and principles of David Snowden's iteration of Managing Complexity were used to assess adaptation and adoption systems within urban development to better understand relationships, such as the human form relationship.

Grounded Theory framed a strategic approach for the organization of the research findings to assemble "an abstract analytical schema of a process... [toward] development of [a] theory [that] might help explain practice or provide a framework for further research."38 This provided insight to produce or utilize logic frameworks.

Case-Study Examples are used for reinforcement of a key finding or tool, however they are also reflective of personal perspective and exercise of the conceptual frameworks.

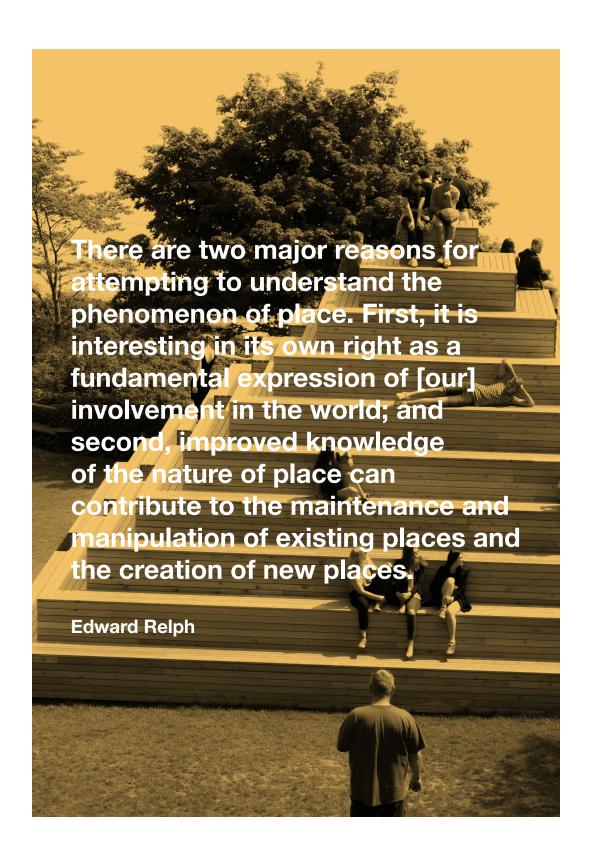
(Endnotes)

- Beekmans, Jeroen, and Joop de Boer, <u>Pop-Up City: City Making in a Fluid World</u> (Amsterdam: BIS Publishers, 2014) 13.
- Haas, Tigran, <u>Sustainable Urbanism and Beyond: Rethinking Cities for the Future</u> (New York: Rizzoli International Publications, 2012) 13-14.
- Pont, Meta Berghauser, and Per Haupt, <u>Spacematrix: Space, Density, and Urban Form</u> (Rotterdam: NAI, 2010) 15.
- Tuan, Yi-fu, <u>Space and Place: The Perspective of Experience</u> (Minneapolis: U of Minnesota, 1977) 121, 140.
- 5 Relph, E, <u>Place and Placelessness</u> (London: Pion Limited, 1976) 1.
- Turner, Michael and Racheal Signer *via*. Bandarin, Francesco and Ron Van Oers, Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage (John Wiley & Sons, 2015) 320.
- 7 Ibid.
- Brook, Daniel, <u>A History of Future Cities</u> (New York: W.W. Norton, 2013) 22.
- 9 Adner, Ron, <u>The Wide Lens</u> (Penguin Publishing, 2012) 163.
- 10 Umut, Toker, <u>Making Community Design Work: A Guide for Planners</u> (APA Planning Press, 2012) 24.
- 11 Ingles, Bjarke, YES IS MORE (Taschen, 2009) xi.
- Kunstler, James Howard, <u>The Geography of Nowhere: The Rise and Decline of America's Man-made Landscape</u> (New York: Simon & Schuster, 1993) 165.
- Rutledge, Albert J, Anatomy of a Park; the Essentials of Recreation Area Planning and Design (New York: McGraw-Hill, 1971) vii.
- 14 Toker (2012) 32.
- 15 Relph (1976) 79.
- Brown, Mark, and Romana King "City or Suburbs: Where Can You Afford to Live?"

 Money Sense, 28 Jan. 28 2016, 5 Feb. 2016 http://www.moneysense.ca/spend/real-estate/city-or-suburbs-where-can-you-afford-to-live/

- 17 Ibid.
- 18 Krieger, Alex *via*. Duany, Andres, and Elizabeth Plater-Zyberk, <u>Towns and Town-Making Principles</u> (New York: Rizzoli, 1991) 10.
- 19 Tuan (1977) 216.
- 20 Relph (1976) 79
- 21 Leopold, Aldo, <u>Sand County Almanac</u> (New York: Oxford University Press, 1949) 243.
- 22 Toker (2012) 4.
- 23 Tuan (1977) 18.
- Teaching to See. dir. Andrei Severny. prod. Edward Tufte. perf. Inge Druckrey. Graphics Press, 2012.
- Scully, Vincent *via*. Duany, Andres, and Elizabeth Plater-Zyberk, <u>Towns and Town-Making Principles</u> (New York: Rizzoli, 1991) 18.
- Brawne, Michael, <u>Architectural Thought: The Design Process and the Expectant Eye</u> (Oxford: Architectural, 2003) 81.
- 27 Ibid, 84.
- Schuler, Timothy A., ed. "Now". <u>Landscape Architecture Magazine</u> 106, no. 1 (January 2016) 34.
- Rutledge, Albert J, <u>Anatomy of a Park; the Essentials of Recreation Area Planning and Design</u> (New York: McGraw-Hill, 1971) vii-ix.
- 30 Tuan (1977) 200.
- Andersson, Throbjorn *via* Haas, Tigran, <u>Sustainable Urbanism and Beyond:</u> <u>Rethinking Cities for the Future</u> (New York: Rizzoli, 2012) 160.
- 32 Dassen, p19
- 33 Haas 2012, p160
- 34 Pont and Haupt (2010)

- 35 Leopold (1949) 238
- 36 Ibid. 239
- 37 Rutledge (1971) 7.
- 38 Creswell, J.W., <u>Qualitative Inquiry and Research Design: Choosing Among Five Approaches</u> (Sage Publications, 2007) 63.



Spatial Dialogue

section two

Background

In the following section, findings of built-form designs research are illustrated and translated as fundamental place-making concepts and principles. The research of this project has been conducted to present definition and perspective of qualitative place outcomes' context and capabilities. Progression through this section is intended to provide strategic input for formulating insight on the location and application of effective intervention and how we can appropriately inform, and possibly innovate, modern qualitative methodologies for designing place. The translation of this synthesized design knowledge have been organized for one's comprehension by the most prevalent and transformative qualitative themes that emerged throughout the review of place-making design's literature and precedents. This was seen as an important step in the project's development as a result of the limited consistency between translations of qualitative 'language' across the researched content. What has been

presented is only a concentrated attempt to distill, define, and illustrate ideas specifically related toward generating inclusive perception of qualitative dynamics.

Most consistently communicated was the overarching framing of a greater 'Spatial dialogue.' This framework uses principles of coherence and language to inform the qualitative state of the human/form relationship. These two concepts provided further structure to the principle elements of my hypothesis: quality, experience, and perspective, as well as providing comprehension and insight into the 'phenomenological' formulation of livability and quality of life.

An analogy of this dialogue's importance to the territory of built-form design and development can be compared to technology: The hardware of a computer, for example, is a fundamental necessity for the machine to function; the hardware also is a self-defining and limiting mechanism – i.e. higher quality hardware will allow a computer to run optimally. However, hardware alone does not develop a usable computer; communication and regulation through software and firmware are essential for the computer to not only run, but also process. This, in essence, is the relationship between form systems and a spatial context of dialogue, functioning to enhance and engage its supporting elements, like its occupants. While qualitative outcomes and the human/form relationship are critical to solution framing, effective translations by society can be better facilitated with acknowledgement of spatial dialogue, because the state of this dialogue shares a causal relationship with the equitable condition of our built-form ecosystem.

Layered Characteristics

By dissecting and re-visualizing our built-form environment into qualifiable layers, we can

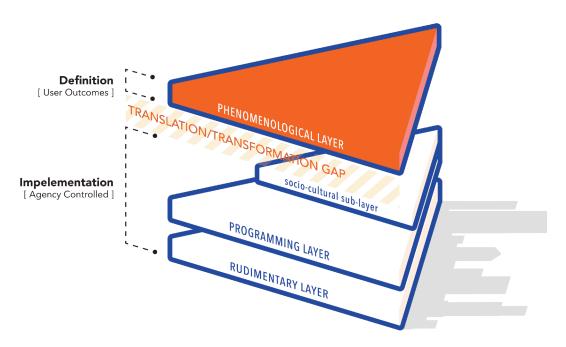


Figure 6: Layered Perspective of Qualitative Form

more readily discern the location of opportunities and the role of influencing organizational hierarchies. *Figure 6* describes a morphological illustration of place-defining layers. When conducted and/or interpreted in a bottom-up sequence it depicts a transformational design process, where quantitated inputs become qualitative outcomes of *place*. A key principle of this sequence is that the potential implemented within each layers delineates the capacity for opportunity in the next – consider the technology example, hardware informs the extent of the software's capabilities that use it. The capacities of the final layer in this process represent the location for achieving the paramount qualitative outcomes of place.

The Rudimentary Layer

This layer is defined by the quantitated characteristics of form and infrastructure systems; specifically the anatomy of [physical and spatial] dimensional layouts, coordination and interactions of geometric volumes, and relationships of scale. This initial stage canvases the

potential and capacity for humanistic qualities of form, and defining/prescribing archetypes that have "been used both to describe the problems of the city (as too dense a century ago, and as too dispersed today) and . . . as a norm to prescribe alternatives – at times formulated as maximum densities, at other moments as minimum densities;" creating indicators that are causally influencing outcomes of sprawl or intensification. Statistically, validated paradigms critically affect this layer and skew the potential for quality in proceeding layers.

The Programming Layer

The programming layer uses the platform defined by quantitated principles of the previous layer and begins to invest the design with qualitative dynamics. Programming first addresses the manifested context of various affects of growth or development imperatives or conditions: integration with pre-existing infrastructure's legacy, co-existence with implemented form systems, and/or the preparation for future phases of growth.² To this context, Andres Duany and Elizabeth Plater-Zyberk have recognized that, while building codes and official ordinances can be a fundamental mechanism for effectively managing and predicting the outputs of the sequences within and following this layer, they can proportionally hinder design processes. This is due to the methodologies for formulating and articulating these codes inability to equitably influence both qualitative and quantitative dynamics of form without delimiting compromise to one or the other. In response to their own criticism, they described, "The solution lay in conceptualizing the problems of the streets and buildings alike and of dictating their forms through the medium of language." However, there are significant knowledge-prerequisite barriers that prevent this from being a mutually equitable platform - that "the perception itself requires cognitive visualization and analytical abilities of a 'very high order." The intention of their insight is exemplified in the successful qualities of historical built-form precedents where, "In spite of all [a form system's] irregularities, [it] produces a harmonious effect because each motif is modeled in great clarity and each superstructure is given a counterpart." The Programming Layer's lack of European-compared success stems from our built-form history's limited development towards establishing a comprehensive and familiar spatial dialogue.⁴

Passive and Active Socio-Cultural Sub-Layer

The purpose of this tactical layer is effective in designing for end-user's experience and interaction through implementing resilient place-making values within the qualities of a design. In defining the opportunity for the subsequent layer, the Phenomenological Layer, Stefano Bianca, in his article Morphology as the Study of City Form and Layering explains, "It is important to understand the cultural codes and social patterns that have conditioned the archetypes of the physical shell and provide meaning and identity to corresponding physical structures." A traditional example of this transformative propensity is the typical transformation of simple, classic, religious architecture into centers of cultural prevalence and value. Despite the weakened religious patterning of more recent generations, the qualities of those form-systems have translated into shared modes of social conduct; given as a framework for parallel form-systems, this highlights the investment value of these places to "endure as cultural traditions that continue providing comfort and identity." These qualitative considerations identify that this particular sub-layer is what is actively circumvented through the adoption chain and in response to expediting density. Bianca underlines the deteriorating role of this sub-layer, suggesting the utilitarian physiological responses of urbanization are now considered as an efficient convention to the elaborations of qualitative design strategies. A systemic problem that risks deteriorating "the very essence of cities."6

The Phenomenological Layer

Definitive interpretations by end-users compose the function of this layer. Here, occupants experience qualities of built-form choreography as a process of translating implemented design solution's capacities into outputs, and cooperatively over time, outcomes. This action alludes that physical patterns and form of place-making alone cannot construct the identity of a form system or place. This highly experience-oriented layer validates end-users as integral components to place making, but it also identifies where *familiarity* and the acceptance cycle are reinforced.

Translation/Transformation Gap

The significance of illustrating this gap is to symbolize the differentiation between stakeholder hierarchies and influence in our typical built-form ecosystem. Based on the functional orientation of the layers, however, it illustrates that end-users are fundamental to design, as they are the ones who validate the definition. In a way, this may seem inferred, but as Charles Eames defined *design*, "A plan for arranging elements in such a way as to best accomplish a particular purpose," encapsulates that there is not a *phenomenological* foundation to the basis of ergonomic design.⁷

This gap outlines two top-level insights: design and implementation by spatial agencies do not define *outcomes*; and, translation and comprehension of end-users is a critical part of the design sequence. In terms of leveraging or incentivizing *demand*, these suggest that the success of a project defines itself after the 'traditional' scope of the design process has been completed and the form stem has been implemented – this is where end-users need to identify that they then become the influencing stakeholders.

CASE STUDY - LAYERS MAPPING: Canary District, Toronto



Figure 7: Three-Dimensional Illustration of West Don Lands (Urban Strategies Inc., 2016)

Rudimentary Layer

This three-dimensional mock up of the Canary District's development illustrates a perspective of the dimensional and volumetric composition of the planning process; these volumes are then the canvas for further qualitative detailing.



Figure 8: Canary Grill - Pre-existing context for programming (James Bow, 2006)

Programming Layer

Precedents, such as this restaurant that was original to the West Don Lands, represent the pre-existing delimitations and considerations of the programming layer. In addition are the non-visible constraints of underground infrastructures, existing environmental conditions, as well as building code and zoning/planning requirements.





Figure 9, 10: Renderings of Pan-Am Village ((top) Dundee Kilmer, 2015; (bot.) Bruce Mau Design, 2016)

Socio-Cultural Sub-Layer

This sub-layer represents the more experiential, interactive, and humanistic realizations of the programming layer. We are frequently familizarized with the 'intentions' of this layer through the renderings that are marketed for new developments, populating the illustrations with people to communicate their validation as centers of social or cultural value.





Figure 11, 12: Development of the Canary District (Aaron Harris, 2014; Jack Landau 2016)

Phenomenological Layer

For the Canary District we cannot yet communicate/identify this layer, as it has not yet become occupied by residents and the commerce that will define its identity. Once it becomes occupied, individuals will be able to validate and appropriately translate the potential invested in the previous layers.

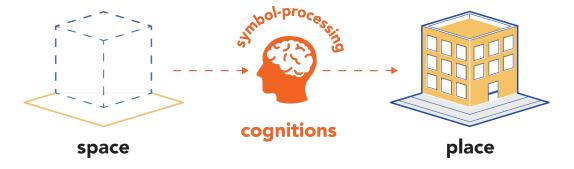


Figure 13: Space's Transformation

Defining Place Phenomenology

Phenomenology may seem like an arduous term that defines a more exclusive approach than inclusive. However, I believe the illustration of the 'Phenomenological Layer' and its predeceasing gap communicates why the following ideas and concepts should be understood and comprehended as 'phenomena' of our qualitative environments. This framing also highlights the importance of 'place-making' design concepts as transformative fundamentals that can contribute to knowledge and strategy design within this problem's territory. These principles are also important for establishing occupants 'scanning' capabilities, developing an analytical thinking process about the development of these environments over time. The concepts detailed in this section will help rationalize how to identify indicators of future urban scenarios, foresight which should then provoke why we need co-evolve our understandings of demand's causality to its qualitative environment. Furthermore, phenomenological framing identifies that design processes require more complex considerations of the human/ form relationship than predeterminations of facility and function. This critical cognitive component and the gap presented by the layered sequence suggests there is an opportunity to improve the understanding of how to design for this transformative phase.

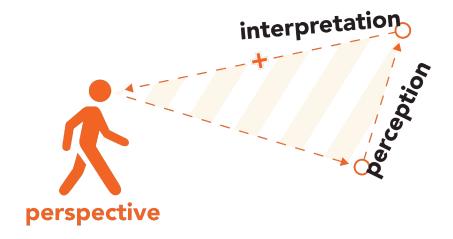


Figure 14: Perspective Model

Fundamentals

Place / Space

[T]he meaning of space often merges with that of place. 'Space' is more abstract than 'place'. What begins as undifferentiated space becomes place as we get to know it better and endow it with value. Architects talk about the spatial qualities of place; they can equally speak of the locational (place) qualities of space. ... Furthermore, if we think of space as that which allows movement, then place is pause; each pause in movement makes it possible for location to be transformed into place.⁸

This project recognizes *space* and *place* as two separate yet interconnected ideas representing a sequence of qualitative cognitive comprehension. *Space* is the cognitive equivalent to the Rudimentary Layer – an abstraction of any qualitative complexities and assumptions of form's dimensionality. In its most elementary existence, space is setting (an envelope or environment) or form (structure, or series of related context-less structures) that has yet to be organized by one's subjective cognitive processes. In other words, through our symbolic cognitions for interpreting a form system, we then transform space into *place* – these are concepts that will be further elaborated in the proceeding concepts. The definitive difference

stems from framing *places* as centers of value: where one associates with their physiological and cultural needs. Richard Stedman's research in place-psychology found that, "Symbolic meanings about place can be translated into cognitions or beliefs: descriptive statements, rooted in symbols about "what kind of place this is." Differing syntax of the two ideas can be determined as: 'I have not see the *space* yet,' versus, 'It's my favourite *place* to be.'

Perspective

Based on symbolic interactionism, identities are meanings we attribute to ourselves, learned from others' expectations" of how behaviours should be performed. Although throughout life there is a multiplicity of qualitative experiences to refine ones perspective from, the dynamism of one's identity is "organized hierarchically according to their importance or salience, . . . our important places may become crucial to our self-definition" and perspective.¹⁰

Perspective is what Donald Molnar describes as "[your] common sense." In the context of visual thinking, it is the subjective expertise and intuition to either consciously or subconsciously deploy analytical interpretations of the qualities composing one's surroundings. In both forms of attendance, our cognitive ability is responding in the form of understanding and comprehension – to acknowledge the visual or physical qualities of an element, even momentarily, begins a process of translating its "reality and value." What makes perspective such a powerful tool within environmental design is its individuality and authenticity; two people can read the same form system yet it is unlikely for them to share a similar interpretation or translation of personal meaning. The capability to subjectively transcode spatial qualities and sensory data into knowledge of the environment, or alternatively recall meanings and understandings from past experiences, underlines perspective's function as a fundamental human mechanism for engaging in qualitative experience and defining the outcomes of qualitative futures. By a refinement of "sensory and kinaesthetic experiences" over time, this knowledge translates into familiarity and personal meaning – constantly shaping one's identity. Tuan illustrates this individuality is a result

of development as we mature,

Small children [and the like] are likely to have difficulty integrating large space into familiar place. They have no trouble identifying specific landmarks and localities. They recognize particular shops and residences, but they understand the spatial relations among them poorly; hence they easily feel disoriented outside the small areas of habitual contact.¹⁴

However, perspective is also constantly being filtered through lenses of perception, which seek to force external influence and compromise the authenticity of one's perspective. Tuan identifies the cultural capacity of perception's influence in the example of a Danish landmark,

Isn't it strange how this castle changes as soon as one imagines that Hamlet lived here? As scientists we believe that a castle consists only of stones, and admire the way the architect put them together. The stones, the green roof with its patina, the wood carvings in the church, constitute the whole castle. None of this should be changed by the fact that Hamlet lived here, and yet it is changed completely. Suddenly the walls and the ramparts speak a quite different language. The courtyard becomes an entire world, a dark corner reminds us of the darkness in the human soul, we hear Hamlet's "To be or not to be." Yet all we really know about Hamlet is that his name appears in a thirteenth-century chronicle. No one can prove that he really lived, let alone that he lived here. But everyone knows the questions Shakespeare had him ask, the human depth he was made to reveal, and so he, too, had to be found a place on earth, here in Kronberg. And once we know that, Kronberg becomes guite a different castle for us.¹⁵

More intentional [economic] manipulations is a frequent occurrence in the urban environment or of the urban design context, and it is only an increasing influence due to the pace and complexity of distractions in contemporary urbanism. An example is cultural perceptions of 'designs' meaning; in our built-form systems the use of an elaborate architectural identity – by way of the architect themselves, or the enhanced aesthetic of the form— provides an ability to camouflage bigger intrinsic or physiological qualitative issues that the design may not adequately resolve, yet only influencing further demand in the market.

From such a vantage-point the characteristics of modern housing appear to transcend our own culture, being lifted to the status of universal and timeless requisites for decent living. This is easily enough explained, since everything ordinary seems at once neutral and indispensable, but it is a delusion, and a delusion with consequences too, as it hides the power that the customary arrangement of domestic space exerts over our lives, and at the same time conceals the fact that this organization has an origin and purpose. ¹⁶

The concluded model of perspective (*Figure 8*) illustrates the process of a subjective experience, this is best simulated through the framing of a first-impression, where the subject is immediately compelled [cognitively or consciously] to make sense of a visual stimuli. The process initiates with the application of one's *perspective*. Next, a latent perception of interpersonal and external conditions attempts to influence our preexisting frameworks for characterizing qualities of place; *perception* frequently takes form in a combination of: media, marketing, and the opinions of others. The final component of interpretation analytically distinguishes how to make 'sense' of the stimuli using the development of one's comprehension through perspective over time. The resulting comprehension becomes knowledge for the next experience, constantly reinforcing and reshaping our frameworks for translating spatial meaning.

In the contemporary context of experiential design and visual accessibility, precognitions and preconceptions by augmented-experiences from technology are now weighing heavier on perspective than the direct experience itself, suggesting that we are actively formulating *expectation*. Expectation in this context is spatial intuition generated by commonalities between perspective (subjective identity) and the perceptive lens (objective identities). A channel such as Google for augmenting forms of visual thinking is developing perspectives of designers and non-designers alike in a way that is less beneficial than comprehending first-hand, compromising experience, and having causal impacts on how we design or what we expect of design. This is reinforced by user perspectives influence from visual memory to look for those typical symbols and apply them to the form systems of the urban environment, as well as use them as a benchmark for evaluation. Brawne describes, "Buildings in our immediate surroundings or those seen while traveling, together with illustrations and computer images, are all stored in our visual memory to emerge when relevant, as part of our non-verbal thinking". Through this process the dynamic idea of *place* is at risk because

Transformative Mechanisms



Expression

The space you live in can be beautiful, especially if it is unfettered by all these other things. I don't believe in pipes in living rooms. I hate them. [...] I want to remain ignorant of how the mechanics really work. I'm impatient with the restrictions of mechanical and construction engineers and with details about how every little thing works. But its place I think I know. I want to express that which is worth expressing, that which has grown to be a distinct characteristic. When one is characteristically different from another, I don't want to make a homogenous mixture of the two. I want to bring out the difference. But I care very little if one pipe goes east and the other goes west. I don't want to make a special characteristics out of pipes, because I know that mechanical things are the first things that going to be changed or altered; but the space you live in must be alive for a very long time. The space is a new landscape, which is to last as long as the materials last. But the spaces which are serving it are made to change. Their positions must be very general and they must be big enough for change and addition to take place. (Lewis Kahn)¹⁸

Expression is an inducing transformative mechanism for generating qualitative outcomes. It is a design process for *influencing* space's qualitative *capacity* through *symbol-making* methodologies. This dimension is essential for impacting visual thinking and communicating a discernible difference 'between the object, and the quality of the object.' It is the responsibility of spatial design agencies to influence through the use of design processes to implement built-form that will enable a capacity for qualitative opportunity, e.g. inspiration. David Brook suggests that the knowledge requisite for the effective use of this place-making strategy "cannot be just a question of technique, for [the practice] is charged with symbolic meaning." In a cognitive framing, this is defined as, "The process of knowing language, meaning, and reasoning." Brook statement refers to the diversity between socio-cultural variables that define the contexts where symbol-making is being applied, that a contextual understand is crucial for appropriate programming of the qualities and characteristics of a

design. The complexity of understanding the symbolic difference between what is arbitrary and appropriate within *expression* ultimately reinforces the need for practiced qualitative cultural frameworks for structuring design solutions. This gives rationalization as to why simply transplanting design or design methodology into an unfamiliar context does not work, because the end-users, symbolically, may not understand the particular capacity, underlining the necessity for adaptable strategies in building cooperative frameworks for qualitative urban conservations. Specifically, tools for expression need to be developed to address the difficulty of translating two-dimensional verbal symbols and thoughts into productive and appropriate three-dimensional representations – a deficit in current process that jeopardizes the outputs correspondence with original symbolic intentions. The typical solution for such an ambiguous task is to start rationalizing symbolic assignment from pre-existing and precedent form systems, however, "Any attempt to resolve the ambiguity is not the beginning of a solution—it is the first sign you are giving up."²¹

Brook describes expression's impact of an experience in London,

When I look at Epstein's sculpture of the Madonna and Child on a wall in Cavendish Square in London, for example, I see the Christ Child with outstretched arms, I understand that this symbolizes his embrace of humanity as well as foretelling the crucifixion. I 'read' these meanings because the sculptor and I share a common iconography. I can of course admire the sculpture and Jewish Museum without being aware of any symbolism but will miss meanings. This is only to point out the danger of loading architecture with symbolism it cannot support and then questionably ascribing it to design initiatives.²²

From his example, I would like to highlight two important symbol-making categories that engage and enhance cognitive dialogue of the human/form relationship: visualization and legibility (in-person and/or reflective), and familiarity.

Visualization is our comprehension of an expression's legibility and a component of visual thinking. For Brook, he comprehends the invested symbols of the sculpture's form. However, legibility is interpretable on many scales (appendix b) and is not restricted to only to the

artistic expressions of a sculpture, this is to say that the city itself is interpretable as a "powerful symbol of a complex society," if one's perspective is equipped with the capacity to translate that scale of meaning. The importance of highlighting visualization as a principle is to suggest we need to progress the application's understanding regarding the affects of layering new symbols and meanings –both purposefully and arbitrarily. The impacts could be considerable over long-term develops if the rapid evolution of our environment through urbanization is factored; however, we have yet to build precedence for what this translates to the human/form relationship.

Familiarity is a common thread throughout subjective comprehension and the qualitative future of our environments. In the frame of expression, it can be an essential consideration for aiding the cognitive establishment of place. Tuan suggests that our recognition of familiarities is the first process perspective for translating what has been expressed of one's surrounding. However, familiarity can be fragile depending on one's psychological or physiological reliance on it, even slight alterations to basic, and predominantly symbolic, structures can revoke the immediacy of understanding. From a technique standpoint, this emphasizes that place-making requires consideration to the intricacies (comprehensive frameworks), not just the foundational idea (understanding). He continues, "[familiar] points are places, centers for organizing worlds. As a result of habitual use the path itself acquires a density of meaning and a stability that are characteristic traits of place."²³

Experience

Indeed, a distinctive and legible environment not only offers security but also heightens the potential depth and intensity of human experience. Although life is far from impossible in the visual chaos of the modern city, the same daily action could take on new meaning if carried out in a more vivid setting. [...] If visually well set forth, it can also have strong expressive meaning.²⁴

Experience and expression share an inseparable relationship with the sequence of place

phenomenology. Experience is the reciprocate qualitative mechanism that, in turn, defines place with the *capability* of end-users to apply perspective and translate meaning. The significance of comprehending experience is that it is innately inclusive and accessible – anyone can *experience*; even for those who's perspective may not be attentive to the aesthetic language of their qualitative surroundings, these *symbol-interpretation* processes are still subconsciously impacting spatial cognitions of its occupants. ²⁵ This symbol identification is the phenomenal capability of perspective to interpret "distinctive qualities" by way of translating the "essential character" behind the idea of a *place*. ²⁶ Tuan describes of experiences' dynamism, "The perception and environmental judgments of natives and visitors show little overlap because their experience and purpose have little in common. […] Attitude to environment changes as mastery over nature increases and the concept of beauty alters."

Critical to experience's contemporary and social integrity is the augmentation of experience in marketing or proposal of new developments, where, "The layman accepts too readily from charismatic planners and propagandists the environmental slogans he may have picked up through the media; the rich experiential data on which these abstractions depend are easily forgotten." There is a growing disconnect between the 'expression' in models and renderings in comparison to how people are capable of experientially perceiving it when it is implemented; this lack of 'experience' in the method non-designer occupants would traditionally rationalize makes it increasingly difficult to effectively predict the concepts validity in a place-making context. This disconnect in the expressive understanding of a developments proposal and the experiential comprehension of the end product only further contributes to a deteriorating reinforcement to the qualitative familiarity of an equitable level.

Continued quantitative focus on design processes also gradually depreciates designers'

abilities to perceive, implement or rationalize sufficient experiential effects. This may reflect a forfeiting to advocate for essential characteristics for qualitative conceptualizations in the design/development process;

In the large literature on environmental quality, relatively few works attempt to understand how people feel about space and place, to take into account the different models of experience (sensorimotor, tactile, visual, conceptual), and to interpret space and place as images of complex –often ambivalent— feelings. Professional planners, with their urgent need to act, move too quickly to models and inventories.²⁹

The modern misconception of this phenomenon fails to acknowledge that its achievement is much more than the aesthetic arrangement of qualitative details. As the explanation of *expression* defined, symbol-making is fundamental and contextually variant – we cannot pragmatically calculate models for standardizing phenomenological design and experience, just as we cannot standardize ordinances for authenticity and inspiration. As being an output and outcome of time and design development, we can start to comprehend why these environments are changing. When we reflect on the evolution of urban form-system's qualities for defining expression and experience,

Projections, porches, ornamental staircases, arcades, corner turrets, etc., have become for us an unthinkable luxury, even on public buildings; only high up – in the form of balconies and bay windows or on the roof – is the architect allowed to give his imagination free rein, but never below at street level where the 'building-frontage line' alone dominates. ³⁰

Sitte asks, "Yet when all the devices for achieving an effect have been discontinued how can the effect itself still be preserved?"

Variables

Three key external circumstances of the environment were found to impact experience. However these then presents indicators for expression processes' consideration. Precedents and methodologies that did not adequately account for one or more of these (this was dependent on the context) frequently resulted in static or placeless design characteristics,

which hampered the design from adapting with/to occupant and community development.

Temporality

Place, person, time and act form an indivisible unity. To be oneself one has to be somewhere definite, do certain things at appropriate times.³¹

Spatial dialogue's *temporality* represents its flow and movement of time on a micro and macro existential scale. Opposing examples of this scale are a pause or moment in time to interpret and translate *place*; or, a cultivation of experience over the course of a setting's life-span that progress one's 'knowing' of the place and spatial intuition of its surroundings. This also includes the attachment to places by way of developing its intrinsic value, which can be both positive and negative reinforcements of familiarity. As James K Feibleman iterates, defining or formulating absolute ideas for designing temporality are extremely complex, however, highlighting quality as the necessary denominator of its application within qualitative mechanisms,

The importance of events in any life is more directly proportionate to their intensity than to their extensity. It may take a man a year to travel around the world –and leave absolutely no impression on him. Then again it may take him only a second to see the face of a woman –and change his entire future.³²

Temporality has many practical objective programming applications used throughout the design considerations of landscape architecture, for example: places with natural form will perpetually change as the plant material matures – whether this is annually or perennially, or the growth and decay of woody material; from an astronomical framing, places also change throughout the course of the day – shadow studies are important for considering how people will escape from the sun or the cold; programming also inherently and consistently cycles throughout the course of a day and week – operational hours of institutions or community agendas.

Over the lifespan of place, its eventual details and functions may likely change, but each

instance of experience is a refinement process, illustrating that an initial set of opinions can change to accept, love, or reject the qualities of the place. That we can become normalized to spatial qualities – and even *tolerable* to them— underscores the importance to of temporality and how it can enhance qualitative awareness. Tuan iterates this power to polarize or erode through the dimension of time,

How is it possible for a monument to transcend the values of a particular culture? An answer might be: a large monument like Stonehenge carries both general and specific import. The specific import changes in time whereas the general one remains. . . Enduring places, of which there are very few in the world, speak to humanity. Most monuments cannot survive the decay of their cultural matrix. The more specific and representational the object the less it is likely to survive: since the end of British imperialism in Egypt, the statues of Queen Victoria no longer command worlds but merely stand in the way of traffic. In the course of time, most public symbols lose their status as places and merely clutter up space.³³

Social Attitudes

Human thought is consummately social: social in its origins, social in its functions, social in its forms, social in its applications. At base, thinking is a public activity—its natural habitat is the house-yard, the marketplace, and the town square. The implications of this fact for the anthropological analysis of culture . . . are enormous, subtle, and insufficiently appreciated. . . . [I]deas are more difficult to handle scientifically than the economic, political, and social relations among individuals and groups which those ideas inform. And this is all the more true when the ideas involved are not the explicit doctrines of a Luther or an Erasmus . . . but the half-formed, taken-for-granted, indifferently systematized notions that guide the normal [practices]. 34

Social attitudes are crucial to the development of 'community conscience' for our qualitative urban environments. Tuan describes this characteristic as *world view*, an attribute which can strongly influence social function and relationships – attitudes which impact the human-form relationship. He explains that the concept of *world view* has the prominence to define influence as belief-system, such as the contemporary example of technology and its accessibility to visual information and enablement of a culture of 'outsideness.' This suggests that "attitudes and beliefs are structured, however arbitrary links may seem, from an impersonal standpoint," 35 that attitudes have the capability to act as an influential layer

of perception that can usurp objective perspective and judgements.

Social compositions, such as outsideness, are detrimental to finding long-term resolutions of *equity*; designing solutions become more than just a task of qualitative and phenomenal design of *place* and settlement, and instead a problem of systemic social narratives in addition to the traditional spatial narratives of the street or community. Understood and accepted, but not necessarily comprehended, symbol-interpretation methods can erode what is thought to be the inherent 'genius of place' that places of value traditionally establish. Ideas such as 'community' and 'neighbourhood' are social constructs by one's cognitions and require a certain knowledge base of the outside world to distinguish *places* as these equitable typologies.

Interaction

Place attachment is a bond between people and their environment based on cognition and affect. Identity is a crucial component of place: Through extensive interaction with a place, people may begin to define themselves in terms of . . . that place, to the extent that they cannot really express who they are without inevitably taking into account the setting that surrounds them as well.³⁶

Qualitative phenomena and interaction are inseparable ideas in the discussion of transforming and translating place; this mechanism is also the fundamental medium of social and temporal circumstances. Interaction is an innate and diverse capacity of any design; locals, tourist, pedestrians, residents, can all use this mechanism variably. There are indicators from existing urbanization implementations that density and value engineering of design are compromising interaction's intermediate and facilitating role between the human/form relationship, progressively making the two more isolated and independent of one another. The expense of these sensory dynamics can be very difficult for those adapting to urbanity. For example, touch is variably different in this modern era between one who matures in an urban, architectural and hard, environment versus a suburban or rural, soft

and malleable, environment. While vision is understandably the most active sense, in some cases its engagement is only passive; again, in considering the acceptance cycle, we become subconsciously tolerable of infrequently using or enhancing the use of our other senses, impacts of experience that influence how we translate place outcomes.

An important literal characteristic of this design is tactility, representing the potential for materials to transcribe powerful associations in visual and physical details, enhancing the 'sensory' achievements of a design without an individual ever having to physically touch the form. This inanimate intimacy to 'feel' surface expressions is in large part due to the symbolic associations we make of the material's physical characteristics. From a literal perspective of transformation, hard versus soft materials have the wherewithal to reflect or absorb sound and heat and have a causal implication on the cognitions we apply. An exposed concrete-walled studio-apartment in the city can 'feel' cold or impersonal, whereas our escape in a park provides soft-scape to absorb expulsions instead of reflecting back at us.

Outcome Models

Sense of Place

At every instant, there is more than the eye can see, more than the ear can hear, a setting or a view waiting to be explored. Nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of past experiences. [...] Every citizen has had long associations with some part of [their] city, [an] image is soaked in memories and meanings.³⁷

Sense of place recognizes the innate capacity of form systems to communicate subjective meaning through its qualities for intrinsic translations by the user. What makes this conceptual model a compelling and significant component of place phenomenology are its



Figure 15: Sense of Place Translation

characteristics of: inherency to [built and natural] form, and authenticity to individuals. Fundamental to this experiential outcome is the translation frameworks that cognitively structure how one rationalizes 'what this place means.' In Relph's research, he finds, "Almost everyone is born with the need for identification with his surroundings and a relationship to them—with the need to be in a recognizable place. So sense of place is not a fine art extra, it is something we cannot afford to do without." This recognizes the importance of *expression* as a mechanism of also supporting and maintaining the human/form relationship; but as the uses of quantitative imperatives increase, they contribute to dissolving the role and necessity for expressive symbols, instead perceiving 'expressive' principles and processes of design as a form of aesthetic extra.

The capacity to subjectively translate 'sense of place' meanings is delimited by two elements: qualitative orchestration through design – i.e. quality of form, as well as qualities of the form and their arrangement/composition (highlighting the intersection of both *experience* and *expression* mechanisms in phenomenological built-form design); and the authentic structuring of one's perspective to cognitively read "an abstract language of signs and symbols." Tuan describes of humanity's subjective translations of this phenomenon,

With it human beings have constructed mental worlds to mediate between themselves and external reality. The artificial environment they have built is an outcome of mental

processes- similarly [informed by] myths, legends, taxonomies, and science. . . . We are well aware that peoples in different times and places have structured their worlds very differently; the multiplicity of cultures is a persistent theme in the social sciences.³⁹

Although this is such an influential concept and of particular importance to the human form relationship, its abstract nature creates a challenge for intentional strategic analysis. This obstacle is signified by the difficulty in strategically designing specifically for *livability* and *quality of life*; furthermore, while they may be key metrics of this study's purpose, they are, by abstraction, subjective measurements of qualitative outcomes, and not a qualitative outcome directly. Nevertheless, understanding how to appropriately model sense of place and its influences is the first fundamental step in addressing or communicating appropriately adapted/adopted design for such complex and subjective concepts

As a starting point, what has been derived from the research process are fundamentals to mapping our comprehension of sense of place, modeled by *Figure 10*'s evaluative 2x2 matrix. Throughout researching what structures one's translations of environmental qualitative indicators it came down to how individuals weigh two intrinsic dynamics: familiarity and meaning/attachment. And while meaning has been just highlighted, Stedman underscores in the conclusion of his research,

Meaning and attachment, so often touted as important components of sense of place, are empirically separable phenomena but have not been treated as such in research. This is crucial neglect . . . What does this place mean to me, rather than how much does it mean? Meanings are the cognitive building blocks of attitude.⁴⁰

This matrix addresses Stedman's identification by illustrating that meaning builds to attachment. Alternatively, the x-axis maps symbolic 'attachment' against the variable of a symbol's cognitive persistence – i.e. familiarity. Mapping within this matrix identifies that although familiarity is critical to our comprehension of place, it is not a detrimental influence to built-form by itself. The real concern of urbanization is instead familiarity to contextually 'meaningless' qualitative characteristics and the development of their influence

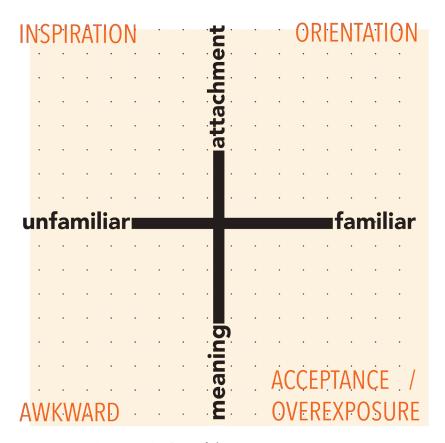


Figure 16: 2x2 Matrix - Measuring Sense of Place

to unintentionally become tacitly accepted, or demanded, qualities of the built environment. This idea reflects on this study's insight to leverage the *how* and *why* of qualitative perspective to evaluate what demand means – before changing *what* we are demanding.

In familiarity's most constructive definition, it is a valuable tool for establishing orientation and ideals of safety. When places become thoroughly familiar to us, it establishes itself as a core of spatial awareness and a center of reference. This is how we start to see the development of spatial dialogue regarding the human/form relationship; the development of individualistic qualitative knowledges, senses or language (whether or not one can frame them as such) define attachments and intuitions to certain symbols or spatial arrangements. Our tacit understanding of this dialogue and intuition is characterized by the capability

to quickly 'familiarize' oneself in a diversity of localities according to street corners and architectural landmarks to establish and inform a *sense* of orientation for a cognitive spatial model. This propensity is describable in a habitation example of our intrinsic understandings and spatial intuitions for translating 'community' and 'neighbourhood' each in our own way,

Besides the home base, working-class people may identify strongly with a few other spots, usually within walking distance of home. These are the favorite recreation areas, the local bars, and perhaps the settlement houses. Sentiment is unromantic and unverbalized but real and pervasive over these fuzzily bounded areas and the web of short linking routes. By contrast, people of the urban middle class are highly selective in the use of space, and the areas familiar to them are far flung. Another difference is that their sense of home has sharp limits. To a middle class person home may extend to a lawn or garden for which he pays taxes, but beyond it the space is impersonal. As soon as he steps on the street he is in a public arena which he feels little sense of belonging to.⁴¹

So why is familiarity so concerning? Familiarity's underlying relationship with 'time' iterates that regardless of sufficient/insufficient intrinsic meaning, symbols/form can become familiar. This rationale is exampled by inspiration's outcome from a moment of significant meaning, but as time elapses it tends to depreciate from its original capacity of value. The 2x2 matrix instead identifies that the problem is framed by lack of translatable humanistic meanings from contemporary environmental qualities – as a result of quantitated approaches to density; but as we become more exposed to these qualities they become rationalized as acceptable, or more comforting than the symbols we are unfamiliar with. This circumstance is what currently is reshaping occupants 'sense' of new urban habitats.

Regarding developing a qualitative environmental conscience, this matrix provides an evaluative platform for better understanding the relevance and disparity between what is being desired, demanded, and outputted. It also recognizes the significance of adoption and adaptation, and why transplanting foreign ideas/symbols can be inappropriate within equitable spatial dialogue.

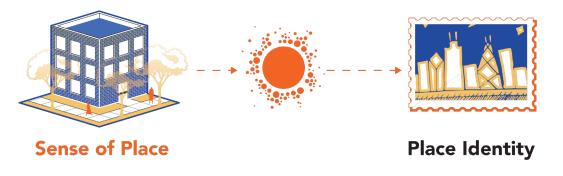


Figure 17: Defining Place Identity

Place Identity

While every individual may assign self consciously or unselfconsciously an identity to particular places, these identities are nevertheless combined intersubjectively to form a common identity. Perhaps this occurs because we experience more or less the same objects and activities and because we have been taught to look for certain qualities of place emphasized by our cultural groups. Certainly it is the manner in which these qualities and objects are manifest in our experience of places that governs our impressions of the uniqueness, strength, and genuineness of the identity of those places.⁴²

Place identity is an outcome modeled by the accumulation of mutual commonalities in sense of place outcomes, converging to formulate a defining and transformative lens for objective perception. This is a transformative capacity of place because it overcomes the necessity for subjective comprehension by communicating understanding through the established meaning of a qualitative environment. The influence from developing this lens of perception can transform our ideas and perspectives of places without ever having to experience the place in-person; however, when we do, we approach these environments with qualitative expectations based on these communicated, contextual, understandings. This capacity is recognizable across the globe of mature places that communicate a meaning in the definition of the name itself, "such as Rome, or [in] a monument (Eiffel Tower), or [in] a silhouette such as the famous skyline of New York, or [in] a slogan or nickname such as The Queen City of the West." 43

Identity alone is a transformative and valuable asset, however 'place identity' and 'identity of a place' are two contrasting distinctions to be cognizant of amid urbanization's rapid development. Place identity being the developed and validated meanings and symbols of place – a bi-product of *sense* of place; identity of a place is instead a subjectively engineered or projected idea to influence or achieve expedited place-related goals through underdeveloped or unvalidated mutual lenses of perception, i.e. built-form marketing or branding.

What significantly contrasts these two concepts is the phenomenological role of temporality, that the latter can produce resilient and durable expressions of built-form by leveraging symbols and themes that have reinforced meaning and are readily identified and comprehended. Relph finds that in the progression and reinforcement of qualitative environments' contexts, "While places and landscapes may be unique regarding their content they are nevertheless products of common cultural and symbolic elements and processes."

As an objective and contextual equivalent to *sense of place*, it has similar key dynamics to *familiarity* and *meaning*, which in this larger scale are definable as: *coherence* and *language*. This identifies as an interrelated and phenomenological component of the earlier presented overarching *spatial dialogue*. *Coherence* informs symbolic intuitions of orientation and a principle for maintaining the integrity of *place identity*. Kunstler describes of its importance to establishing the foundation of a successful community or neighbourhood, that coherence is a result from *places* capacity to, "Expresses itself physically as connectedness, as buildings actively relating to one another, and to whatever public space exists, be it the street, or the courthouse square, or the village green. "Most important," Wendell Berry writes, "it must be generally loved and competently cared for by its people, who, individually identify their own interest with the interest of their neighbor." *Language* describes a framework for curating appropriate symbols that reinforce identity, as language matures it validates what its resilient characteristics are and establishes what the 'essence' of its symbolic integrity

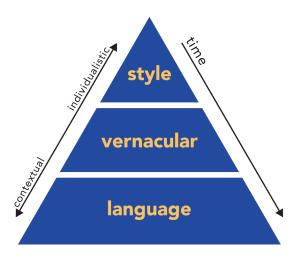


Figure 18: Hierarchy of Qualitative Meaning

is. This qualitative communication and interpretation structure acts as a mechanism for consistency and durability that has allowed iconic global environments to negotiate the influence of turbulent socio-cultural and economic periods, while maintaining the integrity of its *identity*. Rene Dubos writes, "Distinctiveness persists despite change. Italy and Switzerland, Paris and London have retained their respective identities through many social, cultural and technological revolutions," if not only strengthening them.⁴⁶

In the framing of the human/form relationship, *coherence* is an insight to the relationships balance, and *language* rationalizes by what metrics the quality (meaning) of the relationship should be measured on over time. This is a critical component to built-form design processes as an informative platform for *expression*, as well as an important element for effective scanning and foresight capabilities. The hierarchy of qualitative meaning (*Figure* 12) illustrates the development, or impact, built-form implementation's design expressive mechanism and its output have on defining what we understand as the 'context' of place. When we consider 'does this project respond to the context of the area?' this provides insight to what that question is really framing, qualitatively. This hierarchy also rationalizes the

inability for one project alone to change, or establish, identity; Brawne's study finds that "vernacular [and further, language,] cannot be invented, it simply has to occur. Style, on the other hand, is a question of deliberate choice. So much so that it may, for instance, go against structural logic."⁴⁷

Urbanization is, and will continue to, test the qualitative resiliency and integrity of existing place's identities. Of quantitative approaches for achieving increasing demand for density Relph writes,

[These] are the most superficial identities of place, offering no scope for empathetic insideness and eroding existential insideness by destroying the bases for identity with places. This is so because mass [produced] identities are based not on symbols and significances, and agreed on values, but on glib and contrived stereotypes created arbitrarily and even synthetically.⁴⁸

Expedited development timelines compromise processes for qualitative design exploration, and opportunity to appropriately adapt or inform built-form systems according to its contextual identity, this frequently results in approaches that resort to underlining or appealing to readily associated 'clichés:'

The fleeting intimacies of direct experience and the true quality of place often escape notice because the head is packed with shopworn ideas. The data of the senses are pushed under in favor of what one is taught to see and admire. Personal experience yields to socially approved views, which are normally the most obvious and public aspects of an environment.⁴⁹

The risk is that these ideas are compelling for in-migrants who only *understand* place identity of where they are moving, and have not yet *comprehended* the granular and subjective meanings of these places and validated them through their own experiences of *sense* of place. Theodor Adorno, a 20th century German philosopher, phrased that "the absolute rejection of style" then becomes a style of itself; as these implementations of 'style' compound, they risk changing the very essence and identity of some of these pre-existing contexts.⁵⁰ We are already experiencing this throughout North America's urban centers where urbanization and gentrification are redefining our intuitions of what these communities and neighbourhoods

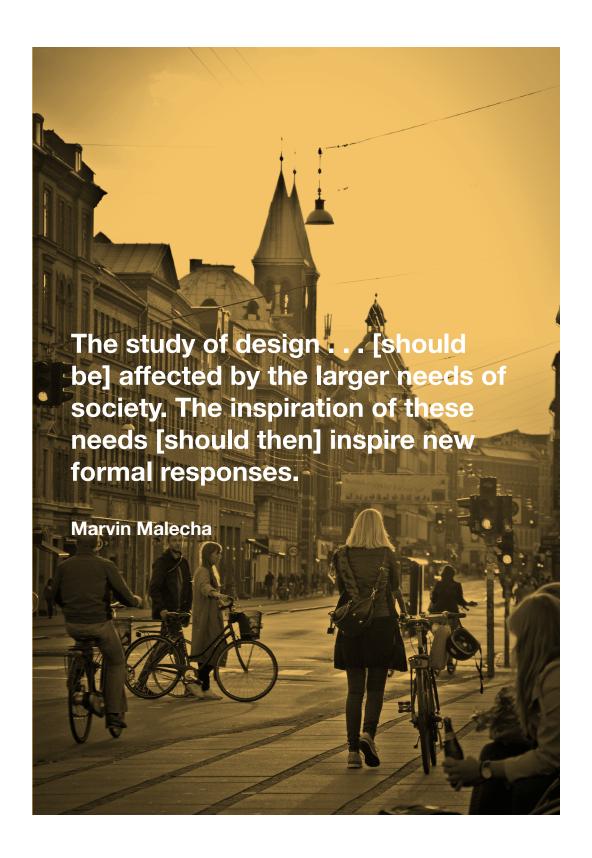
represent. Stylistic imposition of new and development interjected into the quantitative fabric and sense these urban environments risks failure: failure of integration, or failure by segregation – a trend that if continued could compartmentalize valuable urban identities.

(Endnotes)

- 1 Pont and Haupt (2012) 12.
- Bianca, Stefano via, Bandarin and Van Oers, (2015) 90.
- 3 Duany and Plater-Zyberk (1991) 17.
- Sitte, Camillo, <u>City Planning According to Aritstic Principles</u> (New York: Random House, 1965) 10.
- 5 Bianca, Stefano via, Bandarin and Van Oers, (2015) 92.
- 6 Ibid.
- Neuhart, John and Marilyn, <u>Eames Design</u> (New York: Abrams, 1989) 14.
- 8 Tuan (1977) 6.
- Stedman, R.C., "Toward a Social Psychology of Place: Predicting Behaviour from Place-Based Cognitions, Attitude, and Identity," <u>Environment and Behaviour</u>. 14 April 2016. https://researchgate/net/publication/233729905_Toward_a_Social_Psychology_of_Place
- 10 Ibid.
- 11 Rutledge (1971) viii.
- 12 Tuan (1977) 18.
- 13 Stedman (2012).
- 14 Tuan (1977) 73.
- 15 Ibid, 4.
- Evans, Robin, Translations from Drawings to Buildings and Other Essays (MIT Press, 1978) 56.
- 17 Brawne, (2003) 117.
- 18 *Ibid*, 28.

- Brook, Daniel, A History of Future Cities (New York: W.W. Norton, 2013) 78.
- 20 Gharajedaghi, Jamshid, <u>Systems Thinking: Managing Chaos and Complexity</u> (Elsevier, 2011) 55.
- 21 Brawne (2003) 75.
- 22 Brook (2013) 72-73.
- 23 Tuan (1977) 182.
- Lynch, Kevin, The Image of the City (Cambridge: MIT, 1960) 5.
- 25 Tuan (1977) 121.
- 26 Relph (1976) 44.
- 27 Ibid, 264.
- 28 Tuan (1977) 5.
- 29 Ibid, 7.
- 30 Sitte (1898) 107.
- Turner, Phil and Elisabeth Davenport, <u>Spaces, Spatiality and Technology</u> (Springer, 2005) 250.
- 32 Tuan (1977) 184.
- 33 *Ibid* 164.
- 34 Perin (1977) 20-21.
- Tuan, Yi-fu, Topophilia: A Study of Environmental Perception, Attitudes, and Values (New York: Columbia UP, 1990) 4.
- 36 Stedman (2012).
- 37 Ibid.
- 38 Relph (1976) 63.

- 39 Tuan (1974) 13.
- 40 Stedman (2012) 564.
- 41 Tuan (1974) 214.
- 42 Relph (1976) 45.
- 43 Tuan (1977) 148.
- 44 Relph (1976) 44.
- Kunstler, James Howard, The Geography of Nowhere: The Rise and Decline of America's Man-made Landscape (New York: Simon & Schuster, 1993) 186.
- Carmona, Matthew and Stephen Tiesdell, <u>Urban Design Reader</u> (Elsevier, 2007) 106.
- 47 Brawne (2003) 123.
- 48 Relph (1976) 8.
- 49 Tuan (1977) 146.
- 50 Brawne (2003) 120.



Qualitative Toolkit

section three

Brief

In section one I presented the research question:

How might built-form environments be used to [informally] develop an individual's qualitative lens, so they may better perceive place making outcomes, and their future?

As stated earlier, this study recognizes the importance of using *education* as a channel for building qualitative environmental conscience and an equitable qualitative ethic. The research and detailing of spatial dialogue has identified the key dynamics of *familiarity*, *meaning*, *coherence and language*, which have effectively structured a rich body of *content*. It is intended that this may serve as a framework for an individual's use within their built-form environment, or in the case of this project, for formulating an informal platform and dialogue of qualitative education. The significance of using *informal* in this proposition

is to suggest that an effective strategy will be able to leverage any built-form system and provide similar degrees of insight to the development of one's qualitative lens. As well, that the formulation of this type of spatial knowledge is most effective if intuitively and authentically developed.

Curating Experience has approached this problem frame through the development of two tools for occupants to use in their familiar and unfamiliar surroundings, to promotes analytical and visual thinking processes through one's own perspective, regardless of any experience they may have in the territory. The criteria detailed for these tools was derived from the fundamentals and mechanisms of place phenomenology with the intention that individuals may use it to extract insight regarding the phenomenological layer, gap, and corresponding outcome models.

The goal of these tools is to generate provocation or motivation for constructively thinking about what is driving the future of our cities and qualitative environments – and further our habitats. This processing is then indirectly associated with comprehending what *demand* means. This was addressed by orienting the tools to evaluations of 'what to see', as a means of evolving subjective rationalization and translation processes for the 'how' and 'why to see.'

The outcome of the tools are meant to challenge Michael Brawne's interpretation:

If we want non-architects to play a greater role, to make decisions or at the very least to understand the process of design decisions, how can this be done without the use of drawings or models? Both are limited and capable of manipulation. As architecture as a visual medium, I see no way round. Words are certainly not the answer; there is no direct correspondence between words and three-dimensional reality.¹

Brawne may be correct that words do not directly correspond to three-dimensional depictions, but for non-designers, words are inclined to cognitively influence how they perceive the problem and formulate comprehension. The first step is exploring how we

establish a mutual knowledge base and standard for perspective before establishing what we are 'certain' is not the answer. As a minimum capacity these tools will at least reinforce the use of perspective and expose the user to key spatial ideas, which by illustration of the perspective process (*Figure 8*) will have influence on how someone perceives the next problem.

Note: The toolkit is meant for both reflective and active application; however, the tools will be described in the 'active' tense.

ind	cate those that apply
What	composed your experience?
A	☐ Coordinated Spatial Langauge
В	Tangible Built-form History Capture
C	Spectrum of Ad-hoc to Ad-lib Programming
D	☐ Unconstrained by Seasonality
E	Pedestrian-centric Morphology of Form
F	Exploration and Circulation
G	☐ Multiplicity of Retreat
<u>H</u>	Capacity for Spontaneous Experience
<u> 1</u>	Place-Cholesterol
J	Legible Spatial Planning Hierarchy

Figure 19: Experience Map - Analyzing experience of place

Experience Map

Context:

The first line David Brook writes in *A History of Future Cities* is, *Where are we?* ² With appropriate context and capability, his question is a compelling frame to provoke individuals to seek out meaningful comprehension of what defines the places we live, occupy and value.

Towards building this capability, the Experience Map is an introductory tool to ease an individual into critical qualitative thinking and evaluation by focusing on the composition of qualities and its relationship to expressive qualities of place. The approach of this tool is to direct the user toward *what* symbols to look for, so they can focus their visual thinking and perspective on translating and evaluating meaning, such as: how much does this symbol contribute to the quality, and why does it? Influence, in the form of motivation, provocation or simply refining a qualitative lens, is seen as a viable outcome of this tool only if used periodically in order to reinforce the underlying ideas and strengthen perspective.

The flexible layout of a histogram achieves two objectives: it provides a forum to articulate and differentiate the authenticity of individuals' experience; and, provides a platform for an occupant to 'connect the dots' between the relationships of elements in composing a cohesive idea of place. It should also empower individuals to feel they can develop more constructive opinions of the landscape changing around them and be able to overcome any overwhelming perceptions.

An important note is that this tool does not directly translate into evaluations of livability and quality of life. Based on the conducted research, I strongly believe that to achieve evaluations of that significance requires a two-part process, which is completed with the partnering tool; with this tool the user can build cognitive awareness of these criteria as indicators for perceiving the development of outcomes, but first they need to gain appreciation for how qualities of design support certain perceptions of the human-form relationship.

Application:

This is a two-step and multi-sided mapping tool that also provides opportunity for engaging in collaborative dialogue between mutual stakeholders of environmental design. This can be achieved by establishing constructive feedback narratives through the tool regarding

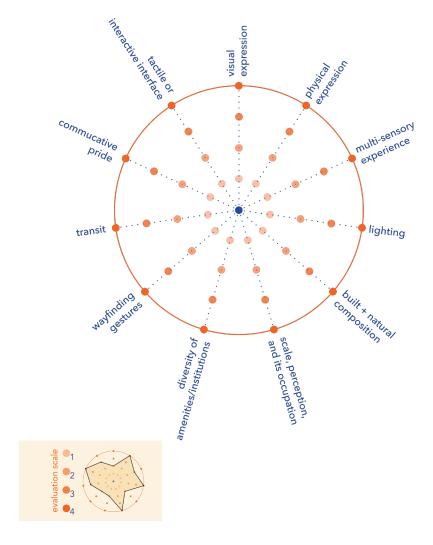


Figure 20: Experience Map - Evaluative Model

a problem frame or design outcome specific to the implemented place concept, providing opportunity for better understanding of how occupants respond to articulated symbols and/ or qualities.

The first part of this tool (*Figure 13*) requires the user to push their analytically comprehension to rationalize the presence of qualitative themes that are composing their experience and its placemaking context. Initiated by evaluative and reflective questioning, the concepts

for review relate to both *sense of place* and *place identity* values. This step achieves three purposes: 1) Reinforce qualitative inquisition in a manner that educates what these concepts mean to the identity of where their particular experience took place; 2) If integrated with professional practice, this can allow practitioners to consider why specific concepts are, or are not, being identified. The adoption of this tool by professionals also generates further dialogue around *what* and *how* they are comprehending expressions; 3) When collecting and analyzing the maps created in the proceeding step, this phase of the tool provides a categorizing mechanism for organizing user's maps. The purpose of this principle is to try and give organization to differing contexts of experience, only comparing experiences that perceived similar themes, i.e. different functions being experienced between night and day, summer or winter.

The second part (*Figure 14*) requires the user to evaluate the qualitative details of the place, this to begin constructing notions of how we are defining sense of place and what allows us to catalogue some of these experiences as memories. The benefit of a histogram layout is that, once many have been compiled, they can easily be overlaid to provide clear visual communication of strengths and weaknesses particular to a place-making design.

I believe the more this tool can be used across both rich and deficient experiences, as well as over extended time frames, the more effective it becomes at framing the maturing or developing impacts of urbanization on our surroundings.

Formulation - Step One:

The following experiential environmental criteria have been distilled from projects and methodologies reviewed throughout the research process. However this was initiated from first recognizing three significant symbolic themes addressed by *experience* and *expression*: cultural artefacts – indicators of cultural imprint; spatial cognitive interface – interaction

and engagement leveraged to produce dynamic methods of visual thinking; and, *urban* anatomy – components that assemble varying scales of urban fabric. These coordinated a list of primary place-making attributes that occupants could comprehend without prior, formal, educating.

Coordinated Spatial Language:

Did your visual experience enhance your understanding of the environment and its quality?

Was there a sense of functional meaning or purpose represented within the fabric of the place?

A coherent and coordinated language allows users to understand the physiological capacity of the human/form relationship; as well, it contributes to defining an interpretable context for *sense of place*. Indicators of an uncoordinated language will seem awkward and unwelcoming, and may be interpretable as out of place (*Figure 10*). It may also be possible to identify whether *language* or *style* was engaged in the design, planning, or development of the environment.

In some contexts this criterion is meant to communicate that new implementations of builtform, maybe even the works of an iconic designer, are not necessarily the ingredient for
'improving' or strengthening identity. Language is also perceivably differed across scales of
the environment – aerial and skyline photography may speak to the architectural vernacular,
but not necessarily the experiential and human-scaled language that is communicated from
street-level.

Tangible and Legible Built-form History Capture:

Am I able to make assumptions of the setting, based on the environment itself?

Physical forms of history are common precedents for places of identifiable value: public landmarks, place of interest, communities that are desirable for residence. Environmental details and age-based characteristics that are not of contemporary built-form, attract users

because of its visual prominence and symbolic communication. To properly evaluate this criterion, there should be no need for preliminary understanding of the environment's historical context, the presence of this form system's characteristic should have the appropriate symbols to express its meaning to cultural heritage. The United State's National Historic Preservation Act of 1966 describes this necessity as,

The historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people... the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans.³

Spectrum of Ad-hoc to Ad-lib Programming:

Does this place act as a stage for local engagements and/or have the capacity to support communal activities? Can it adapt to accommodate a dynamism of cultural needs?

The quality of spatial dialogue's 'Programming Layer' is frequently reflective of its integration into cultural dialogue. This is a result of formal programming for involvement and engagement, which then may influence the manifestation of flourishing community activity and the reliance on the environment to accommodate it. In the greater scheme of developing the qualities of a community, recurring events and experiences create spatial associations with its users, establishing an identity as a place where certain type of entertainment happens. Likewise, unintentional activities and engagements encourage people to revisit places and enhance experiences. These passive engagements are "essential in order to allow space for the unanticipated and the unpredictable; we desire [this freedom] because we have learned to expect from it opportunities to realize many of our objectives." Ad-hoc and ad-lib programming can also be an effective tool for bringing new attention and experience to a place that may be enduring a revival process, and act as a catalyst for strengthening perceptions of its value to local culture.

Unconstrained by Seasonality:

[In seasonal conditions] Am I motivated to be here, for an extended period of time? Extended bouts of poor weather specific to seasons can significantly disengage people from their exterior environment and change their motivations; in some cases, the effects of a form systems design compound these conditions. Equitable environments produce qualities that enable occupants to remain engaged through seasonal experiences.

Pedestrian-centric Morphology of Form:

Are there many people here – and are any engaged with their surrounding or slowing down to interact with it? Do I feel like I should be here?

An equitable experience for pedestrians expands further than typical sensory satisfactions. Pedestrians have psychological needs, the capacity to encourage feelings of safety to enjoy the environment or the opportunity to feel removed from the urban anxiety nearby are attractive features for form to convey. The absence of such attributes are reflective of the human/form relationship's state, such as: difficulties for the public to slow down on a busy street without interfering with similar transitional users, the relationship between open space and architecture to express discomfort through scale.

Exploration and Circulation:

Does the environment evoke a sense of curiosity? Do I know where I am – if not, could I manageably get back to somewhere familiar?

The experience of an environment is enhanced through the availability of visual cues; but for this to comprehensively succeed, these cues require coordination with infrastructure through layout in order to properly motivate one to proceed through their environment and be provoked by what is present in their visual horizon. These two characteristics define an active and passive movement programme – people are readily programmed with destinations in mind when they are in the streetscape, so one may not be consciously engaged in such

a bread-crumb lead stroll, yet they should still feel encouraged to freely investigate or conveniently move through locations. Orientation can be a significant metric of this criterion as well: sight-lines and views that don't require one to be familiarized with the environment and form-systems. This is also part of a greater strategy for getting people to visit local businesses, or alternatively understand how to deter from private neighbourhoods.

Jeff Speck iterates:

A preponderance of human-scaled detail is still not enough if a streetscape lacks variety. However delicate and lovely a building façade, there is little to entice a walker past five hundred feet of it. As Jane Jacobs noted, "Almost nobody travels willingly from sameness to sameness and repetition to repetition, even if the physical effort required is trivial." Getting the scale of the detail right is only half the battle; what matters even more is getting the scale of the buildings right, so that each block contains as many different buildings as reasonably possible. Only in this way will the pedestrian be rewarded with continuously unfolding panorama that comes from many hands at work.⁵

Multiplicity of Retreat:

Where is a comfortable spot to read a book, drink a coffee, or reflect?

For a beneficial interactive relationship with our built environment, users require points of refuge: a point of comfort and retreat usually with an enclosure to its back to provide a sense of security, and prospect: the provisional view and vantage of designed sight lines and vistas. Intriguing and inspiring vantages throughout an environment will promptly establish a positive sense of place and encourage exploration or relaxation. These may also be reflective (quiet) spaces, which become essential as points of escape for community members in particularly dense and urbane environments. Opportunities and experiences of this type are fundamental to human-centric placemaking.

Research suggests that humans pervasively value access to nature, a sense of protected shelter (refuge) with a view (prospect), curved paths that suggest there is more to see just beyond (mystery), dynamic symmetry, filtered sunlight, evidence of care and craftsmanship (making special, and well-organized but multilayered spaces (ordered complexity)).6

Capacity for Spontaneous Experience:

Have I had a quality of experience that was authentic and/or intriguing – will it stand out as a memory?

In contemporary architecture and urban design, examples of dynamic points of engagement that integrate or enhance the interaction between users and form through their experience of the urban morphology have become valuable successes. While basic installments may be to the extent of movable urban furniture, technology has also become a significant proponent to enhancing user experience as well as engaging them with new interfaces – even using digital motivations to move users throughout their environments for new experiences (e.g. place related apps such as Pokemon Go). In this context it is essential for the anatomy of place to be interactive, engaging, and unique. Additionally, the 'points' need to be frequent enough throughout the connected environment so that they maintain a comfortable volume of occupants, yet are not frequent or infrequent enough that they become overcrowded or barren to detract or distract from the capacity of experience. In a highly visual and technologic era where individuals' are consumed by hand-held devices, these methods for promoting experience and sense of place are undervalued in current infrastructure planning and development.

Place-Cholesterol:

Is there physical activity taking place specific to this environment (riding a bike, jogging, exercising)?

Environments that encourage physical movement as a mode of transportation, or exercise, indicate the qualities for facilitating a specific and valuable type of user experience. Biking, walking, rollerblading, etc. are a supportive component a healthy and flourishing population – safety to perform these tasks is also critical dynamic to this idea.

Legible Spatial Planning Hierarchy:

Can I discern a difference between the public and private-oriented environments?

Could you mistakenly end-up somewhere 'by-accident'?

Arterial to private environments should illustrate a planning gradient that is visibly interpretable by pedestrians, such that visual horizon of place readily expresses a changing level of experiences. Frequently main streets or plaza's segue directly into private environments. This may lead to private or semi-private areas becoming unintentionally frequented detour/transition routes. This quality is not to promote isolation, but to promote spatial autonomy and sense of security.

Formulation - Step Two:

The composition of an experience and identity of a place is also an orchestration of much more specific and elementary details; I wanted to engage the visual thinking and analytical processing of the user with their use of a more detailed and compositional perspective to their qualitative surrounding. Architect Jaime Lerner described that successful and well-communicated quality should be able to be articulated by an occupant in a 'one-page guide.' This step of the tool is seen as an opportunity to direct perspective towards associating these details as 'indicators' of qualitative state and the language of experiential dialogue.

Visual Expression:

Layered orchestration of symbols and materials to present stimulating environmental design, or the legibility of important spatial information. E.g. building Facades, appearance of the setting

Physical Expression:

The capacity of architectural, or infrastructure, elements and details to physical articulate and/or facilitate specific spatial functions, or define/express the built-form's legacy. E.g.

Portals or barriers between environments, convenient movement, identifiable history

Tactile or Interactive Interface:

Occupants are engaging with materials or systems, by way of intentional design. E.g. playground, interactive instillation

Multi-Sensory Experience:

The opportunity to produce an experience that is defined by more than visual or physical recollections. E.g. busy intersections have an audible quality, a beach smells of salty air, or a brick-wall is very stiff when you lean on it; these qualities tacitly effect the perception and well-being of pedestrians.

Scale, its Perception, and its Occupation:

A definable openness and spaciousness to the setting; a comfort produced by the presence of others, but not in an invasive capacity. E.g. The comfort of a park on a sunny day

Lighting:

The qualitative environment's usability, while maintaining standards of comfort and safety, are extended. E.g. 24-hour environments

Amenity/Institution Typology Diversity:

The inventory of the environments buildings/amenities supports a diversity of fundamental social and cultural actions. E.g. Market, street fair, community recreation

Transit:

The support of mobility and access. E.g. An identified frequency of public modes indicates accessibility, while a volume of taxis can suggest an insufficiency of public transit

Built + Natural Composition:

A balance and integration of built-form with natural form to create a definably valuable human-scaled setting that does not exclusively use hard-scape materials or auxiliary compositions of street trees. E.g. Thriving trees, community garden

Communicative Pride:

Qualities of *place identity's* language to communicate elements of self-esteem and the intentional support or reinforcement of occupant's well-being. E.g. Community garden, neighbourhood events, murals

Wayfinding Gestures:

A quality of signage systems, from street to institution scale, that embrace and integrate brand/location identity or are integrated cohesively to reflect and communicate the essence of *place*. It should also reflect a contemporary level of shared information and understanding. E.g. Information maps, expressive street/amenity sign

CASE STUDY - EXPERIENCE MAP APPLICATION: Nørrebro, Copenhagen



Figure 21: Nørrebro Streetscape (Alana de Haan, 2012)

Northwest of the Danish capital is one of the city's most unique and authentic neighborhoods. Comprised with a new generation of immigrants mingling with young local professionals, Nørrebro has a distinct character that positively separates its identity from other districts in Copenhagen. As you cycle across Dronning Louises Bro, the bridge that connects the City Centre to Nørrebro, you are immediately able to recognize your transition into a more expressive place. The quintessential Copenhagen streetscape shifts to a haphazard and messy urban fabric of graffitied buildings and colourful storefronts. Yet, despite this visual chaos, Nørrebro is an extremely coherent and successful urban neighbourhood that is maintaining a dynamic capacity for further growth of its identity.



Figure 22: Superkilin - Toposkape (Alana de Haan, 2015)

Planning of the main thoroughfare, Nørrebrogade, organizes a smorgasbord of ethnic shops and eateries, trendy bars and cafes, and varied housing to delineate the neighbourhood's epicenter. This high-traffic route sees tens of thousands of cyclists pass through daily, reinforcing a profitable ecosystem between businesses, retailers and the community. Elsewhere, scattered throughout Nørrebro, are pockets of historic architecture and famous landmarks like Assisten's Kirkegård, Superkilen, BaNanna Park, and Sankt Hans Torv. These public spaces are essential to both Nørrebro's sense of place and place identity, not only providing unique urban reprieve but also using the infusion of quality design to instill pride and well-being. Here, people utilize every inch of public space – Assisten's Kirkegård, a





Figure 23, 24: Superkilin - Red Square (Alana de Haan, 2015)

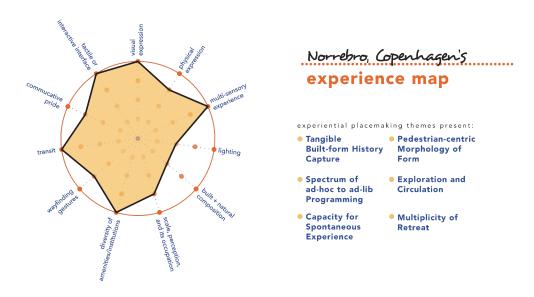


Figure 25: Personal Experience Map for Nørrebro

famous cemetery home to many notable Danes, is also used as a park, and it's not uncommon to find young families picnic amongst the grave stones.

What makes Nørrebro successful is its authenticity and accessibility. The growth of this neighbourhood was completely organic; it's inhabitants essentially dictating its development. While Copenhagen proper continues to demolish, update, and develop, Nørrebro more or less stays the same, it's population increasing due to the vibrant and genuine sense of place it instills, rather than due to the promise of bigger and better.

CASE STUDY - EXPERIENCE MAP APPLICATION: Distillery District, Toronto



Figure 26: Distillery District at Christmas (Alana de Haan, 2015)

The iconic remnants of Toronto's industrial heritage, found within the Distillery District, detail one of the cities most identifiable and sought after locales. The remains of Gooderham and Worts 19th century Distillery, one of Canada's National Historic Sites, assemble an authentic experience and a distinguishable sense of place from the majority of landmarks in the city. The muted residential intensification of the area has allowed this neighborhood to thrive through cultural reinforcement apposing the stylistic designs for densification that surround it. Tamed implementations and the resilient place identity are outcomes of well-enforced heritage and zoning planning; the niche retail identity that is woven through the architecture and historical structures are a result of a no chain store policy upheld by the





Figure 27, 28: Distillery District - Visual expression (Alana de Haan, 2015)

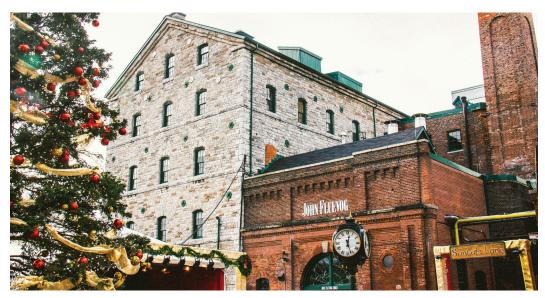


Figure 29: Distillery District - Built-form language (Alana de Haan, 2015)

institutions of the area.

What communicates the Distillery District's identity to a much broader scope of community is its effective programming. The scale, materials and available open area of the place provide an ideal platform for hosting inclusive and engaging events. The Christmas Market, of which this experience map is completed for, is an important element to the programming and seasonal identity of this place. The language of the built-form heritage, in such contrast to alternative symbolic icons of Toronto, makes it feel like you have really escaped the city and found yourself in a holiday environment to explore. However, with the population of the city vastly increasing, and no other cultural spots equally growing in value, this

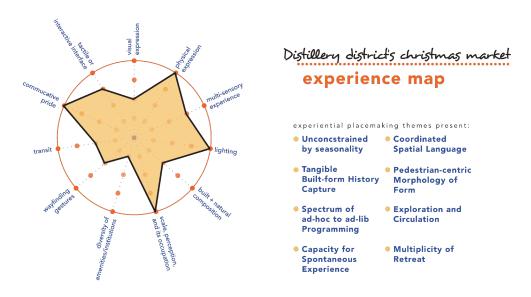


Figure 30: Personal Experience Map for Distillery District's Christmas Market

environment frequently becomes crowded – especially during the holiday period.

In addition to a generally authentic and positive experience, some of the negatives experienced were details of layout and design: the overly accessible lobbys of residential buildings, the monotony of coherence, and a lack of nature. As the area continues to grow it will be of interest to see how the authenticity of this place is maintained as it reaches its carrying capacity and looks to expand.

CASE STUDY - EXPERIENCE MAP APPLICATION: Kensington Market, Toronto



Figure 31: Kensington Market - Community streetscape (Alana de Haan, 2015)

Downtown Toronto's Kensington Market is a cornerstone of the city's more bohemian cultural identity. For many years it has served as juxtaposition to the economic and residential intensifications evolving only a few blocks away. For now, its identity has maintained its most integral componenets, but as the economics of the neighbourhood progress with the economics of the city, compromise will slowly chip away at its authentic spatial language. It is thanks to the existing and established cultural value that the neighborhood still maintains its integrity today.

Although the layout of the 'Market' only occupies one city block, it somehow manages to marry a transition of form and sense of place with neighboring China Town, Baldwin Village,



Figure 32: Kensington Market - Interactions and expression (Alana de Haan, 2015)

Little Italy, and The Annex. By accepting its role as an eccentric waypoint between these outlaying neighbourhoods has allowed it to thrive as a unique identity, but does not make your arrival and departure seem completely unfamiliar. What draws locals and tourists to this area is the close-knit mixture of artists and artisanal outposts, local shops with personable attitude, and a distinct food scene ranging from organic to home-style. What the form-system lacks in 'modernist' quality is made up for in authentic detail and a sense of community and 'down-to-earth' lifestyle. The city's transit infrastructure does well to keep this location ingrained in the urban fabric with transit stops at the primary entries to the Market and accessibility from multiple routes.

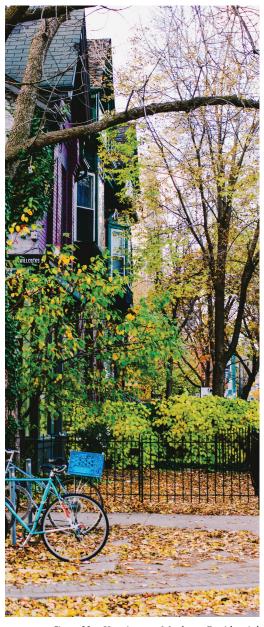


Figure 33: Kensington Market - Residential Streetscape (Alana de Haan, 2015)

What keeps Kensington Market successful is its importance to local culture providing an accessible and welcoming niche sense of community, as well as supporting all-walks of individuality. Amazingly, you can be a street or two over, on a completely quiet neighbourhood road and not know the Kensington Market is but a minute away that is how well it is scaled and maintained. However, due to its centrality these qualities become more fragile everytime a new development is completed in its vicinity. In typical course, more humble institutions will faulter and the programming of the space will become much more intentional and organized. While the area may be undergoing a Heritage Conservation Study, new developments and commercial chains are already modifying the fabric of who

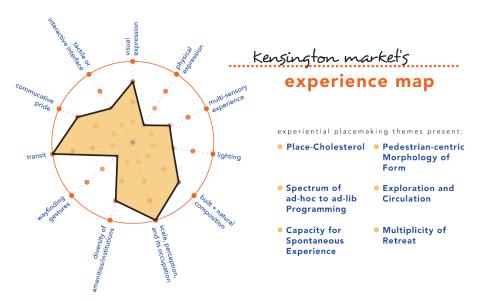


Figure 34: Personal Experience Map for Kensington Market

occupys the neighborhood. As a location that thrives on a sense of individuality, it will be of interest to monitor whether 'preservationism' will still have significant impact to the existing identity of Kensington Market.





Figure 35: Equity Model

Equity Model

Context:

The Experience Map is necessary as the first tool for use because it leads one to comprehend the causal relationships between qualities and quality, as well as understanding what may present as indicators for judging place's evolving qualitative outcomes. With a grasp of those capabilities, the Equity Model builds on the users' analytical perspective and applies it to a broader scope of the qualitative environment toward an environmental conscience regarding built-form's impact on people.

The Equity model is designed to audit the human form relationship according to the framing of *equitability*. Analyzing the human form relationship's equitability is fundamental to this study because, in response to our increasing dependence on form, it represents the foundational idea for a balanced *ethic*. The methodology of this tool is to comparatively analyze the two definitive components of the relationship: human systems and form systems, each based on four respective qualitative framings that reinforce the essence of balance in a cooperative and sustainable *urban ethic*. The form system's principle frames of analysis are: Quality, Resilience, Design, and Flourishing. These will be analyzed based on their capacity to motivate/accommodated the principle frames/scales of human systems: Intrinsic, Inclusivity, Extrinsic, Exclusivity.

The outcome of this tool will communicate *why* we need to improve mutual qualitative perspectives and abilities for qualitative problem framing from the process of analyzing the interactions of these comparative principles. Moreover, it will also contribute to one's analytical ability to address the earlier alluded 'bigger questions' by creating a framework for fundamental analysis of what *livability* and *quality of life* means to the context of place in addition to individually.

The application of this tool has purpose in both evaluating places of existing residence, as well as prospective residence. If society can begin to strengthen their inherency for fundamental qualitative values, such as the ones expressed through this tool, then they can begin to significantly influence *demands* capacity to drive urbanization. Newman articulates the



Figure 36: Equitability Evaluation Outcomes

impacts of understanding these as values of place,

Place-based city concepts [can] increasingly be the people-oriented motivation for the infrastructure decisions that are made. . . many cities are placing increasing emphasis on local place identity, as social capital has been found to be one of the best ways to predict wealth in a community.⁸

Application:

The premise of this framework for auditing the human/form relationship is that the *Scales of Human Systems* will individually measure each *Qualitative Principle of Form*. The degrees of evaluation are sequential: starting from the lowest scale, a degree of measurement cannot be increased unless it meets the preceding criteria.

The evaluation inputs are filled into the model and are then used to appraise the level of equitability, which are then measured by the highest shared level, referenced as a 'link.' In illustrating the necessity of balance, the poorest evaluated principle compromises the *equitability* of the human form relationship.

Formulation - Qualitative Principles of Form:

Quality

Quality defines form systems' capacity for qualitative meanings, which has been reinforced throughout this study. Stedman describes, "one cannot understand sense of place without knowing its cognitive content; meanings put the "sense" into sense of place. The increase in quantitative frameworks for responding to surging urbanization neglect critical theoretical tenets, such as: "the relationship between symbolic meanings and evaluations;" or the significance of environmental characteristics as capital out of which sense of place may be created; and, "the effect of sense-of-place variables on subsequent behavior" – all which are being inadequately represented.9

Resilience

Resilience defines form systems' capacity for qualitative stability and sustainability. Vale describes the emerging explanation of *resiliency* in modern design as, being "embraced by

planners and urbanists as a way to describe the ability of cities to respond to systemic threats, emerging a more action-oriented alternative to perpetually elusive notions of "sustainability," "sustainable development," or "sustainable urbanism"." Sitte emphasizes that desirability is an integral function of sustainable and resilient qualitative design, which requires a shared acknowledgement that 'place really matters.' Newman suggests that resilience can be measured by the thriving nature of an urban fabric: "When people *belong* and have an identity in their town or city, they want to put down their roots and create local enterprise."

This addresses the requirement for analytical foresight regarding the long-term implications of using statistical imperatives as standards for quality; how resilient will their identity be to endure evaluations of livability and quality of life once these built-forms mature? Moreover, what does this express about urban planning and development agencies perspectives for the future of urbanity and livability? Similarly, how do they perceive their existing long-term urbanization strategies to be "part of the solution to the big questions." ¹²

Design

Design represents form systems' capability to qualitatively define symbols and physiologically engage individuals. While this design may seem arbitrary to form, the increasing significance and responsibility of this principle is instigated by the impacts of digital representation and remote access on the translation and transformation of places and their 'symbols.' These trends are also substantially altering the role of imagination and inspiration in our contemporary physical environments – a trade-off of functional ease in exchange for perceptions of expectation. Systemically, this impacts the performance and user's perceived importance of first-hand experiential dialogue in cities, which is an essential medium and incentive for translating and communicating information and knowledge between users and

form. Traditionally this has been an imperative motivation for traveling to European cities, where their culture and history is legible in the qualities and symbols of their environments; Tuan notes that today, as a 'symbol-making' society, we have the capacity to become "passionately attached to places" although we may have had limited to no direct experiences with them. But the absence of authentic spatial assessments negatively reinforces significant tacit cognitions humans use to impose, or refine, inchoate weights of value to objects, places, and qualities – how we develop perspective and comprehend meaning. The disconnect this facilitates from subjective developments of spatial intuition may be reinforcing form systems to become symbolic of a 'backdrop,' which could cause individuals to be at a disadvantage for spatially recognizing and organizing qualitative scenarios and dilemmas, such navigating spaces, or understanding the qualitative impacts to place.

Flourishing 14

Flourishing represents form systems' qualitative capability to facilitate humanity's well-being. In three distinctions it pertains to the psychological well-being of inhabitants, candid social and cultural growth, and maintained or prospective advantageous place identity. The necessity for its active consideration was first proposed in Corey Keyes' 2002 Flourishing Languishing framework, which found that poor mental health (known as 'languishing') can produce similar effects to a major depressive episode, and, while supplementary research is still developing, it is hypothesized that poor mental health can be caused by loss of green space – and if aggravated enough, can have a similar impact to acute mental illness. Geoffrey Vendeville reports a recent study that suggests design consideration could contribute to the future relief of such ailments;

Using data from Toronto, a team of researchers has found that having 10 more trees on your block has self-reported health benefits akin to a \$10,000 salary raise or moving to a neighbourhood with a \$10,000 higher median income or being seven years younger... By comparing satellite imagery of Toronto, an inventory of trees on public land and general health surveys, the team, led by University of Chicago psychologist Marc Berman, found

that people who live on a tree-lined block are less likely to report conditions such as high blood pressure, obesity, heart disease or diabetes . . . The study suggests "pretty strongly" that planting 4 per cent more trees would have significant health benefits, Berman said.¹⁵

According to experts, a lack of routine contact with nature may result in stunted academic and developmental growth in our young people. This unwanted side-effect of the tech-heavy age is called Nature Deficit Disorder. Kuo and Taylor, in their 2004 study, proved that attention deficit hyperactivity disorder (ADHD) symptoms were reduced when children spent time doing activities in green-space compared to when doing the same activities in built-form intensive environments. The improvements were noted to be present regardless of their gender, socioeconomic status, or living environment (rural, urban, etc.). Following in a 2009 study, by the same researchers, showed that 20 minutes in a lush urban park correlated with improvements in cognitive functioning that matched the effect of two top-selling ADHD medications. The improvements in the compared to the effect of two top-selling ADHD medications.

The research to date supports that psychological strength and state of well-being will either have a strong influence on pedestrians' capacity to interpret and further evaluate spatial quality. When we consider the prevalence of technology for so many tasks combined with concrete environments and little natural infrastructure throughout dense urban settings (trees cover approximately 5 percent of Toronto's Financial District)¹⁸, there are few outlets for a mental reprieve in our current urban environments. Contemporary designers need to be capable of "extrapolate[ing] far beyond the sense data," when considering the expressive capacity of their design.¹⁹

Formulation - Scales of Qualitative Human Systems:

The following criteria are adapted from Maslow's Hierarchy of Needs to fit a humanistic and psychological context of design that can evaluating the preceding details of *Qualitative*

Principles of Form.

Intrinsic Needs ('I/Me')

The fulfillment of your *basic* human physiological functions/needs and *support* a capacity for positive cognitions and connections.

Example:

Intrinsic Quality – I can identify meanings of value in my surrounding
Intrinsic Flourishing – I am content here
Intrinsic Design – I feel engaged

Intrinsic Resilience – I see no concerning reason to move in the near future

Inclusive Needs ('We/Us')

The opportunity, or at least potential, for *belonging*, both to one's environment and surroundings as well as to the [contextual] social connotations of *community*.

Example:

Inclusive Quality – Qualities of this place have meaning to us

Inclusive Flourishing – We thrive as a community/I feel safe and secure as part of this community

Inclusive Design – The environment allows us to engage as a community

Inclusive Resilience – The community is relatively established, with minimal fluctuation

Extrinsic Needs ('Here')

The qualitative *environment* may support the *identity and definitions* of one's lifestyle.

Example:

Extrinsic Quality – The qualities of the environment are a significant component of how this place is defined and how in-looking views would identify it Extrinsic Flourishing – The surroundings are an important component to why this

is a mentally supportive place

Extrinsic Design - The environment engages us as a community

Extrinsic Resilience - Capable of supporting growth

Exclusive Needs ('Our')

Place's ability to manage needs of *esteem and actualization*, to the extent that it defines communal conscience and in-ward valuations. For this metric it is important to distinguish between exclusive and restrictive.

Example:

Exclusive Quality – This place's identity is meaningful to a broad context

Exclusive Flourishing – The surroundings are an important component to why this is a mentally supportive place

Exclusive Design - People come here to experience this place

Exclusive Resilience - Growth will not compromise this place's identity

CASE STUDY - EQUITY MODEL APPLICATION: White Rock, British Columbia



Figure 37: White Rock - Pier (Alana de Haan, 2013)

White Rock is a small beach community in the South West corner of British Columbia's mainland that is, like everywhere in Vancouver's Lower-Mainland, experiencing significant inputs of growth and density. This city of over 20,000 residents is also where I grew up. However, the high value of symbolic quality and meaning this location boasts is not due to my bias, it is well known and frequented for its 2km waterfront promenade and pier. From this promenade, or from the topography that abuts it, you can easily see Blaine, Washington across the bay; which is representative of the high volume of seasonal visitors the community supports and survives on.

The largest fault of White Rock is that it is overly dependent on two factors, the real estate



Figure 38: White Rock - Waterfront view (Alana de Haan, 2013)

advantage of its location and the seasonal catering to summer visitors. There's little in terms of design available to describe the location besides the beautiful homes that sit cliffside and overlook the water. Surprisingly, this place's identity is defined by a large white rock that sits on the beach, but really has no reflection or integration to the rest of the local environments design or qualities. The waterfront strip of retail and restaurants is in need of signficant support in terms of redesign to revitalize the independent economics of the area and intervene in the high volume of business turn-over.

This small beach community is significantly at odds in its equitability. With a beautiful, quiet, quaint and communal fabric this is an area that provides a lot of meaning for occupants



Figure 39: White Rock - Residential design (Alana de Haan, 2013)

based on the equity of the natural environment alone. For these reasons its likely to maintain resilient because of its reinforcing relationship with the state of flourishing it enables. But the population is significantly defined by retirees or well-off individuals, which leaves an awkward middle-ground and lack of equitible communal infrastructure to support the full spectrum of people who would like to occupy the area, and that could help the beach-front thrive. Yet if the city invests significantly in its waterfront public infrastructure it also risks altering the authentic and quaint community qualities that make the locals feel invested in the natural and built form environment. It can be noted, however, that I grew up exposed to only one dimension of the diverse socio-economic fabric; I would not be surprised to if this



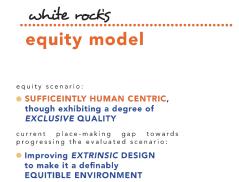


Figure 40: Personal Equity Model for White Rock

place received a higher equitible evaluation from many of the new family's that have begun to occupy the and develop the city.

CASE STUDY - EQUITY MODEL APPLICATION: Guelph, Ontario



Figure 41: Guelph - Speed River (Patty O'Hearn Kickham, 2011)

While my connection to Guelph spans only the course of an undergraduate degree, the decision to attend its University was significantly influenced by my evaluation of its equity during my first visit. The context of this decision is that I had never been anywhere in Ontario before this point, and my evaluation was purely from a first-impression experience. Before moving from White Rock to somewhere in Ontario to attend post-secondary, I toured many of the province's university towns before making a decision on where to apply – this included Toronto, Kingston, Waterloo, London, St. Catherines. Guelph, however, felt familiar.

Although it may not have a focal waterfront amenity, Guelph boasted a prosperous



Figure 42: Guelph - Downtown streetscape (Ivan T. Jativa, 2010)

relationship with nature that I had known so well from White Rock. There was a powerful sense of well-being being communicated by the prevalence, and composition, of its Maple-Beech forests throughout the municipalities planning. And as I toured the campus and parts of the city, there was a distinct feeling like I was not alone in associating this meaning and value. I believe this is also communicated by the Arboretum and Speed River's importance to the City's central identity.

Beyond its natural capital, Guelph also displayed an underlying sense of community – a characteristic that even to this day I have trouble distinguishing down to any one specific element. Even though quite a sprawling County, you still can feel like you are somewhere



Figure 43: Guelph - Church of Our Lady Immaculate (JustSomePics, 2011)

quaint, small, and connected with other locals – and you don't need to be attending the Farmer's Market or Antique Market to establish this feeling. As well, from many of the people that I talked to in my time living there, many alluded to Guelph's capacity for people to grow-in-place and become part of the local, condensed, agricultural, fabric of its place identity. Lately, some of Toronto's periodicals have even been writing about Guelph's opportunity as an affordable alternative for contemporary young urban professionals.

While Guelph's planning and development may still seem aligned with sprawling growth, it does not seem as though these will impact the natural, agricultural, and nodal essences of its extensive sense of place. My only criticism of what seemed to be impacting my ability



Figure 44: Personal Equity Model for Guelph

to make a more equitable evaluation is the state design and typology of built-form being outputted, in addition to the existing form. This identification should not be mistaken as any criticism toward the well preserved and integrated historical aspects of its built-form composition, within areas such as the downtown and the University campus; I will never forget the Church of Our Lady Immaculate's prevelance to Guelph's skyline, and its ability to immediately proide orientation. From my perspective, beyond the University's new institutional buildings, the new commercial and residential developments being implemented did not communicate a progressive sense of design identity, or an elasticity for it to move forward. However, this could be particular to someone – such as myself– who is not familiarized to the typical brick archetypes of townhomes and residences that are conventional to Ontario's built-form DNA.

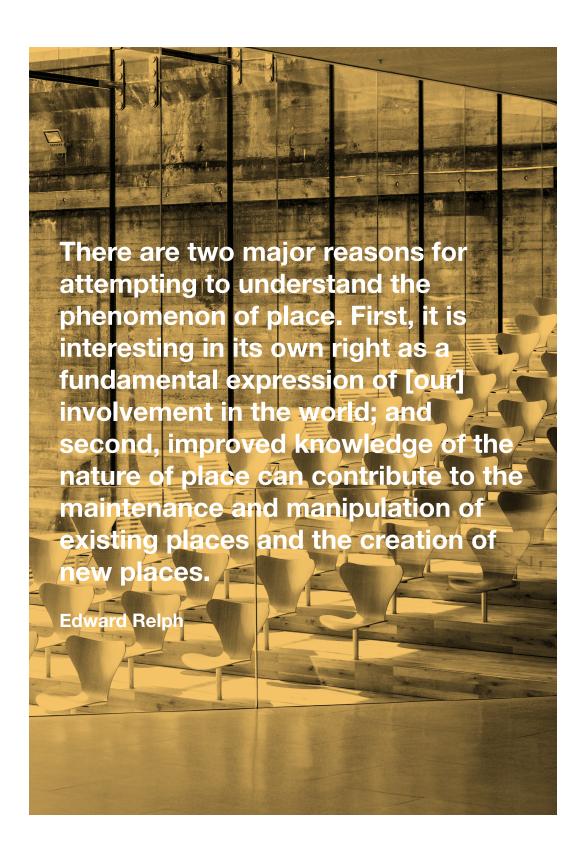
CASE STUDY - EQUITY MODEL: Guelph, ON

(Endnotes)

- 1 Brawne (2003) 99.
- 2 Brook (2013) 20.
- Rypkema, Donovan, Caroline Cheong, and Randall Mason, "Measuring Economic Impacts of Historic Preservation" <u>Preserve America</u>, Nov. 2011, 3 May 2016 < http://www.preserveamerica.gov/docs/economic-impacts-of-historic-preservation-study.pdf>.
- Lehnerer, Alex, Kees Christiaanse, and Ludger Hovestadt, <u>Grand Urban Rules</u> (Rotterdam: 010, 2009) 64, 36.
- 5 Speck, Jeff, <u>Walkable City: How Downtown Can Save America</u>, One Step at a Time (New York: Farrar, Straus, and Giroux, 2012) 246.
- Dutton, Denis, <u>The Art Instinct: Beauty, Pleasure, and Human Evolution</u> (New York: Bloomsbury Press, 2009) *56*.
- 7 Lerner, Jaime, <u>Urban Acupuncture</u> (Island Press, 2014).
- Newman, Peter et al *via* Haas, Tigran, <u>Sustainable Urbanism and Beyond: Rethinking Cities for the Future</u> (New York: Rizzoli, 2012) 18.
- 9 Stedman, (2002).
- Vale, Lawrence J. *via* Haas, Tigran, <u>Sustainable Urbanism and Beyond: Rethinking Cities for the Future</u> (New York: Rizzoli, 2012) 22.
- 11 Newman et al (2012) 19.
- 12 *Ibid*,18.
- Tuan, Yi-fu, <u>Space and Place: The Perspective of Experience</u> (Minneapolis: U of Minnesota, 1977) 18.
- Cairns, Broc, Pratkeesha Singh, and Caralyn Quan, <u>Cementing Toronto's Mental Well-Being</u> (OCADU, 2015).
- Vendeville, "Living on Tree-lined Streets Has Health Benefits, Study Finds" <u>Toronto Star,</u> 13 July 2015, 10 May 2016 < https://www.thestar.com/news/gta/2015/07/13/living-on-tree-lined-streets-has-health-benefits-study-finds.html>.
- 16 Louv, Richard, Last Child in the Woods: Saving Our Children from Nature-deficit

Disorder, (Chapel Hill: Algonquin of Chapel Hill, 2005).

- Selhub, Eva, and Alan C. Logan, Your Brain on Nature: The Science of Nature's Influence on Your Health, Happiness and Vitality (Mississauga: John Wiley & Sons Canada, 2012) 72.
- 18 Vendeville (2015).
- 19 Stedman (2002).



Discussion

section four

Conclusion

In my lifetime, and on humanity's current course, cities will evolve to support three-quarters of the global population. Realistically, North America won't experience as drastic of a change as some of the world's largest or developing economies, but that does not mean we should be any less attentive to the impacts and outcomes this phenomenon can bring. We sometimes, if not frequently, take for granted what our surroundings do for us on more than just functional levels – as any Associate and Affiliate of Landscape Architecture will confirm. We overlooked how the qualities of where we live contribute to and define how we are able to measure/perceive quality of life. Yet, as our cities grow we are consistently directed to 'look over here' at the functional capacities of development: more, more, more. These concepts of selfishness and greed are influencing and depicting the growth of our

cities. However, these are quantitative distinctions; what about the quality – will these implementations be *better*? Will they be *equitable*? These are important questions and framings that not only need to be asked, but comprehended by those who will be living in these unprecedented (for a Canadian, anyway) environments.

The intent of this study was to help occupants of these future environments perceive the qualitative changes urban environments are and will experience. For it to provoke or motivate individuals toward the significance of this developing scenario I felt it was important that the output of this study does not prescribe methodology for perceiving surroundings, but could act as a platform to comprehend and rationalize authentic opinions. In response to this brief I framed the question, "How might built-form environments be used to develop an individual's qualitative lens, so they may better perceive place-making outcomes, and their future?" Using Aldo Leopold's precedent philosophy of the 'Land Ethic', I looked to explore qualitative capacities of built-form design for fundamental principles that could structure a framework for individuals to build their own [qualitative] environmental conscience from. Of particular importance is to direct analytical perspective to the *equitability* of the foundational relationship humans share with their form systems. I hypothesized that in order for individuals to comprehensively perceive the qualities and qualitative status of this relationship, and its outcomes, they would require tools to translate place. This was defined as the ability of our perspective to qualitatively interpret the experiential capacities and components of our built-form environments that define more than just ideas of 'form' and its function.

The research process, which included concepts, philosophies, and theories, provided a comprehensively different perspective to the potential and purpose of qualitative design, *especially* in the built-form context. The critical overarching theme across work dating back to 19th century translated that the increasing use of quantitative approaches for responding to

urbanization and the pluralisation of these solutions are abbreviating or neglecting the most transformative stage of the design process – the humanistic definition through end-users. The significance of this concept is that it highlights the capacity for end-users to translate the implementations of design to be the truly defining capacity of the process. Furthermore, this communicated that the traditional design idiom of 'form follows function,' due to urbanization, is becoming a principally quantitative methodology, which inadequately represents/supports an equitable state for the human form relationship. The hierarchical reorganization that is underway within this relationship has put end-users in an adaptive rather than adoptive responsive role to the development market. Why this is significant qualitatively is because it has left existing and prospective occupants searching for symbols in their environment, and to a further extent 'meanings and attachment.' Inevitably, this results in the most *expressive* places tending to define the most desirable and equitable settings.

The findings of the research and the transformative, yet crucial, details of qualitative design have led me to conclude that my hypothesis was incomplete. With the influence of my bias I had perceived that the 'individuals' who needed to better perceive the changing qualitative dynamics of their environments were only occupants. I would revise my hypothesis to include designers as well and restate that we need tools for *transforming space* and *translating place*. In lieu of recognizing the antiquation of 'form follows function,' qualitative design processes should reflect on 'experience follows expression,' which addresses dependency of end-users on translating symbols, and further transforming the definition of their environment. This, in conjunction with form follows function, then provides constructive perspective to both the human systems and their form systems within the fundamental underlying relationship of the places we live, value, and occupy. It also sets the foundation for improving the development of a cooperative ethic in these emerging and maturing built-form settings.

This project concludes that the most defining, humanistic, phases of built-form design occur after implementation when individuals begin to translate the invested symbolic gestures. The significance of urbanization's impacts to designing human habitats and expediting their production is that they are increasingly abbreviating opportunity for expressive design. As a result, the critical dialogue between expression and experience are not reinforcing one another and are instead separate from the designing of form and function. Camillo Sitte reflects,

We are presented with a mystery- the mystery of the innate, instinctive aesthetic sense that worked such obvious wonders for the old masters without resort to narrow aesthetic dogma or stuffy rules. We, on the other hand, come along afterward, scurry about with our T-square and compass, presuming to solve with clumsy geometry those fine points that matters of pure sensitivity.¹

Next Steps

Evolving The Toolkit

The intention of this project's toolkit is to act as a preliminary vehicle for communicating qualitative principles of evaluative perspective. Its development from this point can serve as either content for discussion and creating new tools and methods, or evolving these existing tools in more cooperative community dialogues. The most integral part of this medium is that expression and evaluation of design, through occupants' perspective, is considered toward how we can evolve equitable platforms between designers and non-designers as well as form and human systems. These tools can be appropriately engineered with the cooperation of designers to obtain feedback on what symbols are effective and how we can make them more readily accessible in our design methodologies.

Cushman and Wakefield showcase the capability of a more expressive, and human-oriented-

meaning, medium for communication in their 2016 North American Urban Retail Guide, titled 'Cool Streets.' While a clear opportunity for defining their key development locations to prospective individuals, they use the metric of neighbourhood 'coolness' to illustrate an idea of up-and-coming neighbourhoods versus areas that have 'gone mainstream.'

Access to these tools is also a significant dimension to the tools' growth. As I see it, there are two options: digital or analog; and while paper and pen can be cumbersome, it seems that the most appropriate option accessibility-wise is to great a digital adaptation – which, in its current form, could be easily converted into an app. However, this contradicts notions within the study that technology is a component of distracting our perspectives from the changes evolving around us, but I see no other way in making this a more viable tool for impromptu evaluation.

The final component of taking these tools forward is to test them amongst different sample sizes across varying timelines. What needs further investigation is how well users of the tools respond to the intention of developing visual thinking and analytic perspective of their qualitative environment. This would consist of: are the chosen criteria the most effective or influential? Does it require reinforcement – and if so, over what period of time does it take to impact individuals? And finally, how do we best measure the impact to perspective – is it through literal changes it is able to influence or just through the capacity for comprehension?

From Problem Identification to Error Elimination

The focus of this project, the enhancement of one's perspective, was to develop a mutual capacity for *framing* qualitative problems of our built-form environment. The outcomes of this study are intended for contribution to the "Problem Recognition" phase outlined in Brawne's iteration of the solution design process, of which he detailed, "The P1 \Rightarrow TS \Rightarrow EE \Rightarrow P2 sequence (Problem recognition, Tentative Solution, Error Elimination, best corroborated

solution which becomes the problem to the next sequence)."² This is made possible by the concluding 'experience follows expression' methodology that can be taken forward for application of either public or private spatial agencies, or educational systems.

Improving how we are able to design resilient and equitable solutions is also seen as an outcome of the improved dialogue that is enabled between designers and non-designers by establishing mutual means of communication and understanding. As this is a long-term issue, a collaborative dialogue and the development of a community conscience can be effectively facilitated to address a cooperative foresight on how new and proposed places will impact livability and quality of life. This is not to say that these forums do not already take place. But a [shared] qualitative knowledge base can be the difference between the ineffectual dialogue that is currently used, and a dialogue that improves the future of the human form relationship and makes urban environments a suitable place to live, without compromise to our intuitive and intrinsic values.

(Endnotes)

- 1 Sitte (1898) 20.
- 2 Brawne (2012) 33.

<u>Images</u>

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www.urbantoronto.ca/news/2015/04/retailers-announced-canary-district-west-don-lands. Web.	
2016.	
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nary-district. Web. 2016	
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business/2015/11/06/pan-am-athletes-village-goes-from-dorm-rooms-to-condos-in-new-toronto-	
neighbourhood.html. Web. 2016.	20
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References

- "About PLACE IT!" PLACE IT! N.p., n.d. Web. 30 July 2016.
- Adner, Ron. *The Wide Lens: A New Strategy for Innovation*. New York: Portfolio/Penguin, 2012. Print.
- Ahmadi, Vahid, Adi Irfan Chi-Ani, Hero Farkisch, and Mastor Surat. "Morphological Study of Urban Hierarchy in Boshrooyeh City of Iran." *Archnet-IJAR, International Journal of Architectural Research* 6.3 (2011): 56-71. Web. 5 Jan. 2016. http://archnet.org/system/publications/contents/6734/original/DPC3591.pdf?1384801334.
- Alexander, Christopher, Sara Ishikawa, and Murray Silverstein. *A Pattern Language: Towns, Buildings, Construction.* New York: Oxford UP, 1977. Print.
- Altman, Irwin, and Setha M. Low. "Place Attachment A Conceptual Inquiry." *Human Behavior and Environment*. Vol. 12. N.p.: Springer US, 1992. 1-12. *Springer Link*. Web. 30 Jan. 2016.
- "Andrew Jackson Downing." *Frederick Law Olmsted*. N.p., n.d. Web. 1 Dec. 2015. http://fredericklawolmsted.com/ajdowning.htm.
- Avenues and Mid-Rise Buildings Study, Rep. City of Toronto, May 2010. Web. 28 Apr. 2016.
- Awan, Nishat, Tatjana Schneider, and Jeremy Till. Spatial Agency: Other Ways of Doing Architecture. Abingdon, Oxon: Routledge, 2011. Print.
- Bacon, Edmund N. Design of Cities. New York: Viking, 1967. Print.
- Bandarin, Francesco, and Ron Van Oers. Reconnecting the City: The Historic Urban Landscape Approach and the Future of Urban Heritage. N.p.: John Wiley & Sons, 2015. Print.
- Bateman, Chris. "City Scrubs Inventive Street Art at Richmond & Spadina." Web log post. *BlogTO*. N.p., 26 Nov. 2014. Web. 22 Feb. 2016. http://www.blogto.com/city/2014/11/city_scrubs_inventive_street_art_at_richmond_spadina/.

- Beekmans, Jeroen, and Joop De Boer. *Pop-Up City: City Making in a Fluid World*. Amsterdam: BIS, 2014. Print.
- Benevolo, Leonardo. The Origins of Modern Town Planning. Cambridge: MIT, 1967. Print.
- Bhatia, Neeraj. Coupling: Strategies for Infrastructural Opportunism. New York: Princeton Architectural, 2011. Print. Pamphlet Architecture 30.
- Bissiri, P. G., C. C. Holmes, and S. G. Walker. "A General Framework for Updating Belief Distributions." *Journal of the Royal Statistical Society: Series B (Statistical Methodology) J. R. Stat. Soc. B* (2016): n. pag. *Cornell University Library*. Web. 25 Feb. 2016. http://arxiv.org/pdf/1306.6430v2.pdf>.
- Bloor Corridor Visioning Study: Avenue Road to Bathurst Street. Rep. City of Toronto, May 2008. Web. 15 Jan. 2016. http://www1.toronto.ca/city_of_toronto/city_planning/community_planning/files/pdf/bloorcorridor_finalreport_may08.pdf.
- Brawne, Michael. Architectural Thought: The Design Process and the Expectant Eye. Oxford: Architectural, 2003. Print.
- Brawne, Michael. Architectural Thought: The Design Process and the Expectant Eye. Oxford: Architectural, 2003. Print.
- Brook, Daniel. A History of Future Cities. New York: W.W. Norton, 2013. Print.
- Brown, Mark, and Romana King. "City or Suburbs: Where Can You Afford to Live?" *MoneySense* Feb.-Mar. 2016: n. pag. *MoneySense*. 28 Jan. 2016. Web. 5 Feb. 2016.
- Brûlé, Tyler, Andrew Tuck, and Santiago Rodríguez Tarditi. *The Monocle Guide to Better Living*. Berlin: Gestalten, 2013. Print.
- Buchanan, Richard. "Wicked Problems in Design Thinking." *Design Issues* 8.2 (1992): 5-21. *ISTOR*. Web. 30 Apr. 2016.
- Cadillac Fairview Design Criteria. N.d. Retail Design Criteria Client Design Delivery.
- Cairns, Broc, Pratkeesha Singh, and Caralyn Quan. Cementing Toronto's Mental Well-Being.

- Rep. Strategic Foresight and Innovation, OCAD University. N.p.: n.p., 2015. Print.
- Carmona, Matthew. *Public Places*, *Urban Spaces: The Dimensions of Urban Design*. Oxford: Architectural, 2003. Print.
- Carmona, Matthew, and Steven Tiesdell. Urban Design Reader. N.p.: Elsevier, 2007. Print.
- Chermayeff, Serge, and Christopher Alexander. Community and Privacy; toward a New Architecture of Humanism. Garden City, NY: Doubleday, 1963. Print.
- Childs, Mark C. *Urban Composition: Developing Community through Design*. New York: Princeton Architectural, 2012. Print.
- Clemente, Otto, and Reid H. Ewing. *Measuring Urban Design: Metrics for Livable Places*. N.p.: Island, 2013. Print.
- Cohen, Jean-Louis. "Le Corbusier's Modulor and the Debate on Proportion in France." *Architectural Histories* 2.1 (2014): n. pag. *EAHN*. Web. 25 Mar. 2016. http://journal.eahn.org/articles/10.5334/ah.by/.
- Community Design Guidelines: Responding to a Changing Market. Washington, DC: National Association of Home Builders, 1984. Print.
- "Complete Streets Guidelines for Toronto." *City of Toronto*. City of Toronto, n.d. Web. 1 May 2016. http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=bdb604f82477d410VgnVCM10000071d60f89RCRD.
- Condon, Patrick M. Seven Rules for Sustainable Communities: Design Strategies for the Post-carbon World. Washington: Island, 2010. Print.
- Creswell, John W. Qualitative Inquiry and Research Design: Choosing among Five Approaches. N.p.: Sage Publications, 2007. Print.
- Curry, A., & Hodgson, A. (2008). Seeing in multiple horizons: connecting futures to strategy. Journal of Futures Studies, 13(1). Print.

- Urban Strategies Inc. Design Guidelines for PATH and Other Climate-Controlled Pedestrian Networks. Rep. City of Toronto, Feb. 2012. Web. 4 Mar. 2016.
- Design Guidelines for Privately Owned Publicly-Accessible Space. Rep. City of Toronto, June 2014. Web. 15 Jan. 2016. http://www1.toronto.ca/City Of Toronto/City Planning/ Urban Design/Files/pdf/P/POPS_guidelines_Final_140529.pdf>.
- District or Area-Specific Guidelines. Rep. City of Toronto, n.d. Web. 12 Feb. 2016.
- "Draft of New Citywide Zoning Bylaw." *Urban Toronto*. N.p., 2 Feb. 2013. Web. 12 May 2016.
- Duany, Andres, and Elizabeth Plater-Zyberk. *Towns and Town-Making Principles*. New York: Rizzoli, 1991. Print.
- Dunham-Jones, Ellen, and June Williamson. *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs*. Hoboken, NJ: John Wiley & Sons, 2009. Print.
- Dutton, Dennis. *The Art Instinct: Beauty, Pleasure and Human Evolution*. New York: Bloomsbury, 2009. Print.
- Evans, Robin. Translations from Drawing to Building and Other Essays. London: Architectural Association, 1997. Print.
- Fahrig, Lenore. "Relative Importance of Spatial and Temporal Scales in a Patchy Environment." *Theoretical Population Biology* 41.3 (1992): 300-14. *Geomatics and Landscape Ecology Research Laboratory Carleton University*. Web. 25 Jan. 2016. http://www.glel.carleton.ca/pdf/landPub/pre-96/92FahrigTheorPopulBiol.pdf.
- Frampton, Kenneth. *Modern Architecture: A Critical History*. 3rd ed. London: Thames and Hudson, 1992. Print.
- Frey, Thomas. "2050 and the Future of Infrastructure." *DaVinci Institute Futurist Speaker*. N.p., 4 Aug. 2014. Web. 5 May 2016.
- Friedman, Avi. *Planning the New Suburbia: Flexibility by Design*. Vancouver: UBC, 2002. Print.

- Furman, Andrew. Connecting Public and Private Paths for Pedestrians in Toronto. Rep. The School of Interior Design, Faculty of Communication & Design, Ryerson University. N.p., n.d. Web. 30 May 2016.
- Garvin, Alexander. *The American City: What Works, What Doesn't.* New York: McGraw-Hill, 1996. Print.
- Gaziano, C. "Components of the Belief Gap: Ideology and Education." SAGE Open 4.1 (2014): n. pag. ResearchGate. Web. 25 Mar. 2016. https://www.researchgate.net/publication/259648857_Components_of_the_Belief_Gap_Ideology_and_Education.
- Gharajedaghi, Jamshid. Systems Thinking: Managing Chaos and Complexity. N.p.: Elsevier, 2011. Print.
- Girling, Cynthia L., and Ronald Kellett. Skinny Streets and Green Neighborhoods: Design for Environment and Community. Washington, DC: Island, 2005. Print.
- Greenberg, Ken. Walking Home: The Life and Lessons of a City Builder. Toronto: Random House Canada, 2011. Print.
- Haas, Tigran. Sustainable Urbanism and Beyond: Rethinking Cities for the Future. New York: Rizzoli International Publications, 2012. Print.
- Hajer, Maarten A., and Ton Dassen. Smart about Cities: Visualising the Challenge for 21st Century Urbanism: "we Need a Globally Networked Urbanism" N.p.: Nai Uitgevers Pub, 2014. Print.
- "Hampstead Garden Suburb History." *Hampstead Garden Suburb History*. N.p., n.d. Web. 20 Mar. 2016. http://www.hgs.org.uk/history/index.html.
- Hansen, Andrew J., Knight Richard L., Marzluff John M., Scott Powell, Brown Kathryn, Patricia H. Gude, and Kingsford Jones. "Effects of Exurban Development on Biodiversity: Patterns, Mechanisms, and Research Needs." *Ecological Applications* 15.6 (2005): 1893-905. Web.

- Harrell, Rodney. "What Is a Livable Community, and How Do We Measure One?" Web log post. *AARP*. N.p., 25 Apr. 2014. Web. 4 Mar. 2016.
- Hassenzahl, Marc. "User Experience and Experience Design." *Interaction Design Foundation UX*. N.p., n.d. Web. 26 Jan. 2016. https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed/user-experience-and-experience-design.
- Heron, John. *Experiential Research*. Rep. London: British Postgraduate Medical Federation, 1981. Print.
- Hess, Paul Mitchell., and Jane Farrow. Walkability in Toronto's High-rise Neighbourhoods. Toronto, ON: Cities Centre, U of Toronto, 2010. Print.
- Hopper, Tristin, and Roberto Rocha. "Metro Toronto Population Blasts above Six Million According to Stats Can. Montreal at Four Million." *National Post*. N.p., 11 Feb. 2016. Web. 1 Mar. 2016.
- Housing Trends and Affordability. Rep. Royal Bank of Canada, n.d. Web. http://www.rbc.com/newsroom/pdf/HA-0827-2012.pdf>.
- Ingels, Bjarke. Yes Is More: An Archicomic on Architectural Evolution. N.p.: Taschen, 2009. Print.
- "International Conference on Public Policy." *Policy Design: Principles and Processes -IPPA-International Public Policy Association*. N.p., n.d. Web. 2 May 2016. http://www.icpublicpolicy.org/Policy-Design-Principles-and.
- United Nations. Istanbul 5: The United Nations Special Session of the General Assembly for an Overall Review and Appraisal of the Implementation of the Habitat Agenda. N.p.: United Nations, 2001. Http://www.un.org/ga/Istanbul 5/. United Nations. Web. 26 Mar. 2016. http://www.un.org/ga/Istanbul 5/brochure.pdf>.
- Jacobs, Jane. The Death and Life of Great American Cities. N.p.: n.p., 1961. Print.
- Jacobs, Jane. Dark Age Ahead. New York: Random House, 2004. Print.

- Jamieson, Claire. The Future for Architects. Publication. RIBA, n.d. Web. 12 Feb. 2016.
- Jenkins, Barbara. "Toronto's Cultural Renaissance." *Canadian Journal of Communication* 30.2 (2005): n. pag. Web. 28 Feb. 2016. http://www.cjc-online.ca/index.php/journal/article/view/1417/1523.
- Jones, Owen. The Grammar of Ornament: All 100 Color Plataes from the Folio Edition of the Great Victorian Sourcebook of Historic Design. New York: Dover Publications, 1987. Print.
- Karlsson, Alexander. Evaluating Credal Set Theory as a Belief Framework in High-Level Information Fusion for Automated Decision-Making. Rep. Örebro University, 2010. Web. 25 Apr. 2016. http://www.diva-portal.org/smash/get/diva2:345982/FULLTEXT03.pdf.
- Keane, Thomas H., and Thomas Ludlow Ashley. *Not in My Backyard: Removing Barriers to Affordable Housing*. Washington, D.C.: HUD, 1991. Print.
- Canada. City of Toronto. City Planning. *Toronto Official Plan Office Consolidation*. By Jennifer Keesmat. City of Toronto, June 2015. Web. 25 Mar. 2016.
- Keesmat, Jennifer. "Greenbelts Make Cities More Livable, Affordable and Transit-friendly." *The Globe and Mail.* N.p., 12 Jan. 2015. Web. 13 Feb. 2016.
- Kendell, Stuart. "Aesthetics and the Ideology of Design." Weblog post. *Stuart Kendell*. N.p., 16 Jan. 2011. Web. 20 Mar. 2016.
- King-Parliament in Association with King-Parliament Secondary Plan. Rep. City of Toronto, June 2004. Web. 20 Apr. 2016.
- Knikker, Jan, and Alex Davidson. "In Defense of Renders and Trees On Top of Skyscrapers." *ArchDaily*. N.p., 02 Mar. 2016. Web. 21 Apr. 2016.
- Koones, Sheri. Prefabulous Sustainable: Building and Customizing an Affordable, Energy-efficient Home. New York: Abrams, 2010. Print.

- Kunstler, James Howard. The Geography of Nowhere: The Rise and Decline of America's Man-made Landscape. New York: Simon & Schuster, 1993. Print.
- Kwan, Amanda. "Private Space or Public Park? Revealing Toronto's In-between Spots." *The Globe and Mail.* N.p., 27 Sept. 2013. Web. 2016 Jan. 5. http://www.theglobeandmail.com/news/toronto/private-space-or-public-park-revealing-torontos-in-between-spots/article14315725/>.
- Lagos, Cristiane Pinheiro. Affordable Housing: Codes, Standards and Regulations. N.p.: n.p., 1992. N. pag. Print.
- Lansing, John B., Robert W. Marans, and Robert B. Zehner. *Planned Residential Environments*. Ann Arbor: Survey Research Center, U of Michigan, 1970. Print.
- Lehnerer, Alex, Kees Christiaanse, and Ludger Hovestadt. *Grand Urban Rules*. Rotterdam: 010, 2009. Print.
- Leopold, Aldo. A Sand County Almanac, and Sketches Here and There. New York: Oxford UP, 1987. Print.
- Lerner, Jaime. Urban Acupuncture. N.p.: Island, 2014. Print.
- Levy, Albert. "Urban Morphology and the Problem of the Modern Urban Fabric: Some Questions for Research." *Urban Morphology: Journal of the International Seminar on Urban Form* (1999): 79-85. International Seminar on Urban Form. Web. 4 Jan. 2016.
- "Livability Index Web-based Tool to Measure Community Livability." *AARP*. N.p., n.d. Web. 4 Mar. 2016.
- Lorinc, John. The New City: How the Crisis in Canada's Urban Centres Is Reshaping the Nation. Toronto: Penguin Canada, 2006. Print.
- Louv, Richard. Last Child in the Woods: Saving Our Children from Nature-deficit Disorder. Chapel Hill, NC: Algonquin of Chapel Hill, 2005. Print.
- Lynch, Kevin. The Image of the City. Cambridge, MA: MIT, 1960. Print.

- Lynch, Kevin. A Theory of Good City Form. Cambridge, MA: MIT, 1981. Print.
- Lynn, Greg. "Structure of Ornament." *Digital Tectonics*. Chichester: Wiley-Academy, 2004. 63-68. Print.
- Malecha, Marvin J. Reconfiguration in the Study and Practice of Design and Architecture. San Francisco: William Stout, 2002. Print.
- Margolin, Victor. Design Discourse: History, Theory, Criticism. Chicago: U of Chicago, 1989. Print.
- Mathews, Vanessa Kirsty. Place Differentiation: Redeveloping the Distillery District, Toronto. N.p.: n.p., 2010. Print.
- Maxwell, Joseph. "Designing a Qualitative Study." *The SAGE Handbook of Applied Social Research Methods* (2008): 214-53. *Saje*. Web. 11 Mar. 2016. http://www.sagepub.com/sites/default/files/upm-binaries/23772_Ch7.pdf.
- McLendon, Timothy, Kristin Larsen, JoAnn Klein, Rhonda Phillips, Glenn Willumson, Lori Pennington-Gray, and John Confer. *Contributions of Historic Preservation to the Quality of Life in Florida*. Gainesville, FL: U of Florida, 2006. Print.
- Miazzo, Francesca, and Tris Kee. We Own the City: Enabling Community Practice in Architecture and Urban Planning. N.p.: n.p., n.d. Print.
- Micallef, Shawn. Stroll: Psychogeographic Walking Tours of Toronto. Toronto: Coach House, 2010. Print.
- Mikoleit, Anne, and Moritz Pürckhauer. *Urban Code: 100 Lessons for Understanding the City*. Cambridge, MA: MIT, 2011. Print.
- Montgomery, Charles. *Happy City: Transforming Our Lives through Urban Design*. N.p.: Doubleday Canada, 2013. Print.
- Moore, Dennis. "World Socialist Web Site." *UK Public Parks Face Perilous Future*. N.p., 9 Jan. 2016. Web. 12 Feb. 2016.

- Morris, Tom, and Tyler Brûlé. *The Monocle Guide to Cosy Homes*. Berlin: Gestalten, 2015. Print.
- Moussaoui, Raja. "Distillery Project Mixed Old with New." *The Toronto Star.* N.p., 5 Mar. 2013. Web. 24 Apr. 2016. https://www.thestar.com/news/gta/2013/02/20/distillery_project_mixed_old_with_new.html.
- Mowery, David, and Nathan Rosenberg. "The Influence of Market Demand upon Innovation: A Critical Review of Some Recent Empirical Studies." *Research Policy* 22.2 (1993): 107-08. Web. 2 May 2016. http://sjbae.pbworks.com/f/mowery_rosenberg_1979.pdf>.
- Mumford, Lewis. *The City in History: Its Origins, Its Transformations, and Its Prospects*. New York: Harcourt, Brace & World, 1961. Print.
- Najafi, Mina, and Mustafa Kamal Bin Mohd Shariff. "The Concept of Place and Sense of Place in Architectural Studies." World Academy of Science, Engineering & Science, Technology 56 (2011): n. pag. World Academy of Science Engineering & Science Engineering & Technology. Web. 24 Apr. 2016. http://waset.org/publications/14034/the-concept-of-place-and-sense-of-place-in-architectural-studies.
- Nasar, Jack L., and Junmo Kang. "House Style Preference and Meanings across Taste Cultures." *Landscape and Urban Planning* 44.1 (1999): 33-42. Web. 30 Apr. 2016.
- Neuhart, John, Charles Eames, Ray Eames, and Marilyn Neuhart. *Eames Design: The Work of the Office of Charles and Ray Eames*. New York: H.N. Abrams, 1989. Print.
- Newman, J. "How Not to Be (Huh? What? Where Was I?) Distracted." *Real Simple* Dec. 2014: 139. Print.
- Norberg-Schulz, Christian. Genius Loci: Towards a Phenomenology of Architecture. New York: Rizzoli, 1980. Print.
- Norberg-Schulz, Christian. *The Concept of Dwelling: On the Way to Figurative Architecture*. Milan: Electa, 1985. Print.

- Norberg-Schulz, Christian. *Architecture: Meaning and Place: Selected Essays*. New York, NY: Rizzoli International Publications, 1988. Print.
- Norman, Rebecca Thandi. "Reimagining the City: Urban Space Initiatives in Copenhagen & Around the World." Web log post. *Scandinavian Standard*. N.p., 7 Nov. 2015. Web. 1 Dec. 2015.
- Novakovic, Stefan. "UrbanToronto's Development Guide: Growth to Watch For 2016." *Urban Toronto*. N.p., 8 Apr. 2016. Web. 30 Aug. 2016.
- Official Plan Five-Year Review: Urban Design Policy Directions for Consultation. Rep. City of Toronto, 3 July 2014. Web. 28 Apr. 2016.
- Canada. Ministry of Culture. Ontario Heritage Tool Kit. Toronto: Government of Ontario, Ministry of Culture & Ontario Heritage Trust, 2006. Ontario Heritage Tool Kit Heritage Property Evaluation. Government of Ontario, Ministry of Culture & Ontario Heritage Trust. Web. 11 Feb. 2016. http://www.mtc.gov.on.ca/en/publications/Heritage_Tool_Kit_HPE_Eng.pdf.
- Oregonian/OregonLive, Joseph Rose | The. "TriMet's \$370,600 Solar-power Project for MAX at Portland State University Will save Only \$3,680 a Year." *OregonLive.com*. N.p., 28 Nov. 2011. Web. 15 Jan. 2016. http://blog.oregonlive.com/commuting/2011/11/trimets_370600_solar-power_pro.html.
- Orth, Ulrich, and Renata De Marchi. "Understanding the Relationships Between Functional, Symbolic, and Experiential Brand Beliefs, Product Experiential Attributes, and Product Schema: Advertising-Trial Interactions Revisited." *The Journal of Marketing Theory and Practice* 15.3 (2007): 219-33. *JSTOR*. Web. 23 Jan. 2016.
- Pantazis, George, comp. TOcore: First Round of Community Consultations Summary Report. Rep. City of Toronto, June 2015. Web. 5 Mar. 2016.
- Pasquarelli, Gregg, Galia Solomonoff, Mario Gooden, Nina Rappaport, and Julia Stanat. Layered Urbanisms: Gregg Pasquarelli / Galia Solomonoff / Mario Gooden. New Haven: Yale School of Architecture, 2008. Print.
- Perin, Constance. Everything in Its Place: Social Order and Land Use in America. Princeton, NJ: Princeton UP, 1977. Print.

- Perry, Clarence. "The Neighborhood Unit." *Regional Plan of New York and Its Environs* (1929): 34-43. Web. 20 Mar. 2016. http://codesproject.asu.edu/sites/default/files/code_pdfs/The_Neighborhood_Unit_a.pdf.
- Pihlak, Madis. *The City of the 21st Century*. Tempe, AZ: Dept. of Planning, College of Architecture and Environmental Design, Arizona State U, 1988. Print.
- Pimlott, Mark. "Frank Lloyd Wright & Broadacre City (2007)." *Art Design Café*. N.p., 21 Oct. 2011. Web. 20 Mar. 2016. http://www.artdesigncafe.com/Frank-Lloyd-Wright-2007-1.
- Placemaking and the Future of Cities. Publication. Project for Public Spaces, Inc., Feb. 2015. Web. 30 Feb. 2016.
- Pont, Meta Berghauser, and Per Haupt. Spacematrix: Space, Density, and Urban Form. Rotterdam: NAI, 2010. Print.
- "Privately-Owned Public Open Space and Public Art (POPOS)." *Planning Department*. City of San Francisco, 10 June 2013. Web. 24 Apr. 2016. http://sf-planning.org/privately-owned-public-open-space-and-public-art-popos.
- Quale, John D. *Sustainable*, *Affordable*, *Prefab: The EcoMOD Project*. Charlottesville: U of Virginia, 2012. Print.
- Relph, E. C. Place and Placelessness. London: Pion Limited, 1976. Print.
- "RIBA AWARDS 2016." *RIBA*. N.p., n.d. Web. 2 Mar. 2016. https://www.architecture.com/awards/awards/2016/awards2016.aspx.
- Rollins, Darcy. Indicators of Livable Communities: A Report on Smart Growth and the Impact of Land Use Decisions on Maine's Communities, Environment and Countryside. Place of Publication Not Identified: Maine Development Foundation, 2002. Print.
- Rutledge, Albert J. Anatomy of a Park; the Essentials of Recreation Area Planning and Design. New York: McGraw-Hill, 1971. Print.

- Ryan, Marc. "Cultural Dimensions of Contemporary Design." *Landscape Paysages* Nov. 2015: 36-39. Print.
- Rypkema, Donovan, Caroline Cheong, and Randall Mason. *Measuring Economic Impacts of Historic Preservation A Report to the Advisory Council on Historic Preservation*. Rep. Preserve America, Nov. 2011. Web. 3 May 2016.
- Schuler, Timothy A., ed. "Now." Landscape Architecture Magazine Jan. 2016: 18-34. Print.
- Seamon, David, and Jacob Sowers. "Place and Placelessness: Edward Relph." *Key Texts in Human Geography* (2003): 43-52. Web. 5 Mar. 2016.
- Sekuler, Robert, and Randolph Blake. *Perception*. 3rd ed. New York: McGraw-Hill, 1994. Print.
- Selhub, Eva M., and Alan C. Logan. Your Brain on Nature: The Science of Nature's Influence on Your Health, Happiness and Vitality. Mississauga, Ont.: John Wiley & Sons Canada, 2012. Print.
- Sewell, John. *The Shape of the City: Toronto Struggles with Modern Planning*. Toronto: U of Toronto, 1993. Print.
- Sitte, Camillo. City Planning According to Artistic Principles. New York: Random House, 1965. Print.
- Sitte, Camillo. City Planning According to Artistic Principles. New York: Random House, 1965. Print.
- Speck, Jeff. Walkable City: How Downtown Can save America, One Step at a Time. New York: Farrar, Straus and Giroux, 2012. Print.
- Srivastava, Kalpana. "Urbanization and Mental Health." *Industrial Psychiatry Journal* 18.2 (2009): 75. *US National Library of Medicine National Institutes of Health*. Web. 12 Feb. 2016. http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2996208/>.

- St George Campus Master Plan. Rep. University of Toronto, Campus & Facilities Planning, June 2011. Web. 4 Feb. 2016. http://www.updc.utoronto.ca/re/Campus_Master_Plans/St_George_Campus.htm.
- St. Lawrence Neighbourhood Focused Area: Urban Design Guidelines. Rep. City of Toronto, July 2005. Web. 5 Apr. 2016.
- Stedman, R. C. "Toward a Social Psychology of Place: Predicting Behavior from Place-Based Cognitions, Attitude, and Identity." *Environment and Behavior* 34.5 (2002): 561-81. *ResearchGate*. Web. 14 Apr. 2016. https://www.researchgate.net/publication/233729905_Toward_a_Social_Psychology_of_Place.
- Stott, Rory. "The Depreciating Value of Form in the Age of Digital Fabrication." Web log post. *ArchDaily*. N.p., 13 Apr. 2014. Web. 25 Mar. 2016. http://www.archdaily.com/495089/the-depreciating-value-of-form-in-the-age-of-digital-fabrication.
- Canada. City of Toronto. City Manager's Office. *Strategic Actions*, 2013 to 2018. City of Toronto, 2012. Web. 16 May 2016.
- Stremke, Sven, and Andy Van Den. Dobbelsteen. Sustainable Energy Landscapes: Designing, Planning, and Development. Boca Raton, FL: Taylor & Francis, 2013. Print.
- Taylor, Brian D. When Finance Leads to Planning: Urban Planning, Highway Planning, and Metropolitan Freeways in California. Rep. Berkeley: U of California: California Transportation Center, 2003. When Finance Leads to Planning: Urban Planning, Highway Planning, and Metropolitan Freeways in California. University of California: California Transportation Center. Web. 20 Mar. 2016. http://escholarship.org/uc/item/8tk6c6bs#page-1.
- Taylor-Foster, James. "Playing the Housing Game for Profit: The British Volume Housebuilding Project." *ArchDaily*. N.p., 06 Jan. 2016. Web. 6 Jan. 2016.
- Teaching to See. Dir. Andrei Severny. Prod. Edward Tufte. Perf. Inge Druckrey. Graphics Press, 2012. Online. Teaching to See. Web. 1 Oct. 2015.
- The Data Team. "The World's Most "Liveable" Cities." *The Economist*. The Economist Newspaper, 18 Aug. 2015. Web. 30 Jan. 2016.

- "Theoretical Framework Statistics Solutions." *Statistics Solutions*. N.p., n.d. Web. 25 Mar. 2016. http://www.statisticssolutions.com/theoretical-framework/.
- Till, Jeremy. Architecture Depends. Cambridge, MA: MIT, 2009. Print.
- Toker, Umut. Making Community Design Work: A Guide for Planners. Chicago, IL: APA Planners, 2012. Print.
- Tomalty, Ray, and Don Alexander. *Smart Growth in Canada: Implementation of a Planning Concept.* Rep. Smart Growth Canada Network, Aug. 2005. Web. 28 Jan. 2016.
- "Toronto Is World's Best City to Live In, Economist Study Says." *The Globe and Mail.* N.p., 30 Jan. 2015. Web. 13 Feb. 2016.
- *Towards* 2030 *Synthesis Report*. Rep. University of Toronto, Sept. 2008. Web. 20 Mar. 2016. http://www.towards2030.utoronto.ca/files/2030_REDUXv7.pdf.
- "Travel by Canadians to Foreign Countries, Top 15 Countries Visited (2013)." *Statistics Canada*. Government of Canada, 25 Aug. 2015. Web. 26 May 2016.
- Tuan, Yi-fu. *Space and Place: The Perspective of Experience*. Minneapolis: U of Minnesota, 1977. Print.
- Tuan, Yi-fu. Topophilia: A Study of Environmental Perception, Attitudes, and Values. New York: Columbia UP, 1990. Print.
- Turner, Phil, and Elisabeth Davenport. *Spaces, Spatiality and Technology*. Dordrecht: Springer, 2005. Print.
- Ulrich, Werner. "The Metaphysics of Design: A Simon-Churchman "Debate"." *Interfaces* 10.2 (1980): 35-40. *Informs*. Web. 25 Apr. 2016. http://pubsonline.informs.org/doi/pdf/10.1287/inte.10.2.35.
- "Urbanity = Urban Identity." *U. Sean Vance Architecture*. N.p., 9 Jan. 2012. Web. 30 Aug. 2016.

- Urbanized. Dir. Gary Hustwit. Plexifilm, 2011. Motion Picture.
- Vancouver 2020, a Bright Green Future an Action Plan for Becoming the World's Greenest City by 2020. Vancouver: Greenest City Action Team, 2009. Print.
- Vendeville, Geoffrey. "Living on Tree-lined Streets Has Health Benefits, Study Finds." *Toronto Star.* Toronto Star Newspapers Ltd, 13 July 2015. Web. 10 May 2016.
- Venter, Wenonah Machdelena. *People And Pride: A Qualitative Study Of Place Attachment And Professional Placemakers*. Thesis. University of South Florida, 2016. N.p.: n.p., n.d. *Scholar Commons*. Web. 1 June 2016.
- Walters, David. Designing Community: Charrettes, Master Plans and Form-based Codes. Amsterdam: Elsevier/Architectural, 2007. Print.
- "What Is a Sears Modern Home?" What Is a Sears Modern Home? N.p., 21 Mar. 2012. Web. 13 Apr. 2016. http://searsarchives.com/homes/.
- White, Douglas R. *Dynamics of Human Behavior*. Working paper no. 2008-09-042. Santa Fe Institute. N.p., 2008. Web. 30 Feb. 2016.
- Wickens, Stephen. "Downtown Toronto Went All in with a Pair of Kings." *The Globe and Mail.* N.p., 16 Feb. 2016. Web. 16 Feb. 2016. http://www.theglobeandmail.com/report-on-business/industry-news/property-report/going-all-in-with-a-pair-of-kings/article28745451/.
- "Winter Cities Ideas to Make Northern Communities More Livable and Sustainable." Winter Cities. N.p., n.d. Web. 2 May 2016. http://wintercities.com/.
- Wolfe, Charles R. "City Life: Revisiting J.B. Jackson's 'The Discovery of the Street'" *The Atlantic*. Atlantic Media Company, 20 Sept. 2011. Web. 16 Apr. 2016. http://www.theatlantic.com/national/archive/2011/09/city-life-revisiting-jb-jacksons-the-discovery-of-the-street/245284/.
- Wright, J. R., W. M. Braithwaite, and Richard R. Forster. *Planning for Urban Recreational Open Space: Towards Community-specific Standards*. Toronto: Centre for Resources Development, U of Guelph, 1976. Print.

Wu, JunJie. "Land Use Changes: Economic, Social, and Environmental Impacts." *Choices*. Agricultural & Applied Economics Association, n.d. Web. 22 Feb. 2016. http://www.choicesmagazine.org/magazine/article.php?article=49>.

Toolkits

appendix A

EXPERIENCE MAP HANDOUT (pp144)

EQUITY MODEL HANDOUT (pp146)

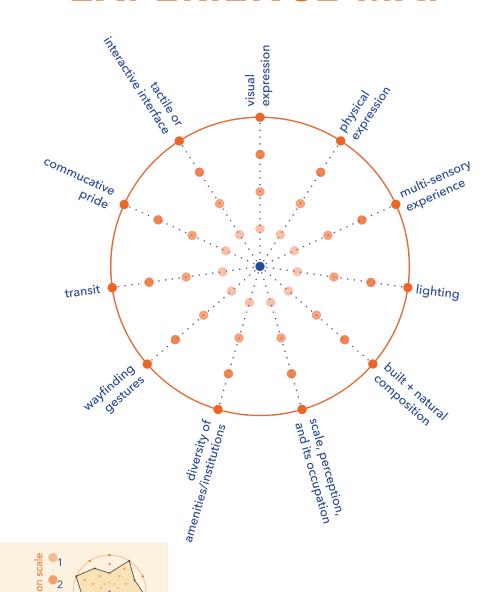
Note:

Both handouts are intended as a double-sided A4 printout, to be folded down the center with the fold resulting on the left-hand side

5

(place of experience)

EXPERIENCE MAP



Visual Stimulating and orchestrated symbols **Expression** and materials **Physical** Difanable architectural elements and details, form's legacy **Expression** Tactile or Positive interaction with form, or Interactive Interface effective placement of technology **Multi-Sensory** Defining senses, beyond imageability Experience **Built + Natural** Integrated natural and built systems Composition Scale, Perception, Openness, spaciousness, comfortable and its Occupation Safety, visibility, potentially 24hr Lighting environment Amenity/Institution A diverse inventory of **Typology Diversity** service-institutions

Mobility and access

enthusiasm

descriptions

Occupant expressed well-being and

Orientation, identifications, and

evaluate + map the following qualitative

indicators:

Commucative

Wayfinding

Gestures

Transit

Pride

Additional notes, rationalizations	
	experiential criteria evaluations:
	Does this place act as a stage for local engagements and/or have the capacity to support communal activities?
	Can it adapt to accommodate a dynamism of cultural needs? Am I able to make assumptions of the setting, based on the environment itself?
indicate those that apply What composed your experience?	Does this place act as a stage for local engagements and/or have the capacity to support communal activities?
Coordinated Spatial Langauge	Can it adapt to accommodate a dynamism of cultural needs?
Tangible Built-form History Capture	[In seasonal conditions] Am I motivated to be here, for an extended period of time?
Spectrum of Ad-hoc to Ad-lib Programming	Are there many people here - and are any engaged with their surrounding or slowing down to interact with it? Do I feel like I should be here?
Unconstrained by Seasonality	Do Fleer like I should be here? Does the environment evoke a sense of curiosity?
Pedestrian-centric Morphology of Form	Do I know where I am - if not, could I manageably get back to somewhere familiar?
Exploration and Circulation	Where is a comfortable spot to read a book, drink a coffee, or reflect?
Multiplicity of Retreat	Have I had a quality of experience that was authentic and/or intriguing – will it stand out as a memory?
Capacity for Spontaneous Experience	Is there physical activity taking place specific to this environment (riding a bike, jogging, exercising)?
Place-Cholesterol	Can I discern a difference between the public and
Legible Spatial Planning Hierarchy	private-oriented environments? Could you mistakenly end-up somewhere 'by-accident'?

using the equity model:

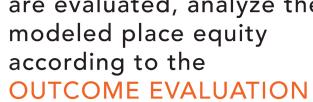
step one



Evaluate each QUALITATIVE PRINCIPLE using the detailed metric of HUMANISTIC SCALES

the degrees for evaluation represent a threshold, a level cannot be skipped if not met

step two



Once the four concepts are evaluated, analyze the modeled place equity according to the

complete a link based highest equivalent point, refer to definitions section



(place of experience)

EQUITY MODEL









Additional notes,	rationalizations	
• • • • • • • • • • • • • • • • • • • •		
evaluated E	quity of Place:	
Outcome	e evaluation	
	e of equity have you analyzed?	
	no possible linkage:	
	disparity in quality of life	
	lowest link: challenging liveability	
1		
	second-level link:	
	sufficiently human-centric	
2		
	thrid-level link:	
	equitible Environment	
3		
	highest link:	
	place of value	

Quality	Availability of experiential meaning and v o	
Flourishi	Viable conditions for a positive state mental well-being and health	Oualitative Principles
Design Built-form and the environment's consistency to express visual and physical engagement		
Resilienc	Stability and strengthening as the environment matures, in opposition tuncertainty in change	

Intrinsic (I/Me)	Stability and positive consistency for achieving basic needs , functions, and connections
Inclusive (Us/We)	Opportunity to fulfill a sense of individual belonging , and become part of a social-fabric
Extrinsic (Here)	Potential for spatial-fabric and choreogrpahy of the environment to become a valued component of one's lifestyle
Exclusive (Our)	Form and infrastructure boast a capacity to build communal esteem, expressing a strong identity of humanistic-character

Humanistic Scales of Place

appendix B

The described units of this layer have been adopted from Pont and Haupt's Four Variables to Calculate Density, which help visualize the various scales that Agencies consider the impacts of planning and development. They are as follows:

Clearway The connective matrixes at ground level that support pedestrian functions and infrastructures.

Building The dimensions and area of the building and building footprint (X, Y, Z dimensions). The borders of *building* are defined by the edges of its footprint.

Lot The area of the lot (also referred to as parcel or plot) is the sum of built and non-built areas designated for building; not in all cases is their – private, or non-built, area. Childs describes the *lot* as the most durable component of the rudimentary layer.² Legal boundaries define the borders of the lots.

Island Commonly identified as the modern city block, comprised of lots and in some cases non-built space not designated for building. This includes parks, plazas, and parking areas. The surrounding accessible streets define the border of an island.

Fabric The fabric, in the context of this layer, represents an arbitrary 'unit' of planning measurement. It consists of a collection of islands, as well as the network that surrounds these islands and is required for access to the islands. Circulation streets

¹ Pont and Haupt (2012) 99-104.

² Childs (2015) 37.

on, the other hand, are primarily used to move from one urban fabric to another or across the city. The size of the fabric is determined by the level of homogeneity (spread) of the different islands within that fabric.

District The area of the district is similar to the *tradition town* building block recognized and implemented by early American planners. The district is composed of a collection of fabrics and large-scale non-built areas not included in the fabric itself, such as arterial circulation routes (if outside of a fabric), parks, large water areas. The boundary of a district coincides with the boundaries of composing fabric-units.

Definitions

appendix C

Built Form: Implemented buildings and hardscapes.

Natural Form: The existing natural landscape and implemented softscape.

Spatial Design Agency: Practices of Architecture, Planning, Urban Design and Landscape Architecture.

Mutual: Of shared value between those who may influence and those who may occupy place; an inclusive body of front-end stakeholders, end-users, designers, non designers.

Qualitative: Theory of design relating to subjective and interpretive quality (essence) or qualities (symbolic details) – in opposition to the generalizations and deductions of quantities (empirical details)

Equitability: A balance between the human-form relationship's inputs of form and humanistic outputs, achieved without compromise to either component, and requiring a fair perspective of what defines compromise versus progression.

Accessibility: Equal opportunity to *experience* quality without obstruction by economic, social, or literal means.

Phenomenology: "[T]o reduce individual experiences with a phenomenon to a description of the universal essence (a "grasp of the very nature of the thing")." Phenomenology provides a frame for understanding social, cultural and psychological dimensions and influences that are encapsulated by the convergence of our "lived experiences."

1 Creswell (2013) 78.